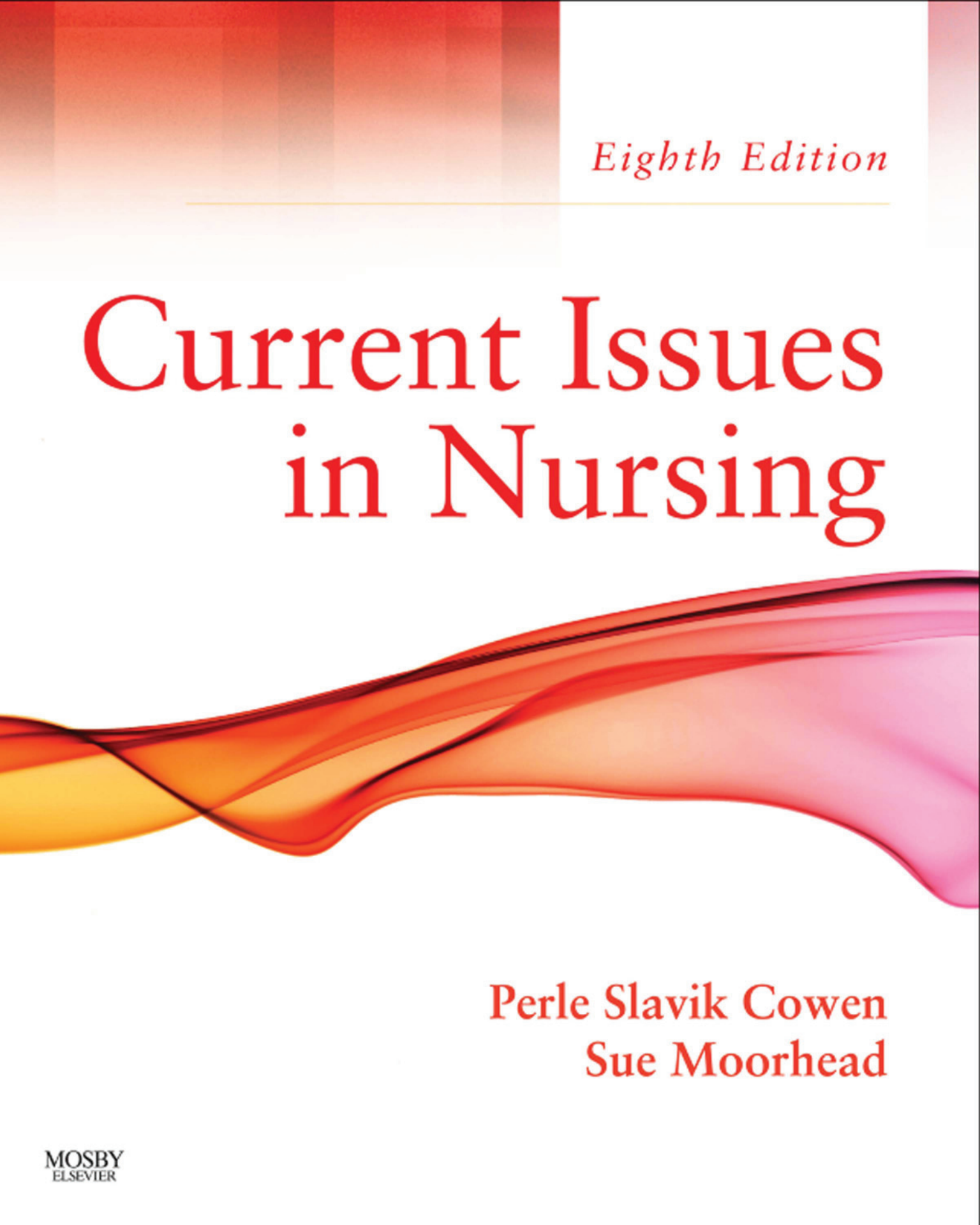




Eighth Edition

Current Issues in Nursing

Perle Slavik Cowen
Sue Moorhead

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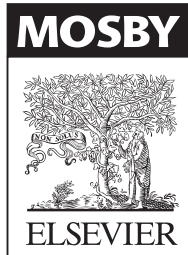
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Preface

Welcome to the eighth edition of *Current Issues in Nursing*. Joanne McCloskey Dochterman and Helen Grace guided this text through six editions from 1981 through 2001. We became the editors with the seventh edition, published in 2006. For almost 30 years, this book has provided a means to discuss the important issues faced by nurses. Some issues presented in the past are still unresolved at this time, and new issues have certainly been identified. What is clear is that nursing is a profession that accepts these challenges and welcomes discussion of the issues. The purpose of this text, as with past editions, is to provide a forum for knowledgeable debate on the important issues that nurses face across health care settings so that intelligent decision making can occur. We are excited about offering our second edition as editors of *Current Issues in Nursing* and have enjoyed working with the many authors who have shared their expertise to make this edition an exciting and important discussion of the issues nurses face in their practice.

Given the rapidity of changes in the health care environment, a book like this that attempts to describe and discuss all the current issues in nursing is important. In periods of rapid change, decisions must often be made quickly. With many important issues confronting such a large and diverse profession, there is danger that decisions will be made without full knowledge or without sufficient opportunity for discussion and debate. Or, worse yet, issues may be ignored and decisions not made. The chapters in this book provide excellent information and thoughtful comment on the important issues currently facing the nursing profession. We hope these chapters help foster debate in practice and educational settings and set an insightful path to the future of nursing.

As in the previous editions, the issues are identified and addressed in sections. The eighth edition includes 11 sections: Defining Nursing from a Variety of Roles; Changing Education; Changing Practice; Information Technology Challenges; Health Care Systems and Practice; Health Care Organization and Finance; Professional Challenges, Collaboration, and Conflict; Cultural Inclusiveness; Ethical, Legal, and Social Issues; Violence Prevention and Care: Nursing's Role; and Global Nursing

Considerations. Each section begins with an Overview in which we briefly introduce the topic. These Overviews highlight some of the important points in each chapter, raise some related issues, and assist readers to select chapters for in-depth reading.

Following the Overview for all but two sections (Violence Prevention and Care: Nursing's Role and Global Nursing Considerations), a Debate chapter features the pros and cons of a problematic issue. A listing of the titles of Debate chapters in the eighth edition gives some idea of the scope of the issues:

- ◆ What Is Nursing, Why Do We Ask, and How Will Nursing Be Better Understood?
- ◆ Creating the Future of Nursing Education: Challenges and Opportunities
- ◆ Moving the Care: From Hospital to Home
- ◆ Nursing: A Profession Evolving with the Use of Informatics and Technology
- ◆ From a Medical Care System for a Few to a Comprehensive Health Care System for All
- ◆ Controlling Health Care Costs: Balancing Public and Private Solutions
- ◆ Collaboration between Nurses and Physicians: The Need for a Broader View
- ◆ Should Nursing Be More Diversified?
- ◆ Ethics of Health Care Reform: Should Health Care Be Rationed?
- ◆ The Global Nursing Shortage—An Issue of Social Justice

The bulk of the book is composed of Viewpoint chapters. In these, each author provides her or his own view and critical analysis of one particular aspect of the section's general topic. Viewpoints are those of the individual authors and may pose a controversial stand on the issue, present a case study or results of research, review the past and current status of a topic, or outline problems and future directions. The Viewpoint chapters differ from the Debate chapters as the words "viewpoint" and "debate" differ; the Viewpoint chapters, for the most part, offer only one side of an issue. It is hoped that the Viewpoint chapters provide material and ideas for debate. We hope that after reading a Viewpoint, readers will be stimulated to think and seek out more information. It is impossible to list all the Viewpoints

here, but a sample list of titles will, we hope, make you eager to read these and more.

- ◆ The Nurse as Chief Executive Officer
- ◆ Educational Challenges: Quality in Prelicensure Nursing Education
- ◆ Genetics, Genomics, and Current Issues for Professional Nursing
- ◆ Personal Health Records as a Tool for Improving the Delivery of Health Care
- ◆ The Research Imperative for the Nurse Executive
- ◆ Drugs Are Too Cheap
- ◆ Harassment and Discrimination Issues in Nursing
- ◆ Determining Staffing Needs Based on Patient Outcomes versus Nursing Interventions
- ◆ Impact of the Health Insurance Portability and Accountability Act

- ◆ Disaster Nursing and the American Red Cross
- ◆ Compassion Fatigue in Nursing

This edition of *Current Issues in Nursing*, as others in the past, offers a fairly complete analysis of all of today's important nursing issues. Careful reading, thought, and debate today can result in good decisions, actions, and achievements tomorrow. We hope readers will enjoy the work of the many talented contributors who collectively represent the diversity and wisdom of nursing. We thank them for their contributions to this edition. We also want to thank Sharon Sweeney for helping us with the many details of editing a book with 85 chapters and over 130 authors.

Perle Slavik Cowen and Sue Moorhead

Who Is *Current Issues* For?

Current Issues in Nursing is appropriate for several audiences. First, it is an ideal book to use in a senior-level undergraduate or graduate-level issues course. Faculty who are teaching courses designed to help associate degree and diploma RNs make the transition to university will also find this particularly useful. A teacher using this book could easily have students orally present the Debates contained here or could structure a whole new set of debates using the readings as source material. The book is also useful for international students who are trying to compare the issues in their countries with those faced by nurses in the United States. In addition, the Global Nursing Considerations section provides further comparisons of nursing across the globe.

Second, it is a good book to use as a core text for a graduate curriculum. There is something here that will fit with most graduate nursing courses. For example, the section on education for an education course; the

sections on practice, quality improvement, and health care systems for advanced practice and nursing administration courses; the section on governance and role transition for leadership classes; and so on. By picking and choosing from the numerous Viewpoints, every class in the graduate curriculum can benefit from the use of this book. By using one text throughout the curriculum, there is financial savings for the individual student and consistency in expectations from the faculty.

Third, the book is an excellent source of information about nursing and the issues confronting the profession. The chapters are written by experts and include many well-known nursing leaders. The book is stimulating and invigorating, and the challenges within will revitalize and energize the reader. It would make a good gift for a new RN or for a nurse going back to graduate school.

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Acknowledgments

We have many people to thank for helping us with the eighth edition:

- ◆ We want to thank Joanne Dochterman and Helen Grace for establishing the tradition of the Debate/Viewpoint framework. We appreciate the opportunity to continue the traditions and unique perspectives this book provides to nurses.
- ◆ A special thank you to Sharon Sweeney, who assisted us every step of the way. Without her assistance and dedication to this book we would have been unable to meet the many challenges in editing a book with 85 chapters. She helped identify authors, communicate with the authors and our publishers, and proof-read and edit the final chapters.
- ◆ Yvonne Alexopoulos, Lisa Newton, Heather Rippetoe, Maureen Iannuzzi, Julia Curcio, Joy Moore, and the editorial staff at Elsevier, who helped us plan this edition and work our way through the process.
- ◆ Our authors for taking the time from busy schedules to think and write about their topics in an interesting and helpful manner. This book is only as good as their contributions.
- ◆ Our readers in the United States and other countries for their continued support and enthusiasm for this book. We hope that this edition continues to meet your needs.
- ◆ Our immediate families, who continue to be our main supporters. Thank you Jessie, Leah, Don, Brian, Sara, Scott, Meghann, Lucas, and Logan.

Perle Slavik Cowen and Sue Moorhead

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SECTION 1

Defining Nursing from a Variety of Roles

The Richness of Nursing

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Nursing is a profession with rich career opportunities that change and reflect the society in which nurses live. Over the years, the role of the nurse has changed to meet the needs of patients. Much of nursing history is focused on the role of the nurse as a direct patient care provider, mainly in a hospital setting. As the health care system changes and evolves, so do the roles of nurses and the places in which they work. Many individuals are calling for radical changes in the current health care system to improve quality, enhance patient safety, and lower the cost of care in the United States. Over the last decade, nurses have experienced a rapid shift to providing care in the community rather than in the hospital; patients return to their homes after brief hospital stays and require assistance with transitioning to care outside of the walls of the hospital. Families are more involved with providing care to loved ones in the home environment, and more and more people want to “age in place” and to avoid assisted-living and nursing home care facilities. Families are faced with complex care issues that challenge their ability to provide appropriate care to family members. Services such as hospice care, home care with intensive treatment protocols, assisted-living facilities, and new models for nursing home care for the elderly are examples of how the health care system has changed to meet these needs. To their credit, nurses have played a key role in making these changes happen, and they need to continue to adapt to the wishes and desires of the patients and families that they serve. In addition to nurses in direct practice roles, the opportunities for nurses as faculty members, researchers, and administrators in a variety of systems are expanding, and critical shortages in every area of nursing are presenting new challenges.

The organizational context of practice is changing and the forms of practice are shifting as the health care system changes to address current challenges. Nurses—especially nurse practitioners—are increasingly developing their own group practices and working in new forms of collaboration with physicians and other health care providers.

Physicians are incorporating nurse practitioners into their practice structures and care delivery models; for example, obstetricians/gynecologists now integrate nurse-midwives as practice partners, cardiologists add nurse practitioners to their staffs, and critical care practitioners are found in hospitals alongside physicians and physician assistants. In the past, nurses’ roles have been defined primarily in relationship to practice and practice settings; however, the business side of health care has opened up new management opportunities for nurses. Nursing educational programs have entered into partnerships with schools of business for nurses who want to build careers in this area. This business model also affects the courses offered in undergraduate programs. The world of information technology is opening up other vistas as nurses influence and help design an electronic health record. The monitoring of patient care with the use of computer technology is another example of a potential career track for nurses that involves the merging of nursing knowledge with information and communication expertise. The impact of technology is present in any role of nursing that may be explored.

Nurses have traditionally developed career paths opportunistically, but today’s students enter nursing with a clearer sense of what they want to do. One commonly hears a nursing undergraduate state that she (or, increasingly, he) would like to eventually become a pediatric nurse practitioner. It is hoped that this trend will continue and that persons entering the nursing field will be knowledgeable about opportunities for career development. It is also expected that these more clearly delineated career paths to a variety of opportunities within nursing will be matched by a commensurate reward system. What is evident is that the roles open to future nurses will continue to evolve to meet the care needs of patients. The first section of this book serves as an introduction to some of the potential career fields in nursing, but it is not an exhaustive list by any means. Subsequent sections

introduce many other possibilities in terms of organizational contexts and practice patterns. Nurses have the responsibility to make these opportunities known to future generations of potential nurses.

Perhaps no other profession has been so obsessive and diligent about attempting to define its field as nursing has. Historically, the first chapter of this book has focused on defining nursing. Because medicine was first to develop a regulatory framework that is so broad that all other professions have had to contend with this “first mover” effect and build their definitions in ways that are not duplicative. Thus, according to Diers, defining the field of nursing is a political process rather than an intellectual and logical exercise. In this edition, Meridean Maas offers a different perspective on defining nursing for today and adds a second question to the discussion. Historically, the question has been, “What is nursing?” In this edition, Maas also discusses the question, “Why do we ask?” Chapter 1 discusses nursing with regard to the public view of nursing, the legal view of nursing, the nursing discipline view of nursing, and other definitional challenges. The impact of advance practice nurses is discussed in terms of how this role expansion affects the definition of nursing. In conclusion, Maas advocates for abandoning the preoccupation with defining nursing and suggests that building the science of nursing and translating the science into nursing practice is a better use of nurses’ efforts. If these nursing practices show a benefit, society will define nursing and resist challenges to the legitimacy of the nursing profession.

In Chapter 2, Ellen Cram examines the demographics of nursing in hospitals today and clearly identifies its importance to the nursing profession. The hospital of today presents formidable challenges to nursing as a result of the greater intensity of care required, the sophisticated technology used in the care setting, and the creation of new roles for nurses to fill. Some of the challenges include the declining proportion of nurses practicing in hospital settings, the aging of the nursing population, and the lag in diversifying the nursing profession to match the diversity of the general population. Cram emphasizes the important roles that clinical judgment and decision making play in patient care outcomes. Several challenges that are inherent in the staff nurse role today are discussed in this chapter: work process design, environmental issues in certain work settings, time pressures, complexity compression, staffing levels, scheduling, occupational health risks, competing

roles in nurses’ lives, and relationship challenges that involve other employees in the hospital. Hospital nursing is responding favorably to these challenges while dealing with a shortage of nurses at the bedside.

In Chapter 3, Kelly Goudreau traces the origins of the clinical nurse specialist (CNS). The CNS is one of four advanced practice registered nurse roles described in Nursing’s Social Policy Statement (American Nurses Association, 2003). Goudreau describes the changing landscape for today’s CNSs in the areas of educational preparation, licensure, certification, accreditation, and practice arenas. The chapter highlights the national dialogue that is centered around the following documents: the *Consensus Model for Advanced Practice Registered Nurse (APRN) Regulation*; the *Vision of the Future for Clinical Nurse Specialists*; the revised *CNS National Core Competencies Project*; and the pending core certification examination collaboratively prepared by the National Association of Clinical Nurse Specialists and the American Nurses Credentialing Center. The chapter summarizes the current challenges faced by nurses who choose this role and the ways in which CNSs in practice can improve health care for patients in a variety of settings.

Chapter 4 focuses on the role of the nurse practitioner. Kathy Morris describes the history of this role in nursing. The chapter summarizes the struggles that nurse practitioners have faced in the legislative arena, on medical turf, and within the corridors of nursing. The role of nurses in this specialty is influenced greatly by Nurse Practice Acts in each state. The chapter includes a description of the current practice environment in which nurse practitioners work, and it discusses the changing educational requirements for this role as the Doctorate of Nursing Practice (DNP) becomes required in the near future. The chapter includes an overview of the American Association of College of Nursing position statement regarding the DNP, which was released in October 2004. Other challenges that face nurse practitioners include barriers to practice, reimbursement, titling for DNPs, and regulation and legislative issues that influence the role. New areas of specialization are developing, such as nurse practitioner hospitalists within acute care settings. Nurse practitioners continue to play critical roles in the care of vulnerable populations. Morris is optimistic about the future of nurse practitioners, but these nurses must be diligent in establishing and protecting their practice alongside that of physicians.

Just as the care environment is changing, the roles of nurses in management positions are also changing. Traditionally, nurse managers were limited to the management

of nursing services, but today the responsibilities of nurse executives have broadened in scope, and many times their responsibilities include all patient care services. SueEllen Pinkerton and Rose Rivers focus Chapter 5 on nurse executives in acute care settings. The challenges faced by these executives include the resurgence of the importance of Magnet status and the current nursing shortage. The authors define the nurse executive role as that of maximizing the quality of patient care, maximizing the professional satisfaction of the nursing staff, meeting the cost-effectiveness goals of the organization, and participating in long-range strategic planning. Nurse executives are clinical and business leaders in the organization, and they are experts in coordinating care and tracking the costs of providing patient care. At a time when the opportunities for nurse executives are increasing, programs to prepare nurses in the field of administration are declining. The current nursing shortage presents a formidable challenge for nurse executives; they are pushed by hospital executives, who tend to see the solution to the problem as bringing additional assistive personnel into the care setting. Pinkerton and Rogers demonstrate that nurse executives have a clear set of standards and a line that they will not cross when it comes to compromising patient care. The authors discuss the importance of critical thinking skills to becoming a successful nurse executive. The chapter ends with a case study that clearly illustrates the dilemmas that face nurse executives.

Chapter 6 is a new chapter that is focused on the role of the nurse as the chief executive officer (CEO) of a health care system. Nancy Formella discusses the opportunities and challenges of this role. The chapter provides an overview of the educational preparation, requirements, and work competencies that are necessary to be a successful CEO, and it summarizes the main categories of the CEO's daily work. The challenges that face any health care CEO include the health status of Americans, the perception of health care by the American people, and the state of the health care workforce in the United States. Several case studies are included in this chapter to assist with the understanding of this role.

In Chapter 7, Anita Stineman and Paula Mobily discuss some of the major issues affecting nursing education as nurse educators prepare nurses for the twenty-first century. One of the most pressing problems facing the profession is the shortage of nursing faculty, which will only intensify in the years ahead. Factors that are influencing the faculty shortage include the following: the aging of the current faculty, the increased time required to complete a graduate education, the heavy faculty workload, the low faculty wages, and

the lack of a robust faculty pipeline. The authors use three major categories as a framework for their discussion: (1) the aging of the current faculty (often referred to as the "graying of the professoriate"); (2) the preparation of new nursing faculty; and (3) the declining interest in an academic career. The chapter outlines a way to create a student-centered learning environment, and it addresses the increasing challenges that nursing faculty members face with regard to the use of technology in nursing education. The maintenance of a civil work environment is also an issue that has emerged. This chapter illustrates the complex issues that nurse educators must face; it is an important chapter for understanding the current issues that affect the education of nurses for the future.

In the last chapter of this section, Nancy Stotts and Diedre Wipke-Tevis address the role of nurse researchers. Nurse researchers focus on understanding the science of care through systematic investigation. Nurse researchers design studies, conduct research, and disseminate findings at professional meetings and in peer-reviewed journals. This chapter outlines pathways to research careers. Successful researchers are adept at problem definition, and their expertise in research methods permits them to gather data to address a specific problem. Being able to attract funding for research, write grants, publish research results, and participate in scientific discourse is integral to the role of a researcher. Challenges for nurse researchers include limited start-up funding, the devaluation of nursing research, disagreements about research methods, limited space for data collection, limited access to populations of interest, and the limited availability of funding for ongoing research programs. The work of nurse researchers to generate new knowledge is vital to the nursing profession, and it is very necessary for a profession that is trying to enhance evidence-based practice.

The introductory section of this book illustrates the richness of nursing as a career choice. Few professions offer the selection of roles that nurses can pursue or the ability to change roles within the field as they gain experience. Nursing roles are constantly evolving, and new roles are emerging for the future redefining of what nursing is. In this changing health care environment, the nursing profession is challenged to retain the positive traditions of the past while embracing the opportunities of the future. Nurses continue to provide leadership to face the complex problems of providing cost-effective, high-quality care while embracing technology and shaping health policy for a future that will fully actualize the potential of nursing. All nurses have an obligation to assist the profession with keeping this richness alive while building the science of nursing to better serve patients.

What Is Nursing, Why Do We Ask, and How Will Nursing Be Better Understood?

MERIDEAN L. MAAS

The question of what exactly nursing is has perplexed nurses and nursing students for some time. I was asked to answer this question for an assignment in one of my first nursing classes in the early 1950s. I thought it was a strange question then, because I had come to school to be taught what nursing is and how to do it, but this question was to be my introduction to nursing's identity crisis.

Why do we ask this question? Why is it important to define nursing? In previous editions of this book, Donna Diers (1994, 2001) suggested that a definition of nursing is necessary if we are to teach it, study it, and make policy decisions that reflect it. Diers also maintained that nursing is not solely defined by what nurses do, despite the fact that it is the major concern of most nurses and that training in nursing tasks is historically the predominant reason for schools of nursing. What do nurses do for certain problems and to achieve certain goals? Why do they do what they do? What is achieved by what they do? These questions and the relationships among them must all be addressed for a complete and widely understood definition of nursing. Definitions of most disciplines vary by purpose and perspective, but the definitions tend to become more concordant as professions mature and as more of their practice is based on scientific evidence. In this chapter, common usage definitions of nursing, legal definitions of nursing, and definitions provided by the discipline are explored. The purpose of the definition from each perspective and the implications for nursing are discussed. Finally, a recommendation to replace nursing's preoccupation with creating a definition is proposed.

THE PUBLIC'S VIEW OF NURSING

Common usage definitions are contained in dictionaries and reflect the customary meaning of a word among members of the public at the time that the

dictionaries are written. For example, in *The Merriam-Webster Dictionary* (2005), the meanings of the word *nurse* as a verb are "to promote the development or progress of," "to manage with care or economy," "to take charge of and watch over," "to care for and wait on," and "to attempt to cure by care and treatment." In *The Merriam-Webster Collegiate Dictionary* (2003), the word *nurse* as a noun is reported to mean "a licensed healthcare professional who practices independently or is supervised by a physician, surgeon, or dentist and who is skilled in promoting and maintaining health." Synonyms for the term that are found in *Merriam-Webster's Collegiate Thesaurus* (2005) are likewise for the verb form: "to cherish, cultivate, foster, nourish, nurse, nurture, advance, forward, further, promote; humor, indulge, pamper." The word *nursing* yields similar action meanings, such as "treatment," "nurture," "tending," and "attention." In the most recent online version of the Merriam-Webster dictionary (2009), the term *registered nurse* is defined as "a person who cares for the sick or infirm; specifically, a licensed healthcare professional who practices independently." Although it is encouraging to note that progress has been made with regard to defining what a nurse is, nurses should still understand that common usage definitions lag behind the definitions used by the discipline and often behind legal definitions. Common usage reflects the public's view of nursing, which often does not distinguish nurses from others who care and nurture and which may not consider nursing as a profession with a body of scientific knowledge. The common usage meanings of *nurse* and *nursing* affect who is recruited into the discipline, their socialization into and within the discipline, their contributions to nursing science and practice, legal and policy constraints on nursing, relationships with other providers, and the resources that are available to support the development of nursing science and practice.

The popular view of nursing is influenced by how nurses behave with consumers and in their relationships with members of other disciplines, especially physicians. Nurses who do not clearly identify and communicate to the client and others their roles and contributions to care propagate the view that nurses are interchangeable with personnel with less training. When nurses do clearly communicate their roles and actions, clients and other health care providers have a much clearer understanding of what professional nursing is. Likewise, the value and status of nursing is diminished when nurses allow themselves to be demeaned. Nurses often confuse familiarity with respect. For example, it is demeaning when nurses address physicians as “Doctor” when physicians address nurses by their given names. Tolerating abusive and humiliating relationships with physicians or administrators also degrades nursing and affects how nursing is viewed and defined by others. In a misguided attempt to emphasize interdisciplinary collaboration in hospitals, there was a recent period of time when nurses were told to not include their registered nurse (RN) identity on their name pins. Although this practice is no longer common, many RNs tolerated the humiliating negation of their professional credentials and roles. Many RNs were seemingly unaware that the discipline’s identity and expertise were prerequisites to interdisciplinary collaboration and that Nurse Practice Acts permit and protect the making public of RNs’ identities, expertise, and prerogatives.

THE LEGAL VIEW OF NURSING

Both the public and nurses seek legal definitions for protection. The public’s legal definition describes the individuals who can advertise themselves as nurses (i.e., use the title *registered nurse*, *licensed practical nurse*, or *advanced practice nurse*) and the scope within which a nurse with a specific title can legally practice. Legal definitions exist in all state codes for registered nurses, licensed practical (or vocational) nurses, and advanced practice registered nurses. The public purportedly seeks these definitions to protect themselves from practitioners who might provide services for which they are not qualified. Nurses seek legal definitions to protect their practice from others who might offer the same services and to enable their own practice according to definitions and standards established by the profession. In truth, legal definitions are highly political and fairly ambiguous, and they usually do not enable nurses to practice the full scope of duties that are defined by the profession.

Licensing laws vary from state to state, so it is important that nurses be familiar with the Nurse Practice Act in the state in which they are practicing. Because licensing laws are relatively vague, they are subject to interpretation by boards of nurse examiners, the staff of boards of nurse examiners, and attorneys general in state jurisdictions. Thus, it is important for nurses to recognize that the refinement of licensing laws is a political process, because interpretations will depend on how well decisionmakers understand current nursing practice and how effective the collective of nurses is in influencing these decision makers.

A problem for nursing and most other health care disciplines is that medicine obtained licensing laws first and defined the practice of medicine so broadly that it encompasses almost everything that could be done to assist another person with his or her health and well-being. When carving out its legal prerogatives, nursing is usually required to show how the practice of nursing does not encroach on medical practice or to provide convincing evidence that nurses have the knowledge and skills to practice in a scope that overlaps with medicine. Not only is this an arduous political process, but, when combined with vague Nurse Practice Acts, it also heightens the potential for nurses to be accused of practicing medicine without a license.

In 1903, North Carolina passed the first licensing law for nursing. The law was primarily intended to protect the title. Under this law, almost anyone could perform nursing functions as long as they did not use the title of RN (Hadley, 1989). It was not until 1938 that New York passed a licensing law that included a definition of nursing (Driscoll, 1976). With this law, nursing sought to protect RNs’ positions and compensation from unlicensed and unqualified persons who were using the title of RN. Like other professions—including medicine, with its very broad definition—nursing seeks to use licensure to protect its own interests.

The word *diagnosis* was especially provocative when it was considered for inclusion in nursing licensing laws. Medicine successfully secured the term for referring only to medical practice until New York redefined nursing in the state’s Nurse Practice Act during the late 1970s:

The practice of the profession of nursing . . . is defined as diagnosing and treating human responses to actual or potential health problems through such services as case-finding, health teaching, health counseling and provision of care supportive to and restorative of life and well-being (Driscoll, 1976, p. 59).

New York's law broadened the definition of nursing and served to differentiate nursing from medicine. It also heightened awareness of the need to define and classify the human responses to actual or potential health problems that nurses could treat. Coincidentally, in 1973, Kristine Gebbie and Mary Ann Lavin organized an invitational conference of nurses at Saint Louis University to identify, define, and classify nursing diagnoses. Subsequently, the North American Nursing Diagnosis Association (NANDA) was formed. Several definitions of a nursing diagnosis were proposed and used during the early years of NANDA, including "a product of assessment" (Gordon & Sweeney, 1979) and "amenable to nursing intervention" (Henderson & Nite, 1978).

In 1980, the American Nurses Association published the monograph *Nursing—A Social Policy Statement*, which contained a definition of nursing that was based on the New York State Nurses Association definition. Although nursing had legitimized diagnosis as a function and drawn a semantic line between the focus of nursing and that of medicine, the term remained controversial within nursing and constrained the evolution of the scope of nursing practice. This constraint was most apparent for advanced practice nurses (APNs) and for RNs working with acutely and chronically ill patients.

Some nurses argue that defining nursing as the diagnosis of actual or potential responses to illness places nursing in a practice cul-de-sac by closing off the expansion of the scope of practice and limiting economic gain. Others argue that the definition describes nursing practice that is independent and autonomous. At the ninth NANDA conference, a nursing diagnosis was defined as "a clinical judgment about individual, family, or community responses to actual or potential health problems/life processes. A nursing diagnosis provides the basis for selection of nursing interventions to achieve outcomes for which the nurse is accountable" (NANDA, 1991, p. 65). This definition expanded the idea that nurses are accountable for treating family and community units and health states other than illness. The definition remains controversial, and a revision is currently under consideration, although it has not yet been authorized (NANDA International, 2009). A major issue seems to center on defining the turf of one discipline versus another based on the diagnoses of the persons that are treated. Perhaps, as professional nurses participate more and gain greater respect in interdisciplinary practice, the regressive nature of trying to divide up clients by what discipline alone treats and is accountable for specific diagnoses will be better recognized. It is very difficult (if not impossible) to identify

any diagnosis—even those ordinarily viewed as within the domain of medicine—that is treated solely by a single discipline.

In reality, many RNs have not assumed the autonomy and accountability for their practice that is legally authorized by Nurse Practice Acts, largely because of the policies and politics of employing organizations and because the diagnosis and treatment of human responses are mostly not reimbursed by third-party payers unless the responses are also included in the taxonomies of medical diagnoses and treatments. Although typical staffing methods do not fully enable RN accountability for specific clients over an extended period of time, many RNs fail to recognize and act upon their accountability for the nursing interventions delegated to assisting staff and delivered to clients. Alternatively, APNs are not fully supported by the definition of nursing as the diagnosis and treatment of human responses. To accommodate APNs, Nurse Practice Acts were split, with separate definitions of nursing developed for RNs and APNs. Although RNs and APNs continue to press for expanded definitions of their scope of practice, the expansion sought by APNs tends to emphasize primary care with greater overlap with medical prerogatives rather than defining more advanced nursing prerogatives. APNs also often hesitate to open Nurse Practice Acts because they fear that medicine's political power will be stronger than their own and thus they may lose rather than gain prerogatives.

APNs have made gains in most states with regard to expanding the scope of their practice into the domain of medicine to enable the diagnosis and treatment of disease. However, half of the 50 states still require APNs to have some form of a "collaborative" relationship with a physician (Phillips, 2008); in reality, this is a euphemism for a dependent, supervised relationship with medicine. APNs in some states have gained prescriptive authority and the authority to admit patients to hospitals, but these privileges are by no means present in all 50 states. As of 2008, 14 states have awarded prescriptive authority to nurse practitioners (NPs) for all medications, including controlled substances; 34 states grant prescriptive authority, including controlled substances, to NPs with some degree of physician involvement or delegation of prescription writing; and three additional states have given prescriptive authority to NPs, excluding controlled substances, with some degree of physician involvement or delegation of prescription writing (Phillips, 2008). In all states, the prescriptive authority that is granted may also apply to all APNs, including clinical nurse specialists,

certified nurse-midwives, and certified registered nurse anesthetists.

Although APNs have gained and are continuing to gain prerogatives that expand the scope of nursing into what has heretofore been the sole domain of medicine, there is no consensus within nursing that this is the way that all of nursing should go. Many nurses fear that gains in medical prerogatives will distract nursing from its calling to holistically advocate and care for the health and well-being needs of individuals, families, and communities. A review of many NP program curricula reinforces this fear by revealing a much greater emphasis on the diagnosis and management of illness as a primary care provider as compared with the study of nursing diagnoses and interventions that complete a more holistic nursing scope of practice. It is of concern to many that APN curricula and practices, of necessity, emphasize primary care but tend to de-emphasize the entire scope of nursing. A closer look at definitions of nursing within the discipline will account for the lack of consensus regarding advanced nursing practice. Historical efforts and differing conceptions used to define nursing by members of the discipline influence how nurses are socialized and their subsequent individual and collective behaviors.

THE DISCIPLINE'S VIEW

There are many definitions of nursing within the discipline, beginning with Florence Nightingale (1859/1946), who claimed that “a nurse is any person in charge of the personal health of another,” that nursing is “the act of using the environment of the patient to assist him in his recovery,” and that “what nursing has to do . . . is put the patient in the best condition for nature to act upon him” (p. 75). Ms. Nightingale must be understood in the context of the time and circumstances in which she wrote. At the time, medicine’s scientific base was underdeveloped, as was most of medical treatment, including pharmaceuticals. Nonetheless, the view of nursing that she advanced greatly influenced subsequent definitions. Virginia Henderson’s much used definition, which she calls her “personal concept” and not a definition of nursing, reveals Nightingale’s influence:

Assisting the individual sick or well in the performance of those activities contributing to health, its recovery or peaceful death that he would perform unaided if he had the necessary strength, will, or knowledge and to do this in such a way as to help him gain independence as rapidly as possible (Henderson, 1961, p. 2).

Years later, Ms. Henderson revised her personal concept to include primary care as a function of nursing and stated that nurses “diagnose and treat as well as ‘care’” (Henderson, 1961, p. 98). Both Nightingale and Henderson emphasize what nurses do when defining what nursing is. Whether or not nursing should be defined by what nurses do is a question to consider as further attempts within the discipline to define nursing are explored.

During the latter half of the 1950s and throughout the 1960s, which was a time when nursing programs were rapidly moving into universities, a number of nurse grand theorists emerged, prompted by the need to describe and justify nursing as an academic discipline. Nursing grand theories—such as Rogers’ “science of unitary man” (1970), Roy’s “adaptation theory” (1970), Orem’s theory of “self-care deficits” (1971), and King’s “human interaction” theory (1971)—were mostly conceptual models or frameworks, each of which contained four major constructs: person, environment, health, and nursing (Fawcett, 1980). Although nursing was struggling for definition, these grand theories offered none; however, they did provide broad concepts that were intended to form the basis of the development of the science of the discipline. The grand theorists proposed conceptual frameworks from which propositions were expected to be deductively derived and tested to generate the science and knowledge of nursing.

Other nurse theorists—mainly Orlando (1961, 1972), Wiedenbach (1964), and Travelbee (1966)—developed practice theories. These theories began with the assumptions that nursing is an independent profession and that what nursing is is already known. The purpose of the practice theories was to guide practice and practice research by underscoring that the most pressing need was to describe the outcomes of nursing. In this same vein, Hildegard Peplau (1987) described nursing diagnoses as the problems that nurses fix.

Nursing was the object of study by sociologists in the 1960s and 1970s, who were mostly concerned with describing nursing’s efforts to be recognized as a profession and its relationships with medicine and other health disciplines. Despite nursing’s efforts to describe its uniqueness, both in academia and in hospitals that at the time employed 80% or more of active nurses, sociologists offered little in the way of definition. An exception was Hans Mauksch, a medical sociologist who advanced a somewhat humorous definition of nursing that was largely influenced by hospital nursing. To paraphrase Mauksch (1963), he observed that nursing is the cookie dough that is left over after all of the

other health care disciplines have cut out their cookies. This definition illustrates the difficulty that nursing was having with defining its identity, but it may also have foretold the holism, coordination, case management, and advocacy concepts of nursing that became prominent during the last decade.

Another approach to defining nursing and building nursing theory began with the NANDA efforts to define and classify nursing diagnoses (Gebbie & Lavin, 1975). Nursing diagnoses are concepts that describe the phenomena (human responses) that nurses treat. A decade later, the Nursing Interventions Classification (NIC) research team began work at the University of Iowa. The research team was funded by the National Institutes of Health's National Institute of Nursing Research (NINR) to identify, define, and classify nursing interventions (Iowa Interventions Project, 1992). The NIC interventions describe the actions and strategies that nurses use to treat nursing diagnoses. In 1989, the Nursing Outcomes Classification (NOC) research team, which was also funded by the NINR, developed and defined patient outcomes that are sensitive to nursing interventions, and it constructed and evaluated measurement scales for nurses to use in their practice (Johnson & Maas, 2000). The NOC outcomes describe variable patient, family, or community states, perceptions, or behaviors that are measured on a continuum in response to nursing interventions (Moorhead, Johnson, Maas, & Swanson, 2008). The NIC and NOC research continues through the Center for Nursing Classification and Clinical Effectiveness at the University of Iowa College of Nursing. As the NANDA, NIC, and NOC classifications are implemented in electronic clinical nursing information systems, opportunities for the development of nursing clinical data repositories that can be used to evaluate the effectiveness and cost-effectiveness of nursing interventions will result. Evaluating the effectiveness and cost-effectiveness of nursing interventions to produce desired patient outcomes is the accountability expected of a profession, and it is consistent with the view of practice theorists. Rather than being concerned about the definition of nursing, it is more important to diagnose, treat, and evaluate the outcome effects of interventions with patients while also systematically evaluating the relationships among these core nursing phenomena.

At the same time, the nursing classifications have much significance for defining nursing. Unlike medicine, nursing did not have standardized nomenclatures to define the substance of their practice before the NANDA work. Without standardized terms to label the concepts of nursing phenomena, nursing has been

mostly invisible in health care documentation, especially in electronic systems. The inclusion of standardized terminologies in the electronic health record is increasing the visibility of nursing and its contributions to health care, and it provides the opportunity for clinical data repositories that can be analyzed to determine and evaluate those contributions. In addition to the greater visibility of nursing and its contributions, electronic nursing data aid the development of evidence to support best nursing practices (Maas & Delaney, 2004).

The development and classification of concepts that describe the phenomena that nurses treat (nursing diagnoses), the nursing treatments that are used (nursing interventions), and the effects of the interventions (patient outcomes) is an inductive theory-building strategy. These descriptive concepts, which are labeled with standardized terms, are the building blocks of nursing practice theory. During the early 2000s, the activities of the NANDA, NIC, and NOC alliance produced an initial, unifying taxonomy to advance the development of propositions that linked nursing diagnoses, interventions, and outcome concepts to build middle-range theories and to encourage research to test the theories (Dochterman & Jones, 2003). Blegen and Tripp-Reimer (1997) argued that the classification of nursing diagnoses, interventions, and outcomes should be used to form middle-range nursing theories.

The knowledge or science of a discipline is the result of building and testing theories. There is no better definition of a practice discipline than the science upon which it bases its practice. Rather than debating the issues of definition, nursing will be better served by focusing those energies on its science and on the translation of the science into nursing practice. Armed with science-based nursing practice, nursing will better resist other definitional challenges.

OTHER DEFINITIONAL CHALLENGES

Medicine and nursing challenge advanced practice definitions of nursing. The challenge from medicine is mostly political, whereas the challenge from nursing is mostly philosophical. Both challenges are over economic resources. Physicians resist the encroachment into what they view as their domain of practice and the corresponding economic loss. To reduce the threat of advanced practice nursing, medicine challenges a definition of nursing that includes the diagnosis and treatment of disease and illness. Advanced practice nursing challenges the definition of nursing as the diagnosis and treatment of human responses to actual

or potential health problems. APNs, as primary health care providers, expand the definition of nursing to include the diagnosis and treatment of illnesses, and they expect greater remuneration because of their expanded practice. APNs claim that the primary care they deliver is comparable in quality to that delivered by physicians but more cost-effective. Some question whether advanced practice nursing is within nursing's scope of practice or if it is really delegated medical functions (Bates, 1974; Edmund & Ruth, 1991; Henrick & Appleyard, 1997). Others fear that, as advanced practice expands into the domain of medicine, "nursing" functions will be neglected (Henrick & Appleyard, 1997). It seems logical that, with the appropriate training, nurses' scope of practice should expand, and consumers should then have a choice of providers of primary care. However, this definitional challenge quickly becomes a political and economic challenge.

Other economic and political challenges come from nurse employer and health policy sources. Employers use nurses however it best suits their economic and political interests. Much of what nurses do when there is an ample supply of RNs and when wages are lower is determined to be done as well by less-trained personnel when RNs are in short supply and wages are higher. Nurses are also often complicit in their misuse by employers and fail to understand the implications for how the nursing profession is viewed and defined.

Breaking nursing into activities that can be delegated to less-trained persons risks the fragmentation of nursing care. The most recent illustration of the dangers of a view of nursing as tasks occurred with the reengineering in hospitals that occurred with the advent of managed care. Responding to consultants and seeking to improve their bottom line, hospital administrators split up the work of nurses and assigned certain tasks to ancillary and assisting personnel while reducing the number of RN positions. Soon, enrollments in schools of nursing dropped sharply, job dissatisfaction escalated among the RNs who remained, the bottom line did not improve, and the quality of patient care was markedly eroded (Kovner & Gergen, 1998; Shindul-Rothchild, Berry, & Long-Middleton, 1996). These results focused attention on the quality of care and the relationship of RN staffing to quality outcomes and patient safety (Institute of Medicine, 1996). The same concerns remain today and are exacerbated by a serious RN workforce shortage in both acute and long-term care settings.

The view of nursing as tasks, including the view that RNs mostly perform delegated medical tasks, has been especially detrimental to the quality of care in nursing

homes and other long-term care settings. Few RNs are employed in these settings, because they are seen as mostly being needed for the care of seriously physically ill older adults and for administering hazardous medications. As a result, the assessment and treatment of nursing diagnoses and syndromes (e.g., pain, incontinence, loneliness, depression, behavioral problems) are inconsistent, often not managed and overseen by qualified RNs, and too frequently inconsistent with best practices.

Perhaps the most pervasive influence on how nursing is defined is the experiences that individual clients have with RNs. Individuals whose RNs explicitly describe their role in providing the individual's care will have a better understanding of nursing. What nursing is will be understood if RNs note their identities; provide descriptions of how they will work with individuals to identify, assist, and intervene to meet holistic needs, including safety; and work as care managers, caregivers, and coordinators of care provided by other disciplines and as advocates in the health care system. Further understanding of nursing and its contribution to the health, function, and safety of clients will result if the RN communicates the evidence base for the mutually identified nursing diagnoses to be treated, the nursing interventions to be used to treat the diagnoses, and the desired outcomes that will be monitored and evaluated. It is unfortunate that RN staffing in many settings does not fully enable this relationship of the RN with the client. Rather, the staffing patterns and care delivery models too often promote an emphasis on the completion of tasks rather than on the accountable management of the nursing care of individuals.

SUMMARY

What nursing is or becomes depends on the influence that it is demonstrated to have on clients' outcomes, whether the clients are individuals, families, or communities. Building the science of nursing and translating that science into practice that is shown to benefit society will define nursing and resist challenges to nursing's legitimacy. Broad conceptions of nursing that encompass the client, the client's health, the environment, and the nurse will guide the development of the science. Forming and testing propositions that link the concepts that describe the phenomena that nurses diagnose, the interventions that nurses use, and the outcomes achieved will build the science of nursing. It is the science of nursing and its translation into practice by RNs who enact a purposeful therapeutic nursing

relationship with individual clients that will move definitions from different viewpoints ever closer together.

Advanced practice nursing will likely continue to expand into areas previously claimed by medicine as APN programs and graduates consume and master medical and nursing science. Without the continued development of the science of nursing, the diagnosis and treatment of responses to actual or potential illness or injury, and the translation of research evidence into nursing practice and policy decisions, nursing will continue to be defined by tasks rather than by the outcomes that are achieved. The knowledge that is needed to achieve the outcomes, including making the correct nursing diagnoses and prescribing the most effective nursing treatments, will not be defined, regardless of who performs specific tasks. Rather than being overly preoccupied with defining nursing, nursing's consumers and the profession itself will be better served by an obsession with building and translating the science of nursing. Better questions to ask and answer include the following: What nursing interventions for specific nursing diagnoses are effective for achieving the desired outcomes? How should the RN relate to each client to optimize the contribution of nursing to the client's welfare? How do nurses collaborate most effectively with other disciplines for the delivery of health care? When the appropriate answers to these questions are identified and enacted, public, legal, and discipline perspectives will be less disparate, and what nursing truly is will be more clearly understood by nurses, their interdisciplinary partners, persons receiving health care, and the public.

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Staff Nurses Working in Hospitals: Who Are They, What Do They Do, and What Are Their Challenges?

ELLEN CRAM

Traditionally, people choose to become nurses because they want to care for people who are ill, injured, or unable to care for themselves. Nurses are bright, hardworking, altruistic, and brave, and they are known for their integrity and empathy. For several years, Gallup poll responses have demonstrated that nurses are viewed as ethical and trustworthy. In 2006, more than 60% of respondents rated nurses as the most trusted of all professional groups (USA Today/Gallup Poll, 2006). Nurses must be adaptable, strong, patient, and responsible (Hallin & Danielson, 2007). In addition to being caring and compassionate, nurses are highly skilled, knowledgeable, and versatile. Versatility makes nursing pivotal in health care and creates some of the challenges that nurses face today.

WHO ARE THEY?

Nurses make up the largest health occupational group in the United States. As of 2006, more than 2.9 million licensed nurses lived in the United States; this was an 8% increase as compared with 2000. More than 80% of nurses with current licenses are actively employed in nursing. The majority (1.3 million) of American nurses practice in hospitals. Most nurses are women (94.2%), and the average age is 46.8 years. Forty-two percent of nurses begin their career with an associate degree education; approximately 20% of these nurses go on to complete a baccalaureate degree or higher (U.S. Department of Health and Human Services, 2006). Although diversity is increasing, 77% of nurses working in direct care roles in hospitals identify themselves as Caucasian. The majority of nurses (69%) are married, and most work in urban or suburban hospitals (Buerhaus et al., 2007). Other than an increasing average age and slightly more ethnic diversity, this demographic data has been stable for the last 10 years.

Nurses are a precious resource; there is a shortage of nurses, particularly in hospital practice. As of December 2006, there were 116,000 vacant registered nurse (RN) positions in American hospitals. More than 40% of the hospital leaders surveyed indicated that RN positions were harder to fill in 2006 than during the previous year. Higher vacancies are generally reported in medical-surgical and critical care units (American Hospital Association, 2007). The shortage is projected to increase to a point where there are 36% or 400,000 fewer nurses than are needed by the year 2020 (Lynn, Redman, & Zomordi, 2006; Letvak & Buck, 2008). However, nurses have returned to the workforce, stimulated in part by the recession after September 11, 2001, and the current economic crisis. This employment increase was primarily caused by older RNs returning to work and foreign-born RNs accepting positions in the United States (Buerhaus, 2008).

WHAT DO THEY DO?

Nurses are educated to provide holistic care for people across the age spectrum and in all settings. Nurses interpret information, teach patients, advise, and advocate. Although patient hospital stays have gotten shorter and shorter, the nurse is still the professional who spends the most time with the patient in the hospital. Nurses use that time to learn about and understand the patient's needs. Nurses are intimate parties to extraordinary events in patients' lives. They celebrate when people recover and rejoice with patients when they get good news. When the news is bad, nurses cry with patients and console grieving families. They use their education and experience to develop personalized care plans, carry out interventions, and refine care on the basis of their evaluation of the person's response. Today, nurses are focused on patient outcomes of care and evidence-based

practice. Nurses coordinate the care provided by other health care providers, explain choices to patients, and help people make life transitions.

In addition to caring for individual patients, nurses contribute to the organizations in which they work and to the profession. Nurses serve on committees in their units and more broadly in the organization. Nurses are involved in a wide array of activities, such as evidence-based practice standards development, the education of other professionals and the public, quality improvement, equipment evaluation, and facility design. Nurses advocate for patients, and, to an increasing extent, they are more involved with policy development at the state and national levels.

Most staff nurses want to spend their time in direct contact with patients. However, their roles are expanding; nurses are increasingly taking on tasks that were previously performed by physicians or members of other disciplines. Roles are evolving so that less time is spent providing direct care to patients; more direct care is being delegated to technicians or other assistive personnel. Nurses describe this shift in their work with regret (Pearcey, 2008).

Every four years, the U.S. Department of Health and Human Services conducts a survey of nurses in America. The survey is designed to collect data about nurse characteristics and about the work in which they are engaged. In 2004, staff nurses described their role as providing direct patient care (U.S. Dept of Health and Human Services, 2006). However, some research indicates that staff nurses actually spend less than 44% of their time in direct care activity and that they spend 47% of their time coordinating and documenting care. The remaining small percentage of time is devoted to educating patients and providing emotional support to patients and their family (Kane et al., 2007).

Staff nurses work hard. Most nurses are on their feet, thinking, and dealing with competing demands throughout their shift. They are acutely aware of the needs of the patients and the patients' families. Nurses are accountable for the decisions that they make with regard to patient care, and they are often required to supervise the work of other staff or students. Manual dexterity, physical strength, and endurance are required. Today, more intricate technology is being introduced, and many organizations are implementing electronic records for all care providers, thus adding to an environment that was already in constant change.

On average, nurses care for approximately 6 patients on general adult medical-surgical inpatient units and 1 to 2 patients in intensive care units (ICUs) (Sochalski,

2004; Lynn & Redman, 2006). In addition to the number of patients assigned, the types of tasks that nurses are being asked to do have evolved. Nurses are performing more technical tasks that were once the exclusive domain of physicians. In many settings, more of the basic patient care (e.g., activities of daily living) is currently delegated to assistive personnel (Pearcey, 2008). Patients are also changing. In general, hospitalized patients are older and have more chronic diseases. These patients require increased time from care providers (Clarke, 2007). Obesity is also increasing in the United States across all age-groups, which also increases the time required for nursing care. Nurses have more difficulty moving these patients, they have a tougher time with intravenous insertions, and they find much of the equipment and supplies (e.g., blood pressure cuffs, gowns) to be inadequate for larger patients (Singh et al., 2007; Storfjell, Omoike, & Ohlson, 2008). Health care consumers today have high expectations for customer service, information, and safety, all of which involve investments of nursing time (Clarke, 2007).

Clinical judgment and decision making are major elements of staff nurse work. In an observational study, a nurse on a medical unit was expected to make up to 50 significant clinical judgments during an 8-hour shift (Thompson et al., 2004). Another investigator found that ICU nurses caring for unstable patients are faced with the need to make a decision about clinical care as frequently as every 30 seconds (Bucknall, 2000). Clinical judgment and decision making require a nurse to acquire and integrate information (e.g., patient signs and symptoms), to measure that information against a standard of normal or risk, and to select a course of action. Nurses apply knowledge and experience to manage uncertainty in many situations. Nurses get feedback on the soundness of their decisions by observing patient responses or clinical condition changes. Being able to draw on expert colleagues for consultation improves the quality of clinical judgments and decisions (Thompson et al., 2008).

Four possible scenarios are associated with decision making:

1. The nurse takes action, and the patient was at risk (correct decision).
2. The nurse takes action, but the patient risk did not warrant that action (false alarm).
3. The patient is at risk, and the nurse takes no action or performs an ineffective action (false negative).
4. The patient is not at risk, and the nurse takes no action (true negative).

The process of clinical decision making is contextual and complex. The need for nurses to accurately and promptly recognize and act on clinical conditions of concern is a major component of safe patient care. When deciding whether to call a physician, in addition to determining whether the patient condition is of concern, the nurse makes predictions about the responses of the physician. Prior experiences and access to resources shape a nurse's ability and willingness to act on risk assessments. If the nurse is unsure about the meaning of the clinical cues, he or she may hesitate to intervene. If the nurse has had an experience during which he or she was chastised for calling a physician when the physician felt the notice was unwarranted, the nurse may hesitate to intervene in future situations. The norms on a unit or within a group of nurses may also guide intervention behavior.

A recent study looked at the effects of experience, practice setting, and time pressure on clinical decision making. Nurses working in acute medical-surgical units and ICUs in hospitals in four countries made up the study sample. Each nurse was given 50 clinical scenarios. For each scenario, the nurse was provided with a brief patient history and symptom information. On the basis of the information provided, the nurse was asked whether a physician should be contacted. The time allowed for nurses to indicate their decision varied; some nurses were given ample time, whereas others were rushed to respond to the same questions. Being short of time significantly reduced the nurses' decisions to intervene. Nurses with less than 2 years of experience had the most difficulty making decisions under pressure; this finding was consistent across the four countries. Critical care nurses were less affected by time constraints than were nurses who practiced in other units, but the effect was still not zero. Overall, Australian nurses were less likely to act on clinical cues than were nurses in the United Kingdom, Canada, and the Netherlands (Thompson et al., 2008). Recommendations for future study include the exploration of cultural norms that may help explain the differences as they relate to the country in which the nurses practice.

Staff nurses strongly desire a practice setting in which they feel that they have the ability to produce quality patient care (Schmalenberg & Kramer, 2008). Some specific attributes have been shown to contribute to creating such a practice setting; these attributes are now known as the *essentials of magnetism*. These essentials include working with clinically competent peers, collaborative nurse-physician relationships, clinical autonomy, support for education, adequate staffing,

nurse manager support, control over nursing practice, and patient-centered values in the culture (Kramer & Schmalenberg, 2004). Aiken and colleagues have affirmed and expanded upon this work; their findings demonstrate that staffing levels, nursing education, and the care environment are three major elements that determine a nurse's ability to deliver quality care. These authors also found that patient care is better in nursing environments in which staff report collegial nurse-physician relationships and high nurse manager ability and support. The definition of sufficient staffing extends beyond numbers; it also includes the strong skills and experience of other nurses and an appropriate skill mix (i.e., the proportion of the nursing team that is made up of RNs; Aiken et al., 2008).

WHAT ARE SOME OF THE CHALLENGES THAT STAFF NURSES FACE?

Nurses are educated about how to provide care and compassion for patients and families. As hospital-based employees, nurses are also part of a broader organization. Most hospitals are still hierarchies in which nursing work environments are largely structured and controlled by someone other than the nurses themselves. Sometimes the way things are differs from the way that nurses think things should be. Numerous challenges face bedside nurses; some have been selected for discussion in this chapter.

Work Design

Units in which staff nurses practice often contain inherent systematic obstacles to optimal performance. Nurses can readily identify the things that hinder rather than help them. Nearly 300 ICU staff nurses participated in a study in which they were asked to complete a questionnaire 2.5 hours before the end of their shift. The tool was adapted from the manufacturing industry and included 36 questions about obstacles that the nurse may face. Performance barriers were identified as routine and prevalent. Examples of common obstacles include equipment not being available, having to search for supplies, waiting for medications, delays in test performance, having to search for patient charts or other data, delays in seeing medical orders, interruptions, insufficient space, and time-consuming family members (Gurses & Carayon, 2007). Similar activities were reported in other studies; non-value-added time examples were also given, such as waiting in line to access medication dispensing systems, hunting for supplies, tracking down reports, dealing with equipment that is not

working properly, repeating work, documenting data in multiple places, calling other departments, and looking for other staff to give or receive report (Kane et al., 2007). Particularly on weekend, evening, and night shifts, nurses spend time in unit support functions such as answering the phone, replenishing supplies, checking equipment, and cleaning as a result of limited clerical or other support staff being available during those shifts (Storfjell et al., 2008).

Documentation is an aspect of care that is time consuming and frustrating for many nurses. To comply with internal policies and external regulatory requirements, nurses spend an estimated 23% of work time documenting the care that they provide (Clarke, 2007). More than half of the nurses surveyed indicated that they thought that the amount of time spent documenting in the patient's record was too much. Health care facility documentation expectations and forms are not standardized, which often leaves nurses confused about what needs to be written where or when. When nurses feel rushed, they often leave documentation until they have a break or finish a shift, thus creating concerns about the quality, consistency, and timeliness of documentation (Hallin & Danielson, 2007). Computerizing documentation has improved safety, but it does not necessarily save nurses time. In fact, when new systems are installed, the nursing workload increases and the efficiency decreases, at least temporarily (Sidorov, 2006).

Management decisions also influence the staff nurse work environment in which care is delivered to patients. Some examples of management decisions that affect patient care are the selection of equipment, the physical layout of the unit, the orientation and ongoing education of staff, and the availability of other clinical service resources that affect patient care (e.g., pharmacy, housekeeping, laboratory services). These management decisions can make the work of the bedside nurse either easier or more difficult.

Decisions about technology are particularly important to the daily work of a staff nurse. A study of the influence of technology on the work of staff nurses was conducted (Zuzelo, Gettis, Hansell, & Thomas, 2008), and the authors found positive effects on nurses' practice from technologies that saved time and eliminated wasted effort. Examples included being able to secure supplies without having to manually count stock and having care-related charges captured automatically. Data from monitoring equipment and some computerized documentation were seen as reducing the inadequate or redundant charting of essential information for safe care. Minimally invasive or noninvasive assessment technology (e.g., bladder

scanning, oximetry, blood glucose monitoring) helped nurses recognize patient needs and intervene in a timely way. Nurses appreciate technology that enhances their personal safety, such as lifting equipment, motorized beds and carts, and effective communication devices.

Negative aspects of technology decisions were also identified in this research. One problem that was identified was the use of nonstandardized equipment (e.g., two different types of feeding pumps on the same unit). Failing equipment without sufficient support staff was noted as a major frustration. For example, if a computer crashes and there is no information technician, nurses must document with the use of a paper record until the system is returned to functionality. New technology requires time and education for nurses to become confident and competent with its use; nurses often commented that people use equipment incorrectly because they are not adequately trained. Some new equipment is cumbersome or requires electricity in spaces with limited outlets. These situations create ergonomic issues, such as heavy lifting, tripping hazards, and a crowded work environment. Nurses shared that they are often placed in a position in which they are required to be technology mediators by helping physicians or other staff who do not feel competent with new equipment; this additional responsibility was seen as an unwelcome burden on the nurse (Zuzelo et al., 2008).

Time Pressure and Complexity Compression

The majority of nurses surveyed report that an increased workload has negatively influenced the quality of care that they are able to provide (Lynn & Redman, 2006). Nurses feel that they do not have enough time to get their work done well. They often report a sense of feeling insufficient, which causes them to take shortcuts and to have too little time and too many tasks to do. Nurses often make comments like the following: "Things pile up" and "Something unplanned can happen at any time, you never have any time to plan or just think" (Hallin & Danielson, 2007). Forty percent of the nurses who responded to the U.S. Department of Health and Human Services survey indicated that three or more tasks were often left undone at the end of a shift (U.S. Department of Health and Human Services, 2006). When nurses feel rushed, the first things that do not get done are teaching and providing emotional support for patients and families (Storfjell et al., 2008). Because time is tight, nurses routinely minimize their own needs to do what they can to meet patient needs, so the nurses' basic human needs are often delayed or hurried. Nurses report having less than 15 minutes for a meal

and often being able to go to the bathroom only once during a 12-hour shift (Gunther, 2007).

Closely related to the sense of limited time is the concept of complexity compression. Complexity compression is the expectation that nurses will assume additional, unplanned responsibilities in a compressed timeframe while still conducting their normal responsibilities (Krichbaum et al., 2007). Organizations require nurses to be adaptable and accepting of change with little or no advance warning. Many times multiple changes are launched concurrently, yet normal care is expected to be carried out without the nurse missing a beat. Little or no work time may be added to learn things that will make the change successful, and there is little margin for error. Most new changes have additional documentation requirements that fall to the nurse. A seemingly small thing like a new form to request laboratory work may be one of a myriad of new things; that small thing may be the last straw for a seasoned, expert nurse.

In a study of Minnesota staff nurses, six themes were found to contribute to complexity compression:

1. Personal: Fatigue; needing to be both at home and at work
2. Environmental: Physical facets such as noise and tight spaces; psychosocial elements such as verbal abuse; cultural components such as unit cohesion
3. Practice: Delegation; competing demands; floating; family members of patients; mentoring and supervising of students and new staff
4. Systems: Documentation; staffing; new equipment; regulations or laws; budget constraints that lead to inadequate resources for care; new technology and lack of backup
5. Administration: Lack of skill or understanding on the part of the manager; many changes in leaders and subsequent changes in policy or philosophy
6. Autonomy: No input into changes; ideas not valued

Of these themes, nurses identified the highest percentage of the issues contributing to complexity compression as being in the area of systems and technology (Krichbaum et al., 2007).

Research in other industries indicates that workers who are more than 50 years old have more trouble with complexity compression. As people age, a trend for reduced problem solving, learning, and speed of decision making has been demonstrated (Skirbekk, 2003). The increasing average age of staff nurses raises significant concerns about complexity compression in nursing

work. Strategies to address these issues must be a priority for the future.

Staffing, Scheduling, and Risk

Evidence clearly points to the fact that staffing affects matters of patient safety and nursing satisfaction (Aiken et al., 2002). A number of studies have demonstrated lower morbidity and mortality when nurses are assigned to care for smaller cohorts of patients. As the number of patients assigned to each nurse decreases, the nurses rate the quality of care delivered as being higher, and they note fewer safety problems (Conway et al., 2008; Kane et al., 2007). Ideal staffing provides a match between the nurse's education, skills, and experience and the patient's acuity, personal level of need, and other support. The overall team available to provide care (i.e., the nursing support staff as well as other services, such as laboratory, physical therapy, nutrition, and housekeeping) makes a difference with regard to the number of nurses needed. The perfect nurse-to-patient ratio is unknown, and the best approach for determining ideal staffing levels is also unknown. Some states approach staffing ratios via legislative mandate, whereas others are using acuity models, staffing committees, the judgment of supervisory nurses, or other approaches to make these important decisions that affect the care provided by staff nurses.

Decisions about staffing resources in many hospitals are made on the basis of the average daily census of the unit. In addition to the problems of using the average rather than the peak census, many of these same organizations count the patient census only at midnight. However, this approach does not reflect the nursing work. Some units have a very high bed turnover (i.e., they are high-volatility units). There may be 20 beds on the unit, but, because of the high numbers of admissions, transfers, or discharges, there may be 40 different people in those beds during a 24-hour period. However, the maximum census that could be achieved with the use of the midnight count is 20 patients. When patients are admitted, transferred, or discharged, a sizable amount of nursing time is consumed. Nursing work is much higher on units that have a high level of volatility versus units that have patients with longer lengths of stay. Some organizations are recognizing this workload and are shifting systems for patient activity accounting. Other organizations are taking further steps and affording nurses the control of the flow of admissions (Institute of Medicine, 2004).

Scheduling, floating, and assignment systems make continuity of care a challenge. "Care in nursing demands

continuity of involvement” (Bosco, Ward, & Styles, 2005, p. 217). For inpatient units with an average length of stay of more than 1 day, the continuity of care should be a key consideration. If a nurse cares for the same patient during several shifts, the nurse knows the patient’s history, his or her baseline condition, events that have occurred during the hospital stay, and key concerns. Rather than having to depend on the limited information that nurses exchange during report or that is recorded in the chart, the nurse knows the patient by having spent time getting to know him or her as a person and also has experience in the patient’s personalized care. Higher continuity reduces errors and improves efficiency. Continuity is impeded by some nursing employment and scheduling patterns. Part-time employment may mean that a nurse is on duty only a day or two per week. Sometimes nurses are scheduled to work on sequential days, but their assignments are not based on continuity; these nurses may be assigned to or choose to work with a new cohort of patients during a subsequent shift. Some nurses who work 12-hour shifts prefer to schedule days off between their duty shifts. The term *floating* refers to a nurse being assigned to a unit in which he or she does not normally work to meet an acute staffing need. In this case, the floating nurse does not have the benefit of patient contact continuity from prior shifts, and he or she also has the additional challenge of practicing in an unfamiliar environment and possibly with a patient population whose care needs the nurse does not know well.

The recognition of subtle clinical cues and clear reasoning may be a challenge because staff nurses are tired. Nursing is physically and emotionally demanding work. The need for nursing presence around the clock means that some nurses will be on duty when, physiologically, their bodies should be at rest. Nursing fatigue is a result of working long consecutive hours, irregular or rotating shifts, on-call requirements, and overtime (Trinkoff et al., 2006). Links between longer shifts, fatigue, vigilance, and patient safety have begun to garner attention. In a recent pilot study, investigators found that ICU nurses who worked 12-hour shifts suffered pathologic levels of drowsiness on the job (Surani et al., 2008). More than 40% of nurses’ shifts extend beyond 12 hours, and, after 12 hours, nursing errors and near misses rise significantly (Rogers et al., 2004). Fatigue is correlated with higher levels of error, yet nurses who are fatigued often do not recognize that their judgment is deteriorating (Clarke, 2007; Garrett, 2008).

The Institute of Medicine (2004) recommends that nurses do not work more than 12 hours per day and not

more than 60 hours per week. Some hospital systems, such as the Veterans Administration, have policies that adhere to these guidelines (Janney & Landrigan, 2008). Although a number of states have passed legislation to eliminate mandatory overtime, voluntary overtime remains common practice. Some nurses oppose limitations on the numbers of hours that they schedule themselves to work. They believe that they know their capabilities and that they should be able to earn more by working more. This belief persists despite clear evidence that sleep-deprived people routinely underestimate their level of cognitive impairment (Van Dongen, Maislin, Mullington, & Dinges, 2003).

Competing Roles

Most nurses are married, and many have dependent children. Responsibilities such as the need to stay home with a sick child or the desire to attend children’s school or social activities compete with work for the nurse’s time and attention (Letvak & Buck, 2008). It is predicted that, by the year 2010, the average age of an RN will be more than 50 years. By nature and profession, nurses are caregivers. Many nurses are providing care all day at work and go home to face the challenges of caring for their parents, children, or grandchildren.

Relationship Challenges

Nursing is a team activity that requires cooperation and collaboration. Developing and sustaining relationships with others at work takes time, effort, and skill. The reward for positive working relationships is improved job satisfaction and quality of care. Some of the important relationships that have been shown to matter are nurses’ relationships with patients, peers, assistive personnel, physicians, and immediate supervisors.

Being able to form an effective nurse–patient relationship is central to the job satisfaction of many nurses. The business focus that is prevalent in health care today is perceived by many nurses as interfering with their relationships with patients. With lower financial reimbursement and shorter lengths of stay, nurses feel pressed to move patients quickly through the system rather than getting to know them and personalizing their care (Deppoliti, 2008; Turkel, 2001).

As a nurse enters employment, many hospitals use a preceptor system of orientation. A preceptor is a peer whose role is to help a new nurse learn the unit. The learning involves both the clinical care requirements and the unit social norms. A critical factor in the success of the orientation process is the relationship between the new nurse and his or her preceptor. If the

preceptor and the new nurse get along well, the new nurse is more likely to feel like a part of the team, to feel supported, and to be perceived more positively by other nurses on the unit (Deppoliti, 2008).

Clinically competent peers are essential components of a healthy work environment (American Association of Critical Care Nurses, 2005). Schmalenberg and colleagues (2008) conducted a study of expert staff nurses in eight hospitals. They asked the nurses to rate the level of competence of nursing practice on their unit on a 1-to-10 scale, with 10 being the highest; the rating was 8.7. The authors then wanted to delve into how a nurse knows if a peer is competent. Six domains of performance emerged. In the order of frequency with which each one was mentioned, the domains were as follows: (1) autonomous clinical decision making; (2) prioritizing and multitasking; (3) interpersonal competence; (4) technical skills; (5) knowledge; and (6) quality of patient outcomes.

Supervisory relationships are particularly challenging for many nurses. The majority of hospitals employ nursing assistants or care technicians to help nurses accomplish direct care. The way that the nurse and the assistant work together matters and is in large part dependent on the RN's skillful delegation. In a national survey, the National Council of State Boards of Nursing (2006) found that many new graduates feel unprepared to delegate; most stated delegation-related content and chances to practice delegation were limited in their educational programs. Under-delegation, overdelegation, and communication gaps contribute to frustration with team members as well as to clinical errors (Kalish & Begeny, 2005). Experienced nurses share concerns about their own delegation skills, the training and competency of the assistive personnel, and insufficient time in practice to adequately supervise the skills performed by others (Hansten, 2008). Communication between the RN and the assistant must include a clear description of the work to be done; opportunities for clarification; specific checkpoints to make sure that the RN has full, current information about the tasks that have been performed and the patient response; and feedback to the assistant. Errors rise when there is incomplete direction, a hesitation to provide feedback to the assistant, and inadequate supervision. Many hospitals lack standard expectations and systems to effectively support these processes (Hansten, 2008).

It can be challenging for some nurses to form collegial, mutually respectful relationships with physicians. However, these relationships are important; positive nurse-physician relationships correlate with stronger

nursing job satisfaction and better patient outcomes (Estabrooks et al., 2005). In a recent study, 57% of 900 staff nurses surveyed said that they were satisfied with their relationships with the physicians with whom they worked; this is up from a level of 43% satisfaction reported in a similar survey in 1991 that was conducted by the same author (Sirota, 2008). Still, two thirds of the nurse respondents in this sample felt that physicians do not understand what nurses do; these responses were unchanged from the 1991 response pattern. In a phenomenological study of the experiences of hospital nurses, some respondents talked about frustrations when they could not get a physician to listen to concerns about a patient's condition. Nurses described this behavior as "being blown off" and disrespected. Another challenge was the nurse's role in trying to coordinate care and communication between multiple physicians (Gunther, 2007).

Occupational Health Risks

High injury rates and lost work time reduce nursing hours at the bedside, and fewer nursing hours correlate with negative patient outcomes (Charney & Schirmer, 2007). Nursing can be a dangerous business. Nurses face workplace hazards that can affect their own health and well-being. In a recent study of staff nurses, nearly a quarter of respondents reported a job-related injury during the previous 2 years (Letvak & Buck, 2008). The general categories of hazards that nurses face are communicable disease exposure, musculoskeletal injury, violence, and dangerous substance exposure. Disease exposure may occur because the nurse is in close proximity to and breathing droplets of airborne pathogens (e.g., tuberculosis). Between 600,000 and 800,000 exposures to bloodborne pathogens occur each year while nurses are giving injections, drawing blood, or managing percutaneous infusions (Perry, Parker, & Jagger, 2003). As a result of the lifting, pushing, and pulling that is part of the physical work of taking care of ill and injured patients, nurses are at risk for acute and cumulative musculoskeletal trauma. Thirty-eight percent of nurses have experienced back, neck, and shoulder injuries (Meier, 2001).

Depending on the type of unit in which the nurse practices, other risks may be prevalent. Some nurses have regular contact with radioactive materials or x-ray equipment. In some settings, nurses may regularly administer medications such as chemotherapeutics. Many hospitals use toxic chemicals for cleaning and disinfecting equipment. Exposure to some chemicals or radiation may increase the risk for cancer, birth defects, or genetic mutations.

The National Institute of Occupational Safety and Health (NIOSH) determined that the rate of assaults against health care staff members is eight times higher than that of private sector workers (NIOSH, 2002). Violence in hospitals differs from workplace violence in general, where most violence is associated with robbery. In hospitals, most violence results from patients or family members who feel frustrated, vulnerable, or out of control. Nurses view dealing with disgruntled patients and families as routine, and it is believed that nurses significantly underreport verbal and physical assaults (Ericksen, 2008). Patients with neurological disorders and those with drug, alcohol, or mental health problems may display violent behaviors. Nurses and aides who have the most patient contact are at the highest risk for hospital violence. Risks for violence increase during periods of short staffing, around mealtimes, during visiting hours, and in situations that involve overcrowding or long waits (NIOSH, 2002).

Caring for patients with chronic illnesses and particularly for those patients for whom the hope of recovery is small is extremely challenging. Nurses become invested in a patient's care, and they may grow close to patients' families. Witnessing prolonged suffering depletes a nurse's emotional reserves. In some settings, when a patient dies, there is less than an hour before the nurse is expected to care for another very ill person. The proximity, intensity, and duration of exposure to traumatic emotional events can lead to compassion fatigue. Figley (1995) described compassion fatigue as the result of prolonged exposure to trauma that results in a variety of problematic symptoms that manifest themselves in both the workplace and at home. A nurse may have symptoms such as decreased appetite, nightmares, irritability, withdrawal, increased anxiety, and increased sadness (Munson, 2002). The nurse who experiences compassion fatigue loses his or her ability to provide the same level of compassion and care to patients (Meadors & Lamson, 2008). In a study of 185 pediatric critical care nurses, those who had high levels of personal stress were more likely than their peers with lower personal stress to experience compassion fatigue (Meadors & Lamson, 2008).

WHY CHOOSE HOSPITAL STAFF NURSING?

After reading about all of the challenges that staff nurses face, one may wonder why anyone does this job. The good news is that the evidence is guiding changes to nursing systems. Many organizations are actively investing in improving the work environment to reduce

barriers to optimal practice. Experienced, well-educated nurses in sufficient numbers are recognized as vital to both patient safety and desirable clinical outcomes. Hospitals want and need to recruit and retain nurses. The way that nurses are scheduled, how their time is spent on duty, and the tasks that are assigned to them are being reexamined. Nursing input is being sought for decision making, and investments are being made to foster strong collaborative workplace relationships.

Although nurses talk about things in their work that create stress and strain, they also describe stimulation and satisfaction. In a recent national survey of staff nurses, 80% of respondents said that they would advise a young person to pursue a career in nursing (Buerhaus et al., 2007). Staff nurses respond with statements such as, "There is no other reward like the joy you get when you see someone recover and you know you are part of the reason why." Many nurses get great satisfaction from the fact that they make a meaningful difference in the health and well-being of their patients. There are many gratifying aspects of the professional practice of nursing. Nurses have a chance to use their intelligence, skills, and creativity to solve problems, and there is a rich variety of career options for staff nurses. Opportunities abound to learn new things and to grow professionally. There are practical benefits in that nursing is a portable skill with employment opportunities in every geographic area; nursing jobs are reasonably secure, and nurses earn a competitive salary. Nurses are respected and trusted by the public. Staff nursing is never routine; it is always challenging and very much needed.

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Clinical Nurse Specialists: Education and Practice Issues

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The landscape is changing rapidly for clinical nurse specialists (CNSs) today. Changes are occurring in the education, licensure, certification, accreditation, and practice arenas, and they are happening so rapidly that it is hard to keep up with the various necessary documents and the impact of those documents on the CNS in practice. As these documents are brought into the public forum, there are many discussions, disagreements, and ongoing dialogues that must occur as nursing professionals—specifically CNSs—wrestle with how best to activate and enact the tasks articulated within the documents. The documents detail the changing environment of the CNS and of other advanced practice roles as well. As these discussions continue, there will be many changes on the horizon for all four of the advanced practice roles: CNSs, nurse practitioners, certified registered nurse-midwives, and certified registered nurse anesthetists. The discussions in the national dialogue center around the following documents: the *Consensus Model for Advanced Practice Registered Nurse (APRN) Regulation* (APRN Joint Dialogue Group, 2008), the *Vision of the Future for Clinical Nurse Specialists* (Goudreau et al., 2007), the revised *CNS National Core Competencies Project* (National Association of Clinical Nurse Specialists [NACNS], n.d.), and the pending core certification examination collaboratively prepared by the NACNS and the American Nurses Credentialing Center (ANCC). The question is how these documents and the intended or unintended consequences of their creation will affect the practice of CNSs now and in the future. This chapter explores these documents, their implications for the CNS, and how the positions within them will change the path of the continued development of the CNS role. This chapter identifies the different perspectives that have occurred as a result of the viewpoints presented in the documents and defines the issues that are currently

being addressed by CNSs in practice, by educational programs for preparing CNSs, by those who validate the competencies of CNSs, and by those who regulate CNS practice in an effort to protect the public.

BACKGROUND

The CNS is a traditional role that was created by the nursing profession to support the nurse at the bedside. In simple terms, it is a role that is “of nursing and for nursing.” More than 50 years ago, Hildegard Peplau first identified the CNS role and voiced the need for it in health care. The CNS was envisioned as someone who would provide support for the nursing staff and demonstrate expert knowledge of nursing and nursing care for patients in a psychiatric setting (Spray, 1999).

The role was accepted and recognized for the support and expertise that nurses in this role provided with regard to practice and the care of patients. This focus on the need to support the nursing staff began to move outside of the boundaries of the psychiatric setting and into all specialty areas in which nurses practiced. CNSs moved into the inpatient areas of medical and surgical units and even beyond, into the home care and community health care environments. Today, CNSs can be found in almost every practice setting.

The growth of the role continued until the early 1990s. At that time, the managed care mandate moved into the clinical environment, and the relatively expensive CNS role was seen only as an excessive and unnecessary expense by those who were looking at cost containment. CNSs were unable to articulate the value of their work in terms that the accountants and cost-efficiency experts could understand. For that reason, CNS positions were turned into staff educator roles or staff nurse positions or eliminated in lieu of staff positions so that more patients could be seen with the same number of staff. CNSs were

often pushed to move into different roles. Some moved into the education departments within their institutions only to be downsized again when those departments were also cut. Some retooled themselves by going back to school to become nurse practitioners, which was a new advanced practice nurse role that was gaining popularity at that time. Others moved into the academic environment and became faculty members.

The CNSs who were expert clinicians were forced to move away from their roles in the practice setting, where they were most needed. This shift created a gap in practice that was not recognized until fairly recently. Organizations such as the Institute of Medicine (IOM; 2000) and the Institute for Healthcare Improvement (2004, 2006) identified that there were an inordinate number of preventable errors occurring in health care settings. By removing the expert clinician from the direct care role in support of the nursing staff, many gaps were created, some of which were so great that they were referred to as "chasms" (IOM, 2001, 2004). The gaps in quality and safety created by the departure of the CNS from the clinical environment are a priority to address within health care systems; many personnel are being targeted to resolve the issues that CNSs formerly managed very effectively.

Nurse managers and chief nursing officers who worked with CNSs in the days before managed care have been asking about bringing this role back. In addition, the CNS role is seen as the advanced practice role that provides support to the nursing staff in the ANCC Magnet designation process (Goudreau et al., 2007; Kramer & Schmalenberg, 2003). Although nurse practitioners typically function in the acute care area, their focus is not on the support of the nursing staff but rather it is appropriately focused on the care of their patients. Currently the number of hospitals that are seeking Magnet designation is increasing, and there is a concomitant increase in the number of facilities seeking to place CNSs at the point of care in support of the staff nurse (personal communication, ANCC Magnet Reviewer, October 2008). The facilities that have brought CNSs back into the practice setting are seeing clearly improved outcomes. The increasing demand for the CNS in the clinical environment means that the educational programs that were reduced or eliminated after the managed care mandate are reopening. There is a resurgence in the number of CNSs who are being prepared for the increasingly complex clinical environment. The rebirth of the role requires a thorough reassessment of the process that is used to accredit educational programs and to educate, certify, and license the new practitioners. The new documents that are

fundamental to the resurgence and rebirth of the CNS role include the *Consensus Model for APRN Regulation* (APRN Joint Dialogue Group, 2008), the *Core Competencies for Clinical Nurse Specialists* (n.d.), and the *Vision for the Future of Clinical Nurse Specialists* (Goudreau et al., 2007). The implications of each document will be described in relation to the future of clinical nurse specialists.

The Consensus Model for Advanced Practice Registered Nurse Regulation

Background. The *Consensus Model for APRN Regulation* (the Consensus Model; APRN Joint Dialogue Group, 2008) was created with the use of a 4-year process of discussion and dialogue among representatives from all major advanced practice nursing organizations. The American Nurses Association (ANA) and the American Association of College of Nursing (AACN) convened a group of advanced practice nursing stakeholders in the summer of 2004 to discuss the future of the APRN. The group determined that there needed to be a smaller, more facile group that could convene and discuss the future of all four APRN roles. The goal was to create consistency in the expectations for the foundations of all roles. The APRN Consensus Work Group was created from a number of members that represented the four advanced practice roles: CNSs, nurse practitioners, certified registered nurse-midwives, and certified registered nurse anesthetists. There were also representatives from certification, education, regulation, and administration. In total, there were more than 20 representatives, even in the smaller group. This group met from 2004 to 2006 to develop a consensus model for streamlining and making consistent some of the more difficult issues common to the four roles. Each role has a very different pathway from inception through continuation, thereby making it difficult to untangle the various issues and discuss them in an open and transparent manner. However, the group was nearing the completion of its task in early 2006.

The National Council of State Boards of Nursing (NCSBN) released a draft paper that detailed their vision for the future regulation of APRNs (2006). This vision included statements about CNSs that caused distress to CNSs nationwide: it advocated the elimination of the CNS from the advanced practice role category. The response from numerous CNSs and from national nursing organizations was to voice in letters and position papers an extraordinary level of support for the CNS role to remain as one of the recognized APRN roles. The AACN (2006a) posted a compelling article on their Web site that affirmed the value of the CNS role. The release of the draft vision paper from the

NCSBN (2006) also caused great distress to the APRN Consensus Work Group, because the group included regulators who had not indicated that there would be a separate yet parallel document released.

The release of the NCSBN draft paper clearly identified the need for a serious discussion between the NCSBN APRN Taskforce and the APRN Consensus Work Group so that some agreement could be reached regarding the differences between the two documents. It was through this discussion that the Joint Dialogue Group was created. The Joint Dialogue Group was composed of representatives from all four roles; administration, certification, and education members of the APRN Consensus Work Group; and members of the NCSBN APRN Task Force that created the NCSBN draft vision paper. This combined group was composed of approximately 16 members in total. The group compared the current draft of the consensus document with the draft NCSBN vision paper. The discussion centered on looking at how to reconcile the differences and move forward. Ultimately, the decision was made to blend the two papers into a single document that became the *Consensus Model for APRN Regulation* (APRN Joint Dialogue Group, 2008).

Implications. The implications of this document for CNSs are multiple and far reaching. The Consensus Model outlines some key points for consideration:

1. CNSs are one of the four advanced practice roles.
2. CNS education must respond to the document by preparing the CNS with a foundation in pathophysiology, pharmacology, and health and physical assessment courses (the 3 Ps).
3. The CNS will be certified.
4. The CNS will have a second license to practice as a CNS that is based on the role and population within which the CNS practices.

The affirmation that the CNS is one of the four roles of advanced practice has been a positive aspect of the document. The issue that generated this perspective is one that has been raised in the literature for many years and that arose as a result of an unclear definition of advanced practice. Because of this document, the question of whether the CNS practices at an advanced practice level should be put to rest for the foreseeable future. This component of the paper presents no difficulties or issues for the CNS other than now the CNS can get on with the business of providing services within the three spheres of influence: the patient sphere, the nursing/health care workers sphere, and the systems level sphere, as articulated by the NACNS (2004).

The second issue related to the document is that there needs to be some level of standardization of the

CNS curriculum. The statement that CNSs must be educated with the 3 Ps as a foundation will cause a change in the curricula of many schools of nursing. Although the necessary classes are clearly stated in the *Essentials for Masters Education* (AACN, 1996), many CNS programs elected to not include these courses as part of a foundation of CNS practice. In many instances, there are strong rationales for these decisions (e.g., they are not appropriately focused for community health CNSs); however, it does mean that the CNS curricula have been very different, depending on the interpretation of the faculty and how the role is enacted and understood in different geographic areas. Some faculty will argue that the change will do harm to the role; others will argue that the change will be welcomed and that it will allow regulators and employers alike to know that there is at least a common core foundation to the CNS role and to the expectations of how the role will be operationalized.

The third issue causes difficulty for many CNSs. Certification and all that it entails has been an issue that has not been easily managed within the CNS world. The perspective on certification has shifted over the years from being a validation and recognition of excellence in practice to being a validation of entry-level, minimal competency to practice (Goudreau & Smolenski, 2008). Certification examinations are now used in a manner that they were not initially intended to be used: as a proxy for a licensure examination. In the CNS world, certification examinations were seen as a validation of excellence rather than as an assessment of entry-level competence (NACNS, 2003). The difficulty arose as a result of the fact that there were so few CNSs in some specialty areas that it was impossible to develop an examination that would maintain psychometric soundness, validity, and legal defensibility. The shift from a mark of excellence to one of validation of entry-level competencies means that there are very few CNS certification examinations relative to the number of specialties present. This lack of available examinations makes it very difficult to validate entry into practice with a certification examination. The NACNS has been working in collaboration with the ANCC to develop a core examination that will allow the CNS who is entering practice to take an examination that meets the regulatory model through the inclusion of the foundational 3 Ps, the core competencies of the role, and the across-the-lifespan population focus as described in the Consensus Model (2008, p. 14). This examination will allow those CNSs who do not otherwise have a certification examination available to them to become regulated

as CNSs based on the model. The specialty component that is essential to the CNS role has been separated from the regulatory process, but it can be assessed by the specialty organization in collaboration with NACNS and the ANCC. The process is anticipated to include the submission of a portfolio that demonstrates competency in the specific area of specialization (e.g., emergency nursing, genetics; (Monsen, 2005; Christine Filipovich, personal communication, Chief Executive Officer, NACNS, February 5, 2008). This is clearly a developing area, and it will likely continue to affect CNSs as the Consensus Model is adopted and implemented nationwide.

The fourth issue created by the document results from the fact that a second license will be required for CNSs to be able to practice. It has been the position of the NACNS from the outset that the educational preparation of the CNS should be validation enough that these individuals are capable and able to perform their roles as advanced practice nurses (NACNS, 2004). The ANA (2004) supported that position in all documentation up until the creation of the Consensus Model. This position is no longer held by either organization, as evidenced by the adoption of the Consensus Model. This is both a positive and a negative in that the regulatory environment has changed to the point where the domain of the CNS needs to be protected (NACNS, 2005a). A second license becomes an administrative burden for the sake of regulatory ease. However, it also assists the CNS with the protection of his or her title; other health care providers cannot legally call themselves CNSs without showing appropriate education, background, and credentials.

The Vision of the Future for Clinical Nurse Specialists

Background. As mentioned previously, the NCSBN released its draft regulatory document in February 2006. The NACNS, as the professional organization for all CNSs, regardless of specialty, felt the need to articulate a clear vision of the future for CNSs that would meet the needs of the CNSs in practice and clearly set aside the discussion that CNSs were not APRNs.

Several documents from national organizations were used for the development and refinement of the vision document. The *NACNS Statement on Clinical Nurse Specialist Practice and Education* (NACNS, 2004) and the ANA's *Nursing: Scope and Standards of Practice* (2004) provided foundational concepts. In addition, the concepts in other documents from the ANA—specifically *Nursing's Social Policy Statement* (2003) and the *Scope and Standards*

of Advanced Practice Nursing (1996)—informed the development of this document. Practice issues were examined in the context of recent publications from the IOM (2000, 2001, 2004) and the Institute for Healthcare Improvement (2004, 2006). Within the education portion of the document, the AACN draft document about the proposed clinical doctorate—the Doctor of Nursing Practice (DNP)—was considered (AACN, 2006b), along with discussions that were focused on eliciting the competencies required for clinical practice at the doctoral level for CNSs. Finally, the content that addressed regulation and certification that was found in previous NACNS position statements and white papers was incorporated.

Key issues identified in the *Vision of the Future for Clinical Nurse Specialists* (the Vision Paper) described the future of CNS practice, education, certification, and regulation. By taking into consideration all of the documents available at that time, the Vision Paper provided an interpretation for educators and practitioners in the clinical environment. It identified that the future for CNSs has a rich potential that was focused on the provision of advanced practice nursing care to patients in all health care settings, with attention paid to ensuring that the health care system is safe and that positive patient care outcomes are attained. The Vision Paper identified that CNSs are experts in the synthesis, integration, transformation, and translation of best practices to be incorporated into nursing practice and care. This means that it is primarily the CNS who works to bridge the gap between what is known through research and what is done in the practice setting.

Implications. Each of the areas described in the Vision Paper had some clear implications for CNSs in practice as well as for CNS educators, certifiers, and regulators.

CNS PRACTICE IN THE FUTURE. Clinical expertise in a specialty area has been the hallmark of CNS practice since the role was created (ANA, 2004; NACNS, 2004). Knowledge of practice issues and technology is exploding in health care, which makes a deep understanding of clinical practice and the ability to build and guide the health care environment even more important. A premise that carries implications for the practicing CNS is to look at the three spheres of influence (the patient/client sphere, the nurses/nursing and health care workers sphere, and the system/organizational sphere [NACNS, 2004]) and to assess the clinical quality outcomes associated with each of the three spheres. Measuring the clinical outcomes with regard to each sphere will highlight the role of the CNS's influence on improved health

care. Therefore, the CNS must look to evaluation measures of their influence within the practice environment as indicators of their effectiveness and as a demonstration to the profession that they are valued and valuable. The difficulty is that the evaluation of outcomes and the attachment of those outcomes to the interactions and functions of a specific role are very difficult to ascertain. Very few tools currently exist to aid in this endeavor. Without a focus on the impact of the role in practice and without its clear documentation through research, quality improvement measures, and publication, the CNS role faces the same difficulty that it encountered during the 1990s. An inability to clearly document the value of the role will lead to the downsizing and removal of the CNS from the clinical practice environment in lieu of other roles that can and will demonstrate outcomes for the challenges that are faced today in the clinical environment.

An additional practice area that holds implications for the CNS in practice is prescriptive authority. CNSs in many states now have the option of prescriptive authority (NACNS, 2005b; Randall Hudspeth, personal communication, Member of the Board, NCSBN, February 9, 2009). The trend is continuing, and, with the release of the Consensus Document, the numbers of states offering recognition and prescriptive authority to CNSs will increase. As identified in the Vision Paper, "NACNS defines prescriptive authority broader than the act of writing a prescription and involves determining the far-reaching implications and consequences of prescribing on the patient/client, the nursing staff, the organization and the system" (2007, p. 9).

The IOM (2004) identified that health care in the future will primarily focus on the prevention of disease, the maintenance of function, and the resolution of functional problems. The CNS in practice will integrate theories of health promotion, evidence-based practice, and the best science available to ensure that the patient receives the best care possible. Much of this care will focus on the growing numbers of older adults and the general aging of the population. Competencies will need to be developed for the CNS so that the focus on the aging population and the unique needs of that population can be taken into consideration. All of this work for the CNS will fall into the full three spheres of influence.

A key issue for the CNS in practice within the nursing practice sphere is the implementation, integration, and translation of evidence-based practice into daily practice. Many CNSs are already working to translate research into usable protocols and procedures and to

educate the nursing staff regarding the best evidence of how to practice. CNSs must be the champions of evidence-based practice in their units or work areas. Providing ongoing education for nurses, modeling best practices, and being an expert resource in the unit in support of the nursing staff are essential elements of the CNS role.

The Vision Paper identified that the final sphere of CNS practice—the organization/systems sphere—will likely see the most significant changes. Identifying systems-level issues that need to be addressed, bringing teams together from across disciplines and perhaps even from across systems, and facilitating work on issues and topics that need to be addressed are key skills that CNSs will need in the future. The skill and expertise of the CNS will be used to analyze the effectiveness of programs, the cost-effectiveness and cost benefits of new products, and the implementation of new interventions and programs. The connecting and integrating of systems and microsystems will be a key skill set drawn upon by the system overall to create synergy and ultimately to improve patient care outcomes.

CNS EDUCATION IN THE FUTURE. CNS education has been at the master's or doctoral level from its inception. CNSs are educated in graduate-level programs that prepare them to attain advanced specialty practice competencies. The NACNS developed the first *Statement on Clinical Nurse Specialist Practice and Education* (the Statement) in 1998 and then refined it in 2004. This document provided a consistent and solid platform upon which CNS competencies have been articulated. The competencies and spheres of influence outlined in the Statement have been validated, and they continue to resonate with CNSs who are in practice today (Baldwin, Clark, Fulton, & Mayo, 2009). The Statement was refined again in 2008, and the information that it contains served as a foundation for the revision of the core competencies that was recently completed by the NACNS in collaboration with the American Board of Nursing Specialties and the ANA. The core curricular recommendations from the NACNS include the following:

1. Health policy, the organization and financing of health care, research, health promotion, disease prevention, human diversity, social issues, ethics, professional role development, and theoretical foundations of nursing practice;
2. Advanced physiology and pathophysiology, advanced health and physical assessment, and advanced pharmacology (The caveat that the Vision Paper placed on the core advanced practice

document is that the courses must be relevant to the specialty in which the CNS will be practicing and can therefore be modified. This differs from the final conclusion of the Consensus Model, and it has implications for the education of CNSs well into the future); and

3. Theoretical foundations for CNS practice; the theoretical and empirical knowledge of phenomena of concern that form the basis for the assessment, diagnosis, and treatment of illness and wellness within the CNS specialty; the theoretical and scientific bases for the design and development of innovative nursing interventions and programs of care; clinical inquiry and critical thinking with the use of advanced knowledge; the selection, use, and evaluation of technology, products, and devices; theories of teaching, mentoring, and coaching for use in all three spheres; influencing change; systems thinking with regard to the organizational culture; leadership development for interdisciplinary, cross-disciplinary, and transprofessional collaboration; consultation theory; the measurement of patient outcomes; fiscal outcomes; outcome evaluation methods; evidence-based practice; and the translation of research into practice.

An additional question or key issue that arises when looking to the future educational model for CNSs pertains to questions that are currently arising in APRN discussions, such as the DNP degree being promoted by the AACN. The question becomes what value the DNP lends to the CNS when it contains much of the information that is already included in the master's-level preparation (AACN, 2006b; Goudreau et al., 2007; NACNS, 2004). The NACNS has taken a neutral position on the DNP: it believes that the benefits of the DNP are not clearly articulated and that its unintended consequences have not been fully realized, but it also acknowledges that any amount of additional education is additive to the individual who is seeking that education (NACNS, 2003). The NACNS is also nearing the completion of a set of competencies for the doctoral-level CNS, and it has specifically examined the competencies required at that level of education; this document is expected to be released at a later date (Sue Sendelbach, personal communication, President of NACNS, November 2008).

CNS CERTIFICATION. The third component of the Vision Paper that raises issues for current CNSs is its perspective on certification. The issue of CNS certification was discussed previously with regard to the implications of certification as articulated in the Consensus

Model. This is a continuing issue that will take the collaboration of many organizations to ensure that the CNS is not prevented from practice because of a lack of a certification examination. The issues identified in the Vision Paper are the same as those identified previously: that certification was once a mark of excellence and a formal recognition of expertise. In addition, the document identifies that the certification examination process is now used to validate knowledge and to verify the meeting of regulatory requirements. An unintended consequence of the movement to use certification as a proxy for a licensure examination, however, is that it potentially prevents a current CNS from continuing to practice. To block an existing CNS from practicing because he or she does not meet current standards is a restraint of trade issue that can raise legal issues. To avoid this, it is important to consider the regulatory component and the position that each state board of nursing assumes relative to the issue.

As mentioned previously, the NACNS is currently working with the ANCC to develop a core CNS examination that works in tandem with the Consensus Model and that provides a foundation for recognition as a CNS through certification at a core level. Specialty knowledge is to be demonstrated outside of the realm of regulation; it will be evaluated through a portfolio review by the specialty group in instances in which there is no current examination available. The expectation of the implementation of the ideas put forth in the Vision Paper is that the use of a core examination and a specialty portfolio for certification purposes will allow for the creative development of new and emerging specialties.

CNS REGULATION. The Vision Paper identified the following key issues for the regulation of CNSs:

1. The uniformity of the regulation of CNSs as advanced practice nurses;
2. The congruency between the educational preparation of CNSs, the CNS scope of practice, and the regulatory requirements for CNSs;
3. The fair treatment of the CNSs who are currently in practice and who may not meet the current expectations for entry into practice.

The regulation of practice requires a uniform set of rules to be applied to each group of professionals and to each individual within that group. The intent is to provide protection for the health, safety, and welfare of the public by ensuring that individuals who call themselves by a certain title have in fact met the required qualifications and are at least minimally competent to provide care as practitioners in that role.

In the Vision Paper, there is a discussion of the need for congruency between the educational preparation of the CNS, the scope of practice as an advanced practice nurse, and the regulations that govern the CNS in practice. This refers to the differences that appear in states that involve the education of the CNS; the role that CNSs play in various health systems, which range from an expert clinician to a staff educator; and how CNSs are regulated in many states with regard to only the registered nurse scope rather than the advanced practice scope. The differences need to be resolved and some level of consistency needs to be attained and maintained within and among various states.

The third issue of fair treatment for CNSs who are currently in practice refers to the recognition of the good service that is being provided by CNSs who may not meet expectations that are articulated in the regulatory world of today. There is a greater understanding today of the implications of the standardization of expectations, such as the number of clinical hours in an educational program and curricular content. Unfortunately, there is also a lack of vision on many parts when the CNSs of the past who are still practicing in a safe and effective manner are held up to scrutiny under newly revised standards or regulations and are found to be lacking. The potential exclusion of these CNSs is shortsighted on the part of regulators and needs to be addressed based on the principles of patient safety and quality of care. If CNSs are not practicing their roles in such a manner as to raise issues of public safety and if they are providing quality care, then there should always be a grandfather clause invoked to maintain the licensure of these CNSs to allow them to continue to practice.

The Vision Paper further described three key issues for CNSs and for the regulation of the role:

1. CNSs need title protection.
2. Regulation should be at the role level and not at the specialty level.
3. Competency should be determined by the completion of an accredited graduate-level program that prepares the individual as a CNS.

The first two of these three ideas were later supported by the statements of the Consensus Model, but the third item was not. Perhaps this will become a larger issue but as the NACNS and the ANCC are developing the core examination; with a focus across the lifespan, this issue too may be resolved. Discussion of the benefits of graduate preparation as compared with certification as a proxy for licensure will continue for many years as the educators and regulators determine who

will prevail. It is clearly something that will be worked out in each and every state when determining the role or implementation of the Consensus Model.

The Core Competencies for Clinical Nurse Specialists

Background. The NACNS undertook the task of creating a set of validated core competencies in response to the process outlined by the Consensus Model. This was done with the support and facilitation of the process by members of the American Board of Nursing Specialties and the ANA. The perception from other advanced practice roles was that the document that outlined the core competencies (the *Statement on Practice and Education* [NACNS, 2004]) had not been through a complete validation process by all CNS stakeholders; therefore, the competencies it listed were determined to not have been nationally vetted. The process used incorporated the competencies as outlined in the statement and added components from other groups as its conceptual framework. These additional elements included elements of the synergy model from the AACN, the three spheres of influence from NACNS, and the CNS sub-roles as articulated by Hamric, Spross, and Hanson (2008).

Implications. This document is in the final stages of validation, and it is being endorsed by a wide variety of organizations with a stake in the CNS role. After it has been fully validated and endorsed, it is expected that these competencies will be published by NACNS as one element of the newest revision of the statement. These newly vetted competencies will be recognized by many as the foundational competencies for education, practice, certification, and, ultimately, licensure. The fact that they have been developed collaboratively and bring together into a single document the three competing frameworks that have existed in CNS practice for many years will mean that there will potentially be consistency in education and in practice expectations for CNSs nationwide. This will allow for increased standardization and subsequent consistency in the expectations of the CNS role across the country. However, only the future will tell if this does in fact come to pass.

Core Certification Examination

Background. The final document that has been created in response to the issue of certification as a proxy for licensure examinations is the core certification examination. The examination is being collaboratively prepared by the NACNS and the ANCC in response to the need identified within the Consensus Model.

Implications. As mentioned previously, there are positive and negative aspects to the creation of this examination. The discussion of those issues is left to the reader as you consider the changes to the discipline that moved the NACNS in the direction of the creation of the examination.

SUMMARY

The CNS role has undergone some energetic swings in popularity as it has developed and grown. The upturn in the role when it was first created, which was followed by a downturn in the 1990s, is now being met with another upturn. It is up to CNSs everywhere to clearly articulate their worth and to address some of the issues that have arisen. Some key documents have raised the awareness of the CNS role, but they have also pointed out some areas that CNS educators, accreditors, licensers, and certifiers need to address. There are clearly gaps in the health care system that the CNS is well poised to address (IOM, 2000, 2001, 2004), but there are many discussions and vigorous dialogues that need to occur to ensure the strong future of the CNS role. CNSs are uniquely prepared to pull together transprofessional teams for purposes of collaboration, to be the agent of change, to integrate evidence-based practice into care provided at the bedside, and to move toward positive patient/client outcomes. It is CNSs who are needed to ensure patient safety and quality now and into the future. However, CNSs can only meet these expectations with the recognition of their practice, the acknowledgement of the educational standards that they must meet, their certification for purposes of licensure and as a mark of excellence, and, most importantly, title protection and a defined and unique scope of practice that ensures that the public has access to appropriately trained and qualified CNSs.

The recent release of a number of documents that set the path for CNSs in collaboration with other advanced practice roles raises a number of issues that CNSs need to address. Those documents and the issues that they raise will create a significant dialogue in the CNS world. This dialogue and the subsequent outcomes are welcomed as the CNS world works to clean up the currently messy house that has evolved over the years. The recently released documents (Goudreau et al., 2007; APRN Joint Dialogue Group, 2008) are key to the future of CNSs; they will guide the process of the change and realignment of the role as it becomes poised for the future. The future is bright for CNSs as the role is again recognized

and valued for the extraordinary contributions that it brings to the health care environment. CNSs will continue to expand into various health care environments and to focus on quality, safety, and patient/client outcomes in all settings well into the future.

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Nurse Practitioners: Taking Their Place in the Health Care Arena

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In the rapidly changing health care environment, nurse practitioners (NPs) continue to strive to carve out their niche. From their humble beginnings more than 40 years ago, NPs have fought their way up the health care ladder and will continue to do so until they are accepted as independent health care providers. The journey has been long and hard, with numerous changes on both the state and national levels. The many efforts of NPs at the grassroots level have led to a groundswell, and the forward momentum is growing. Most changes are positive, such as improved prescribing abilities and the elimination of collaborative agreements. However, just as NPs are pushing for an increased scope of practice, there continues to be pushback from physicians. It seems that an increase in the scope of practice privileges for NPs correlates with an escalation of resistance to NP practice by physicians. There is light on the horizon, however. Recently, several physician organizations have acknowledged the role of NPs in primary care as a result of the worsening shortage of primary care physicians. This is exciting and hopefully a glimpse of a not-too-distant future in which NPs are welcomed into the practice arena.

The growth of the NP profession has not been without growing pains. The diversity in practice and the increased specialization of NPs is both a blessing and a curse. An example is the advancement of specialty practices, which led to the development of multiple new NP organizations on both the state and national levels. Although the development of professional organizations is important, small organizations with low membership can make it difficult to effectively create change. Currently, several national organizations exist that represent the majority of NPs. Two of the most well-known national organizations are the American Academy of Nurse Practitioners (AANP) and the American College of Nurse Practitioners (ACNP). These organizations represent large memberships from both individual NPs

and state NP groups. The membership of these organizations is mostly primary care NPs, but it does include NPs from all specialties. The AANP and the ACNP focus on several areas, including education and health policy. National specialty organizations include the National Conference of Gerontological Nurse Practitioners, the National Association of Pediatric Nurse Practitioners, the National Association of Nurse Practitioners in Women's Health and the National Organization of Nurse Practitioner Faculties.

In many ways, having multiple groups has been a hindrance to advocating for health policy legislation. Each group has its own agenda, and this may at times be counterproductive to the professional growth of NPs. This behavior is also noted on a state level, because many states have multiple NP organizations. The development of the multiple state organizations may be driven by specialty practices. Larger states may have several smaller state NP groups as a result of the geographical and travel constraints. Some state organizations have identified the need for collaboration on legislative issues. Several states with multiple NP organizations have developed a common legislative committee with members from each NP group and even share a common lobbyist. The results of these groups working together on legislation have been effective and hopefully will provide some cohesiveness within individual states. There is still a great deal of progress that needs to occur in the NP profession to develop a productive working relationship among organizations. It is essential for this type of collaboration to occur to secure the continued growth of the profession.

HISTORY

The first NP program was developed in 1965 by Loretta Ford and Henry Silver. It was based on the nursing model with emphasis on health promotion, growth and development, and disease prevention in children. The

primary care physician shortage contributed to the dissemination of the NP role to other parts of the country. Initially, there was a great deal of resistance from physicians, federal agencies, and the academic nursing community; however, the need for affordable and accessible health care sustained the movement (McGivern, Sullivan-Marx, & Menzy, 2003). Since that time, the NP role has evolved and expanded into multiple specialties, partially driven by the needs of the consumer and the health care system (Table 4-1).

WHAT IS A NURSE PRACTITIONER?

NPs are registered nurses who have received advanced nursing education. Most NPs have a master's degree of science in nursing or a doctorate of nursing practice. NPs are licensed independent practitioners who practice as primary or specialty care providers in a variety of settings, including ambulatory, acute, and long-term care. They focus on health promotion, disease prevention, health education, and counseling (AANP, 2007a).

NPs practice focuses on a combination of both nursing and medical domains. The nursing domain examines the entire scope of the illness, including considerations of the impact of the disease process on the patient and the patient's family. NPs evaluate how well the patient or the family is coping with the illness, how the illness has affected the patient's ability to work and provide for the family, or if the patient is homeless and living in a shelter. The medical domain involves the diagnosis and treatment of disease. As nurses move through the educational process to become NPs, they build on the nursing framework, adding advance diagnostic and critical-thinking skills (Chase, 2004).

SCOPE

Making definitive statements about the many facets of NP practice is difficult. The scope of practice, education, and regulation continue to change as a result of health care policy and the needs of the population. At this point in time, health care policy is very fluid.

TABLE 4-1 Nurse Practitioner Specialties

Specialty/Certification	Subspecialties	Practice Settings
Acute	Hospitalist	Hospitals Surgery department
Adult	Oncology Hospitalist	Internal medicine department Hospitals
Mental health	Adult psychiatric and mental health Family psychiatric and mental health	Ambulatory clinics Hospitals Schools
Family	Primary care Emergency Hospitalist Cardiology Dermatology Gastroenterology Urology	Ambulatory clinics Urgent care clinics Emergency departments Hospitals Schools Nurse-managed centers
Gerontology		Clinics Nursing homes Senior centers
Pediatric	Pediatric acute care	Clinics Hospitals School-based health centers
Neonatal		Hospitals
Women's health		Clinics Hospitals

Source: NP Central. (2006). *Nurse practitioner FAQ or "how to become a nurse practitioner."* Retrieved January 5, 2009, from <http://www.npcentral.net/consumer/npfaq.shtml>.

National legislators are evaluating multiple ways to deal with the growing health care crisis in the United States. The ranks of the uninsured and the unemployed grow daily. That being said, the scope of practice is best defined by the AANP. The NP diagnoses and manages episodic acute and chronic illness; this includes ordering and interpreting diagnostic and laboratory tests as well as performing procedures and conducting tests. The NP also develops a plan of care in cooperation with the patient and the patient's family and prescribes pharmacologic and nonpharmacologic therapies (AANP, 2007b). The NP is also accountable for health care outcomes. This is accomplished by maintaining certification, evaluating clinical outcomes, obtaining ongoing continuing education, and maintaining clinical skills. Another role of the NP is to conduct clinical and community research and to translate the findings into clinical practice.

The scope of NP practice is regulated by each state. NP regulations are administered by the board of nursing in most states. The board of medicine and board of nursing jointly regulate NPs in a seven states, and two states have separate advanced practice boards (AANP, 2008). Some NPs practice independently, whereas others have a requirement for collaborative practice with a physician. Prescriptive privileges vary across the nation, and, in many states, they mirror the freedom or restriction of the NP practice, with several states still restricting the prescribing of scheduled drugs by the NP. There are currently more than 147,295 NPs nationally, and approximately 6,000 individuals graduate from NP programs annually (AANP, 2007a).

The appeal of NPs to the public continues to grow as more patients have NPs as their primary care providers and recommend NPs to friends and family. Many feel that it is the patient care aspect of nursing that attracts patients to NPs. NPs are credited with consistently providing high-quality care. During the past 10 years, an increasing number of studies have demonstrated positive patient outcomes and patient satisfaction when NP care was compared with that of physicians. Patients report that NPs spend more time with them and seek patient collaboration in the plan of care. Quality of care and patient satisfaction are also reflected in low malpractice rates. The Pearson Report (Pearson, 2009) compared malpractice rates between NPs and physicians. The overall national occurrence rate of malpractice and adverse actions (i.e., licensure actions, civil judgments and other negative actions) showed that that 1 in 173 NPs had been involved in an action during the previous year as compared with 1 in 4 physicians.

EDUCATION

A master's degree is the current entry-level degree required to practice for NPs, with the plan to transition to the Doctorate of Nursing Practice (DNP) as the entry-level degree in the year 2015. The development of the DNP as the terminal degree for NPs has been surrounded by controversy. In 2002, the National Organization of NP Faculty began the discussion regarding the DNP on the basis of two issues. The first issue was the gradual increase in the credit hour requirements for master's programs. The second issue was the movement of other clinical disciplines to the professional doctorate degree, particularly the PharmD. At the time, most of the doctoral degrees available for nursing were focused on research or education rather than clinical practice. Those who are currently certified NPs with a master's degree will not be required to seek further education.

The American Association of Colleges of Nursing (AACN) position statement on the DNP was released in October 2004. It called for educating advanced practice nurses—including NPs—at the doctorate level with a non-research clinical doctorate. Health care disciplines such as pharmacy and medicine require a professional doctorate as the entry-level education for practice. The DNP would provide parity with these other professions so that nursing would be considered an equal partner in health care discussions. Another key driver for the DNP degree was the increasingly complex health care needs of individuals living in the United States, along with concerns about national health care quality. Finally, the shortage of doctorally prepared faculty required to educate future nurses was a factor. Since 2003, only 411 doctorally prepared nurses have graduated. This small number of replacements, as compared with the aging of the current doctorally prepared nurses, will lead to a severe shortage within the next 10 years (AACN, 2008).

The DNP essentials were developed by the AACN in cooperation with multiple advance practice nursing constituents to guide the development of DNP programs. The essentials ensure that the focus of the DNP curriculum remains clinical and that it includes content regarding health policy, systems leadership, clinical prevention, and population health outcomes. Currently, there are 84 DNP programs in the United States, with approximately 50 more in development. The goal of DNP preparation is to revitalize the core of advanced practice; it is not intended to just add on to existing MSN programs. DNP candidates are encouraged to think outside of the box with regard to existing NP functions. The capstone project of the program is similar to

a doctoral thesis. Many of the projects are pilot studies or community programs that expand or redesign current practice or treatments. The DNP degree is designed to prepare creative transformational practitioners to fill the gaps in existing health care programs on the individual, community, and national levels.

ISSUES

Although many physician organizations continue to establish barriers for NP practice, the American College of Physicians (ACP) recently released a position statement that consisted of four primary statements regarding NPs in primary care. The purpose of the paper was to promote a framework for primary care physicians, NPs, and other health care professionals to meet the health care needs of the country. Position one of the executive summary acknowledged that, although physicians and NPs have different educational preparations, they share a common commitment to providing high-quality health care. Position two of the executive summary defined collaboration as an important part of interdisciplinary care for both individuals and populations. Emphasis was placed on the role of respect for each professional's knowledge, skills, and contributions. The ACP also commented on recommendations for sufficient reimbursement for the coordination of care between NPs and physicians. The third position statement opposed the use of the U.S. Medical Licensing Exam and certification by the National Board of Medical Examiners for DNP graduates. Position four discussed the NPs role in the patient-centered medical home model. The ACP called for the inclusion of NPs in the evaluation of the effectiveness of the model (ACP, 2009).

By contrast, the National Board of Medical Examiners (NBME), in collaboration with the Council for Advancement of Comprehensive Care, developed a certification examination for graduates from DNP programs. The test was developed to ensure that the DNP graduates possess the knowledge and cognitive skills to practice. The NBME defends its position for developing the test by saying that the organization's mission is to protect the public by assessing health professionals. The test has been met with a great deal of controversy by national NP organizations, because the content of the test demonstrates that the NBME does not truly understand the education and role of the DNP. Certification examinations that were written by NPs and regulated by accreditation bodies already exist for entry into NP practice. Most states require the successful completion of the certification examination for licensure.

Titling for the DNP has also been a controversial issue. The American Medical Association (AMA) passed a resolution in April 2008 that resolved that only physicians licensed to practice medicine, dentists, and podiatrists should be allowed to use the title "Doctor." The AMA's intent was to protect the title and to exclude DNPs and other health care providers who did not meet the AMA's definition of the title "Doctor" from using the term professionally (AMA House of Delegates, 2008). Several states reported legislative or regulatory activity that attempted to restrict DNPs from using the title of "Doctor" (Phillips, 2009). Seven of the national nurse practitioner organizations made a unified statement regarding the DNP and titling. The document promoted the use of the title of "Doctor" for doctorally prepared NPs for several reasons: the use of the title would promote parity within the health care system; "Doctor" is not a protected title, and no single discipline owns it; and, in the health care system, the term "Doctor" is not limited to medical doctors but also refers to dentists, podiatrists, and psychologists, among others (Nurse Practitioner Roundtable, 2008b).

REGULATION

The rapid growth and changes in health policy and the growing needs of the population have driven legislative and regulatory changes in NP practice during the past several years. The controversies that surround independent practice and prescribing privileges are the most prominent issues. Many of the regulations that govern NPs are not based on evidence but merely establish a barrier to practice that contributes to problems with health care access and that prevents competent providers from caring for patients (Lugo, O'Grady, Hodnicki, & Hanson, 2007). Although some changes have been positive, others have the potential to impede the NP's scope of practice. A discussion of some of the changes follows.

In Alabama, the board of medical examiners passed a regulation that assesses the physician a fee for each NP with which he or she collaborates. Missouri, Arizona, New Jersey, Oregon, Rhode Island, and Washington had improvements in their statutes or regulations that affect prescriptive privileges. Iowa passed legislation that allows psychiatric NPs to sign court committal documents. Maine, New Hampshire, and Washington passed similar mental health legislation, thereby increasing the scope of practice of psychiatric NPs (Phillips, 2009).

From the NP perspective, collaboration in and of itself is not the issue. NPs have been collaborating with

physicians since the inception of the NP role. Rather, the problem lies with legislative or forced collaboration, which, in combination with a lack of physician understanding of the NP role, can lead to conflict. The lack of respect of physicians for NPs has been another barrier to effective communication, and physician demands for monetary compensation to sign collaborative agreements is under fire by many state legislators (Clarín, 2007). The nursing model lends itself to a collaborative or team approach, and NPs who practice independently collaborate much like their physician counterparts. When a patient has a specialized health problem, the NP consults with and refers the patient to a specialist (who may be an MD or an NP) and then incorporates the specialist's recommendations into the plan of care. This model of collaborative care—with a primary care provider coordinating the patient's physical and emotional health along with the social and economic factors that affect the patient's care (otherwise known as the *nursing model*)—is the heart of the medical home legislation.

HEALTH POLICY

NPs must be cognizant and observant of both state and national legislation that can affect their ability to practice. The introduction of new legislation by a senator or house representative may be done with the best of intentions, yet that same legislation can dramatically affect the ability of the NP to practice. In recent years and partly as a result of support from national NP organizations, there have been improvements in both the understanding of and participation in legislation by NPs.

The medical home bill is a good example of harmful legislation. By using the term *physician* instead of *health care provider*, NPs are excluded from participating in the medical home demonstration project. The history of the medical home actually began in 1967, when the American Academy of Pediatrics introduced the concept to provide a central location for maintaining the health care records of children with special needs. The American Academy of Pediatrics expanded on this concept in 2002 by including the medical records of all children. The physician primary care organizations adapted this to adults in 2007, with the concept of a patient-centered medical home. The two pieces of legislation that mandated the medical home—the Tax Relief and Health Care Act of 2006 and the Medical Homes Act of 2007—are both written to include only physicians in demonstration projects. Since that time, there has been support for adding NPs to the legislation. The

Medicare Payment Advisory Commission issued a report in support of provider-neutral language, and the Senate Finance Committee supported a technical revision to the medical home legislation that would add NPs to the bill; the support for inclusion has been entered into the Congressional Record. Several states are currently passing legislation regarding medical home demonstration projects, and Iowa and Minnesota both have included NPs in their legislation (Duderstadt, 2008). Hopefully the actions taken by these state legislations will provide an incentive to change to provider-neutral language in future national legislation.

This need for constant vigilance has promoted some NPs to be leaders in their states and to organize legislative committees within state NP organizations. State NP organizations have legislative days where they meet at the state capital, discuss impending legislation, and visit their representatives. The 2008 American Academy of NP's National Conference was held in Maryland where more than 3000 NPs from 50 states spent an afternoon on Capitol Hill educating the legislators about the importance of NPs. It is extremely important as the next generation of NPs prepare to begin practice that they are educated with regard to the importance of being legislatively active. The future of the profession depends on the next generation of NPs monitoring and actively participating in legislation that affects health policy.

REIMBURSEMENT

Reimbursement issues plague NP practices and are a barrier to many NP providers. Regulations that promote improved reimbursement are not frequently seen. In 2008, Oklahoma enacted legislation that required insurance companies who reimburse for behavioral or mental health services to reimburse master's prepared providers, including NPs. Colorado also passed legislation regarding direct reimbursement to NPs for services provided (Phillips, 2009). The formation of a multistate reimbursement alliance is one model that may be a solution for the lack of recognition from third-party payers. The first alliance started in 2005, when state NP associations in Ohio and Michigan established a relationship to seek solutions for issues with a third-party payer in their region. The alliance developed educational materials that documented the cost-effectiveness of NP and nurse-midwife services as well as the quality of care outcomes. The alliance invited nine surrounding states to join to improve bargaining power. As a group, this alliance has been able to resolve issues with

Medicaid programs, and it has become credentialed on some health maintenance organization panels (McMurtrie, 2008). This is another example of NPs learning to mobilize their resources to promote change. Nationally, NP organizations continue to monitor reimbursement legislation that may positively or negatively affect NP practice. Legislative changes are disseminated to the NP members, who advocate necessary changes with state and national legislators using the mantra of “gentle persuasion applied relentlessly.”

PRACTICE

Primary Care

The Institute of Medicine defines primary care as follows:

...the provision of *integrated, accessible healthcare services* by *clinicians* who are accountable for addressing a large majority or personal health care *needs*, developing a *sustained* partnership with patients and practicing in the context of *family and community* (Donaldson, Yordy, & Vanselow, 1994, p. 16).

Primary care is also focused on ambulatory and community-based care. Its components include health maintenance, screening, and the management of acute and chronic illness. The primary health care provider establishes a relationship with the patient that is continuous across the lifespan and focused on the patient's health care needs. The NP as a primary health care provider provides comprehensive and coordinated care as well as the maintenance of continuity for patients. Through health and self-care education, the NP assists patients with managing their illnesses and, if possible, improving their health status (Mauksch, 1981). Since the creation of the NP role, NPs have focused on primary care, with approximately 80% of NPs in the United States providing primary care (Nurse Practitioner Roundtable, 2009). According to Medicare data, the number of NPs has grown faster than the number of primary care physicians (Medicare Payment Advisory Commission, 2008).

The role of NPs in primary care is very much tied to the management of chronic illnesses, which continue to rise in the United States. In 2005, 133 million people had at least one chronic illness, and 63 million had multiple chronic illnesses. The number of individuals with a chronic illness is projected to increase to 157 million by 2020. There is a high prevalence of chronic illness among individuals living below the federal poverty level, and this population is often served by NPs.

One of the potential solutions is the prevention of chronic disease (Bodenheimer, Chen, & Bennett, 2009). Obesity in the United States is increasing. Statistics show that, in 2007, only Colorado had a prevalence of obesity less than 20%, whereas the prevalence of obesity in most of the other states was more than 25% of the population. Obesity is defined as a body mass index of 30 or more. This continued rise in obesity can be linked to the earlier development of chronic diseases such as diabetes and hypertension; all three of these conditions are more frequently seen in the lower-income population (Duderstadt, 2008). These statistics reinforce the need for NP involvement in primary care, especially in the areas of health prevention and wellness education.

Specialization

One of the newest and rapidly growing NP roles is that of hospital medicine. Traditionally, physicians have held this hospital-based practice, with approximately 20,000 hospitalist physicians in practice today. Increased numbers of inpatient admissions and decreased numbers of physicians have led hospitals to consider adding NPs to the hospitalist team. Although the role is in its infancy, it appears to be successful. Acute care NPs report that they like the autonomy of working in the hospitalist setting. Studies report quality of care that is equal to that of physicians and decreased mortality rates when NP hospitalists are used. The responsibilities of NPs in this role include ordering and reviewing laboratory and diagnostic tests, attending team meetings, and managing medications. The nursing background provides the NP hospitalist with the ability to excel at patient care coordination. NPs have a unique knowledge of community resources and an understanding of the role of family involvement in patient care; this combination promotes individualized patient-centered hospital care. Most hospitalist NPs are certified as acute care NPs; however, adult, pediatric, and family certified NPs also function in this role (Ford, 2009).

Vulnerable Populations

From the beginning, NPs have placed an emphasis in their practice on health disparities and vulnerable populations by trying to provide a safety net for individuals who would otherwise not receive health care. NPs have traditionally provided health care to populations and in settings that have limited services. In addition to serving the underserved, community NPs also provide cost-effective treatment to their patients. The patients receive primary and mental health care services with an emphasis on health promotion and disease prevention.

An emphasis is also placed on cultural, family, and community issues (Luthy, Peterson, & Wilkinson, 2008).

Nurse-managed health care centers are one venue in which NPs have been able to provide medical care for patients. These centers are usually associated with academic programs that serve a dual purpose: education and service. Students at different levels of education programs from various health care disciplines participate at the clinics. Studies regarding the quality of care indicate that patients are extremely satisfied with their care. Patients report they were treated with respect and felt valued as people (Pohl et al., 2007). Evidence shows that nurse-managed centers improve health promotion, preventive services, and treatment plan adherence and that they reduce emergency room visits and hospitalizations. There are currently 250 nurse-managed centers in the United States; however, many are at risk for closing. They are currently not eligible for federal funding, and third-party reimbursement is paid at a lower level than that paid to physician providers (Coddington & Sands, 2008). In the current financial climate, with an increasing number of uninsured patients, nurse-managed clinics may be a possible solution to the already burdened health care system. For nurse-managed clinics to continue to provide services, policy changes need to occur to improve reimbursement from third-party payers and to provide federal funding opportunities.

Rural and frontier communities are also locations in which NPs frequently care for vulnerable populations. In many of the rural states, there is a higher number of NPs working in rural and sparsely populated areas. NPs are critical to the provision of primary and mental health care to underserved rural areas and small communities; they have been providing primary health care in rural areas for many years. This shortage of providers will probably worsen with the decreasing number of primary care physicians on the horizon (Brown, Hart, & Burman, 2009). NPs are a good match for rural health care because of the cost-effective quality care that they provide. These NPs work longer hours and see more clients than their urban counterparts. The rural NP has an expanded and more autonomous role, with more responsibilities. NPs generally practice in rural clinics and have hospital admitting privileges. They also take call and provide emergency room coverage, including trauma care, at critical access hospitals (Casey, Wholey, & Moscovice, 2008).

There is also a large disparity in rural areas with regard to mental health care. Although the incidence of mental illness in rural areas is comparable to that of urban areas, psychiatric services are severely limited in

rural areas. Some patients may have to travel more than 100 miles for psychiatric outpatient care and even further for hospitalization. Although some family practice providers treat mild to moderate depression, patients with more severe psychiatric needs may be undertreated or not receive treatment until a crisis occurs. Data indicate that psychiatric NPs are more likely to live in rural areas than psychiatrists, and they have great potential to fill the gap in rural health care; however, barriers to practice, including scope and prescriptive privileges, need to be addressed (Hanrahan & Hartley, 2008). Many rural states are evaluating methods such as grant funding and loan forgiveness to increase their numbers of mental health NPs available.

INTERNATIONAL NURSE PRACTITIONERS

The NP role has grown internationally, and NPs can be found in approximately 35 countries. Many of the same driving forces that led to the development of the NP role in the United States (e.g., provider shortages, economic factors, increased need for chronic disease management) are present in other countries as well (Hoppel, 2009). These needs are compounded in many countries by poverty and natural disasters. This has increased the opportunities for NPs to provide services to vulnerable populations in urban, rural, and isolated areas. Health care planners are beginning to realize that NPs are part of the solution to the growing global health care crisis (Schober, 2008). The NP role was founded in the United Kingdom more than 20 years ago. Much like the United States, the United Kingdom was experiencing primary care shortages as a result of a declining workforce of family physicians. This trend has continued, and it is the basis for the U.K. government's evaluation of existing health care programs and potential expansion of NP roles (Bonsall & Cheater, 2008).

A complicating factor of the NP role as it develops globally is the methods that are used to establish the role within each country. Prescribing privileges, educational programs, title confusion, and scopes of practice are unclear, thereby making it difficult for programs to succeed. The educational preparation and regulation varies widely among countries, thus making it difficult for an NP to cross international borders to practice.

Many of the barriers to practice in international countries mirror those of the United States, especially during the early years of NP practice (Schober, 2007). One of the most prominent issues is physician attitudes toward the NP role in primary care. Australia, Canada,

New Zealand, and the United Kingdom are the leaders in international NP roles, but they still report that they struggle with negative physician attitudes. The cause of these attitudes has been attributed to a lack of knowledge of the role of NPs as well as NP scope and education. A great deal of physician education and relationship building need to occur to establish collegial and collaborative relationships between physicians and NPs on an international level; this is an absolute necessity so that the NP role can progress globally (Elsom, Happell, & Manias, 2009).

The International NP/Advanced Practice Nursing Network was founded during the early 1990s, when the first group of qualified NPs from the United Kingdom was invited to attend an NP conference in the United States. At the first conference, the NPs met with representatives from the AANP and the University of Colorado. The group agreed to work together to provide a method to share information and experience on an international level. The International Council of Nurses, in cooperation with the International NP/Advanced Practice Nursing Network, developed the following definition to promote the global understanding and future development of the NP role:

A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master's degree is recommended for entry level (International Council of Nurses, 2009, p. 2).

The formation of an international NP organization opens the door for the exchange of information and experience. The NPs in the United States have both an opportunity and an obligation to reach out globally to support the growth of the profession.

SUMMARY

NPs today have grown far beyond their beginnings, yet, in some ways, the role has not changed. Modern NPs are champions for vulnerable and at-risk populations, just as they did years ago. There are currently approximately 35 nurse-managed clinics in the United States, most of which have an academic association. These clinics speak to the fact that NPs continue to address the health care needs of populations who are unable to access more traditional health care venues. Academic nursing centers are not the only nurse-managed clinics: many entrepreneur NPs have started their own private

practices, most of which are primary care clinics. The NP owners have had to navigate through many reimbursement and regulatory issues to establish their practices. As the NP movement continues to grow, NP group practices may become as common as private physician group practices. That type of practice would be an innovative model to increase access to primary care while providing wellness and health maintenance across the lifespan. NP specialization continues to grow and expand, and NPs have proven their value in specialized care. Patient satisfaction and quality outcomes have been the most prominent drivers of NPs providing care in specialized environments. In rural health, NPs have found a valuable niche. Although some NPs provide care in rural health clinics, others staff the emergency departments of critical access hospitals. Administrators in these small hospitals find NPs to be cost-effective and competent care providers for their communities.

The current health care and political environment is in extreme flux. The term *health care reform* is on the lips of national and state legislators, with new bills and resolutions being formulated almost on a daily basis. Now more than ever is the time for NPs to join forces and begin speaking with one powerful voice. Recently, several leading NP organizations have banded together on topics such as health care reform and titling. The AANP, the ACNP, National Association of Pediatric Nurse Practitioners, and the National Organization of Nurse Practitioner Faculties are the leaders of this new united front. The leaders of these organizations have seen the importance of banding together not only to support legislation but also to refute the numerous affronts by the medical community.

Where do NPs go from here? In 1997, Loretta Ford reflected on 30 years of NP practice and the sociopolitical changes that influenced the growth of the NP profession. According to her, "The deviant of yesteryear has indeed come of age" (Ford, 1997, p. 91). This probably seemed true at that time, and, when looking at the NP of today, one may make the same comment. However, the reality is that the NP of yesteryear has more than come of age: modern NPs have surpassed the previous incarnations of the role, but they continue to be on an uphill climb. There are still barriers to overcome, but the NPs of today are not content to wait for legislative and regulatory changes to occur. Instead, they are advocating for changes, establishing relationships, and gaining the respect of legislators, always keeping their eyes on the growth of the profession and their focus on the patient.

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Nurse Executives: Critical Thinking for Rapid Change

SUEELLEN PINKERTON ◆ ROSE RIVERS

This chapter outlines the challenges that nurse executives face in rapidly changing and shifting health care environments and in professional nursing practice. The purposes are to provide a basis for continued discussion, to stimulate readers to reflect on and think through the issues, and to motivate nurses to seek further information and dialogue.

The title of nurse executive is most often used by vice presidents of nursing, chief nurses of health care systems, and deans of colleges of nursing. However, in this chapter, the focus is on nurses who fill the roles of vice president of nursing or chief nursing officer (CNO) in acute care facilities, hospitals, or systems. All nurse executives may find the content to be of interest, depending on the scope of their practice and the type of line or staff authority that they have within their role.

NURSE EXECUTIVES: FACING RAPID CHANGE

Because the role of CNOs is broad, the preparation to become a CNO must be correspondingly broad. CNOs are concerned with exceeding expectations for providing quality patient care: meeting all regulatory requirements, with a heightened focus on patient safety; maximizing the competency and professional satisfaction of the nursing staff; meeting the cost-effectiveness goals of the organization; maintaining relationships across the organization, the system, the community, and the profession; and participating in short- and long-range strategic planning. As the lead professional nurse and designated spokesperson for nursing in the organization or system, the CNO is concerned with the governance and advancement of professional nursing practice and with contributing to the development and advancement of nursing knowledge. In addition, the CNO serves as a liaison with the board of nursing to

promote public safety; for example, the CNO ensures that necessary systems are in place to identify and manage impaired nurses, if needed.

CNOs are clinical and business leaders in the organization. They know how to coordinate care as well as the cost of such care. They contribute to the growth of the organization, and they affect patient outcomes. Nurses have often assumed responsibility for areas and departments other than nursing because of the breadth of their experience and knowledge. In addition, it is not unusual to see nurses accept positions such as chief operating officer, chief executive officer, and human resource officer. Because of their knowledge and experience with coordinating care in the hospital 24 hours a day and 7 days a week, nurses are prepared to step into many different operational roles within an organization. Given this breadth of potential responsibilities, should nursing administration programs in schools of nursing offer courses or develop joint courses with other schools (e.g., schools of business administration) that help to prepare nurse executives for leadership in other departments? Is it limiting to the careers of CNOs to have the courses in a master's program focus primarily on nursing?

Many rules and regulations in health care affect and enhance nursing and the CNO role. For example, some advertisements for CNO positions require that candidates have experience with a Magnet-designated facility; this is a result of the positive impact that Magnet designation has had for many health care facilities. The eligibility criteria for Magnet-designated facilities list the educational requirements of the CNO and describe their expected impact within the organization. For example, at the time of application for Magnet designation, the CNO must have a master's degree, and either their master's degree or baccalaureate degree must be in nursing (American Nurses Credentialing Center, 2008).

The Magnet application manual (American Nurses Credentialing Center, 2008) also lists the need for organizations to be in compliance with the practices recommended in the National Patient Safety Goals (Joint Commission, 2007) which include things such as improving the effectiveness of communication among caregivers, ensuring the safe administration of medications and the safe use of infusion pumps, and reducing the risk of surgical fires.

As part of their business role, nurse executives expect to be included in the planning, development, and decision making of the governing body of the organization. Participation at the highest organizational level provides the CNO with an opportunity to influence organizational planning and outcomes, to communicate relevant information to the staff, and to ensure adequate preparation for new services. However, nurse executives are commonly excluded from business activities, despite the fact that they are expected to support the services by providing competent nursing staff and, in some instances, leading the implementation. Nurse executives who are consistently excluded from such decision making and yet held accountable for nursing and patient-related outcomes eventually must confront the chief executive officer (CEO) or president with a rationale for inclusion. If a satisfactory resolution is not reached, the CNO must decide whether he or she is in an organization or system that actually values nursing contributions or if he or she is supporting a system that uses these tactics as a subtle devaluation of nursing participation and contributions. A CNO who stays in such an organization may miss an opportunity to develop business skills, which may mean restricting job mobility. The recently published Magnet application manual gives examples of organizational outcomes, including "Chief nursing officer input in system-level change" (American Nurses Credentialing Center, 2008, p. 4). Supporting evidence must be supplied that demonstrates this involvement at the highest level of the organization, including "copies of the most recent annual reports and quality and strategic plans for the organization and nursing services" (p. 19). "The CNO must be strategically positioned within the organization to effectively influence other executive stakeholders, including the board of directors/trustees. Strategic positioning is imperative to achieving the level of influence required to lead others both operationally and during periods of change management due to internal or external factors" (p. 24).

This is an example of how an organization—in this case, the American Nurses Credentialing Center—is

helping to set the standards for the CNO and for the responsibilities inherent in the CNO's role. This seems to be supportive to role development, especially in the aforementioned case, but is it where this influence on the responsibilities of the CNO should reside? What if there are standards and criteria that do not make sense for mainstream CNOs? How do CNOs influence the Magnet Commission if they are not a part of the Magnet application process? Does this situation limit the impact that a CNO has on the standards being developed for her or his job? These are questions that need to be answered by CNOs as they refine their roles.

Another area of rapid change in nursing administration is related to the nursing shortage. The current shortage is predicted to have long-lasting effects because there are so many forces that are increasing the demand for nurses as the supply diminishes. The economic downturn of 2008 had an impact on the nursing shortage by appearing to diminish it in some geographical areas of the United States. However, this is in part tied to patients not seeking elective procedures because they have lost health insurance coverage. It is expected that, when the economy improves, the nursing shortage will still exist.

Forces that have repeatedly been mentioned in the literature include the following:

1. Population growth, especially among those who are more than 100 years old, who require more care as they age because of the increased onset of illnesses and diseases;
2. An increase in chronic illnesses that require more caregivers; and
3. Advances in technology that require more skilled caregivers (nurses) to operate the technology and provide the complex care required as a result of the implementation of such technology (e.g., transplants).

The decreasing supply of nurses is a result of the following:

1. A preference by women, who have traditionally made up the majority of nurses, for careers such as law, pharmacy, and medicine;
2. A decrease of nursing faculty that has resulted in limitations being put on nursing school enrollments;
3. A decline in the growth of wages for nurses; and
4. The aging of the registered nurse workforce.

How should CNOs address the nursing shortage? Should they look for more responsibilities to carve out of nursing? Should they try to take the issue to the policy level? The Robert Wood Johnson Executive Nurse Fellows Program brochure states that the purpose of

the program is to be “an advanced leadership program for nurses in senior executive roles in health services, public health and nursing education who aspire to help lead and shape the U.S. health care system” (The Robert Wood Johnson Foundation, 2008, p. 3). This is one way that CNOs can learn how to influence policy and try to affect funding for research, training, and recruitment. Should CNOs contribute to the political action committee of the American Hospital Association to support candidates for public office or to the political action committee of the American Nurses Association, which often supports opposing candidates? What is the impact of CNOs choosing not to be members of the American Nurses Association because the Association supports collective bargaining groups that are often in opposition with CNOs during negotiations?

Should CNOs rely on national media campaigns, such as the Johnson & Johnson media campaign, to eventually change the image of nursing—especially the negative images related to long hours, hard work (both mental and physical), and shift work? Will younger generations be driven by altruism to enter nursing, or will they remain true to their age group by seeking jobs that give them more freedom to pursue personal interests? Will loyalty to self be more important than loyalty to an organization, with the latter being a hallmark of the generation of nurses who are retiring?

Can the American Organization of Nurse Executives rally support for the nursing profession? Where is nursing leadership making an impact on factors that can address the nursing shortage? How should such efforts be organized? Which professional organization should nurse executives support? Are the nursing profession and its leadership still functioning as an oppressed group? Susan Roberts (1983), in her classic article “Oppressed Group Behavior: Implications for Nursing,” purports that dominant groups, which in hospitals are hospital administrators (CEOs) and physicians, control and influence outcomes for subordinate groups such as nurses. The way to move groups out of the oppressed status is through deliberate and active nursing leadership, which brings us back to the question of current leaders and future leadership by nurse executives. Are CNO leaders supported? Is CNO leadership united? Are we educating nurses as future leaders and future nurse executives? What is the CNO’s role in succession planning?

Nurse Executives: Critical Thinking

Embedded within the challenge of the nursing shortage, in addition to the challenge of leadership, are the challenges of relationships with hospital CEOs and

physicians. Just how much can a nurse executive learn during his or her interview for a position? What critical thinking skills are necessary to assess a position and the relationships that support the position? Can the nurse executive applicant get a sense of the support for nursing that the CEO demonstrates to the hospital board of directors? Does this really say anything about the CEO’s support of nursing in the daily operations of the organization? Is there a balance of discussions about financial and quality issues at the board of directors meetings? Does quality, when discussed, mean only medical care, or does it include nursing care? Should the CNO be a voting member of the board of directors? Should this be negotiated before hire? What issues should a CNO consider as part of his or her decision to leave?

As the nurse leader in the organization, each nurse executive must have a “line” that he or she will not cross. If that line is crossed, the nurse executive will seemingly have no choice but to resign. However, what if the CNO leaving creates a worse situation for nursing staff and patients than remaining does for the nurse executive? Is the “line of no return” related to variance in staffing? Will the nursing shortage create situations that are intolerable for CNOs? Will compassion fatigue (Figley, 2003) be a factor that affects the CNO’s ability to care for the caregivers? Can the CNO use the nursing shortage for some leverage? Is the “line” related to a continual devaluation of nursing? Is it related to sexual harassment? Is it related to substance abuse by the CEO? Where does the nurse executive find colleagues with whom to discuss such situations?

The other embedded relationships in the organization that are important to nursing are the relationships with physicians. What does it mean when a CNO addresses a group of physicians who will not return eye contact? Do physicians really want collaborative relationships with nurses? What are the generational differences among physicians that affect relationships with nursing? How much support should the CNO expect from the CEO for the creation of productive nurse-physician relationships? How strong should the relationship between the CNO and the physician chief of staff be to demonstrate that there is a collaborative relationship between nursing and the physician staff?

SUMMARY

For all of the issues put forward in this chapter, nursing leadership by the CNO is key, especially when the outlined situations occur in hospitals. However, the structures of hospitals and the nursing profession are

complex. Where does the CNO begin? Does it matter if a CNO focuses only on the hospital organization to promote change? Will CNO leadership in one hospital somehow affect another hospital? Should a CNO focus on creating excellence in his or her own hospital to attract and retain nurses and not worry about other hospitals? Are CNOs willing and able to “manage” other CNOs? Should the CNO stop worrying about the direction and future of the nursing profession and essentially becoming isolated in his or her own environment? If not, how will CNOs connect as a profession to ensure the continued development of nurse leaders and CNOs? Is there an organizational disadvantage to the CNO who has the responsibility of personal professional development that other leaders in operations do not have?

Will the spirit that nurses have always had be a central rallying point? Will the government, through policy development, help promote the continued growth of nursing? How should CNOs be involved? There is plenty to do, but how will CNOs get organized to do it? How will CNOs get it all done?

CASE STUDY

Ann Mason has been a vice president for 14 years. This is her second position as CNO; she was very successful in her first position, but she left it to take up the challenge of being a CNO in an academic health center with a college of nursing.

In her current role as CNO, she is seen as a team player, and she has had responsibility for departments other than nursing. The nursing staff is unionized, but the union has not been very active until just recently. Ann is very loyal to nursing. Actually, she is passionate about nursing. She has a PhD in nursing, and she is anxious to work in partnership with the college of nursing on research and knowledge generation.

In her daily operations, Dr. Mason holds individuals accountable for their actions. She has been successful in putting a shared governance model in place, and she recently extended the model from nursing to include all hospital departments.

Dr. Mason has a productive relationship with the medical staff. She is respected for her knowledge and actions. The quality of care is considered by physicians to be excellent. Ann is responsible to physicians, including them in decision making and working with them in collaborative partnerships. As part of the shared governance model, she established physician–nurse committees.

One week ago, Dr. Mason was told to make some budget cuts that she thinks would affect nursing practice at the bedside. She thinks the cuts into her budget are too deep. Nonclinical vice presidents take a linear or oversimplified approach to address budget cut implications for nursing. They challenge Ann to divide the work among lesser-paid employees to achieve cost savings. Ann thinks that their suggestions do not take into account the complexities involved in delivering quality patient care.

Staff nurse reactions are starting to reach Dr. Mason. She thinks that the staff feels she might be selling them out to a form of work redesign. How can Ann address staff nurse concerns? How can she communicate the principles that are driving her decision making? Her communication through the nurse managers is strained at this point because of their fear and what seems to be immobility and paralysis on their part. How can she gain the support and leadership of the nurse managers?

What should Ann lose sleep over? What evaluation criteria should she use to determine her effectiveness as CNO? Ann wonders if she has a colleague with whom she can discuss these issues. Because she does not have a colleague in the institution, should she discuss her situation with a colleague at the local or national level? As Ann ponders the situation, she suddenly remembers the whimsical idea that CNOs often entertain in tough situations: is it time for me to leave and open my own boutique?

Should Ann leave or stay? Why? If she stays, what should her plan be for convincing her counterparts in administration that the expected cuts will affect quality care? What elements can she use to make her points in a counterproposal (Kritek, 2002)? If her request for reconsideration is denied, should she rally the staff nurses and physicians?

How will she deal with the gap between staff nurses and the CNO? How can she diminish the filtering of information from the staff and managers? How can she convince the staff nurses that she is not the enemy? What are the short- and long-term implications of involving other people in the response to the request for budget cuts? Will it be seen as the CNO and her allies against the CEO and administration?

If Ann gets a positive response to her request, how will she work with the administration to keep them updated about the needs of nursing at the bedside? Does she risk stepping over the hospital’s “loyalty line” in favor of the nursing profession? As a CNO, how does she keep all of this in balance?

Ann is all too aware of the potential human and business effects of a senior leader leaving an organization. If she decides to leave, what are some likely scenarios for the future of the staff nurses and for patient care? How will the change in nursing leadership affect nursing options? Will it make any difference if she leaves? Does a decision to leave reflect self-interest? How will she know if she is staying because she is afraid to leave? How can Ann ensure that she is playing to win instead of playing not to lose? Has she had all of the crucial conversations necessary to make a decision? How can Dr. Mason get a good estimate of her own power in the organization?

Ann's situation is typical of the challenges that many CNOs face in rapidly changing health care environments and professional nursing practice; these situations are fraught with reimbursement issues, staffing shortages, increasing external regulations, and the expanding scope of CNOs. CNOs must possess highly developed critical-thinking and negotiation skills to thrive in rapidly changing, volatile health care

environments. Are CNOs adequately prepared to practice in such environments? Where do CNOs learn the necessary critical-thinking skills to manage in these rapidly changing environments?

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The Nurse as Chief Executive Officer

NANCY A. FORMELLA

The focus of this chapter is on the role of chief executive officer (CEO), which is a role that nurses may aspire to achieve. The CEO role holds mystique for many. This chapter discusses the work required of a CEO, including a summary of the main categories of the CEO's daily work. There are many challenges that face any CEO, some of which are unique to a CEO in health care. These challenges will be explained with a reference to the nursing background that can be drawn upon by nurse CEOs to help address these challenges. Finally, several case study questions will be posed for the reader's reflection and further exploration of the role of CEO.

HEALTH CARE CEO OVERVIEW

Although relatively few nurses currently hold the title of CEO, the number is growing, and the interest in the role continues to expand. It is worthwhile to understand the statistics that surround the cohort of nurses that serve in this role. Understanding exactly how many nurses are CEOs in health care is a challenging statistic to uncover. Because data are not reported specifically by background for each CEO, the answer to the question can be narrowed by understanding that 92% to 95% of all registered nurses in the United States are women (McDougall, 2009). There are many types of health care organizations, such as home care institutions, ambulatory surgery centers, and hospitals, to name just a few. Understanding how many female CEOs there are in hospitals and knowing how many are nurses narrows the answer to the question and provides a general understanding of how many health care CEOs are women. In 2007, the American Hospital Association (AHA) reported that there were 6450 hospitals in the United States; 92% (N = 5934) are members of the AHA. Of those 5934 AHA hospitals, 932 (about 16%) had female CEOs at the helm. Sixty-six of those 932 women were nurses, which is equal to 7%

(McDougall, 2009). Therefore, it would be a realistic interpolation to estimate that less than 10% of all health care CEOs are nurses.

Most CEO positions in health care require an academic degree beyond the bachelor's degree. The most frequently required degree is a master's degree in a health care field. However, there are a variety of degrees that fulfill this requirement. Some examples of appropriate graduate degrees are a Master's in Healthcare Administration, a Master's of Science in Nursing or a related field, and a Master's of Business Administration. Each organization differs in its requirements, and there is no singular academic pathway to the role of CEO. Attaining the basic academic credentials required is imperative but not sufficient; it is also necessary that the CEO have the appropriate leadership experience. There are many pathways to achieving this goal. Some health care CEOs have experience in traditional graduate programs in which they serve in an internship as a stepping stone to a beginning leadership role. Others have experience in a health care field such as nursing and move to the CEO role from that base. Others have no health care experience but have business experience that they then apply to their health care leadership roles. In general, the pathway to the CEO role includes an appropriate academic background coupled with a robust track record of experience to prepare the CEO for the expected scope, depth, and range of functions of the role.

The American College of Healthcare Executives (ACHE) has compared the career attainments of male and female health care executives. This organization conducts a similar study every 5 years, with the most recent being carried out in 2006 and coordinated by researchers from the Department of Health Policy and Management of the University of Kansas. Questionnaires were sought from ACHE affiliates. There were 837 respondents, with an overall response rate of 52% (ACHE, 2006).

The most recent study found that 12% of women and 19% of men who completed the study had achieved CEO

status. Women appear to have moved up the organization into their CEO positions more frequently than men, who came to the CEO position from outside of the organization. Fifty-six percent of the women in the study had previous experience as clinicians as compared with 31% of men. More women than men began their health care experience as a department head or a staff member in a department within a health care organization as compared with men, who began their health care experience as a vice president or higher.

ROLE DIMENSIONS OF THE HEALTH CARE CEO

The CEO role is complex, but what exactly is the work of the CEO? Very simply and very clearly, the work of the CEO is leadership. Although charisma is often touted as a key ingredient of excellent leadership, the essence of leadership is really performance and the moving of human capital in an organization to ever-higher levels of performance. As simple as this may sound, it is not. To be effective, leaders must “have the ability to get the right things done” (Drucker, p. 204). Drucker describes four key elements of a leader’s effectiveness. First, setting, understanding, and defining the organization’s mission are critically important. Setting clear goals and defining what is to be accomplished are parts of setting this direction. The second element of leadership effectiveness is that leaders must “see leadership as a responsibility rather than as rank and privilege” (Drucker, 2001, p. 270). The effective leader understands that he or she is ultimately responsible and yet also sees that the only way to attain effectiveness is with the help of others. The final ingredient of effectiveness is the leader’s ability to generate and garner trust. To be trustworthy is to have integrity. Drucker says that to be consistent in these elements is to be an effective leader and that leaders, no matter how well educated or intuitive, can only learn how to lead from experience. However, experience need not be measured in years. Each situation that an individual on a leadership learning track encounters can be an opportunity for deepening the understanding of leadership.

Underlying CEO effectiveness is a base of leadership competence. How does one achieve leadership competence, and how can it be described? Jim Collins uses a hierarchy to illustrate leadership competence (Collins, 2001). This hierarchy is not dependent on the role held by an individual in the organization; there are CEOs who function at the lowest level of the hierarchy just as there are frontline workers who function at the peak of

the hierarchy. The effectiveness of the individual is somewhat dependent on the setting and the situation; however, it is most definitely linked to the individual’s capabilities and level of effectiveness rather than to a position within an organization.

The first level of Collins’ hierarchy is the highly capable individual. Organizations are filled with many highly capable individuals who make excellent contributions to the workplace and who work more or less on their own. Moving to the next level (Level 2) requires them to be contributing team members. Most nurses are highly effective contributing team members. They learn how to work in groups in which varying roles and functions are coordinated to work toward a specific outcome. Some then move to the next level of functioning, which is that of the competent manager (Level 3). Competent managers know how to organize resources and people in pursuit of a common objective. A competent manager can be someone who is in charge of a shift or an entire department. Some CEOs function well as competent managers and do not move beyond that level. The fourth level of competence in Collins’s hierarchy is the effective leader. This level calls for the ability to create a compelling vision and to mobilize the workforce toward that vision; this in turn stimulates higher performance standards. The director or vice president who motivates an entire unit toward a goal is functioning as an effective leader. The highest level (Level 5) of Collins’ hierarchy of leadership function is that of the executive. According to Collins, an individual who is functioning at this level “builds enduring greatness through a paradoxical blend of personal humility and professional will” (2001, p. 20).

There are significant barriers to overcome when developing and continuing to develop the base of competence that is required to be a CEO. Achieving the title and appointment to the role in no way guarantees success in the role. There are three significant barriers that each CEO must understand and overcome to be effective: managing time, being part of a system, and understanding complex adaptive systems. First, it is extremely difficult for CEOs to dictate how they will spend their time. This may seem counterintuitive to the belief that the CEO can dictate any manner of things, the most basic of which would seem to be their own time management. In essence, the CEO role requires being responsive to a variety of needs of the organization and doing what needs to be done (as compared with doing what might be the most interesting to do). In other words, the CEO must constantly be scanning the work of the organization and

making adjustments to that work. Managing one's daily time in the light of this overarching responsiveness role is a significant challenge.

Second, many executives get caught up in the activity of the organization and do not take action to change the reality in which they work. Because organizations are so complex, deciding how and what to change is no small matter. There may be longstanding traditions or habits that would take a great deal of skill and energy to change for the organization to move to a higher level of effectiveness. Some CEOs contribute more to sustaining the status quo than they do to achieving the changes necessary to support organizational growth. Cultures in organizations pull strongly toward the maintenance of the status quo; overcoming this barrier is a complex body of work. If the CEO allows the current activities of the organization to dictate how time is spent, opportunities for change and growth will be missed.

Third, just being a member of the organization is a constant push toward being ineffective. The CEO is inside the system and therefore is part of the system. Understanding how complex systems work and how work inside the systems is influenced is a core requirement of leadership competence. The CEO must understand how the work gets done, and he or she needs to develop the skill of standing "above" the work to see it more clearly. To neglect this complex task has the CEO drawn up into the general activity of the organization and serves to sustain the status quo. It is important that the CEO understand how organizations work and how to influence people within the organization. In addition, the CEO must understand how complex systems function and be able to navigate this landscape as well (Drucker, 2001, pp. 197-198).

How do CEOs spend their time? In very general terms, the categories of time can be described as governance, operations, strategy (including organizational development), external commitments, and personal formation. It is impossible to segment every minute of every day into these categories, and there is overlap among them. However, Figure 6-1 provides a general breakdown of how CEOs spend their time, with 20% being spent on governance work, 20% on operations and internal work, 25% on strategy, 20% on external commitments, and 15% on personal formation.

Governance is defined as the time that the CEO spends on matters that have to do with trustees and with the governance of the organization. The vast majority of health care organizations are not-for-profit organizations, and, as such, they are bound by law to have a majority of board members who are indepen-

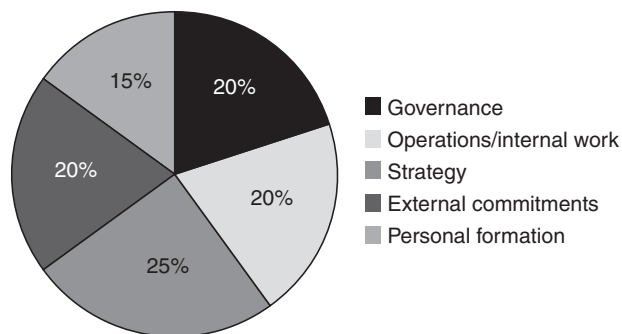


FIGURE 6-1 The work of the CEO.

dent from the organization or unpaid volunteers. Activities in this category include cultivating and selecting appropriate trustees, orienting them to the organization, preparing for trustee and board meetings, participating in these meetings, and completing the follow up required after these meetings. The CEO reports to the board, and the chair of the board is the direct supervisor of the CEO. Developing and sustaining an effective working relationship with the board chair is extremely important. Having the CEO and the board chair working effectively together is necessary for the board and the organization to run smoothly (Totten & Orlikoff, 2007).

Activities in the category of internal work include selecting and managing individuals who report directly to the CEO (e.g., the chief operating officer, the chief financial officer, the chief nursing officer), conducting meetings, setting goals, writing and reviewing documents, problem solving, and building physician relationships. In essence, anything that helps the organization run effectively on a daily basis would be found in this domain of activity.

Strategy is an extremely important section of the CEOs work, and, as such, it is the area in which the most time should be spent. Strategy work includes planning, setting the long-term agenda, and understanding the gap analysis that faces the organization and that must be overcome to move the organization from where it is currently to meet the long-term expectations. Rapid changes in health care financing, policy, and regulations make this a very important part of the CEO role.

External commitments can comprise more or less than 20% of the CEO's time, depending on the state of internal, governance, and strategic affairs of the organization. Included in this section are philanthropy, representing the organization at various functions and meetings, relating with community leaders, sitting on boards

of other organizations, and attending local, regional, and national events to represent the organization.

Lastly, at least 15% of the CEO's time should be spent in personal formation or personal mastery. Senge defines personal mastery as "the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience and of seeing reality objectively" (1990, p. 7). The methods that can be used to focus on personal formation vary greatly and range from personal improvement to continuous learning to activities that renew and refresh the leader. This category is most often shirked by the CEO, but this can seriously compromise the effectiveness of the individual. CEOs need to guard time to work on this domain; they must recognize that, although it is tempting to encroach on this time first, it in fact is the time that should be the most protected.

CHALLENGES TO THE HEALTH CARE CEO ROLE

There are three key challenges to any CEO in health care today: the status of health of the United States population, the perception of health care by the American people, and the state of the health care workforce in the United States. In addition, there is a unique challenge to the CEO who comes to the role with a nursing background. This challenge is balanced by some unique advantages, and it has to do with balancing the understanding of the organization's core business by virtue of having studied nursing with the potential organizational expectations that somehow nursing will be positively affected by a CEO who is a nurse.

The health of the population of the United States is approaching a level of crisis. It has been reported that 67% of Americans are currently overweight or obese. Twenty-seven percent of Americans have high blood pressure, and 96% of citizens of the United States do not eat the recommended amounts of fruits and vegetables. Equally troubling is that 40% of the population does not get enough exercise. These unhealthy habits are being passed on to society's children, and, for the first time in history, members of the younger generation may have shorter life expectancies than the generation that came before them (Park, 2008).

Americans are at a crisis point both as a result of their collective low levels of wellness and because of how they view and experience the health care system. The lack of affordability and accessibility to care as perceived and experienced has built mistrust and a lack of confidence in health care in general. Variability

in care across the country has been well documented. The Dartmouth Institute has recently published a white paper to assist President Obama's administration to think about an agenda for change in health care. White papers are reports written by an expert or group of experts focused on problems and how to solve them; they can be used to educate readers and help individuals or groups make decisions. The Dartmouth Institute white paper reported that unwarranted geographic variation regarding how care is provided is not only a health problem; it is an almost overwhelming change management problem (Wennberg et al., 2008). These facts present great challenges to health care in general and to CEOs of health care institutions specifically.

These challenges for CEOs can be categorized in four ways. First, the consumers of health care are much more knowledgeable and informed about their options. The expansion of the use of the Internet to research medical conditions and treatment options has exploded over the last few years. No longer is a methodology based on paternalism an acceptable approach. This is actually a very positive change. However, it becomes a challenge when organizations are unwilling to understand these market forces. Developing shared decision-making approaches, creating medical homes, and focusing on patient education all require significant changes in the current methods of health care. Second, the CEO must partner extremely well with physicians and other health care providers to make the necessary organizational improvements that Americans are rightfully learning to expect and demand. This is an organizational change management challenge that must be lead by the CEO. Third, the view of Americans about the state of health care translates also into how health care is funded. There is a strong call for a national plan for health care that ensures access for at least the most basic of health care needs. How will this be structured? How will it be funded? How will the expectations of consumers and providers be reconciled with the realities of funding? Dissatisfaction with the level of quality in hospitals has led to payment practices such as "pay for performance" and a commitment to withhold bills if something from a list of possible "never events" occurs. Americans are demanding improvements in care by varying the more traditional payment methodologies. This is expected to align incentives and create significant change in how care is provided and reimbursed. Fourth, the way that Americans view health care has contributed to the increase in regulation, standards, and oversight. None of these is necessarily inappropriate, but all of them

together create a very complex environment for a CEO to understand and incorporate into a plan to lead the organization to the next level.

The state of the workforce involved in health care is also a significant challenge for a health care organization CEO. It is predicted that a shortage of physicians is looming, especially in primary care (Sheldon, 2008). Although the nursing shortage is now predicted to grow more slowly than previously thought, it will actually likely deepen to a deficit of 500,000 nurses by 2025. Faculty shortages and a negative perception of the work environment are key factors that affect nurse workforce numbers. The unionization of nurses and physicians is on the rise, which reflects a growing rift in the relationship of these professional groups with the organizations that employ them. Without a robust, satisfied, and tightly aligned workforce, any health care CEO will be extremely challenged to accomplish the mission of the organization (Nursing shortage, 2008).

A unique situation exists for the CEO who is also a nurse that involves balancing an advantage and a potential disadvantage. There is a base of knowledge that the nurse brings to the CEO role that really supports an understanding of the core business of health care. Nurses are educated to understand both the prevention of illness and the care of people who become ill. There is no dimension of health care that would not be well served by a CEO who has that base and who is bound by a code of ethical conduct (American Nursing Association, 2005). Theoretically, the nurse can be relied on to approach the role of CEO by maximizing the background knowledge obtained as part of a nursing education while functioning with a high level of integrity.

However, the risk is that the nurse fails to see this perspective as a base or a springboard to a broader view. The CEO must focus on the work and its depth and breadth. Nursing serves as a base for the nurse CEO, but, if that CEO's perspective stops at what is good for the professional and does not take into account that recipients of care (patients) and professionals are part of the same system of care with a focus on the right work, then the CEO will not be truly effective. The nurse CEO is at risk for both not being able to change perspective but also of others viewing the background of being a nurse as a limiting factor.

Engaging with all groups and disciplines within the organization, speaking broadly about the work of the organization, and continuing to develop a broad perspective on the work (i.e., the care of people, with all of its ramifications) must be key focus areas for the nurse CEO to overcome any potential disadvantage that may

be based on his or her background. The work for any CEO is to value the background that he or she brings to the role and to move on to personal mastery. Given this breakdown of work and the challenges outlined, what might be some guiding principles that the CEO could use to successfully carry out the role? Four general principles, as promulgated by Drucker (2001, pp. 268-271), can be used:

1. Individuals in an organization look to the CEO to gauge their own level of optimism regarding the state of the organization and its future. Leaders need to present themselves as understanding the complexities and the challenges, having a plan to deal with them, and exuding excitement and optimism about the opportunities that emerge from the challenges. This stance entails talking about the future even while recognizing the complexity of the situation for what it is, including the organization's and the CEO's own inadequacies.
2. Effective leaders are well served by continuing to acknowledge success while focusing on developing their own personal mastery and at the same time maintaining a healthy dose of modesty.
3. Effective leaders must learn when and how to get out of the way and let others contribute.
4. Leaders have the most positive impact when they help build systems where the actions of a few people matter least and groups can succeed (even despite individuals!).

The use of these four guiding principles can support the CEO in navigating the complexities of the work while engaging the hearts and minds of all of the human capital of the organization.

CASE STUDY ON PERSONAL MASTERY OF THE CEO ROLE

Amy Watson was the CNO of an academic medical center. Although she had 25 years of progressive leadership experience, including staff nursing, service line directing, and nursing executive leadership, she had only been at this specific organization for 5 years. Upon the retirement of a long-sitting and deeply respected hospital president, the board reviewed the leadership situation. After conducting an appropriate search process, the board decided to select Amy Watson. Ms. Watson was respected for her leadership capability and for her focus on the future and on the development of the organization toward that ideal future. She had developed extremely effective working relationships across the organization, both inside and

outside nursing. Amy accepted the role and was launched headlong into a big challenge.

Immediately, Ms. Watson recognized that there were elements of her background that she could draw upon to sustain her move into the new position. Leadership was not new to her; she had been serving in leadership roles for many years. Thinking about the core business of the organization was also not new to her, because patient care is what she had focused on for her entire career. In addition, Amy had a master's degree, she had sustained her own continuous learning by reading current literature, and she was also a past fellow of the Johnson & Johnson Wharton Fellowship program for nurses. However, the move to the new role was startling. Amy did not realize that, as the CNO, she was at the top of her game and indeed an expert in the world of nursing leadership. She was plunged overnight into the role of novice CEO, which meant a number of surprising things on a daily level: almost all pieces of mail were new to her and required some background information; she was now the direct link between the trustees and the organization; she felt that she was expected to change all of the annoying parts of the organization all at once while facing the strong desire of the organization to sustain the status quo; and, finally, she no longer had the same network of peers to draw upon, and she realized that she needed a new network. Amy viewed her new work as an exciting challenge, and she set goals for herself in each of the domains of the work of the CEO, as delineated in Figure 6-1.

Shortly after taking on the new role, Amy was faced with some complex challenges. Like all seasoned leaders, she drew upon her knowledge, her background, and her intuition. She was working hard on filling in her learning gaps, developing her team, and focusing the organization toward the future. She was faced with all of the challenges of health care CEOs and health care CEOs who are nurses. The following situations arose. How do you think Amy should approach them, given what you have read in this chapter and what you have learned about leadership?

Case Study Scenarios

1. One day, Amy is visited by a physician who is extremely upset about the level of nursing care that is being provided on the unit that houses most of her patients. Concerned and embarrassed, Amy is committed to improving the situation. What is the best course of action to take?

2. A group of four staff nurses makes an appointment with Amy. The nurses are concerned about the individual who is currently serving the organization as CNO. They describe her as not listening, not advocating for them, and not understanding what it is like for them to work there. They appeal to Amy to come to a staff meeting on each of their units to find out what is really going on. How does Amy honor this request without undermining the CNO?
3. Ms. Watson realizes that the financial performance of the organization is eroding. The organization has had 2 years of poor financial performance and is on the verge of once again not meeting the budget for the quarter. When studying the financial reports, Amy is reminded of the continually poor fiscal performance of the inpatient nursing units. One unit in particular has both poor financial results and poor quality indicators. The director of the unit is one of Amy's long-term colleagues, and they see each other regularly at church. How should Amy address these issues? How should she engage (or not engage) her friend when she sees her outside of the organization? What risks might she be taking by dealing directly with the unit leader?
4. It is time for the 6-month performance review for the CEO. The board set some very basic performance goals for the CEO's first 6 months. However, the goals were not well written, they were not measurable, and they were process focused. Amy is unsure of how she will be judged, and she has some very specific thoughts about what needs to be addressed over the next 1 to 5 years. How should she structure her discussion with the board chair?
5. When reviewing some of the quality improvement work, Ms. Watson notes that one of the medical departments is not complying with the organization's standards for hand washing. The clinical chief of that department is a physician who is known for having a lack of interpersonal skills; in fact, he had several altercations with Amy when she was in her CNO role. How should Amy prepare for the conversation with this chief? What resources might she use? What background information might she acquire?
6. The hospital is contemplating building a new outpatient surgery center. The board has asked Amy to outline the financial risks related to such a venture, including a series of scenarios that

will help them understand the pros and cons of the idea. Amy has never been involved in a building project from the ground up. What resources should she seek? How should she go about educating herself regarding all of the complexities of a project of this magnitude? What should she think about as she imagines presenting this information to the board?

SUMMARY

The work of the health care CEO is challenging and exciting. Nurses are well prepared to understand the core business of health care organizations, and they have the potential to become great CEOs. However, there are inherent challenges, and realizing that all past experience and education is only a base for the next role supports all beginning CEOs to continue to learn, to grow in leadership, and to focus on personal mastery. A very rewarding role awaits those who embrace the many challenges in their journey to lead.

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Nurse Educators: Issues that Affect the Profession

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The current and projected shortage of nurses is placing nursing education in the spotlight, and it highlights a number of major issues that affect nursing education. This chapter discusses many of the issues faced in baccalaureate and graduate programs and by nursing faculty in particular as we move into the second decade of the twenty-first century.

NURSE AND NURSE FACULTY SHORTAGE

Nurses constitute the single largest component of the health care workforce, and, during the past decade, considerable concern and attention have been devoted to the shortage of nurses. On the basis of a number of reports released between 2005 and 2008, government analysts and nursing organizations continue to predict significant shortages in the nursing workforce for the next 20 years (American Association of Colleges of Nursing [AACN], 2005, 2008a; Buerhaus, Staiger & Auerback, 2008; Health Resources and Services Administration, 2006; Joynt & Kimball, 2008; National Advisory Council on Nurse Education and Practice, 2008; Yordy, 2006; U.S. Department of Labor, Bureau of Labor Statistics, 2008). This unprecedented shortage of nurses is significant and likely to persist in the face of increasing demands for health care as the baby boom generation ages, as the workforce ages, and as there was a decline in interest in nursing as a career as opportunities expand for women in previously male-dominated professions.

A shortage of faculty is significantly interwoven with the current and projected national shortage of nurses. Educational programs are necessary to supply more nurses, but the shortage of available faculty will limit student enrollments and the number of graduates. Concurrently, the shortage of faculty presents one of the most pressing problems facing the profession. As noted by the AACN, “the deficit of nursing faculty has

reached critical proportions” (2005, p. 3); this deficit is projected to worsen as the current faculty workforce rapidly advances toward retirement and the pool of replacement faculty decreases.

Recently, there has been accelerating interest in nursing as a profession and a concomitant acceleration of interest in baccalaureate and graduate nursing education programs. However, not all applicants are being accepted at 4-year colleges and universities. The AACN (2008a) reports that 40,285 qualified applicants were not accepted into baccalaureate and graduate nursing programs in 2007; an increase in admission denials is also expected when the 2008 enrollment data is released in 2009 (AACN, 2008b). Of note is that almost three quarters (71.4%) of the 341 nursing schools that responded to the survey that generated these data pointed to faculty shortages as the primary reason for denying the admission of all qualified applicants into nursing programs (AACN, 2008a, 2008b).

In 2008, the AACN released data that revealed that a nurse faculty vacancy rate of 8.8% among baccalaureate and graduate programs for the 2008/2009 academic year (AACN, 2008a). This can be compared with a vacancy rate of 7.9% identified by a National League for Nursing (NLN) survey (2006). The NLN survey reports an increase in the vacancy rate of 32% since 2002 for baccalaureate and higher-degree programs and an increase of 10% in the vacancy rate for associate degree programs during the same period. Although these vacancy rates may seem relatively small and insignificant, vacant positions seriously affect the numbers of students admitted to existing nursing programs and subsequently affect the workload of the remaining faculty. A statement from Allan and Aldebron (2008) noted that the nation’s short-term demand for nurses could be satisfied by just accepting the number of applicants who meet admission standards.

Multiple factors contribute to the shortage of nursing faculty. A recent position paper entitled *Blowing Open the Bottleneck: Designing New Approaches to Increase Nurse Education Capacity* (Joynt & Kimball, 2008) was commissioned by the Robert Wood Johnson Foundation, the Center to Champion Nursing in America, and the U.S. Department of Labor to provide a comprehensive understanding of the complexity of factors and barriers that are affecting nursing education capacity. In this report, underlying factors driving the nursing faculty shortage were found to be aging faculty, increased time to complete graduate education, heavy faculty workload, low faculty wages, and lack of a robust faculty pipeline. Three major categories appear to encompass these factors and will be used as a framework for the discussion in the rest of this chapter:

1. The aging of current faculty, which is often referred to as “the graying of the professoriate”;
2. The preparation of new nursing faculty; and
3. Declining interest in an academic career.

THE GRAYING OF THE PROFESSORiate

Faculty Age

The AACN conducts an annual survey of faculty in baccalaureate and higher-degree nursing programs, and the data confirm that the average faculty age continues to climb: the average age of nursing faculty in baccalaureate and graduate degree programs is 51.5 years (Tanner, 2006). In 2006, 9% of full-time faculty were more than 61 years old, and nearly 63% were between 45 and 60 years old (Robert Wood Johnson Foundation, 2007). According to the most recent AACN report (Fang, Htut, & Bednash, 2008), the average ages of doctorally prepared nurse faculty holding the ranks of professor, associate professor, and assistant professor were 59.1, 56.1, and 51.7 years, respectively; the average ages of master's prepared faculty for the same ranks, respectively, were 58.9, 55.2, and 50.1 years.

Retirement Data and Trends

Given the average age of nursing faculty, it is not surprising that a wave of faculty retirements is expected during the next decade. On average, nursing faculty retire at the age of 62.5 years, and faculty 65 years old and older account for only 3% or less of nursing faculty (AACN, 2005). The AACN projected that, from the years 2003 to 2012, between 200 and 300 doctorally prepared nursing faculty were or will be eligible for retirement annually and that, from 2012 to 2018, between 220 and 280 master's prepared nurse faculty will be eligible. According to data from the NLN/Carnegie National

Survey of Nurse Educators (Kaufman, 2007a), half of nursing school faculty indicate that they plan to retire within 10 years. As many educational institutions face serious and growing economic issues, early retirement incentives may increase faculty attrition further. These data are clearly of significant concern with regard to maintaining faculty capacity. It will be interesting to see if the current national economic crisis will decrease the rate of nurse faculty retirements given the significant decline in the retirement funds for many nearing retirement age and the uncertainty of the time frame for the resolution of the crisis.

THE PREPARATION OF NEW FACULTY: A DIMINISHING PIPELINE

The problem of the nursing faculty shortage is likely to become a more pressing problem because of the lack of new faculty to replace the older generation as they retire. A number of factors are associated with this situation. There has been a decrease of 17.3% in the number of faculty aged 36 to 45 years old (AACN, 2005), and other trends have surfaced that narrow the pipeline for replacing the current generation of nursing faculty.

As compared with other professions, nurses typically pursue faculty roles at a later age (Joynt & Kimball, 2008). The median age for recipients of nursing doctoral degrees in 2002 was 47.3 years as compared with a median age of 33.3 years for all research doctoral awardees (National Opinion Research Center, 2004). More than half of nursing students enrolled in research-focused doctoral programs are part-time students (Joynt & Kimball, 2008), which adds to the length of the program and further delays entry into a faculty position. Additional factors that contribute to the shortage of faculty include the following: the increase in academic standards and expectations for advanced degrees; the high cost of acquiring the necessary academic credentials (i.e., tuition, loan burden, and income forgone during education); and the lack of motivation to seek a faculty career in the light of growing opportunities both within and outside of health care (AACN, 2005; Yordy, 2006).

Master's and doctoral programs in nursing are not producing a pool of applicants sufficient to meet the future demand for nurse educators. Although a 5-year trend data from 2000 to 2004 (AACN, 2005) showed an average increase in the number of students enrolled in doctoral nursing programs, the pattern of graduations revealed no increase, thereby indicating a failure of programs to produce more graduates despite the increase in the number of both students and doctoral programs.

Similarities exist in trends for master's education. Although there has been an increase in enrollment in master's programs since 2001, 5-year graduation patterns showed a steady decline through 2003. However, since 2003, there has been an increase in graduates that is expected to continue. This ultimately may provide a greater number of nurse educators, because master's degree graduates are the source of a significant percentage of current and future educators as well as the primary source for future doctoral students. The failure of colleges and schools of nursing to produce more graduates is particularly disconcerting given that the number of doctoral programs has increased from 52 in 1992 to 158 (including both PhD and DNP programs) in 2008 (Berlin, Wilsey, & Bednash, 2005; AACN, 2008c).

DECLINING INTEREST IN AN ACADEMIC CAREER

The reasons that fewer nurses with graduate degrees are selecting academic careers include increasing opportunities outside academia, noncompetitive salaries in academia, and faculty workload and role expectations. A recent AACN white paper called "Faculty Shortages in Baccalaureate and Graduate Nursing Programs" noted that "egression from academic life is the major reason for the loss of younger faculty members" (2005, p. 6).

Opportunities Outside of Academia

An AACN survey of 280 nursing programs reporting faculty resignation data in 2002 revealed that 188 full-time doctorally prepared faculty and 202 master's prepared faculty resigned from schools of nursing. Of these, 56.2% of those with doctoral degrees left to take other faculty or administrative positions in academia, but 43.8% left academia to assume nonacademic positions, such as nursing service, private sector, or private practice positions. Of those with master's preparation, 43% resigned to take nonacademic jobs. A *Survey of Earned Doctorates*, which was conducted by the National Opinion Research Center (2004), revealed that the percentage of nursing doctoral recipients planning to be employed in nonacademic settings has increased steadily. The AACN (2008d) reports more than 20% of 2007/2008 nursing doctoral graduates plan to work in settings other than schools or colleges of nursing.

Why are the nonacademic positions becoming more appealing? Corporations often use the leadership and research skills of doctorally prepared nurses in positions that reinforce and use competencies in research and administration, which are most highly valued by

doctorally prepared nurses (Hinshaw, 2001). Conversely, most graduate programs do not provide opportunities for developing knowledge and expertise in teaching, and graduates may not be as comfortable with the teaching role that is inherent in academia.

Marion Broome (2003) posits that one of the primary characteristics of nursing academia that makes it less attractive to many potential doctoral students contemplating a career in nursing education is the lack of an intellectually stimulating and growth-enhancing environment. She argues that the majority of faculty has become "bored and tired," and the result is a lack of intellectual debate and creative dialogue that previously challenged those in an academic environment, sharpened critical thinking skills, and infused the environment with a sense of excitement. She contends that these changes in the academic environment are recognized by doctoral students and thus diminishes their interest in an academic career.

Noncompetitive Salaries

Salary differentials between academic and other positions often are cited as influential factors that contribute to the nursing faculty shortage (AACN, 2005; Joynt & Kimball, 2008, National Advisory Council on Nurse Education and Practice, 2008; Yordy, 2006). When comparing the responsibilities and salaries associated with various employment opportunities that are open to nurses with graduate degrees, faculty positions often are less appealing. Academic salaries in general—and especially at public educational institutions—are not competitive with those of clinical practice or administration.

The gap between academic and nonacademic salaries is likely to increase as hospitals and other health care institutions try to attract nurses by raising salaries (Joynt & Kimball, 2008). Constrained state and local budgets and reduced federal funds will also contribute to this problem. When comparing 16 factors, a recent NLN/Carnegie survey of almost 8500 nurse faculty found that these faculty were least satisfied with their salaries and that more than half of the respondents were either "very" or "somewhat" dissatisfied (Kaufman, 2007b). Among respondents who reported that they were likely to leave their jobs, salary was most often cited as the reason. Of note is the fact that salary was also the reason most frequently cited by faculty for retiring.

The salary gap faced by nursing faculty is significant not only when compared with nonacademic nursing positions but also when compared with other non-nurse faculty. The NLN/Carnegie survey revealed that

salaries for nurse educators are typically 21% less than other faculty in public institutions and 33% less than other faculty in private institutions.

Anderson (2002) poses an intriguing and important question in terms of nursing faculty salaries. She concurs that nurses with advanced education can earn more in clinical or administrative positions, but she also notes that a discrepancy exists between academic and practice salaries in many disciplines, such as the other health professions, law, and engineering. In these other professions, salaries of faculty typically are well above the campus mean because of the market. She questions why the economic concept of supply and demand does not work in terms of the nursing faculty shortage. Is this related to the fact that academic nursing is a female-dominated profession and therefore not as highly valued by the institution? Is it related to the fact that many nurse educators lack the doctoral degree, thereby marginalizing nursing faculty? Clearly, salary is an important issue with regard to nursing faculty satisfaction and retention.

Faculty Workload and Role Expectations

Issues related to faculty workload and role expectations are connected closely to the faculty shortage. The NLN/Carnegie survey addressed faculty workload as well and found that 36% of the respondents who indicated that they were likely to leave their position within the next 5 years cited “more flexibility to balance work/life issues” as reasons to leave, whereas 30% cited “reduced workload” (Kaufman, 2007b).

Those who select academic careers and who are on the tenure track have high expectations related to teaching, research, and service; however, balancing these is often difficult. For many, the high expectations associated with these roles compromise the ability to do all of them well, thus contributing to role stress and job dissatisfaction. As many institutions strive to increase their national standing, expectations for promotion and tenure increase at the same time that funding for research is constrained by budgetary issues. New faculty working toward tenure may be expected to do more than their senior colleagues, thereby causing anxieties for the individual and additional tensions between the two groups. Many faculty perceive that expectations are unclear or evolving, which further contributes to their sense of stress and overload.

Because of the shortage of faculty, many institutions now offer nontenured clinical-track positions. Faculty in these positions typically carry heavier teaching loads and provide the majority of the clinical teaching, but

they also are expected to be productive in terms of service and professional scholarship or practice. As this new role evolves in academic settings, stress and job dissatisfaction for these faculty is common.

The workload for faculty in both tenure-track and clinical-track positions has increased in response to the loss of faculty to nonacademic positions as well as in response to the pressure to increase enrollment to address the nursing shortage and to increase revenue for the institution. The NLN/Carnegie survey data revealed that full-time nurse faculty report working, on average, 56 hours per week when classes are in session and nearly 25 hours per week during break periods (Kaufman, 2007b). Almost half of these nurse educators expressed dissatisfaction with their current workload, and more than one quarter of those who were likely to leave their job cited workload as a reason.

As noted by Longin (2002), the life of the college professor has changed considerably since the late 1980s. Now more than ever, faculty have varied responsibilities and stressors. In addition to the traditional teaching role, they also are expected to obtain extramural funding, conduct research, produce scholarship, and provide community and university service. Most faculty spend a significant amount of time advising and mentoring students outside of the classroom, developing new courses, maintaining their knowledge base and clinical expertise in an ever-expanding field, and mastering new advances in technology.

In addition to pressures to increase nurse workforce capacity by increasing enrollment, nursing programs are also under pressure to change curricula to meet the guidelines and core competencies of accrediting bodies and professional and national organizations and entities. For example, the 2003 Institute of Medicine report entitled *Health Professions: A Bridge to Quality* calls for educational reform to meet certain core competencies (Greiner & Knebel, 2003). In response to the Institute of Medicine core competencies, the AACN (2008e) revised the *Essentials for Baccalaureate Nursing Education*, which is a required set of standards for accreditation. Faculty in graduate programs have similar standards that must be met. As a consequence, faculty are expected to devote considerable time, effort, and energy into curricular and course innovation and revision, thereby adding even more to an already significant and frequently overwhelming workload. It is certainly not surprising that faculty “express frustration at never having time to complete a piece of work” (Berberet & McMillin, 2002, p. 9).

The landscape for nursing education is changing. The nursing shortage has resulted in external pressures to

increase enrollment in nursing programs. This has led to larger classes that are populated with multigenerational students, who bring with them a wide variety of backgrounds and experiences. This challenge is being compounded for nursing programs by the critical shortage in nursing faculty and by the plans of a large percentage of current faculty to retire within the next 10 years. The need for both new and seasoned faculty to acquire skills to effectively facilitate student learning and to function at a maximum level within academia is crucial.

FACULTY DEVELOPMENT

Faculty who possess the proper skill set can design approaches that prepare graduates to meet the increased health care needs of a diverse population in an ever-changing complex delivery system. Educational programs designed to develop these skills will help the faculty experience increased satisfaction with their roles and serve as a strong recruitment and retention strategy.

The development of new faculty starts with orientation. The question becomes, "How effectively are orientation programs preparing faculty for their new roles?" The norm for most institutions is that new faculty orientation, which spans only a limited number of days, focuses on the policies and procedures of the nursing program; it is a time to learn about the institution and the services offered to students and faculty. Although this information is needed, much more must be addressed to assist new faculty with successfully becoming top-notch educators.

Orientation for new faculty should continue throughout their first year. New educators who have limited teaching experience and perhaps no background in educational principles will need additional support for the development of their courses, the preparation of lecture and classroom activities, and the construction of various tools to assess student learning. If their teaching assignments include online instruction, additional support must be provided for the use of a course management system and its components, guidelines to facilitate successful online discussions, and innovative ways to engage students to create an active learning environment. Plans for this comprehensive orientation of new faculty should be individualized, and they should require the faculty member to take an active role in identifying his or her specific learning needs.

Teaching is only one part of the tripartite mission that must be addressed as part of the development of new faculty. Research, scholarship, and service should not be overlooked. Without ongoing support, the new

faculty member can become so overwhelmed with the new responsibilities of teaching that the development of a program of research suffers. The formation of support groups can be effective. The benefits of such groups go beyond assisting new faculty with developing their research focus; these groups also serve as mechanisms for the socialization of individuals into the professional role of the nursing educator, and they provide a network of individuals that the new faculty can feel comfortable turning to for advice.

A mentoring program can function to assist new faculty with the transition from the role of clinician to nurse educator. This process involves a senior faculty member taking a personal interest in the success of the more junior member and facilitating that junior member's adjustment and success within the organization. The time commitment to mentor a new faculty member effectively may seem burdensome for the senior faculty member who is involved heavily in meeting his or her own responsibilities, but this type of sharing of skills and insights is a critical component in successful faculty development programs and the retention of new faculty (Genrich & Pappas, 1997).

As enrollment increases, nursing programs are hiring part-time faculty to teach clinical courses or moving to a preceptor model for these student experiences. To enable students to receive quality clinical experiences, nurse educators must properly prepare those who are facilitating that learning. Although these approaches can be essential for building capacity in nursing programs, the developmental needs of these individuals as educators must be addressed. Although these individuals may be excellent clinicians who can expose students to innovative clinical practices, they often have no background in educational theory to guide their interactions with students. The educational significance of the clinical experience may be diminished or lost if clinical faculty does not have the pedagogical background to facilitate maximum student learning (Cangelosi, 2007).

As nursing organizations and accrediting bodies approve new competencies for practice, faculty will be required to develop a level of expertise in areas that are new to nursing. One such area is nursing informatics (AACN, 2008e). Faculty will need educational opportunities that will help them develop a knowledge base and a level of confidence with this topic so that they will be able to discern information that is essential for students to learn. Informatics will affect all sectors of nursing education: didactic teaching, skills laboratories, and clinical experiences. To apply learner-centered

instruction, faculty will need to develop learning activities that will assist students with applying this content in a variety of practice arenas. The electronic health record is one example of the impact that the evolution of informatics will create. This will require new ways of gathering data and making comprehensive assessments to address client needs.

The learning needs of individuals who have established careers as faculty in an academic setting should not be overlooked when it comes to the design of a comprehensive faculty development plan. Needs change over the course of a career. Many of these individuals may have developed expertise as a teacher, but, as changes take place in the educational environment, new learning needs arise that must be addressed.

Examples of some of these changes include advancements in the technology available for use in the classroom (e.g., simulators, handheld electronic devices), the best way to match outcomes and technology use, and knowledge of current student characteristics and specific learning needs. The expansion of the teaching and learning environment to the online format may be a challenging transition for seasoned faculty. Providing educational sessions about the best practices for designing a Web-based course, strategies for actively engaging students, techniques for providing online feedback, and effective ways to integrate technologies to enhance online learning will provide faculty with the knowledge and skills needed for both faculty and students to have a successful teaching and learning experience. Finally, as faculty take on leadership positions, they may find that assistance is needed when developing an additional skill set to be effective in this new role.

Although multiple topics that would be valuable to include as a part of a faculty development program have been mentioned, the authors would like to take a closer look at three specific ones that are becoming critical to the skill set of nursing faculty:

1. Learner-centered instruction;
2. Maintaining an atmosphere of civility in academia; and
3. Using simulation as a learning strategy.

LEARNER-CENTERED INSTRUCTION

The paradigm has shifted: teacher-centered learning is out, and student-centered learning is in. The modern learning environment is undergoing other changes as well, as evidenced by larger class sizes, a more diverse student population, and a multitude of program types.

These changes present instructional challenges for the seasoned educator, but, for the novice faculty, they can be overwhelming.

What is learner-centered instruction? Weimer states that, when the teaching and learning process is learner centered, it focuses on the student: "...what the student is learning, how the student is learning, the conditions under which the student is learning, whether the student is retaining and applying the learning, and how current learning positions the student for future learning" (2002, p. xvi). This is in contrast with the previous paradigm of teacher-centered instruction, with which the focus is on the teacher, the knowledge that he or she chooses to share, and the control that he or she has over the students and the environment.

There are five key characteristics that differentiate learner-centered instruction from teacher-centered instruction (Weimer, 2002):

1. *The balance of power between faculty and student:* The instructor shares some of the decision making about the course with the students, as demonstrated by faculty-student collaboration with regard to course policies and procedures, the establishment of deadlines, and the methods of learning and assessment.
2. *The use of content to help students develop a strong knowledge base as well as active strategies to help them learn new information:* Strategies are taught that will serve students as lifelong learners and that will help them to develop critical thinking and clinical judgment skills.
3. *The role of the teacher to create a safe environment for learning:* Learning can be facilitated through activities that actively engage learners while connecting them with resources.
4. *The responsibility for learning rests with the students:* Faculty create situations that motivate students, and they provide feedback to assist with the learning process.
5. *Evaluation used as a means to generate grades and as an avenue to stimulate ongoing growth:* Feedback and self-assessment are used so that the learner has a more active role in the process.

As faculty transition from the "sage on the stage" to the "guide on the side," the best practices identified by Chickering and Gamson (1987) provide evidence-based guidelines, which enhance student learning. Students need to be actively engaged with the content that they are learning to apply it to their professional practice.

Integrating active learning activities into classroom presentations allows educators to both maintain student attentiveness and to provide a mechanism to bring the practice setting into the classroom. This allows students to receive feedback as they practice clinical decision making. Research has shown that establishing this type of classroom learning environment will result in a higher level of student performance during the clinical experience (Hoke & Robbins, 2005).

Incorporating active learning into presentations with a large class that meets in an auditorium-style room may appear to be an unrealistic goal, but the reality is that strategies that promote active learning are even more vital in this type of classroom environment. Student participation in large classes is usually limited to a small percentage of the group. Through the use of active learning strategies, students develop a sense of belonging as well as increased self-esteem, because they feel that they have an opportunity to share their thoughts. Developing faculty skill with implementing active learning strategies into presentations is an example of the type of faculty development that needs to be provided for all faculty, regardless of their level of experience (Weimer, 2002).

The learner-centered paradigm is not limited to didactic courses; it also extends to laboratory and clinical experiences. In the past, the most desired activity for students during their clinical time was providing direct care to patients. Although this is a valuable experience, in the new paradigm, caring for patients does not always mean that the students are having the best learning experiences. Look at the objectives that students are going to accomplish with an experience. Is there a more effective way to achieve them than with a patient assignment? Developing alternative assignments that require students to collect and analyze data may create a more engaging opportunity to develop clinical judgment and critical thinking skills.

MAINTAINING AN ATMOSPHERE OF CIVILITY IN ACADEMIA

Educators are reporting an increase in the disruption of the teaching and learning environment from acts of incivility by students. These acts range from arriving late to class and being disruptive to others by carrying on side conversations to verbal abuse and physical assaults. Faculty need to learn skills that help them effectively curb these occurrences as well as ways to prevent them. Nursing is much more than merely providing safe care to clients. Students need to learn that

respect for human dignity and concern for others are primary expectations for the ethical conduct required of the members of the nursing profession (American Nurses Association, 2009; AACN, 2008e). Applying the principles of learner-centered instruction will create active learning opportunities that will allow for the exploration of the ethical side of nursing and establish a learning environment in which students are less likely to be disruptive (Luparell, 2005).

The failure to intervene when uncivil acts occur can have far-reaching consequences. In addition to disrupting the teaching and learning environment and creating a barrier to learning, these behaviors have been reported to increase faculty stress and burnout and to ultimately contribute to dissatisfaction with the educator role. Negative interactions with students have been reported to affect faculty decisions to leave teaching; this is an outcome that educational programs want to prevent during the current faculty shortage (Luparell, 2004). In addition, the impact that the uncivil actions of students toward faculty and other students can have on the practice arena must be considered. Do students who exhibit uncivil behaviors become uncivil colleagues and coworkers (Luparell, 2005)? This is an area that requires future research.

Educators are not the only ones who are experiencing uncivil actions; students are also reporting experiences of uncivil actions from faculty. Clark and Springer (2007) report that students view faculty actions such as making rude gestures or comments, being condescending, exerting their superiority and power, using ineffective teaching methods, being late for scheduled events, and not following the course syllabus as uncivil. When experiencing these behaviors, students report feeling traumatized, powerless, and being in a no-win situation. Behaviors such as these create increased stress in student-faculty relationships, and they often result in students being more likely to respond with uncivil behaviors toward faculty.

Consider the following comment: "Nurses eat their young." This refers to what has been identified as "horizontal violence" in the clinical setting: nurses exhibiting uncivil behaviors toward the new person on the unit. The academic world has voiced dismay about this situation. Educators invest a tremendous amount of time and effort into developing the caring side of students, only to have those students become targets of uncivil acts by coworkers. However, as in the practice arenas, collegial incivilities are now becoming significant issues in the academic setting

(Kolanko et al., 2006). Heinrich (2007) used the term “mean girl games” when referring to faculty–faculty and administrator–faculty incivility. These “joy stealing” games replace passion and enthusiasm with self-doubt and vulnerability. New faculty is a precious commodity. Discussion time needs to be provided to allow faculty to have the opportunity to focus on approaches that create a supportive culture that devalues competitiveness and that accentuates both the large and small achievements of all.

USING SIMULATION AS A LEARNING STRATEGY

Advancements in technology are everywhere. These advancements are changing the way we live our daily lives as well as the way that the nursing workforce of the future is educated. Technology is providing a new approach to a familiar strategy: simulation. The new high-fidelity simulators have very little in common with the mannequins found in the skills laboratories of the past. They are sophisticated, interactive, computer-driven mannequins that can exhibit a vast array of signs and symptoms related to a variety of disease conditions. These mannequins are being used to allow students to have the opportunity to apply content to patient-care situations and to master procedural techniques in an environment that is free from potential patient harm.

A simulation model has been developed to guide research related to the use and effectiveness of this strategy. This model illustrates that the outcome of the simulation experience is influenced not only by the design of the simulation but also by the interactions between student factors, teacher factors, and the degree to which Chickering and Gamson’s (1987) best practices are incorporated into the simulation experience (Jeffries, 2005). The best practices for conducting a simulation experience continue to be identified (Bremner et al., 2006; Jeffries, 2005).

Nursing programs nationwide are attempting to identify creative funding avenues to support the purchase of high-fidelity simulators. Although these simulators are costly, the purchase is only the initial investment. They require an ongoing investment in faculty development: someone must have the knowledge and skills required to operate the computers that drive the responses of the simulators and to ensure that components of the simulation are executed in accordance with the best practices for maximal student learning.

Educators are using simulation to promote the development of critical thinking and clinical decision making, to provide experiences with patient conditions that are not available via clinical experiences, to increase the effectiveness of communication and interaction among interdisciplinary team members, and to integrate quality and patient safety measures into patient care. Data show that students report an increase in self-confidence and a satisfaction with this type of learning strategy (Jeffries, 2005). However, additional research needs to be completed to identify if there is any increase in the retention of knowledge, skills, and attitudes when simulation is used as a teaching strategy.

SUMMARY

The expectations for a nursing educator are vast. Nursing education is a demanding career that requires the brightest and most creative to be among its ranks. The dynamic challenges faced by educators should be seen as opportunities for leadership and professional growth. The bottom line is that nurse educators affect the lives of many students, patients, families, and populations. The rewards experienced are priceless to both nurse educators and society. It is critical that the shortage of nursing faculty be addressed with a variety of strategies; the future of the nursing profession depends of a steady supply of new nurses to provide quality care to patients.

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Nurse Researchers: Who Are They, What Do They Do, and What Are Their Challenges?

NANCY A. STOTTS ◆ DEIDRE D. WIPKE-TEVIS

Nurse researchers are scientists who seek to find answers to questions through methodical observation and experimentation. The work that they do is diverse. They design studies, conduct research, and disseminate findings at professional meetings and in peer-reviewed journals. The studies span the scope from qualitative to quantitative research, and they can involve interviews, epidemiological surveys, large databases, controlled clinical trials, and basic science experiments. The topics addressed by nurse researchers are broad and divergent; they reflect the vast scope of practice of nursing and the rich heritage of nursing in the biological and social sciences. Nurse researchers study individuals, families, communities, and health care systems. Some analyze large databases, others are basic scientists who work in laboratories, and still others are scientists who perform clinical research. A great deal of variety exists among the cluster of individuals who call themselves nurse researchers.

This chapter is designed to introduce you to the world of nurse researchers. It will answer the following questions: Who are nurse researchers? What do they do? What challenges do they face?

WHO ARE NURSE RESEARCHERS?

Nurse researchers are nurses who seek to solve problems or answer questions related to nursing practice, health care, or both by designing and implementing systematic studies that involve the use of scientific methods. They seek to develop the science behind evidence-based nursing practice and to understand the fundamental physiological mechanisms and humanistic laws that have implications for health and illness.

Historically, most nurse researchers began their careers as staff nurses and progressed up the clinical ladder. Several pathways led to the role of the nurse

researcher. Some of these nurses had always dreamed of being faculty members in schools of nursing, and research is an integral part of that role in major research-intensive institutions. Others realized that they did not want administrative responsibilities in the clinical arena, so they chose research as an alternative way to progress in nursing. Another group was overcome with a desire to understand why things happened and the related mechanisms, so they used research to find the answers. A fourth group just happened into a job and fell in love with the work of research. Today, nursing students are introduced to research early in their nursing education. Some elect to prepare themselves as nurse researchers by moving rapidly into graduate programs, thus bypassing the many years of clinical practice that in the past have characterized nurse researchers.

As with most other disciplines, doctoral preparation is required to be a scientist and scholar in nursing. Although previously many nurses earned a Doctor of Philosophy (PhD) in another discipline (e.g., psychology, statistics, physiology, education), this route has become less popular in recent years. Usually the degree obtained is a PhD with a major in nursing or a Doctor of Nursing Science (DNS, DSN, or DNSc). In the purest sense, the PhD is designed to prepare a nurse researcher, and the DNS is conceptualized as preparing an advanced clinician and as being parallel to the Doctor of Medicine but with the substantive focus being on nursing science. However, in practice, there often have been few differences in the curricula of the PhD program and the DNS program. Consequently, many schools of nursing have converted their terminal degree from the DNS to the PhD.

The Doctorate of Nursing Practice (DNP) is designed to enhance clinical practice, and it is clearly differentiated from the academic, research-focused doctorate.

The DNP has less emphasis on theory development, research methodologies, and the conducting of research and more emphasis on the evaluation and use of research. The DNP is designed to prepare advanced practice nurses with the leadership skills necessary to translate research into the clinical setting to improve nursing practice and patient outcomes (American Association of Colleges of Nursing, 2004).

Nurses who are prepared with a research doctorate are equipped to carry out all aspects of the research process. They have been taught and actually have carried out the process of conceptualizing a problem, formulating a question or a hypothesis, designing the study, securing funding for the study, collecting the data, analyzing the data, interpreting the results, and disseminating the findings. This process is encompassed in their dissertation research, which is a requirement for graduation.

As nurses in research doctorate programs progress through the academic system, they begin to learn the research process by initially working as research assistants. Classically, the research assistant is an undergraduate or graduate student who is working for a faculty member in nursing or another discipline. The research assistant may conduct a library search as the basis for the literature review, collect data, or enter data into a computer for later analysis. In the most ideal world, the research assistant is an integral member of the research team who is learning process and content through a paid or volunteer position.

The next level of nursing researcher is the research nurse. This nurse is usually prepared with a bachelor's or master's degree and is hired to recruit subjects, collect and manage data, or to carry out specific aspects of the research that have been planned by the researchers who wrote the grant. Research nurses are often employed solely for research purposes and do not have concurrent clinical responsibilities. The term *project director* is used for the research nurse who assumes major responsibility for coordinating and implementing the research study.

Coinvestigators are researchers who have expertise in a specific area and who share the responsibilities of conceptualizing and conducting the study. They are asked to participate for a variety of reasons, such as substantive expertise (e.g., wound healing or social support), exceptional knowledge of a research method (e.g., phenomenology or high-performance liquid chromatography), an understanding of a statistical analysis technique (e.g., survival analysis, mixed models), or access to a potential subject population (e.g., individuals

with diabetes). One or more coinvestigators may be on a grant, depending on the nature of the project and the expertise of the various team members. Consultants also have expertise in specific areas, but their contribution is more circumscribed than that of coinvestigators.

The leader of the research team is the principal investigator, who is responsible for writing the grant as well as for the scientific conduct of the research project. This means that this researcher needs to bring the team together, define the roles of the members, and see that the conceptual work is completed. Later, the principal investigator will ensure that the study is conducted, that the data are analyzed and interpreted, and that the results are presented and published. The principal investigator sets the tone for how the team works together. The research team may be run with a democratic or autocratic style; one approach is not better than the other, they just produce different dynamics, and each style has its own strengths and limitations.

The principal investigator also initiates discussions about the authorship of articles and plans with team members regarding the nature of publications and the order of authorship. This proactive negotiation sets a tone for fairness and parity on the team. When students are part of the research team, their contributions and roles need to be addressed during these negotiations.

It is important to recognize that many research teams are interdisciplinary. The research team may consist of physicians, social workers, physical therapists, basic scientists, or other scholars with PhDs. The nurse may be the principal investigator or a coinvestigator, or he or she may have any of the other roles described. Working on an interdisciplinary team is a rich experience, especially when all members of the team leave their titles behind and bring the full measure of their expertise to the research team and the research process. Ideally, a student experiences this as a member of the team.

Thus, nurse researchers are nurses who do research. They are usually doctorally prepared. They may design and conduct the entire project, or they may be responsible for only a portion of the research. They use a variety of research designs and methods, including surveys, interviews, clinical trials, evaluation research, and basic science techniques. They function with a variety of titles and roles. The work that they accomplish is diverse, and it reflects the heterogeneity of nursing. The role that a specific researcher occupies depends on the nature of the study, the various personalities of the team

members, the expertise of the researcher, and timing or serendipity.

WHAT DO NURSE RESEARCHERS DO?

The research process outlines the type of thinking and activities of nurse researchers. For a study to take place, the researcher must identify a problem and have sufficient interest and expertise in the area to address it. Seasoned researchers have an identified program of research and know the literature in that substantive area so that gaps can be identified for the focusing of future research. Often these researchers have a long list of questions that they would like to answer; they just need the time and funding to address them. Newer researchers have an evolving set of research questions, the foundation of which will likely have come from their dissertations. This set of questions forms the basis for developing a program of research.

Knowledge of funding sources is an integral part of the role of the researcher, because, without funding, research productivity is significantly limited. Funding is important because it is needed to pay the salaries of the research team members, to buy equipment or supplies for data collection, to pay for computer programs or a statistician for analysis, to reimburse subjects for their participation, and to pay for travel to meetings for presentations. The major source of funding for health care research is the National Institutes of Health (NIH). Although the National Institute for Nursing Research (NINR) is an important source of funding for nursing research, other institutes (e.g., the National Institute on Aging, the National Heart, Lung, and Blood Institute) may also fund nurse researchers.

The researcher must understand the NIH and NINR priorities for funding. The priorities of these organizations are based on the identification of needs for scientific knowledge for health care. The NINR roadmap for the future indicates funding priorities in “lifestyle

behaviors, chronic illness, health disparities, advanced technologies, and end-of-life care” (Grady, 2004). These topics have been identified as significant to the health and welfare of the American people, and so future NINR funding will focus on these topics.

Grants are also available from public and private foundations as well as professional organizations (Box 8-1). Each organization has its own funding priorities, budget limits, and application processes. Data about funding sources are available on the World Wide Web and in specific grant-funding books in the library. The contracts and grants division of most research-intensive universities also provides assistance to faculty with understanding the multiple sources and processes for obtaining financial support for research. A specific funding source is usually targeted early during the proposal development process so that the explicit criteria for that agency are incorporated into the proposal.

The first step of writing a grant proposal is the identification of an important research question. For the seasoned scientist, the next research study is typically formulated during the course of conducting and analyzing data from a previous study. For the novice researcher, generating a research idea usually involves analyzing the existing research literature to understand what has been done in the field and identifying one or more gaps that need to be addressed. Regardless of how a research idea is generated, the researcher critically analyzes the literature and puts the proposed study into the context of the published literature. The researcher makes a case for the significance of the problem to be studied. Reviewing the literature also helps with the development of the study procedures, because using established approaches and instruments increases the validity and reliability of inferences that can be drawn from the findings.

When a new area of study is embarked upon, pilot work often needs to be undertaken. The process for a grant application for pilot work is the same as that for

BOX 8-1 Examples of Selected Private Foundations and Professional Organizations that Fund Nursing Research

NAME OF ORGANIZATION

American Heart Association
American Diabetes Association
American Nurses Foundation
American Association of Critical Care Nurses
Sigma Theta Tau Honor Society
Society for Vascular Nursing

WEB SITE

<http://www.americanheart.org>
<http://www.diabetes.org>
<http://www.ana.org/anf/>
<http://www.aacn.org>
<http://www.nursingsociety.org>
<http://www.svnnet.org>

applying for a major grant; however, because pilot work can usually be done more inexpensively, the sources of funding may be different from those used for the larger project.

A crucial aspect of grant writing is the development of a budget. This involves determining the costs for conducting the research. The researcher must step through the entire research process and estimate costs for a wide variety of expenditures, including personnel, office and laboratory renovations, travel expenses, computers and specialty software, equipment and related supplies, laboratory fees, biochemical assays, data collection tools, advertisements, photocopying and office supplies, subject and mileage reimbursement, data analysis, and publication costs. Although this sounds relatively easy to do, it is a sophisticated skill. For example, when calculating staff costs, one item to consider is the recruitment of subjects. The researcher must know the number of subjects who must be screened, the proportion who will meet the study criteria, and some estimate of how many will consent to participate and during what time period. The researcher must also include in the calculation the attrition rate from drop out or death. Part of the consideration is also how sick the potential subjects are, the amount of burden that the study imposes, and what the subject will gain by participating. All of these factors need to be considered when calculating the amount of time that it will take to recruit subjects, the level of personnel required to do the job, and the amount of subject reimbursement (if any) required to compensate participants fairly. Because a grant award is a fixed amount of money, the budget must be planned carefully, monitored closely, and adjusted throughout the study to account for unexpected expenses and inflation.

The general activities of the nurse researcher are consistent across settings; however, variability is seen on the basis of the nature of the study and the specific employer's expectations. Researchers are employed by colleges and universities, health care agencies (e.g., hospitals, community agencies, not-for-profit groups), government agencies (e.g., Centers for Disease Control and Prevention), and industry (e.g., wound care product, pharmaceutical, durable medical equipment companies); alternatively, they may be self-employed, work under contract, or perform independent consulting.

In a research-intensive university, researchers typically serve either in the academic series or research series. The person in the academic series is classically in a tenure-track position in which research and creative work is one criterion for progression in rank. Research

needs to be completed, but time also needs to be devoted to teaching, professional competence, and university and public service. Thus, most nurse researchers in the academic series are not solely researchers. The nurse researchers in the academic series are usually on "hard money" (i.e., university or college funds), and grant funding is used to offset a part of their salary so that release time is available to conduct the study. One must realize that participation in research depends on the mission of the educational institution and how that mission is implemented; thus, non-research-intensive colleges and universities allow their faculty little time to devote to research.

In the research series, the nurse researcher is hired specifically to conduct his or her own studies or to be employed as a member of someone else's research team. Individuals in the research series are funded entirely from grant money or "soft money." Successful nurses in this series are productive, flexible, and creative, because their position lasts only as long as they are funded by grants. Individuals in the research series typically do not have a teaching assignment; however, some level of service to the institution may be a role expectation.

Researchers employed in a health care agency must focus their research questions on issues that are relevant to the agency and to the populations that the agency serves. Depending on their contracts, these researchers may also be expected to help the nursing staff develop and implement their own research studies or learn how to interpret studies as the basis for developing evidence-based care in the facility.

Nurse researchers employed by industry are often hired because they bridge the gap between clinical practice and the basic sciences. They are usually responsible for overseeing the clinical research testing of the company's products. These researchers are often responsible for implementing a project: locating sites to conduct the studies, identifying a principal investigator, setting up multisite studies, training the project coordinator at each site, and performing site visits to ensure that the protocol is conducted consistently and that data are recorded in a manner that allows for analysis by site and for the pooling of data across settings. Often the nurse researcher who is employed by industry must understand the requirements of the U.S. Food and Drug Administration for the testing of new products so that the protocol developed and the data gathered will meet the scrutiny required for the ultimate approval of the product.

Nurse researchers who are self-employed contract with others for specific services. The type of services

offered and their costs vary widely. Some researchers do primarily data analysis, others assist with the design of studies, and still others combine their substantive nursing expertise (e.g., adult cardiovascular nursing) with research skills. Their income depends on developing a set of clients with ongoing needs or being so well known that new clients are referred to them.

In summary, nurse researchers are prepared to actualize all aspects of the research process. They may be responsible for the entire study or for just a portion of it. They may work in academia, health care or government agencies, or industry, or they may be self-employed. Much heterogeneity exists with regard to what nurse researchers actually do.

WHAT CHALLENGES DO NURSE RESEARCHERS FACE?

Nurse researchers face a myriad of challenges (Box 8-2), including the limited availability of start-up funding; defining why nursing research is important to nursing practice; developing intradiscipline respect for nurse researchers whose substantive focus or research method differs from one's own; continuing to define the discipline of nursing through nursing research in a changing health care arena; the limited availability of laboratory or clinic space for data collection; acquiring access to potential research subjects; obtaining national-level funding in a world of shrinking fiscal resources; and implementing the study.

In the basic science arena, a newly hired researcher is given a start-up package. Depending on the type of research, the equipment necessary to perform the research, and whether the researcher is bringing any equipment from a previous job, the start-up package often consists of hundreds of thousands of dollars. Historically, schools of nursing have not had the monies available to offer a start-up package to new faculty members; this can be particularly problematic in the case of biological research for which expensive instrumentation may be

required. To obtain national-level funding, which is the gold standard in academia, preliminary data are necessary; however, the only grant funding with a sufficiently large budget to purchase much of the need equipment is a national-level grant. In many cases, however, nurse researchers become creative and borrow equipment from a collaborator or rent equipment with funds from a small "seed" grant.

Within nursing and from outside of the profession, there has been limited appreciation of the need for nursing research. Research in nursing has been viewed as an activity of nursing students or as one of the hoops to jump through to obtain a master's degree or PhD rather than as being important to the development of the discipline and practice of nursing. This conclusion is not overwhelmingly surprising because, in the past, few nurses conducted research. Furthermore, nurse researchers predominantly published their results in data-based, research journals rather than in practice-based journals read by clinicians. More recently, however, clinical nurses are expected to use the best available evidence to make patient care decisions to promote patient safety, improve outcomes, and decrease costs (Polit & Beck, 2008). Consequently, both the conduct of nursing research and the translation of nursing research into clinical practice are becoming more valued and recognized as essential components of evidence-based nursing practice and as hallmarks of quality nursing care. In fact, the Magnet Recognition Program, which identifies excellence in nursing services and acknowledges those health care organizations that are committed to the delivery of quality nursing care, includes staff nurse participation in research as part of the eligibility criteria (American Nurses Association, 2008).

Recently, nurse researchers have been recognized for their programs of research. For example, Drew and colleagues (2006, 2007) produced research in electrocardiography with significant clinical implications for bedside critical care nursing practice. Interdisciplinary research is illustrated by the work of Miaskowski and colleagues (2007) with regard to the development, implementation, and evaluation of strategies to modulate cancer pain. Multicenter studies are also important contributions, because large populations that would be unavailable at a single institution can be enrolled to answer clinically important questions in a more expedient manner (Aiken et al., 2008).

Within the nurse researcher community, there is increasing respect for researchers whose substantive content or research method differs from one's own. The battle has been between quantitative and qualitative

BOX 8-2 Challenges that Nurse Researchers Face

- Limited start-up funding
- Devaluation of nursing research
- Disagreements about research methods
- Limited availability of space for data collection
- Limited access to populations of interest
- Limited availability of funding for ongoing research programs

methods and between basic science laboratory research and applied clinical studies. Although some of the conflict involves honest discussion and an effort to understand by comparing and contrasting, the discourse has often been divisive, and it has detracted from nursing research. A kinder and more broad-minded approach that encourages the understanding of differences and an appreciation of the types of knowledge that can be produced with different approaches allows nurse researchers to focus their energies on generating science rather than defending their substantive content or research method. Ultimately, the research question being asked should drive the methods used. A need exists for building a scientific basis for care, regardless of the research method selected.

Another challenge for nurse researchers is to continue to define the discipline of nursing through research in a changing health care arena. The nature of nursing is changing continually as a result of economic forces and as the costs of disease prevention and treatment rise. Less expensive care may not be better care. Nursing has not properly defined its unique contribution to health care, and the discipline is in jeopardy of being marginalized during this period in which interventions are being closely linked to outcomes. Nurse researchers whose research focus is on health care systems and nursing-sensitive outcomes have begun to demonstrate the importance of quality nursing care for decreasing failure to rescue and mortality among hospitalized patients (Friese et al., 2008; Rafferty et al., 2007). Additional work in community settings is helping to establish the importance of nursing care coordination with regard to clinical outcomes such as pain, dyspnea, and activities of daily living (Marek, Popejoy, Petroski, & Rantz, 2006) as well as with regard to nurse-managed, community-based, long-term care programs that improve clinical outcomes such as cognition, depression, and incontinence (Marek et al., 2005).

Because maintaining an active clinical practice is typically not required or even feasible and certainly challenging for faculty members within a school of nursing, nurse researchers seldom have their own caseload of patients. Thus, when the time comes to recruit subjects for research, gaining access to potential subjects may be a challenge. If a sample of healthy subjects is needed, physician approval may not be required, and advertising in newspapers or posting flyers in the community is sufficient. If the sample involves patients with a particular disease process, access to patients may depend on the openness of the patient's primary or specialty care provider to having the subject studied; a

positive collaborative relationship between the nurse researcher and other health care providers is pivotal to success. Other considerations that may affect access to patients are the numbers of studies being conducted at a given site, the direct potential financial benefit of the study to the health care team, and whether the researcher is seen as someone who may "steal" patients from the primary care provider's practice. More recently, the implementation of the Health Insurance Portability and Accountability Act (HIPAA) privacy rule has added another layer of complexity to the recruitment of research subjects by regulating the researcher's ability to perform preparatory chart reviews, to make initial contact with potential subjects, and to prescreen potential subjects (e.g., by telephone; Wipke-Tevis & Pickett, 2008).

Another challenge is the availability of funding. Funding available from the NINR for nursing studies is limited, and nurse researchers compete directly with each other and with scientists in other institutes at the NIH. The benefit of research to the consumer requires more emphasis to help leverage funding from both the public and private sectors. One approach to this is to focus for a period on translational research in which the emphasis is on research use and the effects that research findings have on clinical outcomes. However, there must be a fine balance between creating knowledge and finding ways to use it. The funding for the pipeline of knowledge must not be sacrificed for immediate use.

Implementing a research study brings its own unique challenges. A local committee called the institutional review board (IRB) must review the proposal before the initiation of the project. The IRB determines whether the risks associated with the study are reasonable with respect to the potential benefits and the knowledge to be gained. Potential risks include not only the risk of physical harm (which may be negligible in many nursing research studies) but also the possibility of emotional distress, breach of confidentiality, and financial and legal issues. Compliance with the HIPAA privacy rule must also be evaluated; depending on the institution, the IRB may serve this function, or the study may have to be reviewed by a separate privacy board. The HIPAA privacy rule also affects the number of subjects, the length of the study, and complexity of the paperwork involved in the informed consent process, which can be a deterrent to the recruitment of potential subjects (Wipke-Tevis & Pickett, 2008). Depending on the amount of risk involved with the project, the type of data being collected (e.g., individually identifiable personal health information vs. de-identified data), and

whether the researcher is part of a covered or hybrid entity, the informed consent process may include obtaining the oral or written informed consent of the participants, obtaining a written HIPAA authorization, and providing a copy of the institution's notice of privacy practices.

Several categories of vulnerable populations for which the IRB requires special precautions include minors, cognitively impaired adults, pregnant women, fetuses, prisoners, and those who do not read, speak, or understand English. Depending on the type of vulnerability, the IRB will require special adaptations. For example, parents give approval for research with their children, and, when the child is of an age of understanding, the child must also give assent. The same process is applicable when cognitively impaired adults are present: the person with legal authority provides consent, and the potential research subject provides assent, if able. Special guidelines are applicable for other vulnerable categories, such as prisoners. The protections provided may increase the challenges of the researcher who must obtain informed consent. In fact, Geluda and colleagues (2005) suggest that third-party consent is a major obstacle to research in these populations; the researcher must accommodate the research plan to address the slow recruitment that often results.

The recruitment of subjects offers its own challenges (e.g., developing methods to screen and obtain consent from potential subjects). Perhaps a study is designed to examine pain in patients with long bone fractures and the researchers want to follow the patients from the emergency department, through hospitalization, and back into the community. How will these researchers identify subjects? They could hire a research assistant to sit in the emergency department and identify cases as they enter the system, or they could pay the ward clerk a fee to page them when a person who meets the inclusion criteria arrives. Alternatively, the researchers may invite the head nurse of the emergency department to work as a member of the research team to help address this critical issue. Depending on the characteristics of the desired sample, the researchers may also have to consider issues such as obtaining proxy or surrogate consent. Resourcefulness and creativity are important as researchers consider the issues related to the recruitment of subjects.

Instrumentation also provides challenges for nurse researchers. Some paper-and-pencil instruments are copyrighted and require permission for use. Other instruments require acknowledgment of the source, and still others require a fee for use. Biological instruments

provide other opportunities for growth. Training study staff in the proper use and routine maintenance and calibration of the instrument is critical to obtaining quality data. Where to place the sensor, how to get it to adhere to the site, and strategies to minimize subject burden with multiple biologic instruments are considerations that the researcher needs to address.

Adequate physical space in which to perform the research is also a pivotal issue. In the ideal situation, the researcher has dedicated research space within the school of nursing. During the grant-writing process, this allows the researcher to demonstrate to the potential funding agency that the researcher has institutional support for the research. During the implementation phase, dedicated space provides a controlled environment for data collection, entry, and management as well as space for study staff. Unfortunately, research space is often not readily available, because most schools of nursing were designed with the mission of teaching rather than research in mind. Consequently, nurse researchers may have to negotiate research space in an affiliated health care facility or wherever it is available on campus or in the community. If the actual data collection occurs in the clinical arena (e.g., nursing home, outpatient clinic), knowledge of the formal and informal lines of communication and refined diplomatic skills are required to gain and maintain access to the site.

The hiring and maintenance of a research staff requires yet another skill set. The system may require advertising for a minimal period, and salaries may be dictated by standardized criteria. Knowledge of union standards and holiday and vacation time are hidden responsibilities of the researcher. Given the extensive specialized training required to get research staff oriented to a project, it is important to select individuals who are compatible with the research team members and who are likely to stay throughout the duration of the project.

Nurse researchers face many challenges in their work. Anticipating the challenges assists the researcher with consciously devising approaches to mitigate them so that the researchers can focus their energies on the generation of knowledge.

SUMMARY

Nurse researchers are a hearty group of nurses who seek to develop the scientific basis that underlies nursing practice. For the most part, they are doctorally prepared nurses who initiate or participate in all phases of the

research process. They are engaged in diverse research methods, and their substantive content addresses the full life span, the health and illness spectrum, and the health care system. These nurses work in a variety of settings, and they face numerous challenges in their daily work. However, it is critical to recognize that the work of the nurse researcher is pivotal to the profession, because it provides the scientific basis for current and future nursing care.

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SECTION 2

Changing Education

Nursing Education in Transition

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

It is a paradoxical but profoundly true and important principle of life that the most likely way to reach a goal is to be aiming not at that goal itself but at some more ambitious goal beyond it.

Arnold Toynbee

The authors of the chapters in Section 2 have most certainly aimed into the near future and beyond when addressing ongoing challenges (e.g., nursing and faculty shortages, role changes) and those that have recently appeared on the horizon (e.g., global fiscal recession, international collaboration in nursing education). The authors of Chapter 9, Theresa M. Valiga and Mary Champagne, note that the health care system of the twenty-first century is complex, technologically rich, ethically challenging, and ever changing. The roles of all health care providers are continually evolving, and the boundaries of practice are shifting regularly. Knowledge is exploding at unprecedented rates, and the evidence base for practice grows stronger day by day; health care providers must repeatedly make decisions and take action in situations that are characterized by ambiguity and uncertainty.

At the same time, the current nursing shortage is different, and has perhaps resulted from a perfect storm of economic, social, technological, workplace, and demographic forces. Data from the U.S. Department of Health and Human Services indicate that, by 2020, hospitals will be short almost 800,000 nurses. There are many complex problems underlying this shortage, and there are no easy solutions. A unique factor in today's shortage is the graying of nursing faculty and clinicians, with large numbers of both projected to retire in the next 20 years; this is paired with an insufficient pool of young replacements. The National League for Nursing reports that there are currently less than 20,000 nursing faculty, with a projected need for 40,000 to address the nursing shortage. This problem is the watershed of the issues discussed throughout many of the chapters in this section. Valiga and Champagne posit that the changing

expectations and roles for nurses require new goals and approaches to nursing education that are designed, implemented, tested, and continually revised to remain relevant, effective, appropriate, and cutting edge.

Recent efforts are underway by the National League for Nursing, other organizations, and individual schools of nursing to continually broaden diversity to have the nursing population more closely mirror the racial and ethnic composition of the communities that nurses serve and to have a larger pool of individuals who can pursue preparation as nurse educators and nurse scientists. A student population that is more diverse ethnically and racially challenges educators to be experts at assessing learning needs, to become increasingly responsive to meeting those individual learning needs, and to design learning experiences that take full advantage of what diverse students have to offer to one another. This raises curricular, collaborative, institutional, and international nursing education implications, which are explored by other authors in this section.

In addition, the changing landscape of nursing education is discussed, including the evolution of new programs in nursing and the creation of new advancement opportunities. These new options challenge faculty to reconsider a variety of entry and exit points for programs, to reflect in new ways about how learning at one level can be built upon in creative ways to help nurses continue their formal education, to rethink how programs can prepare nurses for an unknown and unknowable future, and to seriously consider the future of various program options. Other chapter authors express concern for the negative unintended consequences of the Doctorate of Nursing Practice (DNP) degree, including a decrease in the number of PhD-prepared nurses, the erosion of nursing as a

scientific discipline, and a further widening of the chasm between nurse scientists and clinicians. Several authors in this section delve into these issues.

In Chapter 9, Valiga and Champagne deftly describe the path that led to this crossroad and that will lead into the future through the genesis of new competencies and outcomes for graduates; new curricular designs, teaching strategies, and evaluation models; and new models for clinical education. They conclude by saying that nurse educators need to be willing to give up the many traditions that seem to get in the way of innovation and creativity.

In Chapter 10, Kathryn J. Dolter provides an update regarding the status of quality in prelicensure nursing education by examining the outcomes of that education. She then presents a systematic analysis of the inputs and processes of prelicensure nursing education. She approaches this through a quality assurance paradigm, marching through indicators and outcome measurements that include the production of adequate numbers of prelicensure students, faculty supply issues, NCLEX pass rates, and student cost and access. Dolter skillfully examines issues related to quality of care, particularly recent Institute of Medicine findings, with implications for both nursing and nursing education. She concludes her chapter with a solid process assessment of prelicensure regulation and accreditation issues.

In Chapter 11, Michele J. Upvall expands the scope to include an international perspective and provides an interesting overview of varying approaches to international education. She describes the vast differences in the maturity of international graduate education programs, she offers a very insightful review of global nursing shortage issues, and she identifies both internal and international migration as critical challenges. Upvall notes, "The intense, active recruitment of nurses in developing countries in particular is a new phenomenon affecting the global shortage and negatively impacting health care in the home country." Although the International Council of Nurses supports the right of nurses to migrate, it recognizes that this may negatively affect health care in the home country, and it condemns active recruiting by countries that have not addressed human resources and planned appropriately. Upvall concludes that "this issue will continue to be a matter of debate between the nursing leadership in Western and developing countries until the nursing shortage in Western countries eases."

Continuing the theme of international collaboration in education, in Chapter 12, Tess Judge-Ellis and Connie Trowbridge describe two examples of education

programs that have successfully offered international opportunities for undergraduate nursing students at the University of Iowa College of Nursing: Xicotepec and Collaborative Learning Across Borders. The two experiences have differences in their designs, yet they share many things that are common to all nursing study abroad experiences: partnership, student and faculty preparation, and cultural competence. The authors' discussion of the faculty perspective on a nursing program that involves the collaborative efforts of both international institutions and multidisciplinary groups provides for a very interesting read.

In Chapter 13, Christine L. Latham describes a related concept when addressing the development of a partnership between an established academic nursing program and two separate, service-based, clinical programs housed within a neighboring university and a large health care service provider organization in California. This collaboration resulted in three new programs: a statewide distance baccalaureate registered nurse completion program and two Master's of Science in Nursing advanced practice specialties (nurse anesthetist and family nurse practitioner). The American Association of Critical-Care Nurses AACN has supported the development of strategic partnerships to expand nursing programs in the light of the current faculty shortage, the lack of sufficient clinical sites to support nursing student education, and academic fiscal constraints. This chapter provides an interesting operationalization of this concept.

In Chapter 14, we move in a new direction; Howard K. Butcher provides a thought-provoking debate about the relationships among nursing theory, nursing research, and nursing practice. Butcher notes that, if nursing is to be successful in the emerging conceptual age as a scientific practice discipline, then nursing theory, practice, and research knowledge development need to be unified into a seamless whole. He posits that the bringing together of nursing theory, practice, and research creates a true unity of knowledge designed to support the service provided to clients as well as the health of society. Butcher approaches this through what he describes as "big thinking" regarding the primacy of nursing theory as disciplinary knowledge. He identifies three vantage points: knowledge based in nursing theory, knowledge based in practice, and knowledge based in research. Although a fully integrated, discipline-specific theory-research-practice model is the ideal, the author reviews subtypes that approach this benchmark, and he provides an overview of nursing classification systems that he considers the "sources for knowledge development"

and that provide “the language of the nursing discipline.” This chapter should provide for much lively debate and discussion among all who are interested in knowledge generation and use.

In the final chapter of this section, Diane J. Skiba supports the growth of online learning and summarizes the best practices for Web-based education. She also provides students with criteria to use to assess the quality of Web-based educational programs before selecting an online course or degree program. She reviews principles regarding the quality of electronically offered degree or certificate programs under the areas of curriculum and instruction, institutional context and commitment,

and evaluation and assessment. An overview of the Evaluating Educational Uses of the Web in Nursing “Benchmarking to Education Standards (B.E.S.T.)” project is provided and includes interesting research findings related to differences in perceptions of undergraduate and graduate students’ experiences in Web-based courses.

Section 2 provides an interesting view of the far-reaching shifts that are occurring during this remarkable time in nursing. The themes are amazingly consistent with regard to detailing the threshold of change that nursing education has entered and the new frontier that lies ahead.

Creating the Future of Nursing Education: Challenges and Opportunities

THERESA M. VALIGA ♦ MARY CHAMPAGNE

The health care system of the twenty-first century is complex, technologically rich, ethically challenging, and ever changing. The roles of all health care providers evolve continually, and boundaries of practice shift regularly. Knowledge explodes at unprecedented rates, and, although the evidence base for practice grows stronger every day, health care providers must repeatedly make decisions and take action in situations that are characterized by ambiguity and uncertainty.

Despite these unprecedented changes, the educational preparation of nurses has remained virtually unchanged for more than 50 years. Delivery modes such as distance learning, online classes, and e-learning now exist, and high-fidelity simulators are increasingly being used in nursing programs; however, nursing education remains content focused and teacher centered. Collaborative partnerships in which students and teachers learn together and from one another are few. Teachers still feel pressured to cover the content through lectures rather than experimenting with innovative modalities that focus on thinking, true understanding, and the development of the new skill sets needed for today's practice arena. Clinical rotations—where students spend limited time in a variety of settings but never truly feel as if they are an integral part of any of them—remain the norm. Multiple-choice tests continue to be the primary mode of evaluating what students have learned, despite the modern understanding that such methods attend only to cognitive domain learning, typically focus on superficial learning, and promote one right answer. Students remain passive learners rather than becoming active learners, who are empowered to explore, challenge ideas, propose new solutions, and lead.

The changing expectations and roles of nurses in combination with the changing context of health care demand that new approaches to nursing education be designed, implemented, tested, and continually revised to remain relevant, effective, appropriate, and cutting edge. However, these goals will only be achieved when

faculty have the knowledge, skills, and commitment to envision a preferred future for nursing education; take risks to design innovative programs; integrate technology effectively; incorporate the scholarship of teaching (Boyer, 1990) into their day-to-day practices; and engage in true student-centered teaching.

CHALLENGES FACED BY NURSE EDUCATORS TODAY

It is clear that the context of nursing education is changing and that new models of education are needed. The student population is increasingly diverse, and efforts are underway (e.g., by the National League for Nursing [NLN] and other organizations as well as by individual schools of nursing) to continually broaden that diversity to have the nursing population more closely mirror the racial and ethnic composition of the community that it serves and to have a larger pool of diverse individuals who can pursue preparation as nurse educators and nurse scientists. A student population that is more diverse ethnically and racially also includes more men, embraces individuals for whom English is a second language, and integrates varied cultural perspectives. A population this diverse challenges educators to be experts at assessing learning needs, to be increasingly responsive to meeting those individual learning needs, and to design learning experiences that take full advantage of what diverse students have to offer to one another and to the overall educational enterprise.

The context for and expectations related to nursing education are also being increasingly influenced by external forces. For example, the Institute of Medicine (IOM) has outlined recommendations for changes in the education of all health professionals (Greiner & Knebel, 2003). As the result of a multidisciplinary summit of those who teach physicians, physical therapists, pharmacists, occupational therapists, psychologists, nurses, and other

health professionals, the IOM recommended that educational programs emphasize the following core competencies (Greiner & Knebel, pp. 45-46):

1. Provide patient-centered care.
2. Work in interdisciplinary teams.
3. Employ evidence-based practice.
4. Apply quality improvement methods.
5. Make use of informatics.

Nurse educators have written about how faculty can integrate these concepts into curricula, and other groups have extended the thinking about these competencies to include a sixth one: safety (Finkelman, Kenner, & American Nurses Association Staff, 2006). The Quality and Safety Education in Nursing collaborative, which is sponsored by the Robert Wood Johnson Foundation, has helped educators appreciate the complexity of creating cultures of safety in health care arenas, and it has also helped them to “address the challenge of preparing future nurses with the knowledge, skills and attitudes necessary to continuously improve the quality and safety of the healthcare systems in which they work” (Cronenwett et al., 2007, p. 122). Their competency statements related to the five IOM core competencies and the additional competency area of safety have guided faculty with regard to curricula development.

Nursing faculty are being challenged to incorporate genetics and genomics competencies (Jenkins & Calzone, 2007) and informatics competencies (Technology Informatics Guiding Educational Reform Informatics Competency Collaborative, 2009) into curricula at both the basic and graduate levels. Demands for excellence and innovation in nursing education are increasing (Adams & Valiga, 2009; NLN, 2003, 2004, 2006). New essentials of education at the baccalaureate level have been articulated (American Association of Colleges of Nursing [AACN] 2008). With the use of lengthy collaborative efforts among educators and regulatory bodies, a consensus mode that addresses the licensure, accreditation, certification, and education of advanced practice registered nurses has been formulated that will influence the ongoing design and implementation of nursing education at the graduate level (Advanced Practice Registered Nurses Joint Dialogue Group, 2008).

The changing landscape of nursing education also includes the evolution of new programs in nursing (e.g., clinical nurse leader, (CNL) Doctor of Nursing Practice [DNP]) and the creation of new advancement opportunities (e.g., RN to MSN, BSN to PhD). These new options challenge faculty to reconsider a variety of entry and exit points for programs, to reflect in new ways regarding how learning at one level can be built upon in

creative ways to help nurses continue their formal education, to rethink how programs can prepare nurses for an unknown and unknowable future, and to seriously consider the future of various program options. For example, what might the future of associate degree programs be as health care facilities demand nurses who have a broad scope of preparation? What might the future of baccalaureate programs be if the role were to become widely accepted in the practice arena? What might the future of master's programs be when all advanced practice clinical nurses are expected to hold a DNP? What might the future of PhD programs be when more and more nurses complete DNP programs and secure positions (in practice or in education) that had previously required a research doctorate?

Finally, the context of nursing education is being influenced by two other significant factors: a shortage of qualified faculty and calls for developing the science of nursing education. There is no question that most nursing schools across the country in all types of programs are experiencing a serious shortage of faculty who hold the appropriate credentials for faculty appointment and who have been prepared for the complexities of the faculty role.

Both the AACN (2009) and the NLN (2009) report the growing number of unfilled faculty positions, the continually increasing number of qualified applicants who must be turned away because there are not enough faculty to teach them, the large number of faculty expected to retire in the next few years, and the demands being placed on schools to expand enrollment to address the nursing shortage. Not only are the numbers of faculty inadequate to meet the increasing demands, but questions are also being raised about the extent to which individuals now involved in designing and implementing nursing curricula have the knowledge of education and pedagogy to do so effectively. The number of today's nursing faculty who have achieved the competencies outlined for the nurse educator role is questionable (Halstead, 2007; NLN, 2005), and this situation will certainly affect future academic programs.

Although the number of individuals who have been prepared as education scholars in nursing is limited, efforts continue to advance regarding the development of a science of nursing education. Just as the health care arena is calling for evidence-based clinical practice, the academic community is calling for evidence-based teaching practice, the advancement of the scholarship of teaching, and the development of a science of education in nursing. Research regarding the best learning environments for diverse student groups, the most

effective ways to help students understand various complex nursing care concepts, standards for distance education and technology-based teaching modalities, and other elements of the educational experience is being conducted, and faculty are increasingly expected to select teaching and evaluation methods based on the findings of such research.

Perhaps one of the most significant studies of recent years was the national study supported by the Carnegie Foundation for the Advancement of Teaching (2009) and led by Dr. Patricia Benner, which was designed to “understand the demands of learning to be a nurse and the most effective strategies for teaching nursing.” Among the most significant findings of this study were the explication of what characterizes excellent teachers and the identification of the signature pedagogies used in nursing. This study reported that excellent teachers “have a clear vision of what kind of nurse they would like to graduate; place their students in a collaborative nursing role; ask students to answer questions about what is at stake for the patient, what the patient is experiencing, and what the next step is for the patient; highlight what is salient about a case or a situation and what is an appropriate response; seamlessly integrate the three apprenticeships to teach how to be a nurse in terms of ethical comportment, knowledge of the humanities, sciences, and social sciences, and practice skills; and engage in dialogue with students to explore the student’s thinking.” The signature pedagogies of nursing as identified by this study include coaching, simulation, and role modeling.

Findings from the Carnegie study and other research are making it clear that nursing educators must rethink the outcome competencies expected of graduates, and they must think about the most effective ways to help students successfully achieve those competencies. Indeed, the time is now for creating the preferred future of nursing education.

NEW COMPETENCIES AND OUTCOMES FOR GRADUATES

As noted previously, today’s educational programs are called upon to prepare nurses who can provide safe, quality care to patients, families, communities, and diverse populations of individuals with health promotion, health maintenance, health restoration, and disease prevention needs. To practice effectively in the uncertain, ever-changing health care environments of today and tomorrow, nurses must be armed with new skill sets. Nursing graduates must be prepared with

exquisite thinking skills, the ability to make decisions in uncertainty, a system-wide perspective (rather than focusing merely on isolated incidents), and the ability to create cultures that expect and value quality and safety. They must also be able to engage effectively as members of interdisciplinary teams, to manage enormous amounts of often conflicting information, and engage in evidence-based practice. Finally, they must be aware of their own values, view themselves as leaders, and attend to the scholarly dimensions of nursing practice.

Even at the basic, prelicensure level, it is no longer acceptable that nursing graduates only be prepared to provide one-on-one care to patients in traditional ways. Educators must design curricula and learning experiences that attend to all of the necessary competencies. But what might those curricula and learning experiences look like?

NEW CURRICULA DESIGNS, TEACHING STRATEGIES, AND EVALUATION METHODS

Curricula

The curriculum that will prepare nursing graduates to function effectively in the evolving health care system must be flexible to meet individual student learning needs, it must accommodate the incorporation of new health care issues or concerns that arise, and it must respond to insights gained through clinical or educational research. The days of nursing’s rigid, lockstep curricula must end.

Faculty need to reconceptualize the fundamentals of nursing and lay a different foundation upon which subsequent learning experiences will be built. Although it is important for students to learn about vital signs, hygiene measures, and medication administration, they also must learn about evidence-based nursing practice, health team collaboration, information management, system-wide thinking, health policy, the structure and dynamics of the health care delivery system, health care economics, and clinical reasoning, all of which will serve as the new fundamentals.

As knowledge explodes, it become increasingly impossible to cover it all, so nursing faculty must free themselves from the focus on content coverage (Diekelmann & Smythe, 2004; Ironside, 2004; Tanner, 2004). Instead, courses must be organized around broad concepts that help students truly understand the complexities of patient care situations and nursing interventions rather than merely asking them to memorize isolated facts to pass a test.

In the light of the fact that students in nursing programs come from increasingly diverse backgrounds, have varied interests and career goals, and have different learning styles, the nursing curriculum may better serve students if it provides opportunities for students to take electives (in or outside of nursing) or if students are able to design their own courses to some extent. Should students be given a choice about the sequence in which they take courses? There is no evidence that it is better to learn medical-surgical information before community health or wellness before illness, and one can find programs that follow any of these sequences. Thus, if a student is particularly interested in learning about caring for patients with cancer because his sister was just diagnosed with the disease and he wants to know all he can about its management, could he not take the course that addresses that health problem when he is eager to learn about it rather than postponing the class for another semester or two because that's when it's "supposed to be" scheduled? Alternatively, just the opposite might be the case. A student may be scheduled to take a course that addresses care of patients with cancer during the next semester, but, because her younger brother has just been diagnosed with cancer and she is devastated by that fact, she would prefer to postpone the course. Is it impossible or merely inconvenient to accommodate such variety in course sequencing in nursing curricula?

Faculty may also consider the hours-to-credit ratios that exist at different points in the program. For example, beginning students require extensive time to do almost everything, which is congruent with what the literature tells us about learning in the psychomotor domain (Harrow, 1972). Perhaps the ratio at that level of the program needs to be 4:1: four hours for every credit awarded. Students at the end of the program, however, are expected to be more proficient in their performance and to make practice decisions more effectively; the ratio at that level of the program may more appropriately be 2:1. In the middle of a program, as students are transitioning from being beginners to being more competent clinicians, a ratio of 3:1 may be most appropriate. Again, as faculty build curricula that will prepare tomorrow's nurses, new ways of thinking must be considered, and old (and untested) traditions must be left behind.

One other idea will be offered here for consideration: prerequisite requirements. Historically, nursing programs have been quite rigid about spelling out courses that must be completed before a student can enroll in another course. For example, in many cases a

microbiology course must be completed before a student can enroll in a course that addresses the care of ill adults and children. However, do students truly need an entire microbiology course, and do they need to do all of the laboratory exercises that are typically integral to such a course? Perhaps faculty need to think about the specific concepts of microbiology that are critical for students to learn well to be successful in a subsequent course; they need to make it clear that such material will be built upon but not repeated in the nursing course. Thinking in this way emphasizes the particular knowledge and skills needed as a foundation for a higher-level course. When that knowledge is clarified, it allows for the possibility that students can learn it in various ways. Some students might enroll in the microbiology course, whereas others may complete some online modules that address the significant concepts. Alternatively, some student may gain the needed knowledge by working with a faculty member in a microbiology laboratory or on a research project that addresses the necessary concepts. Faculty in the subsequent nursing course could devise some measure of course entry competencies to ensure that entering students do indeed have the necessary foundation. Earning a "C" (or even a "B" or "A") in a microbiology course does not necessarily guarantee that the student has truly learned the concepts that have been deemed essential as a foundation for nursing.

There are many more ways in which nursing faculty can reconceptualize curricula design, and readers are challenged to identify those options. As educators move forward with creating the future of nursing education, they must also consider how they teach and how they involve students in the learning process.

Teaching Strategies and Student-Teacher Relationships

The higher education literature is replete with recommendations related to collaborative learning, active learning, problem-based learning, and many other student-centered approaches to teaching. Faculty are encouraged to consider how technology (e.g., simulation, serious gaming, handheld devices, student response systems, wikis, blogs, virtual environments, YouTube) can be effectively integrated into nursing programs to make education more accessible to students and enhance learning. It is beyond the scope of this chapter to explore the full range of innovative teaching strategies that can be used to facilitate student learning, but readers are encouraged to examine the research that attests to the value of such approaches.

A recent book entitled *Building a Science of Nursing Education: Foundations for Evidence-Based Teaching Learning* (Shultz, 2009) provides an excellent overview of research that has been completed related to teaching in the cognitive, psychomotor, and affective domains. In addition, faculty can learn about innovative teaching strategies through nursing-focused publications like the *International Journal of Nursing Education Scholarship*, the *Journal of Nursing Education*, *Nurse Educator*, and *Nursing Education Perspectives*, as well as higher-education-focused publications such as *Higher Education Research and Development*, *Innovations in Education and Teaching International*, *Medical Teacher*, and *Studies in Higher Education*.

Nursing faculty would also benefit from exploring the use of narrative pedagogy (Andrews et al., 2001; Diekelmann, 2001; Ironside, 2006), which is derived from studies of the experiences of nursing students and teachers. When this perspective is enacted, students and teachers think and talk about topics of interest, and they share and interpret their experiences to discover new and deeper understandings of phenomena of concern. Research into the use of narrative pedagogy shows that teachers who enact it move beyond strategies that emphasize cognitive gain and skill acquisition (Ironside, 2006), which are so typical of current programs. The narrative pedagogy engages students in thinking about situations that they encounter from multiple perspectives, and it helps them to explore how one's background, assumptions, and experiences inform one's practice. Thus, this perspective holds promise for preparing nursing graduates for the complex practice world that awaits them.

Overall, faculty need to design teaching strategies that position students and teachers as co-learners, that enable faculty to give up some control of the learning environment, that meet the needs of diverse student populations, and that promote dialogue among students and between students and teachers. Ironside (personal communication, September 2007) reported that, when she completed all of the assignments that she had given her students at the same time that they were completing them, she realized how time consuming those assignments were, she questioned the value of some of them, and she reflected on how much more learning might occur if some were completed by teams of students. This experience led to major revisions in the amount and nature of the assignments that she gave to her students, although the rigor of the assignments and the expectations regarding their quality were not lowered.

The nursing education of the future must attend to teaching strategies, and it must address the nature of

the relationships that are established between learners and teachers. In addition to rethinking the nature of student-teacher relationships and using student-centered, evidence-based approaches to teach and facilitate learning, nurse educators also need to consider the ways in which they evaluate what students have learned, how they have grown personally and professionally, and the extent to which they have achieved intended program outcomes.

Evaluation Methods

Just as learning is a complex phenomenon, so too is evaluation. Just as there are many strategies that one can use to help students learn, there are many ways that faculty can evaluate what has been learned. It is important to remember that, because the practice of nursing is performed by complex human beings for other complex human beings in complex environments, it is virtually impossible to measure success via simple means. In other words, scores on multiple-choice tests provide no evidence of a student's ability to provide safe, quality care or that his or her practice reflects professional standards and values. Likewise, the efficient performance of a psychomotor skill is not necessarily an indication of what a student knows about the principles that underlie that skill; successful performance may happen by chance. To evaluate what students truly have learned, faculty must use multiple methods, measure success over time and in various circumstances, and view evaluative feedback as a teaching and learning tool in and of itself.

Because of the structure of the licensing examination and the pressures felt by schools of nursing to have good NCLEX pass rates, student learning is evaluated in many schools to a large extent through multiple-choice tests. When multiple-choice test questions are well written and a valid test blueprint is followed, faculty can have some assurance that student scores on such tests are an indication of what a student knows. Far too often, however, questions are poorly constructed, the focus of questions is on minutiae rather than on significant concepts, and tests may be more representative of the personal preferences of the faculty constructing them than of what students truly know about a particular topic. Such forms of evaluation must be used judiciously.

Nurses who practice in the twenty-first century will increasingly be expected to integrate and make sense of large amounts of information, to know how to find and use resources to help them answer practice questions or solve practice problems, to communicate effectively,

and to work collaboratively with others. Perhaps the evaluation methods used throughout the course of study should be designed to measure these abilities at least as much as (if not more than) they measure the abilities to recall and regurgitate isolated facts.

Faculty may consider using dyad testing (Rossignol, 2004) or group projects. There may be some value in asking students to engage in more extensive and reflective self-assessments through journals, blogs, or other means. Students may benefit from engaging in more peer review so that they learn how to give positive and less-than-positive feedback to peers as well as how to receive and respond to such feedback from colleagues. The use of methods that require integration and synthesis (e.g., community projects, portfolios, thought papers, letters to the editor, writing a short story or poem, analyzing a novel or work of art) may be better indicators of what students truly have learned than their selecting "A" or "B" on a multiple-choice test ever could be.

It is important for faculty to remember that learning is a complex phenomenon, and so is one's evolution as a nurse. The measures used to determine progress or success in each of these areas therefore must also be complex.

NEW MODELS FOR CLINICAL EDUCATION

Perhaps the most complex and significant component of nursing education occurs in the clinical environment. Thus, as ways to create a new future for nursing education are considered, the following must also be considered: what clinical learning experiences are like for students, the relationships that exist between students and teachers and those in clinical practice roles, and what it is that is intended to be accomplished through clinical learning.

The clinical environment is generally acknowledged as the place where "it all comes together." Students are expected to draw on the broad range of knowledge that they have gained and to integrate that knowledge, assess patient needs, establish priorities, provide physical care and emotional support to patients and their families, establish and maintain professional relationships with a wide range of individuals (both patients and providers alike), communicate effectively and in a timely way, and work collaboratively with everyone from the housekeeping staff to physicians and advanced practice nurses.

Yet, despite the dramatic changes in patient acuity and length of stay and "despite consistent and tireless

efforts, we seem to be constantly 'tinkering with parts' of our clinical education processes, but generating limited significant change" (Zungolo, 2009). Clinical education in nursing has remained essentially unchanged for more than 50 years. For the most part, students are still cycled through various clinical rotations. They are placed in clinical settings for short blocks of time (e.g., 4 to 6 hours) and often on nonconsecutive days (e.g., Tuesday and Thursday). Students are assigned to different facilities each semester or every few weeks, they are expected to provide comprehensive care to one or two patients, and they are told to check with the educator rather than with the nurse. The focus generally remains on task completion. All of these characteristics together (perhaps unintentionally) keep students relatively isolated from the realities of the clinical practice environment. If students are to be prepared to function effectively in today's complex care environment, these practices need to change. Indeed, they do seem to be changing, but they are changing slowly.

Faculty and clinical partners throughout the state of Oregon have collaborated to form the Oregon Consortium for Nursing Education (OCNE), which is reconceptualizing the design and implementation of prelicensure nursing education in that state, including the clinical component. Those involved in this collaborative have developed a clinical education model that is intended to make better use of clinical education sites, to reduce the burden for staff nurses, and to improve learning outcomes for students. Elements of this model include concept-based experience; case-based interventions; skill-based experiences; focused and direct client care experience; and integrative practice (OCNE, 2008).

One very exciting project that has arisen from the work of OCNE is the formation of dedicated education units (DEUs; Moscato et al., 2007). A DEU can be described as follows (University of Portland School of Nursing, 2009, ¶1):

...a client unit that is developed through academic and clinical agency partnership into an optimal teaching/learning environment that maximizes the achievement of student learning outcomes, uses proven teaching/learning strategies, and capitalizes on the expertise of both clinicians and faculty, while giving excellent patient care. Key features [of a DEU] include: exclusive use of the clinical unit by one School of Nursing (SON); use of staff nurses who want to teach as Clinical Instructors (CI), paired with the same two students for the entire rotation; preparation of CIs for their teaching role through SON orientation and on-going development activities; master's-prepared

SON faculty serv[ing] as Clinical Faculty Coordinators to support staff as their coach, resource, and liaison to didactic learning; and commitment by all partners to build an optimal learning environment and maintain a climate of mutual respect.

“It takes a unit to raise a nurse”: this is the mantra that guides this type of arrangement. Both the school and the clinical unit staff must be committed to ensuring the success of each student. Preliminary findings indicate that students whose clinical experiences are on a DEU learn more deeply, are integral to the clinical unit’s functioning, and establish more productive relationships with health care providers; student enrollment and teaching capacity are enhanced; faculty work life and satisfaction are improved; and nurse recruitment and retention are enhanced (Angela McNelis, personal communication, March 2008; Warner & Moscato, 2009). The research of these and other scholars will provide evidence regarding the value of this approach to clinical education in nursing.

Another way in which clinical education is being reconceptualized is through the design of immersion experiences. Faculty at the University of Delaware (Diefenbeck, Plowfield & Herrman, 2006) report about the preliminary success (in terms of student learning, resource efficiency, and patient safety) of a transition-to-practice model that “front loads” much of the theory component of the curriculum. Then, the types of learning broaden to include field experiences, simulation learning, and work requirements, and the experience culminates in an extended, intensive clinical immersion during the senior year. This program has resulted in increased student competency and accountability with each progressive semester.

Faculty are also exploring the extent to which simulated learning experiences can be used to build a more solid foundation for clinical practice and, in some instances, even substitute for experiences in health care facilities. Although the National Council of State Boards of Nursing has taken the position that “simulation is not a substitute for, but a complement to, supervised clinical practice” (National Council of State Boards of Nursing, 2005, p. 8), research continues to be done regarding the value of simulated learning (Jeffries, 2007), and discussions continue regarding the use of simulation in place of hands-on clinical experiences.

Despite these innovations, faculty need to reconsider where and when clinical experience actually occurs. Although the vast majority of health care takes

place outside of the acute care setting and although community-based clinical facilities are increasing with regard to both number and use, the clinical experiences of nursing students continue to take place largely in acute care settings. Somehow faculty seem reluctant to accept or acknowledge that students can learn the practice of nursing outside of the hospital. If it is understood that nursing takes place wherever people are, it may be time to provide a wider range of and more extended experiences for students in all places where people live and work: homes, schools, outpatient clinics, nurse-managed clinics, community centers, group homes, self-help group meetings, homes for the disabled, places of employment, long-term care facilities, senior centers, inpatient and outpatient rehabilitation centers, diagnostic clinics, health care research centers, and many more.

Broadening the current thinking about the “where” of clinical experience may also open up possibilities about the “when” of these experiences. Is it not possible for students, under the guidance of well-prepared and strongly supported preceptors or clinical partners, to be in clinical settings whenever patients, families, and communities need nursing care? Do students always have to “do clinical” only during prescribed, teacher-directed days and times? If a student’s preceptor works nights on a weekend, could that student also be in the clinical setting with that preceptor? Before thinking things like “The board won’t let us do that” or “It will never work,” faculty are challenged to think creatively about how to best partner with their clinical colleagues to provide exceptional learning experiences for students and about how they can make such arrangements work.

It is evident from the discussion of creative approaches to clinical education that the careful selection, intense and serious preparation, and ongoing support of clinical partners is essential for success. Faculty must pay increasingly serious attention to how preceptors or clinical instructors are selected. Programs must be implemented to prepare preceptors and clinical instructors for their teaching and evaluation responsibilities, and resources must be made available to them to help them manage unexpected situations that occur when teaching students in the clinical setting. Faculty must design and implement support or mentoring programs for clinical partners so that ongoing dialogue about learning and teaching can occur. Finally, all clinical learning experiences for students must be planned collaboratively by faculty and clinical partners. Those experiences need to be evaluated critically for

their impact on patient care, student learning, staff satisfaction, and the achievement of learning outcomes. Remember, "It takes a village."

SUMMARY

It is clear that nursing education must change if graduates are to be prepared for the challenging roles that they will assume throughout their careers. Faculty must engage in serious reflection—both individually and collectively—about the knowledge and skills that students need to develop, the values that students need to reflect upon and internalize, the evidence that underlies current teaching practices, and the nature of the relationships that they have with students. Educators must address the nature of excellence in nursing education and what needs to be done to achieve it.

Clearly, educators need to be prepared—through formal academic programs, continuing education, mentoring, and collegial support—for the full scope of responsibility that they take on when they assume the faculty role. They need to know about how students learn, about the best practices to use to enhance student learning, and about how findings from pedagogical research efforts can be used to strengthen their effectiveness as teachers.

Nurse educators need to be willing to give up the many traditions that seem to get in the way of innovation and creativity. They need to design, implement, and test approaches to teaching and evaluation that serve to create learning environments that are characterized by excitement, questioning minds, collegial relationships, an openness to change, and excellence.

It is up to educators to create the future of nursing, and they can do that if they keep the following words in mind:

Care more than others think is wise,
Risk more than others think is safe,
Dream more than others think is practical, and
Expect more than others think is possible.

—Anonymous

As educators create the future of nursing education, they face many challenges. However, the opportunities for creativity and innovation in combination with the possibilities for excellence are unlimited, and they should serve to keep faculty engaged with and excited about their work as teachers.

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Educational Challenges: Quality in Prelicensure Nursing Education

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This chapter provides an update about the status of quality in prelicensure nursing education via an examination of the outcomes of that education. The chapter then presents a systematic analysis of the inputs and processes of prelicensure nursing education.

QUALITY ASSESSMENT IN PRELICENSURE NURSING EDUCATION

The primary outcome of nursing education would be the production of an adequate number of competent nurses to meet health care demand. The number of competent nurses produced per year is therefore a major outcome indicator, but what exactly is a competent nurse? The National Council of State Boards of Nursing (NCSBN, 1996) defined the characteristics of a competent nurse (Box 10-1) and identified stakeholder accountability for nurse competency (Figure 10-1). More recently, the NCSBN cited Epstein and Hundert's definition of competency: "The habitual capability and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served" (2002, p. 226). Nursing education outcome indicators of prelicensure graduate nurse competency include the rate of graduation from basic registered nurse (RN) programs; the first-time NCLEX-RN pass rate among U.S.-educated nurses; employer assessment of prelicensure graduate nurse competencies and satisfaction with graduate competency; and graduate self-assessment of competency and satisfaction with competency preparation. However, these are only intermediate outcome indicators of nurse competency. End or terminal outcome indicators of nursing education include quality-of-care measures such as iatrogenic morbidity and mortality rates, quality-of-care process measures, patient satisfaction, cost-of-care measures, and access-to-care measures. Box 10-2 lists intermediate

and final indicators of the nursing education outcome of nurse competency.

The outcomes indicators of nursing education listed in Box 10-2 are themselves the result of many variables. What are the current trends among these nursing education outcome variables?

IS THERE A TREND IN THE NUMBER OF GRADUATE NURSES PRODUCED?

The number of professional nursing graduates declined precipitously from 1995 to 2002/2003 (Figure 10-2). The number of professional nursing graduates has been increasing since then, although it has not yet equaled the 1994/1995 graduation rate (National League for Nursing [NLN], 2009).

IS THERE A TREND IN THE NUMBER OF GRADUATE NURSES PRODUCED WHO PASS THE NCLEX-RN EXAMINATION ON THE FIRST ATTEMPT?

The number of competent professional nursing graduates as demonstrated by the number of U.S. graduates who pass the NCLEX-RN on the first attempt also declined during the 1990s, but it has been increasing since 2001 (NCSBN, 2009). Since 2004, the total number of U.S.-educated first-time NCLEX-RN examination candidates who passed increased from 87,177 to 129,121, which is a 187% increase since 2001 (NCSBN, 2009).

IS THERE A DOWNWARD TREND AMONG U.S.-EDUCATED NURSES PASSING THE NCLEX-RN ON THE FIRST ATTEMPT?

The NCLEX-RN measures the competencies needed to practice safely and effectively as a newly licensed entry-level registered nurse. This examination is used

BOX 10-1 Characteristics of a Competent Nurse

In addition to the definition of competence, the National Council of State Boards of Nursing developed the following standards in 1996.

The nurse is expected to do the following:

1. Apply knowledge and skills at the level required for a particular situation

Indicators:

- Determines actions needed to achieve desired outcomes
- Performs nursing activities in a safe and effective manner
- Demonstrates current knowledge necessary to provide safe client care
- Delegates in accordance with established guidelines
- Collaborates with appropriate professionals to attain client health care outcomes

2. Demonstrate responsibility and accountability for practice and decisions

Indicators:

- Exhibits ethical behavior
- Ensures that client welfare prevails
- Establishes and maintains therapeutic boundaries
- Limits practice to current knowledge, skills, and abilities
- Clarifies expectations of the role
- Intervenes when unsafe nursing practice occurs
- Practices within the legal authority granted by the jurisdiction
- Implements professional development activities on the basis of assessed needs

3. Restrict or accommodate practice if he or she cannot safely perform the essential functions of the nursing role because of mental or physical disabilities

Indicators:

- Identifies abilities necessary to perform the essential functions of the nursing practice role
- Implements accommodations when needed
- Safely performs essential functions of the nursing practice role
- Limits practice when accommodations are not sufficient to enable the safe performance of essential functions of the nursing practice role

From National Council of State Boards of Nursing. (1996). *Assuring competence: A regulatory responsibility*. Chicago: Author.

by boards of nursing throughout the United States and its territories to assist with the making of licensure decisions. The NCLEX-RN is based on an incumbent job analysis of newly licensed entry-level registered nurses. This analysis addresses critical nursing activities, the frequency of performance, and their impact on client safety. The job analysis is the foundation for the development of a test plan that ensures that each unique NCLEX-RN examination reflects the knowledge, skills, and abilities that are essential for the RN to have to meet the needs of clients who require the promotion, maintenance, and restoration of health (NCSBN, 1999). The NCLEX-RN has transitioned from a paper-and-pencil examination available intermittently throughout the year to a computer-adaptive testing examination that is available continuously.

A downward trend in NCLEX-RN pass rates appeared for U.S.-educated candidates who were taking the examination for the first time; from 1995 to 2000, the rate dropped from 90.4% to 83.8%. This downward trend matched a previous trend from the years 1988 to 1990. The trend in the pass rates of U.S.-educated NCLEX-RN candidates taking the examination for the first time has varied since 2001, ranging from 85.5% (2001) to 88.1% (2006) (NCSBN, 2009). However, it has not achieved 1995 levels. The NCSBN is revising and updating the NCLEX-RN constantly to ensure that the examination measures graduate nurse competence.

IS THERE DATA REGARDING POSTEMPLOYMENT GRADUATE NURSE PREPARATION AND COMPETENCY?

The NCSBN most recently surveyed nurse employers in 2001 and 2003. Nurse employers were asked whether “the various groups of newly licensed nurses were prepared to provide safe, effective care. Positive ratings were given to both ADN and BSN graduates by 41.9% of overall respondents [and] to diploma graduates by 48.8%...” (Smith & Crawford, 2004). Although 41.9% and 48.8% of employers gave positive ratings to nurses with a Bachelor’s of Science in Nursing (BSN) or an Associate’s Degree in Nursing (ADN) and to nurses with diplomas, respectively, regarding whether they were competent (i.e., “prepared to provide safe, effective care”), this also means that 58.1% and 51.2% of employers must have given negative or neutral safe and effective care ratings to these same graduates.

The Regulatory Board

- Establishes standards for competence
- Communicates standards
- Engages in a collaborative model to ensure ongoing standards
- Identifies mechanisms to demonstrate competence
- Holds individual nurses accountable through disciplinary process

The Employer

- Incorporates standards into institutional policies
- Assesses nurses' performance
- Evaluates nurses on report of poor performance
- Performs evaluations based on standards
- Reports nurses who fail to meet standards to Board of Nursing

The Individual Nurse

- Conducts self-assessment
- Develops developmental criteria to facilitate professional growth
- Accepts legal and ethical obligations of the profession
- Limits nursing practice and/or implements accommodations
- Participates in peer review

The Educator

- Incorporates standards into curriculum
- Promotes integration of standards by student
- Evaluates student performance based on standards
- Provides first role model for student as to the expectation of life-long learning, professional accountability

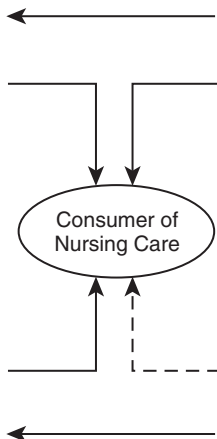


FIGURE 10-1 Stakeholder accountability for nursing competence. (From National Council of State Boards of Nursing. (1996). *Assuring competence: A regulatory responsibility*. Chicago: Author.)

BOX 10-2 Outcome Indicators of Nursing Education

INTERMEDIATE OUTCOME INDICATORS: NATIONAL, STATE, AND PROGRAM LEVEL OUTCOMES

- NCLEX-RN pass rate
- Employer satisfaction with graduate nurse educational preparation
- Graduate nurse satisfaction with education preparation
- Number of registered nurse graduates produced annually

END/TERMINAL OUTCOME INDICATORS: NATIONAL, STATE, AND HOSPITAL/PROVIDER LEVEL

Global Hospital Level

iatrogenic morbidity and mortality rates	Adverse event rates
Patient satisfaction with care	Patient satisfaction
Cost of care	Supply cost
Access to care	

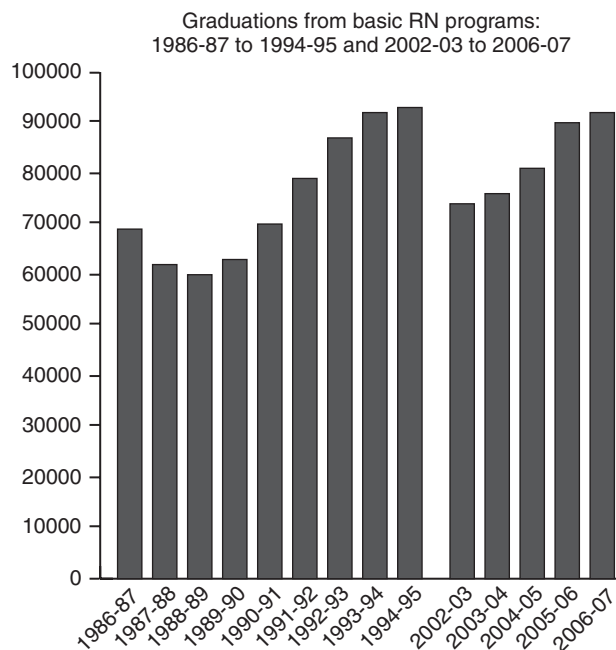


FIGURE 10-2 Graduations from basic registered nurse programs (1986/1987 to 1994/1995 and 2002/2003 to 2006/2007). (From National League for Nursing. (2009). Retrieved March 30, 2009, from http://www.nln.org/research/slides/pdf/AS0607_12.pdf.)

The Joint Commission (2002) cites the NCSBN in its Health Care at the Crossroads report:

In two recent studies from the National Council of State Boards of Nursing which asked entry-level nurses and employers of newly licensed nurses to rate the adequacy of nurses' preparation to perform a variety of patient care tasks, both groups ranked the adequacy of preparation low. Employers' rankings were much lower for every variable. Among these tasks, the ability of new nurses to respond to emergency situations, supervise the care provided by others, and perform psychomotor skills were rated at the lowest levels (p. 3).

These NCSBN surveys were conducted at two points in time: 2001 and 2003. Employer satisfaction and graduate nurse satisfaction with graduate nurse competence and preparation were not positive. Data were available to the public only for these two points in time, which were 2 years apart. Thus, the discernment of any trend in employer and graduate nurse satisfaction with graduate nurse competency is difficult. It would be interesting to assess and compare overall and task-specific employer and graduate satisfaction rates over time and their correlation with NCLEX-RN results.

More recently, the NCSBN has identified additional concerns regarding graduate nurse competence after the NCLEX-RN, and a link has been identified between new graduate error rates and a lack of a formal transition program (NCSBN, 2007a, 2008c). In addition, the NCSBN identified that The Joint Commission "has found that a lack of orientation and training is a major root cause of sentinel events in hospitals" (2007b, ¶5).

IS THERE A TREND IN THE TERMINAL NURSING EDUCATION OUTCOME INDICATORS OF QUALITY, COST, AND ACCESS?

The 2.8 million nurses and the 2.3 million nursing assistants that they supervise compose 54% of the health care provider population in the United States (Greiner & Knebel, 2003). Although the health care outcomes of quality, cost, and patient and provider satisfaction are multifactorial, nursing has a major impact on all of these outcomes.

Status of Quality Care in the United States

The Institute of Medicine (IOM) has called into question the quality of health care in its two reports, *To Err Is Human* (Kohn, Corrigan, & Donaldson, 1999) and *Crossing the Quality Chasm* (IOM, 2001). These

reports outlined the quality issues in the U.S. health care system and made recommendations for addressing the identified problems. The *To Err Is Human* report cited estimates of hospital deaths caused by iatrogenic injuries that ranged from 44,000 to 98,000 per year and indicated that the number of errors in hospitals exceeded that of the eighth leading cause of death in America. In the United States, iatrogenic hospital deaths exceeded deaths from breast cancer (45,297), motor vehicles (42,297), and acquired immunodeficiency syndrome (16,516). This iatrogenic mortality estimate is based on hospital errors alone and does not include iatrogenic deaths in outpatient clinics, same-day surgical settings, long-term care facilities, or other health care settings. Other safety statistics indicate that 7% of hospital patients experience a serious medication error and that 11% of hospital admissions are the result of adverse drug events.

The *Crossing the Quality Chasm* report concluded that the American health care delivery system is lacking in each of the six dimensions of quality that are defined within the report:

- ◆ Safe: Avoiding injuries to patients that result from the care that is intended to help
- ◆ Effective: Providing services on the basis of scientific knowledge
- ◆ Patient-centered: Providing care that is respectful and responsive
- ◆ Timely: Reducing waits and harmful delays
- ◆ Efficient: Avoiding waste, including that of supplies, ideas, and energy
- ◆ Equitable: Providing care that does not vary in quality because of personal characteristics (e.g., geographic location, socioeconomic status)

Health care quality issues continue to exist after the publication of the *Crossing the Quality Chasm* report. In its 2007 National Health Care Report, the Agency for Healthcare Research and Quality (AHRQ) concluded that "[t]he safety of health care has improved since 2000, but more needs to be done" (2007, p. 1). As compared with similar countries, the United States still provides a lower quality of care to its citizens. The United States spends the most per capita yet has the highest infant mortality rate and the lowest length of life at birth for males and females of any comparable Organization for Economic Co-operation and Development nation (OECD, 2008).

Root causes of quality-of-care issues in hospitals identified by the IOM in its *To Err Is Human* (Kohn et al., 1999); *Keeping Patients Safe: Transforming the Work*

Environment of Nurses (Page, 2003); and *Health Professions Education: A Bridge to Quality* (Greiner & Knebel, 2003) reports included the following:

- ◆ Insufficient number of nurses
- ◆ Loss of the best nurses
- ◆ High nursing turnover
- ◆ Overworked nurses
- ◆ Unfocused nursing roles
- ◆ Too much wasteful work
- ◆ Process breakdowns
- ◆ Missed handoffs
- ◆ Interdisciplinary breakdowns
- ◆ Low compliance with best practices
- ◆ Insufficiently prepared nurse leaders
- ◆ Lack of reward systems
- ◆ Increased patient condition severity
- ◆ Shorter hospital stays
- ◆ Redesigned work
- ◆ Change in total nursing personnel in relationship to adjusted patient days
- ◆ High patient turnover
- ◆ Long work hours
- ◆ Rapid increases in new knowledge and technology
- ◆ Increased interruptions of and demands on nurse's time
- ◆ Inadequate health professional preparation for the complexities of the environment of the twenty-first century health care system

Aiken and colleagues (2002) and the AHRQ (2004) illustrated the importance of nursing on patient outcomes. Aiken and colleagues demonstrated the importance of the ratio of RNs to patients with regard to patient outcomes, with higher morbidity and mortality noted on surgical units with lower BSN nurse-to-patient ratios. In another study, Aiken and colleagues (2003) also found lower mortality and morbidity in hospitals with higher proportions of BSN nurses. "Higher rates of RN staffing were associated with a 3- to 12-percent reduction in adverse outcomes, depending on the outcome. Higher staffing at all levels of nursing was associated with a 2- to 25-percent reduction in adverse outcomes depending on the outcome" (AHRQ, 2004). Nurse-to-patient ratios and the proportion of BSN-prepared nurses affect health care (Aiken et al., 2003). Population-specific nurse knowledge has also been associated with lower mortality rates. Dolter (1995) identified an association between the greater knowledge of intensive care unit nurses regarding hemodynamic assessment techniques—the basis of cardiovascular therapy in the postoperative open heart surgery patients—and lower mortality in

open heart surgical units. As identified previously, RN transition to practice is also associated with errors and sentinel events (NCSBN, 2007a; 2008b).

Health care in the United States has quality issues, with studies demonstrating associations between the quality of health care and the number, education level, knowledge level, and transition to practice of nurses.

Status of the Cost of Care in the United States

The cost of health care in the United States exceeded \$2.2 trillion in 2007 (Centers for Medicare and Medicaid Services, 2009). The approximately \$6714 per capita health care spending in the United States exceeds the per capita health expenditures of comparable OECD countries (OECD, 2008), with United States per capita health care expenditures being two to three times that of most OECD nations. Health care dollars in the United States are not spent on preventive services; rather, 70% of health care dollars are spent on the care of chronic illness (Centers for Disease Control and Prevention, 2008). With 5% of people accounting for more than half of all health spending (Stanton, 2006), the fairness of U.S. health care spending is also called into question. Research suggests that a sizable percentage of U.S. health care spending can be traced to the higher administrative costs required by the complexities of the U.S. system (Reinhardt, Hussey, & Anderson, 2004).

The cost-of-care issues in U.S. health care include the high costs related to morbidity (AHRQ, 2004):

While inadequate staffing levels place heavy burdens on the nursing staff and adverse events are painful for patients, there is also a considerable financial cost to be considered. An AHRQ-funded study found that all adverse events studied (pneumonia, pressure ulcer, UTI, wound infection, patient fall/injury, sepsis, and adverse drug event) were associated with increased costs. Treating pneumonia raised total treatment costs by \$22,390-\$28,505.... Pressure ulcers are estimated to cost \$8.5 billion per year.

The relationship between the cost of health care and the number, education level, and knowledge level of nurses requires further study.

Status of Access to Health Care in the United States

Although the United States spends more on health care, health care is inaccessible to a greater percentage of the U.S. population as compared with comparable OECD nations, with 16.4% of the U.S. population lacking health care coverage (National Center for Health

Statistics, 2008). In the United States, approximately 43 million people do not have health insurance (National Center for Health Statistics, 2008). Access to health care in the primarily employer-based health insurance system is decreasing because of the continued rise in health care costs, which has led to employers reducing health benefits for full-time employees; increasing the use of part-time employees to avoid having to provide health care benefits; and reducing or eliminating retiree health benefits.

Health care in the United States has access issues. The relationship between access to health care and the number, education level, and knowledge level of nurses has not been studied.

Despite high health care expenditures in the United States, health care is inaccessible and of poor quality. The IOM, in its *Crossing the Quality Chasm* series, emphasizes that quality-of-care issues are primarily system issues, stating that “Health care has safety and quality problems because it relies on outmoded systems of work. Poor designs set the workforce up to fail, regardless of how hard they try. If we want safer, higher quality care, we will need to redesign systems of care. . . . The current system cannot do the job. Trying harder will not work. Changing systems will” (2001, p. 4).

The IOM indicts the system of care rather than health care providers for the current crisis in health care quality. However, current health care providers—especially nurses, who make up 54% of the health care provider workforce—bear a major responsibility for the current and future status of the quality, cost, and access of health care. Although advocating for changes in the system by current providers, the *Crossing the Quality Chasm* report also concluded that health professions education must ensure that future health professionals have the skills necessary to face these twenty-first century challenges in the areas of cost, quality, and access if the U.S. health care system is to improve. The report recommended that a multidisciplinary health care summit be convened to address “restructuring clinical education to be consistent with the principles of the 21st century health system throughout the continuum of undergraduate, graduate, and continuing education for medical, nursing, and other professional training programs” (IOM, 2001, p. 19). The IOM convened this multidisciplinary summit, which culminated in the publication of *Healthcare Professions Education: A Bridge to Quality* (Greiner & Knebel, 2003). This report defined the changes in health professions education that are needed to overcome the quality issues in the U.S. health care

system and other challenges of twenty-first century health care.

Within the *Healthcare Professions Education* report (Greiner & Knebel, 2003), the IOM indicated that health professionals have the following characteristics:

- ◆ “Are not adequately prepared to address shifts in the nation’s patient population”
- ◆ “Are not educated or trained in team-based skills”
- ◆ “[Are not] schooled in how to search and evaluate the evidence base and apply it in practice”
- ◆ “Have few opportunities to avail themselves of coursework and other educational interventions that would aid them in analyzing the root causes of errors and other quality problems and designing system-wide fixes”
- ◆ “[Are] not provided a basic foundation in informatics”

The report ultimately recommended that “accreditation bodies should . . . revise their standards so that programs are required to demonstrate—through process and outcome measures—that they educate students to . . . deliver patient care using a core set of competencies” (Greiner & Knebel, 2003). Box 10-3 lists other recommendations from this seminal report, which has affected nursing education accreditation and regulatory bodies.

Currently, the NCSBN has incorporated the IOM competency recommendations into its model nursing education practice act (NCSBN, 2008a). The NCSBN is also incorporating these competencies in its proposed transition to practice model (Figure 10-3) requirement for new graduate competency in the Quality and Safety Education for Nurses (QSEN) competencies (QSEN, 2009). The QSEN Competencies are in the following areas, which mirror the IOM (Greiner & Knebel, 2003) recommendations:

- ◆ Patient-centered care
- ◆ Teamwork and collaboration
- ◆ Evidence-based practice
- ◆ Quality improvement
- ◆ Safety
- ◆ Informatics

The Roberts Woods Johnson QSEN initiative has corresponding knowledge, skills, and attitudes (QSEN, 2009; Cronenwett et al., 2007; Box 10-4). The American Association of Colleges of Nursing (AACN, 2008b) has incorporated the IOM competencies into its newly revised accreditation standards, and it has provided nurse educators with a toolkit to facilitate the implementation of these new competencies into nursing program curricula (AACN, 2009).

BOX 10-3 Institute of Medicine Recommendations**RECOMMENDATION 1**

The Department of Health and Human Services and leading foundations should support an interdisciplinary effort focused on developing a common language, with the ultimate aim of achieving consensus across the health professions on a core set of competencies that includes patient-centered care, interdisciplinary teams, evidence-based practice, quality improvement, and informatics.

RECOMMENDATION 2

The Department of Health and Human Services should provide a forum and support for a series of meetings that involve the spectrum of oversight organizations across and within the disciplines. Participants in these meetings would be charged with developing strategies for incorporating a core set of competencies into oversight activities on the basis of definitions shared across the professions. These meetings would actively solicit the input of health profession associations and the education community.

RECOMMENDATION 3

Building on previous efforts, accreditation bodies should move forward expeditiously to revise their standards so that programs are required to demonstrate, through process and outcome measures, that they educate students in academic and continuing education programs with regard to how to deliver patient care with the use of a core set of competencies. In so doing, these bodies should coordinate their efforts.

RECOMMENDATION 4

All health profession boards should move toward requiring licensed health professionals to periodically demonstrate their ability to deliver patient care as defined by the five competencies identified by the committee through direct measures of technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods. These boards should simultaneously evaluate the different assessment methods.

RECOMMENDATION 5

Certification bodies should require their certificate holders to maintain their competence throughout the course of their careers by periodically demonstrating their ability to deliver patient care that reflects the five competencies, in addition to other requirements.

RECOMMENDATION 6

Foundations, with support from education and practice organizations, should take the lead in developing and funding regional demonstration learning centers that represent partnerships between practice and education. These centers should leverage existing innovative organizations and be state-of-the-art training settings that are focused on teaching and assessing the five core competencies.

RECOMMENDATION 7

Through Medicare demonstration projects, the Centers for Medicare and Medicaid Services should take the lead in funding experiments that will enable and create incentives for health professionals to integrate interdisciplinary approaches into educational or practice settings, with the goal of providing a training ground for students and clinicians that incorporates the five core competencies.

RECOMMENDATION 8

The Agency for Healthcare Research and Quality and private foundations should support ongoing research projects that address the five core competencies and their association with individual and population health as well as research related to the link between the competencies and evidence-based education. Such projects should involve researchers across two or more disciplines.

RECOMMENDATION 9

The Agency for Healthcare Research and Quality should work with a representative group of health care leaders to develop measures that reflect the core set of competencies, to set national goals for improvement, and to issue a report to the public that evaluates the progress made toward these goals. The Agency for Healthcare Research and Quality should issue the first report, which is to be focused on clinical educational institutions, in 2005; annual reports should be produced thereafter.

RECOMMENDATION 10

Beginning in 2004, a biennial interdisciplinary summit should be held that involves health care leaders in education, oversight processes, practice, and other areas. This summit should focus on reviewing the progress made toward explicit targets and on setting goals for the next phase with regard to the five competencies and to other areas necessary to prepare professionals for the twenty-first century health system.

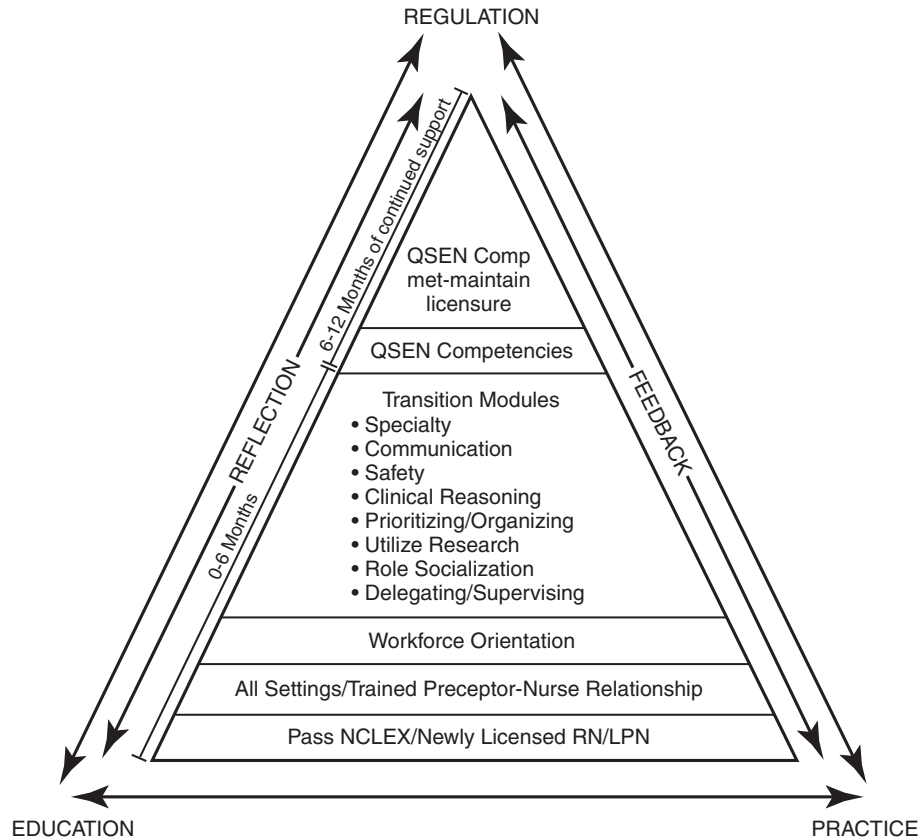


FIGURE 10-3 Transition to practice regulatory model. (From National Council on State Boards of Nursing. (2008). *Regulatory model for transition to practice report*. Retrieved March 30, 2009, from https://www.ncsbn.org/Final_08_reg_model.pdf.)

The NCSBN is currently in the process of developing a clinical competence scale for use in future studies of postgraduate nurse competence, with items that support four identified areas of competency: “clinical reasoning and judgment; patient care delivery and management skills; communication and interpersonal relationships; and recognizing limits and seeking help” (Li, 2007). A listing of the competencies associated with each area is listed in Box 10-5.

CONCLUSIONS REGARDING THE OUTCOMES OF PRELICENSURE NURSING EDUCATION

Nursing outcomes indicators are mixed with regard to the quality of prelicensure health care education. The number of graduates from RN programs trended downward during the 1990s but has been increasing since 2000. Pass rates for the NCLEX-RN are currently trending upward after a downward trend from the early 1990s to 2002, and, although employer and

graduate nurse assessment of graduate nurse competency are low, data is insufficient to assess a trend. The quality, cost, and access issues in U.S. health care are the responsibility of nurses and other health care providers. Although these global outcomes have multifactorial causes, the number of nurses and nurse educational level, knowledge level, and postgraduation transition programs have a demonstrated association with these outcomes. Nurse competency is a major issue. Nursing education must produce an adequate number of competent professional nurses to ensure the provision of quality health care.

PRELICENSURE NURSING EDUCATION INPUT ASSESSMENT

Inputs into nursing education include money, students, and faculty. An analysis of these inputs and a discussion of input-specific issues, concerns, and recommendations follow.

BOX 10-4 Quality and Safety Education for Nurses: Patient Safety

Definition: Minimize risk of harm to patients and providers through both system effectiveness and individual performance.

KNOWLEDGE

- Examine human factors and other basic safety design principles as well as commonly used unsafe practices (such as work-arounds and dangerous abbreviations)
- Describe the benefits and limitations of selected safety-enhancing technologies (such as barcodes, Computer Provider Order Entry, medication pumps, and automatic alerts/alarms)
- Discuss effective strategies to reduce reliance on memory
- Delineate general categories of errors and hazards in care
- Describe factors that create a culture of safety (such as open communication strategies and organizational error reporting systems)
- Describe processes used in understanding causes of error and allocation of responsibility and accountability (such as root-cause analysis and failure mode effects analysis)
- Discuss potential and actual impact of national patient safety resources, initiatives, and regulations

SKILLS

- Demonstrate effective use of technology and standardized practices that support safety and quality
- Demonstrate effective use of strategies to reduce risk of harm to self or others
- Use appropriate strategies to reduce reliance on memory (such as, forcing functions, checklists)
- Communicate observations or concerns related to hazards and errors to patients, families, and the health care team
- Use organizational error reporting systems for near-miss and error reporting
- Participate appropriately in analyzing errors and designing system improvements
- Engage in root-cause analysis rather than blaming when errors or near misses occur
- Use national patient safety resources for own professional development and to focus attention on safety in care settings

ATTITUDES

- Value the contributions of standardization/reliability to safety
- Appreciate the cognitive and physical limits of human performance
- Value own role in preventing errors
- Value vigilance and monitoring (even of own performance of care activities) by patients, families, and other members of the health care team
- Value relationship between national safety campaigns and implementation in local practices and practice settings

From Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., et al. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131, Table 5, p. 128.

Funding for Prelicensure Nursing Education

The amount of federal funding for nursing education is far below that of medical education. In 2001, \$78 million was appropriated to fund basic and advanced nursing education as compared with \$9 billion for medical education. "During the last serious nursing shortage [1974], Congress appropriated \$153 million for nurse education programs. In today's dollars that would be worth \$592 million, approximately four times what the federal government is spending now" (NLN, 2005b, p. 1).

Various stakeholders have recommended increased funding for nursing education, specifically nursing students and nursing faculty (The Joint Commission,

2002). The NLN (2005b) has advocated for increased expenditure on nursing education research to ensure evidence-based nursing education. Public-private partnerships are being advocated to assist with defraying costs related to faculty and equipment (Robert Wood Johnson Foundation, 2005). A lack of funding to support nursing education affects its other inputs, nursing students, and nursing faculty.

Prelicensure Nursing Students

Before 2000, the enrollment of students in U.S. nursing prelicensure programs was declining (NLN, 2009). Although enrollment has increased since 2000,

BOX 10-5 The National Council of State Boards of Nursing Clinical Competence Scale: Components and Items

1. Clinical reasoning and judgment
 - Recognize changes in client condition
 - Recognize implications of clinical presentation
 - Understand implications of medications
 - Synthesize data from multiple sources
 - Proactively monitor patients
 - Provide intervention specific to patients
 - Recognize complications of treatments
 - Strategically delegate and supervise
2. Patient care delivery and management skills
 - Administer medications accurately
 - Perform technical skills accurately and efficiently
 - Provide care in a timely fashion
 - Accurately perform client assessment
 - Manage time and workload effectively
 - Prioritize appropriately
 - Understand assignments fully
 - Understand workflow patterns
 - Anticipate the complexity of the work
 - Understand the big picture
3. Communication and interpersonal relationships
 - Communicate effectively with clients
 - Communicate effectively with physicians
 - Document a legally defensible account of care
 - Provide appropriate patient teaching
 - Work effectively within the health care team
 - Maintain a safe and respectful environment
 - Exhibit effective interpersonal relationships
4. Recognizing limits and seeking help
 - Recognize when demands exceed capability
 - Seek assistance from experienced nurses
 - Recognize threats to client safety and seek help

From Li, S. (2007). *Assessing clinical competence and practice errors of newly licensed registered nurses*. Retrieved March 30, 2009, from https://www.ncsbn.org/ICN_competence_for_Dawn.pdf

the increase will be insufficient to meet the projected need for nurses in upcoming years, with implications for the current and future quality of health care. It is projected that the United States will need 2.8 million nurses by 2020 (Health Resources and Services Administration, 2004). Even with recent increases in young, U.S.-educated nurses, the recruitment of international nurses, and older nurses returning to the workforce, the projected supply is estimated to peak at only 2.3 million, which is 500,000 short (AACN, 2008e; Buerhaus, Staiger, & Auerbach,

2004). In a recent update regarding the impact of the 2008/2009 downturn of the economy on the health care sector, the Bureau of Labor Statistics (2008) identified that the health care sector continued to add jobs despite an overall loss of jobs in the economy.

Enrollments in nursing programs are at their highest since 1977. Although nursing enrollments are increasing, many qualified nurse applicants are being turned away from all levels of nursing education programs because of an inadequate number of spaces. An estimated 99,000 applicants were turned away from prelicensure nursing programs in 2006/2007 (NLN, 2008).

Currently, with inadequate space for all of the qualified nursing program applicants, the primary strategy to increase the number of competent graduates from nursing programs needs to focus on increasing the capability to increase enrollments in those programs. An increase in enrollments could be achieved by opening more nursing programs, but this is constrained by a lack of nursing faculty and clinical sites (nursing education inputs will be discussed later); this could also be achieved by redesigning current nursing programs to facilitate increased enrollment through the more creative use of existing nursing faculty and the development of alternatives to the limited number of clinical sites. A lack of faculty and a lack of clinical sites are major constraints to increasing enrollment. Creative solutions to increase enrollment that were discussed by Oermann (2004) include “offering...nursing programs on site in clinical agencies...[where] advanced practice nurses and clinicians provide clinical teaching with academic faculty assuming responsibility for the classroom component and coordinating the course” (p. 4).

Secondary strategies that focus on increasing the enrollment of qualified students into nursing education programs include improved and earlier recruitment, such as the Johnson & Johnson (<http://www.discovernursing.com/>) and Nurses for a Healthier Tomorrow (<http://www.nursesource.org/mission.html>) campaigns. Tertiary strategies to support those who become interested in a career in nursing would need to focus on increasing the funding for nursing students through scholarships, grants, and service-cancelable loans and increasing the convenience of obtaining a nursing degree through the implementation of accelerated nursing programs, time-saver programs embedded within the traditional setting to support those who must work to pay for their

education, and Web-based nursing curricula. Primary, secondary, and tertiary enrollment strategies would need to be pursued simultaneously. Many of these strategies are being pursued vigorously: accelerated nursing programs have increased from 31 in 1991 to 205 in 2008 in response to an increased demand (AACN, 2008a).

Another potential strategy involves the better matching of the supply of qualified applicants with available nursing program slots. This strategy would involve the development of a matching program by which qualified applicants who are unable to gain entry at a local school (because the local demand for nurse student spaces exceeds the supply of those spaces) would be notified regarding approved and accredited nursing schools throughout the nation in which student spaces were not filled (Rachel McDermott, personal communication, spring 2005).

Nursing Faculty

Currently, there are less than 20,000 nursing faculty, with a projected need for 40,000 to address the nursing shortage (NLN, 2005b). Reasons for the faculty shortage include the aging and retirement of current faculty; the lack of competitiveness of nursing salaries in academia as compared with industry; the lack of funding for the education of prospective nursing faculty; state budgets that constrain faculty hiring at public institutions; budgetary constraints on hiring at private institutions for what is perceived as a resource-intensive department; and faculty dissatisfaction. Faculty dissatisfaction relates to workload and role expectations, including the disparity between the counting of clinical hours as compared with didactic hours; the lack of value and incentives for the teaching role in the current tenure system; the need to accommodate the broad range of student capabilities as a result of aging, nontraditional, and multigenerational student bodies; and frustration with student study habits (AACN, 2005b; The Joint Commission, 2002; Oermann, 2004; Robert Wood Johnson Foundation, 2005; Valiga, 2002; Yordy, 2006).

Strategies to address the faculty shortage focus on improving the following:

1. The use of faculty positions;
2. The recruitment of nurses into nursing education;
3. The retention of current faculty; and
4. The preparation of faculty for the educative role.

The improved use of faculty positions includes the use of part-time faculty, joint appointments with industry, preceptorships, the use of retired faculty,

and the use of interdisciplinary faculty (AACN, 2005b, 2008d; The Joint Commission, 2002; Oermann, 2004; Robert Wood Johnson Foundation, 2005; Valiga, 2002). Recruitment strategies to increase the number of nurses in nursing education include stimulating interest in the faculty role, providing financial assistance for education, making academic training more accessible, increasing salaries and other faculty support, and enhancing productivity through the use of non-nursing faculty, technology, and distance learning (Yordy, 2006). With the clinical component of nursing education requiring the most labor-intensive faculty input, focused strategies that have been proposed or that are already in use include decreasing faculty-to-student ratios in clinical rotations, expanding the use of preceptorships throughout nursing curricula, and decreasing or eliminating the requirement of a clinical component for nursing education. Issues and concerns arise with the implementation of any of these strategies.

In light of studies by Aiken and colleagues (2002) and discussions related to mandatory nurse-to-patient staffing ratios in various clinical environments, the lowering of faculty-to-student ratios in the clinical arena would seem to be counterintuitive. If experienced nurses who are familiar with the clinical environment can take care of only five to six patients safely, how many nursing students can a nurse educator safely supervise, teach, and evaluate? The current board of nursing mandated RN-to-student ratios range from 1:8 to 1:12 (NCSBN, n.d.).

Examination of the expanded use of preceptorships has identified issues with that strategy. Within a preceptorship, staff nurses replace faculty in the role of mentoring nursing students by guiding students on a one-to-one basis in the clinical arena, usually during the student's final semester. Preceptorship would appear to be an advantageous method of extending nurse faculty if the staff nurse preceptor is a volunteer with the following characteristics:

- ◆ Appropriately qualified by education and extent of clinical experience;
- ◆ Appropriately educated in the preceptor role;
- ◆ Provided with student learning objectives;
- ◆ Afforded fewer patient-load responsibilities during student precepting experiences;
- ◆ Afforded a break from the precepting role; and
- ◆ Compensated for the extra responsibility of education in addition to patient care.

Unfortunately, the overuse of nurse preceptorships may lead to an abrogation of nurse faculty responsibility

to overworked, underpaid, poorly prepared, non-volunteer staff nurse preceptors, with resulting implications for the quality of nursing education and the quality of patient care.

The NLN (2003) is calling for innovation in nursing education but also advocating that nursing education innovations be evidence based and that nursing education research increase (2005c). No study of preceptorship on nursing education outcomes was identified in a systematic review published by the NCSBN (2005b). An examination of the optimal ratio of nurse faculty to students was also not noted in the NCSBN systematic review.

Additional strategies to improve faculty recruitment and retention include increased funding for nurse faculty education; improved nurse faculty salaries as compared with industry; increased valuation of the teaching role of nurse faculty (as opposed to service and research roles in academia); and increased support of the administrative functions of nursing faculty (e.g., grading, paperwork). More controversial strategies to increase nurse faculty recruitment include the elimination of the undergraduate degree and clinical experience requirements as prerequisites to graduate study. Controversy regarding these strategies relates to the ability of a faculty member of a practice profession who has never practiced the profession to teach that profession. With the majority of nurses working in hospitals or in nonacademic, non-research positions (Health Resources and Services Administration, 2006), it is difficult to understand how faculty who have never had any clinical experience can teach or role model effective nurse practice in those settings. The Joint Commission white paper on nursing comments about “the lack of awareness of nursing faculty about actual nursing practice today” and the “continental divide between nursing education and nursing practice” (2002, p. 30). The NCSBN advocates for clinical experience: “In order for faculty members to act as role models for their students and others, faculty members should have advanced clinical preparation in their areas of expertise” (NCSBN, 2008b, p. 4).

Faculty competency is also an issue. The increased preparation of nurse faculty is being suggested by the AACN, which is advocating for the doctoral degree as the minimum degree required for nurse faculty teaching in baccalaureate prelicensure programs (AACN, 2008c). This advocacy appears counterintuitive when the causes of the existing nursing faculty shortage of master’s-prepared faculty have not been addressed.

In its publication “Nursing Faculty Qualifications and Roles,” the NCSBN (2008b) recommended a master’s degree or a doctoral degree from an RN program. In addition, it is recommending graduate preparation in clinical practice; graduate preparation in education; preparation for the faculty roles of “collaborator, director of student learning, and role model”; and “comprehensive orientation and on-going development” for all faculty members. The NLN is also emphasizing the need for competent nurse faculty (NLN, 2005a), and it has instituted a certification for nurse educators with identified minimum competencies.

Patient Care Experiences

A major limitation to the number of students that a nursing program can matriculate is the availability of clinically relevant patient care experiences. With the decreases in patient admission and patient length of stay and the closures of units and hospitals (American Hospital Association, 2002; U.S. Department of Health and Human Services, 2002), fewer clinical opportunities are available. The creative use of available clinical sites (e.g., weekends, evenings, nights, summer, winter), less focus on the number of hours spent in clinical settings, and more focus on reflective examination of clinical experiences are possible solutions, as is decreasing or eliminating clinical experiences within nursing curricula. However, the elimination of clinical content is controversial:

AONE [American Organization of Nurse Executives] posits that the education programs for nurses of the future will require a balance of didactic content and supervised clinical instruction. They hold that all pre-licensure nursing education programs must contain structured and supervised clinical instruction and that the clinical instruction will be provided by appropriately prepared registered nurses (NCSBN, 2005a, p. 8).

Currently, the NCSBN continues to emphasize the need for clinical experiences in its model nursing education practice act, and it states that “prelicensure nursing education programs should include clinical experiences with actual patients” (2008a; Box 10-6).

PRELICENSURE NURSING EDUCATIONAL PROCESSES

Demming, who is the father of total quality management and the infamous plan-do-study-act quality cycle, noted that variation is the enemy of quality. However, the hallmark of nursing and nursing

BOX 10-6 The National Council of State Boards of Nursing Recommendations Regarding Prelicensure Clinical Instruction

The position of the National Council on State Boards of Nursing is as follows:

- Prelicensure nursing educational experiences should be across the life span.
- Prelicensure nursing education programs should include clinical experiences with actual patients; they may also include innovative teaching strategies that complement clinical experiences for entry into practice competency.
- Prelicensure clinical education should be supervised by qualified faculty who provide feedback and facilitate reflection.
- Faculty members retain the responsibility to demonstrate that programs have clinical experiences with actual patients that are sufficient to meet program outcomes.
- Additional research needs to be conducted regarding prelicensure nursing education and the development of clinical competency.

From National Council of State Boards of Nursing (NCSBN). (2005a). *Clinical instruction in prelicensure programs*. Retrieved March 30, 2009, from https://www.ncsbn.org/Final_Clinical_Instr_Pre_Nsg_programs.pdf.

education is variation. Variation is pervasive in the preparation of nursing graduates for RN licensure, and it exists in all types of programs, the curricula within each type of program, the mode of program delivery, and the amount and type of clinical and patient experience required. Nothing is standardized in nursing prelicensure programs. This variation is highlighted in the NCSBN's "Practice, Regulation and Education Committee's Comparison of Faculty Qualifications in National Documents," which describes variations in faculty educational requirements and addresses the definitions and criteria of clinical and didactic experiences.

Currently, various stakeholders are promoting changes in curricula, such as the addition of end-of-life, gerontology, and bioterrorism content requirements. The IOM (Greiner & Knebel, 2003) is advocating that nursing programs develop evidence-based medicine, informatics, quality improvement, patient-centered care, and teamwork competencies in graduates, which requires further curricular change. Clinical simulation

and Web-based education are being promoted, and the requirement for clinical experiences in prelicensure programs is being debated (NCSBN, 2005b). Employers advocate for the competencies that they view as most important: critical thinking experiences and therapeutic relationship skills (Smith & Crawford, 2004), whereas new graduates advocate for other competencies. Box 10-6 shows process recommendations from various stakeholders at a summit convened by The Joint Commission (2002).

Meanwhile, change continues. Baccalaureate programs may be offered at community colleges (AACN, 2005a); a clinical nurse leader program (AACN, 2007) is being implemented at the master's level; and others advocate for a postgraduation/licensure residency requirement before independent practice (The Joint Commission, 2002). Currently, the NCSBN (2008c) is exploring a transition to practice model (see Figure 10-3), with temporary licensure granted with the passing of the NCLEX-RN examination; this would be followed by a 6-month preceptorship with simultaneous nationally standardized education and another 6-month period during which the new graduate focuses on the development of the QSEN competencies, with full licensure contingent upon the completion of this year-long program. Still others promote simulation as the answer to diminishing opportunities for clinical instruction within health care provider agencies. The NLN (2005c) is currently advocating for evidence-based nursing education innovation and endorsing centers of educational excellence at the same time that non-evidence-based innovations are being implemented vigorously by others. Evidence is being gathered for some innovations (QSEN, 2009): studies are ongoing relative to the effectiveness of simulation education (Jeffries & Rizzolo, 2005) and postgraduation/licensure residencies (The Joint Commission, 2002). The NLN has developed a model that describes all of the inputs necessary for excellence in nursing education; this will possibly serve as a basis for the focus of future evidence gathering.

PROCESS ASSESSMENT: PRELICENSURE REGULATION AND ACCREDITATION

Regulatory and accrediting agencies are facing ever-greater challenges with regard to the performance of their mission to protect the public. These agencies are charged with ensuring the competency of nurses and

the adequacy of nursing education providers in the ever-changing and challenging health care environment of twenty-first century. Faced with the competing demands of their various stakeholders, variations in nursing education regulatory and accreditation processes have become the norm. State boards of nursing have variable structure and process requirements for nursing education programs. Instead of one accrediting agency for all nursing education programs, there are two. Nursing education programs write self-assessments for accreditation and approval instead of being judged by standardized, evidence-based process and outcome measures. Variation in regulation and accreditation requirements is confusing to various stakeholders and may not serve the public well. Without the standardized, evidence-based assessment of nursing programs, best practices cannot be identified. Just as there is a need to increase the transparency of health care through the publication of provider outcomes on the Web for easy access by the public by the Centers for Medicare and Medicaid Services (U.S. Department of Health and Human Services, 2009a, 2009b), there is a need for the increasing transparency of nursing education provider outcomes via the publication of NCLEX-RN pass rates on the Web for easy access by the public and nursing education stakeholders.

The NCSBN (n.d.), with its mission to protect the public, has been and continues to be focused on addressing these variation issues; identifying variations in nurse faculty and clinical and didactic requirements; publishing a model nursing education practice act (NCSBN, 2008a); and pursuing evidence-based nursing education regulation (NCSBN, 2006).

SUMMARY

Outcomes that depict the quality of nursing education and its production of competent nurses are mixed; the volume of nursing graduates is up, but the pass rates of U.S.-trained nurses who are taking the NCLEX-RN for the first time continue to go down. More concerning is the competency of new graduates as judged by employers, the graduates themselves, and external indicators (e.g., sentinel events, error rates). The quality and cost of health care in the United States, for which nurses and other health care professionals are accountable, also forces nurses to question the adequacy of nursing education for developing competent nurses for twenty-first century health care systems.

Analyses of the inputs and processes of nursing education identified input problems and some strategies for input and process improvement. Controversies exist related to some of the identified input and process strategies, especially the implementation of non-evidence-based nursing education process innovations. Process variation was identified as a major quality of nursing education and nursing education regulation and accreditation issue.

Nursing education, regulation, and accreditation process variation need to be decreased for quality improvement to happen. Some of this is being addressed by the incorporation of the competencies identified by the IOM (Greiner & Knebel, 2003) into NCSBN regulatory and AACN accreditation standards. Standardized, evidence-based outcome measures to supplement NCLEX-RN pass rates (e.g., employer and graduate nurse competence and satisfaction surveys to be used by all nursing programs) need to be developed, implemented, and publicized. The NCSBN's clinical competence scale (Li, 2007) is one such measure that has been developed and validated. Nursing education outcome measurement should be a transparent process, with all data easily accessible to the public and other stakeholders.

Evidence-based nursing best practices can then be identified on the basis of these outcome measures, and process improvements can be implemented to achieve quality improvement in nursing education. The move to evidence-based nursing education outcomes measurement, the identification of nursing education best practices and processes, and the dissemination of nursing education best practices and processes for quality improvement across all providers of nursing education is essential to ensuring the provision of quality health care in the twenty-first century.

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Graduate Nursing Education: A Critical Examination from a Global Perspective

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Shifting the focus of nursing education from the perspective of “international” to “global” facilitates awareness of the profession’s interconnectedness, regardless of geography and imposed boundaries. There is a need for experienced, educated nurses throughout the world to ease and resolve the health care needs of individuals and society. However, nursing education must be engaged within the broader context of health, with educators acting as global citizens to solve complex healthcare issues (Thorne, 2006). Nurse educators throughout the world face many of the same challenges: shortages, migration, and retention, to name the most visible. A broad perspective and a willingness to work together to address these challenges without preconceived notions of boundaries will benefit nurses and, most importantly, the recipients of nursing care.

A CALL TO ACTION FOR NURSING EDUCATION

The World Health Organization (WHO), the International Council of Nurses (ICN), Sigma Theta Tau International, and the American Academy of Nursing are only a few of the major organizations that have documented the global challenges that affect both health care and the profession of nursing (Hegyvary, 2004; ICN, 2004). Major challenges that affect global society include the alleviation of poverty, the care of refugees and migrant populations, violence, promoting education and access to health care for women and children, and preventing infectious diseases.

The WHO has documented the severe shortage of health care providers throughout the world, including the misdistribution of providers in Africa, which bears 24% of the world’s disease burden but has only 3% of the world’s health care providers (WHO, 2008). The Global Health Workforce Alliance through the WHO has provided 10 recommendations to prevent

the critical shortage of providers from worsening. Education and training programs for all types of health care workers are the foundation of these recommendations, with an emphasis on quality assurance for education, continuing education, preservice training, financial support, and collaborative learning among countries (WHO, 2008). Unfortunately, many of these training programs are directed toward the community health worker rather than providing support for existing nursing education programs (Holzemer, 2008). Nursing leadership across the globe must respond to the WHO with demands for advanced educational opportunities for nurses and for the promotion of quality within current programs.

The internationally focused Arista conferences sponsored by Sigma Theta Tau International delineated issues and strategies specifically for the nursing profession for the creation of healthy communities. One recommendation common to participants from each of the world’s regions during the third Arista conference was the development of “comprehensive, culturally sensitive, student-centered educational models” (Dickenson-Hazard, 2004, p. 8). This recommendation has implications for the further evolution of existing graduate nursing programs while establishing the need for new programs.

The Expert Panel on Global Nursing and Health, which is a committee of the American Academy of Nursing, also offers recommendations for promoting a global nursing agenda (Rosenkoetter & Nardi, 2007). The panel addresses support for nursing education through recommendations such as creating a database and inventory of nursing faculty and student exchange programs, encouraging the movement of U.S. nursing curricula from an international focus to a global vision, advocating for more full-time faculty positions, and using technology to connect nurse educators across the world. Varying levels of nursing education are required

to meet today's global health needs, but graduate nursing education must respond to the need for increased numbers of faculty and nurse researchers to meet educational demands.

GRADUATE EDUCATION AROUND THE WORLD

Countries are increasingly moving toward university-based models of nursing education. This evolution from diploma to baccalaureate and graduate programs reflects the expansion of nursing knowledge (Hinshaw, 2000) and an awareness of the need for competent nurses to manage complex health care problems in society. There is a trend toward requiring advanced levels of education for health professionals of all disciplines, but nursing has been slow to realize the necessity of a university-based education. Countries are in the process of reversing this trend by developing graduate programs. Master's and doctoral programs can be found throughout Africa, Asia, Australia, Europe, and the Middle East. Many have been influenced by the development of nursing education in Canada and the United States, which presents its own set of issues. For example, cultural norms of harmony may influence the decision-making process of Japanese nurses, regardless of where the nurses receive their education (Turale, Ito, & Nakao, 2008). Theories of leadership and management may then be enacted very differently in Japan as compared with Canada and the United States.

Graduate programs are at various levels of development in Africa. Master's and PhD programs are present in Egypt, Namibia, and the Republic of South Africa (Munodawafa, 2003). One creative initiative to promote graduate education and to enhance the teaching skills of nursing and medical faculty in undergraduate programs throughout West Africa is occurring at the University of Ibadan in Nigeria (African, Caribbean, and Pacific Secretariat, 2008). This project provides a Master's of Science degree that can be obtained 2 years, and it involves a partnership between universities in the United Kingdom and six universities in West Africa. The retention of well-qualified faculty in the university is a primary aim of this distance education project. Hopefully, those who complete the program will stay in their respective universities without adding to the current challenges of migration and "brain-drain" to Western countries.

Nursing education in Japan is very complex. Turale, Ito, and Nakao (2008) provide a comprehensive history of the discipline. They emphasize that there are a number

of alternatives to becoming a registered nurse (even more than in the United States), although the first Japanese university-based program for nursing was initiated in 1952. There has been a proliferation of university nursing programs since that time, with at least 30 higher-education institutions offering doctoral degrees.

Similar growth of university-based nursing education can also be found in Iran, where there are at least 14 master's programs and 4 doctoral programs that have been developed since 1986. There are plans to add another doctoral program every 2 years. Courses in the programs include those that support both clinical work and research (Nasrabadi, Lipson, & Emami, 2004).

GLOBAL MOVEMENT TOWARD ADVANCED PRACTICE NURSING

Advanced practice nursing (APN) encompassing the roles of nurse anesthetists, nurse-midwives, clinical nurse specialists, and nurse practitioners. It is a natural development in graduate education in response to the complex health care needs of society. Historically, APN began in the United States as a result of the Civil War and the discovery of chloroform (Keeling & Bigbee, 2005). Sociopolitical forces and other factors have shaped the development of APN from an international perspective.

Critical factors in the development of APN elsewhere in the world as compared with the United States include the sociopolitical environment, the health needs of society, the supply and demand of nurses, government support, collaboration among nurses and with other health professions, the nursing education specific to the advanced practice role, and the documented effectiveness of the role (Styles, 1996). These factors provide a useful framework for tracing the evolution of APN in other countries. Additional factors that facilitate APN include overcoming barriers to primary health care and the increasing incidence of disease (Schober and Affara, 2006).

Tracking the progress of the global development of the APN role is problematic. Published reports documenting APN roles remain sporadic, although countries such as Canada and Botswana initiated nurse practitioner (NP) roles during the 1970s in response to the need for community-based health care. During the 1980s, Canada experienced a growth in the number of physicians that, along with lack of legislation for NPs, led to the discontinuation of NP programs until the 1990s. Japan was another forerunner of the APN movement, with the first clinical nurse specialist graduating

in 1986. Certification came nearly 10 years later, and the clinical nurse specialist movement has continued. The APN role is evolving in many other countries and regions of the world, including Australia, France, Latin America, Pakistan, Spain, Sweden, Switzerland, and Thailand (Schober and Affara, 2006).

The ICN promotes the further evolution of APN, and it may be the best organization for tracking the development of the APN role. The ICN International Nurse Practitioner/Advanced Practice Nursing Network (INP/APNN) is a subgroup of the ICN that provides a forum for discussing and deliberating APN issues as they affect nurses globally. The INP/APNN also supports member countries that are in the process of developing APN programs, and it disseminates information related to APN issues (ICN, 2002). The INP/APNN has also developed a definition of APN along with a scope and standards of practice. The ICN-approved definition of APN is as follows:

The Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills, and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A Masters degree is recommended for entry level (ICN, 2002).

This definition is clear in its position of the APN role beginning with the credentials of a registered nurse and involving further clinical expertise. It allows for the adaptation of the role, depending on the societal and cultural context in which nursing is practiced.

The ICN scope and standards encompass APN in primary, secondary, and tertiary levels of care in both rural and urban settings. Standards for regulation, education, and practice have been established in the INP/APNN document *Scope of Practice and Standards* (ICN, 2005). This document outlines the practice and core competencies of APNs worldwide, and it emphasizes the need to adapt the competencies for country-specific use. The ICN does expect that APN practice takes place after an advanced level of education has been reached and that it contains a formal system of licensure and credentialing.

Another organization that influences the standards and defining competencies of APN internationally is the National Organization of Nurse Practitioner Faculties (NONPF). NONPF competencies have served as the model for APN education in Canada and the United Kingdom (Crabtree & Hunter, 2005), whereas countries such as Pakistan use the American Association of

Colleges of Nursing (AACN) competencies (AACN, 1996; Upvall et al., 2004). In 2002, NONPF and AACN joined forces to further develop core competencies for NP specialties (Crabtree & Hunter, 2005). Regardless of the model used to guide APN education, all countries must adapt the standards and competencies to their unique settings.

GLOBAL ISSUES THAT CONCERN GRADUATE NURSING EDUCATION

A myriad of issues affect the development of graduate nursing education today. Some of the concerns are limited to a few countries, whereas others are more prevalent. For example, the nursing faculty shortage in the United States has severely limited the number of nursing students accepted into programs. The AACN (2008) reports that more than 40,000 potential nursing students were turned away from nursing programs in 2007. Other countries may not have enough faculty educated even at a baccalaureate level, and those with graduate-level preparation are even harder to come by. Selected issues and potential solutions are based on experience and those discussed in the literature.

Migration

The movement of nurses from one country to another—especially that of nurses going from developing countries to Western countries—has affected the global nursing shortage and the state of the world's health. A report from the ICN (2006) that reviewed the global nursing shortage identified poor human resource planning, high attrition, the impact of human immunodeficiency virus/acquired immunodeficiency syndrome, and migration as some of the most significant issues perpetuating the nursing shortage. Nurses in China exemplify the issue of human resource management, with both the unemployment and underemployment of nurses during a time of a severe shortage (Fang, 2007).

Buchan and Calman (2004) identified internal and international migration as critical challenges. Nurses are not only moving from country to country, but they are also moving within their own countries from rural to urban areas, from the public sector to private employment, and from nursing positions to non-nursing employment. There are many reasons for this movement, including economics, career advancement, issues of safety and survival, a sense of adventure, and educational opportunities (Kingma, 2006).

The intense, active recruitment of nurses in developing countries in particular is a new phenomenon that

has contributed to the global shortage and negatively affected health care in the home countries. Major shortages of nurses have been reported in sub-Saharan Africa, especially in Malawi, where more than 50% of the nursing positions in hospitals are unfilled as a result of migration. Ghana is another country in which those with the most education leave the country for better opportunities. Most nurses in the developing world migrate as a result of financial incentives, poor working conditions, lack of opportunities for professional growth or promotion, and lack of autonomy; these conditions are similar to those of nurses in Asia. These nurses are often young and competent with regard to nursing skills, and they may well have been future leaders in their home countries (Buchan & Calman, 2004; Fang, 2007; Tally, 2006).

The issue of nurse recruitment in developing countries has been debated by nursing organizations. The ICN does support the right of nurses to migrate, but it recognizes that this may negatively affect health care in the home country. Active recruiting by countries that have not addressed human resources and planned appropriately is condemned by the ICN (2007). This issue will continue to be a matter of debate between the nursing leadership in Western and developing countries until the nursing shortage in Western countries eases.

The effects of migration are documented and should be seriously considered by policy makers and nursing leaders. Migration may reinforce divisions of social class, gender, and race, and it may destabilize nursing education in those countries from which nurses migrate and in those where they are received (Hancock, 2008; Kingma, 2006; Smith & Mackintosh, 2007). Creative solutions to addressing nurses' desire to migrate are being developed, including Managed Migration of the Caribbean (Salmon, Yan, Hewitt, & Guisinger, 2007). This program promotes the training of nurses for export and temporary migration. Although it is too soon in the program's development for evaluation, it may serve as a model of collaboration and partnership within the Caribbean region.

Research

Research and evidence of the impact of nursing must continue to be developed, despite a global shortage of nursing and issues with migration. Edwards (2008) provides strategies to further the position of nursing research. First, there is a need to speak clearly regarding the essential role of nursing research in health care. Second—and perhaps most importantly for nurse researchers in developing countries—is the need to

create channels of communication with key policy makers and decision makers. Finally, nursing must conduct more large-scale studies that can translate knowledge and with results that can be generalized.

Nursing and health care research are still in the early phases of development in many countries. The lack of graduate programs and faculty with research skills are major obstacles for the future development of nursing knowledge. Encouraging nurses who left the country for higher education to return and then providing them with resources to conduct collaborative studies with their colleagues in hospitals and universities would begin to create the capacity for global nursing research.

Regulation of Advanced Practice Nursing

Issues of adapting cultural values, migration, and research capacity are generic to international graduate nursing education. Regulating professional practice—including licensure, certification, and standards of practice—are more specific to APN. Regulation provides professional accountability to the public and facilitates safety and quality within nursing (Bednash, Honig, & Gibbs, 2005).

The INP/APNN network of the ICN completed a survey of member countries to learn more about APN and how it has been implemented in these countries (Pulcini, Jelic, Loke, & Gul, 2008). Participants from 18 countries in the regions of Africa, Asia, Europe, North America, and South America responded. The findings indicated that there are a variety of titles for APNs and that most have completed formal education programs. Credentials ranged from certificates to master's-level education, with 94% of countries having accrediting or approval processes for their APN programs.

Despite progress made in regulating APN, many countries continue to struggle. Twelve of the 18 countries in the survey reported resistance to the APN role, mostly from physician organizations within the country. Schober and Affara (2006) offer strategies for overcoming the barriers to the development of policies for APN practice. Mutual recognition agreements may be a significant strategy for advancing APN regulation while at the same time addressing some of the complex issues that surround the global nursing shortage and migration.

PROMOTING QUALITY GRADUATE NURSING EDUCATION

Factors that influence the quality of graduate education from an international perspective are similar to those that affect the successful development and

implementation of undergraduate programs. Collaboration and an awareness of cultural values that affect the collaborative process are key to the globalization of the nursing profession (Dougherty, Lin, McKenna, & Seers, 2004). Collaboration in nursing education occurs through international organizational networking, agreements among institutions and across national boundaries, and expert nurses providing consultation on an individual basis. Through these collaborative activities, new programs can be developed that may have a long-term impact on global health.

The International Academic Nursing Alliance (<http://www.nursingalliance.org>) was established in 2001 with the support of Sigma Theta Tau International. Its purpose is to globally unite schools of nursing through information sharing so that standards of nursing education, faculty resources, and nursing expertise can be improved throughout the world, thereby improving the health of all people. The Global Alliance for Nursing Education and Scholarship (<http://www.ganes.info>) is another organization that was created to strengthen nursing education and promote the professional development of nurses. National organizations of nursing from every country are eligible for membership. Both of these organizations represent the globalization of nursing; they are new opportunities for nurses to collaborate on a global basis, to learn from each other, and to share knowledge.

Advancing levels of education is one strategy to promote the development of nursing as a profession and to facilitate global health. However, doctoral education is underused when promoting the WHO's global health agenda via the Millennium Development Goals. Ketefian (2008) emphasized that the countries with the greatest health needs and thus that have the greatest stake in achieving the Millennium Development Goals are those with few doctoral programs and few members of nursing leadership prepared at the doctoral level. Guidelines for developing quality doctoral programs have been recommended by the Quality Criteria, Standards, and Indicators committee of the International Network for Doctoral Education in Nursing. The committee, which is comprised of members from eight countries, addressed the criteria of the institution's mission for doctoral education, the quality of faculty and students, the curriculum, the administration of the program, resources, and evaluation. Standards for each of these criteria as well as for various subcriteria and indicators provide a useful guide for those universities that are planning new doctoral programs (Kim, McKenna, & Ketefian, 2006).

Finkelman and Kenner (2008) encourage the movement toward increasing partnerships between universities and service providers. They view this trend as an example of global flattening that will provide new opportunities and challenges for the nursing profession. Partnering with other universities that offer graduate education and encouraging nursing organizations to seek government support for doctoral programs are two strategies that have worked in Thailand, southern Africa, and Latin America (Ketefian, 2008).

A partnership between St. Bartholomew's Hospital, the London National Health Service Trust, and Valley Health in Winchester, Virginia, is an example of a successful collaboration among health care organizations, and it offers a different perspective when compared with traditional academic exchanges among universities (Ganske et al., 2007). Promoting nursing practice and scholarship from a global perspective are the major goals of the partnership. Each nurse is paired with another clinical nurse "buddy" for 4 days a week for a 3- to 6-week period. To date, more than 14 nurses have participated in the exchange, with plans to institute a biannual exchange between the United States and England and perhaps to expand to other countries as well. Research is anticipated to become an important component of the exchange so that evidence-based practice will also be promoted.

Individual nurses also promote collaboration and quality nursing education. Schools of nursing in developing countries may actively seek nurses who are willing to make short- or long-term commitments to the institution as faculty members, administrators, or consultants. These nurses are hired by governments or universities and provided with individual contracts. This type of collaboration has a special significance and perhaps a greater impact when the nurse is of the same ethnic origin as the country seeking assistance.

EMERGING MODELS FOR GRADUATE NURSING EDUCATION

Graduate nursing education is evolving in the United States, and it has the potential for influencing graduate nursing education internationally. Two of the most recent developments originated by the AACN (2007; 2004) include the clinical nurse leader (CNL) and the Doctor of Nursing Practice (DNP).

The CNL is a nurse generalist with leadership preparation and a master's degree in nursing. Various models for preparing the CNL are now being tested in partnerships between schools of nursing and clinical settings

throughout the United States. It is expected that the CNL will provide and manage the care of patients in a variety of clinical settings, not only hospitals. They are not prepared as nurse administrators or managers, but they are leaders in designing, implementing, and evaluating patient care. They will also delegate and supervise other health care providers while practicing from an evidence-based perspective.

The DNP is anticipated to be the terminal degree for APNs in the United States by 2015. It is based on the premise that current master's degree programs for APNs already require more credit hours than a typical 2-year master's program, and more educational demands are being placed on these programs. DNP preparation will provide more education to allow APNs to remain current in practice. It is an exciting development that allows nursing to meet the challenge of ever-increasing health care demands (AACN, 2007; Draye, Acker, & Zimmer, 2006).

Much work remains to realize the vision for both CNLs and DNPs. Issues of licensing and credentialing must be addressed and standards must be in place before more nursing programs develop these degrees. At an international level, these new roles can transform graduate nursing education. To be successful, they would need to be implemented with the support of organizations such as the ICN and the WHO. Nursing councils worldwide and nursing associations should take an approach of watchful waiting as these new graduate roles evolve elsewhere.

SUMMARY

Graduate nursing programs throughout the world are evolving in many ways. The need for APNs is being recognized, and the development of new APN programs is occurring globally. Criteria for quality doctoral programs are emerging. Nurse educators and consultants from Western countries will need to take particular care to adapt their knowledge of graduate education for the cultural context in which they are working. Examples of successful partnerships should be carefully scrutinized for lessons learned before new partnerships are initiated. The problem of migration could interfere with partnerships if the nursing leadership in developing countries perceives that they are having their human resources depleted by uncaring, wealthier countries that are also in need of well educated nurses. Graduate nursing education will never be a finished product in any country. Nurse educators who embrace a global perspective will be unified through changes in nursing

research, education, and practice (Kulwicki, 2006). This commitment to change is required if today's health care needs are to be adequately addressed by the nursing profession.

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International Collaborative Institutional Approaches to Nursing Education

TESS JUDGE-ELLIS ♦ CONNIE TROWBRIDGE

As U.S. universities and colleges become more concerned with global health, it is imperative that nursing offer study abroad options as part of the curriculum. Study abroad opportunities are becoming more popular with students, and pressure from the administration to include international experiences is increasingly felt in colleges of nursing.

Cultural competence, global health care, and diversity are highlighted as mandates for professional nursing practice. The *Essentials of Baccalaureate Education for Professional Nursing Practice* authors by the American Association of Colleges of Nursing (AACN) states the following:

Increasing globalization of healthcare and the diversity of this nation's population mandates an attention to diversity in order to provide safe, high quality care. The professional nurse practices in a multicultural environment and must possess the skills to provide culturally competent care . . . With projections pointing to even greater levels of diversity in the coming years, professional nurses need to demonstrate a sensitivity to and understanding of a variety of cultures to provide high quality care across settings. Liberal education, including the study of a second language, facilitates the development of an appreciation for diversity (AACN, 2008, p. 6).

This chapter will describe two examples of education programs that have successfully offered international opportunities for undergraduate nursing students at the University of Iowa College of Nursing in Iowa City, Iowa—International Perspectives: Xicotepec and Collaborative Learning Across Borders. The two experiences have differences in their designs, yet they share many things that are common to all nursing study abroad experiences: partnership, student and faculty preparation, and cultural competence (Kirkham, Hofwegen, & Pankratz, 2009; Tabi & Mukherjee, 2003; Robinson et al., 2006).

INTERNATIONAL PERSPECTIVES: XICOTEPEC

Xicotepec

Xicotepec, Mexico, is a city of approximately 75,000 people that is located 75 miles northeast of Mexico City. From the airport, ground transportation takes about 3 hours to get to the city. The elevation is more than 4000 feet, and the region is mountainous, with much vegetation. Fruits and vegetable gardens can be seen high on the mountainsides. Common sites include cactus fields, sheep herders, an occasional burro, and small herds of sheep and cattle. The water supply comes from a large tank on the roof of each dwelling. Shops and markets line the city's brick streets. The town square is the hub of the commercial district, and vendors occasionally display their wares openly. Market days are Sundays and Thursdays, and the markets attract large crowds to purchase supplies for the next 3 to 4 days.

Partnership

The Interdisciplinary Service Learning Project is an outgrowth of a Rotary International District 6000 (Iowa) service project that was initiated in 2002. The Rotary project is focused on assistance with the construction of additional classrooms and associated school upgrades within the city of Xicotepec. The foci of the project are drinking water and wastewater (sanitation) infrastructure. From the beginning, the project has depended on the collaborative efforts of partnerships, and new partners have been sought as the project has grown. Initially, the "water team" consisted of three individuals from Iowa State University, three from the University of Iowa, and two Rotary members. By the spring of 2008, the team consisted of some 50 members, including faculty, students, and Rotary members from Iowa.

The strong partnerships and relationships fostered through the project are key to the project's strength and

sustainability. Without the support of the international presence of the Rotary, its knowledge of service, and all of the organization behind the scenes, a project of this level would be too overwhelming and would thus collapse. It is this partnership that allows the team of faculty from the University of Iowa colleges of engineering, pharmacy, nursing, and education to take students to Xicotepec. There, the students engage in service projects, such as pouring cement, painting classrooms, digging trenches to run pipe to a new water fountain, presenting each child at an orphanage with a pair of new shoes that are properly sized, and dispensing anti-parasite tablets to more than 3000 schoolchildren.

The logistical coordination between the Rotary members from the United States and Mexico provides the arrangements for transportation (air and ground), housing with host families for faculty and adults, dormitory housing for students, and family dining three times a day for more than 50 individuals. The partnership fosters community, acculturation, and building and sustaining the relationships that are so valuable to international work.

Interdisciplinary collaboration has been inherent in this project. The expertise and unique skill set of each discipline are acknowledged and appreciated. For example, during the deworming project, nursing students performed height, weight, and oral assessments to determine if each child was able to take oral medication. The pharmacy students then dispensed the antiparasite medication via the appropriate route. Interdisciplinary communication skills, teamwork, problem solving, and professional recognition were highlighted and promoted.

The Course

The course entitled “International Perspectives: Xicotepec, Mexico” is cross-listed for engineering, pharmacy, nursing, and College of Liberal Arts and Sciences (CLAS) writing. It is a 3-credit-hour course, and it is a full semester in length. This is a service-learning course that is offered one evening per week during the spring semester. Projects are completed in Xicotepec, Mexico, over spring break. Students who want to travel to Mexico must take the course, and they are then required to travel and complete the projects on site. Faculty from each discipline are required to team teach and to participate in each week’s seminar and discussion. Faculty feel quite strongly about this mandatory involvement and believe that it is imperative for the success and sustainability of the relationships and project work.

Discussions are led by the respective faculty, and groups work within their own disciplines on the projects to be implemented during the field experience in Mexico. Sessions that follow the field experience are used to evaluate the experience and to plan for the next year.

Face-to-face planning is necessary for faculty to meet, plan, and schedule field experiences. Nursing was new to the team in 2008, and faculty participated without U.S. nursing students. However, eight Xicotepec nursing students joined in, and they provided valuable contributions in terms of numbers and expertise for assessing children for the deworming clinics. Interpreters were readily available within both the U.S. group and the Mexico group. For the purposes of this experience, verbal communication is superior to written.

Coursework begins with an orientation to the history, culture, customs, health practices, and systems of Mexico. Students are required to read *The Labyrinth of Solitude* by Octavio Paz, and discussions throughout the semester focus on chapters and passages from this book.

The second phase of the course focuses on service learning, team building, leading, following, role conflict, and communication and language. Case studies are used to foster the development of the learner and approached from the theory of problem-based learning.

The third phase of course work focuses on the projects, which are both interdisciplinary and within the discipline. It is imperative that the faculty travel to Xicotepec the first year without students. The purpose of the initial trip is for the faculty to identify projects, assess the Xicotepec community, meet with health care professionals and the Xicotepec Rotary to establish a relationship, and to determine resources that are available or needed. Faculty are responsible for working on the logistics of each project, supervising, and ensuring accountability. Students are expected to work on the content and delivery of the project under the respective faculty leadership. Each project has a designated leader, and each interdisciplinary team member has an identified role. As projects change location or content, the assignments may also change. This concept builds community, fosters relationships, and strengthens the character of each student.

Nursing students are recruited through marketing, flyers, and word of mouth to apply, and they are individually interviewed to participate in the semester-length course and field work (practicum) after the successful completion of their first clinical rotation. For most students, this is the junior year of a 4-year baccalaureate program. The

course is offered in the spring, and travel to Mexico occurs over spring break. This schedule eliminates the interruption of the normal flow of the curriculum. All faculty volunteer for this project, and it is not considered part of the teaching load or contract. No compensation is awarded to faculty in terms of salary or benefits. Faculty expenses may be out of pocket, or, if developmental award money is available, this may defray part of the cost. Students may apply to study abroad with the use of financial assistance or scholarship.

The Projects

Service-learning projects require an initial assessment to identify a project that the host community desires and that can be accomplished with minimal additional resources. This is one purpose of the faculty site visits that are done periodically without students. These visits serve to promote relationship building, accountability, and sustainability.

Nursing projects include field work on site at orphanages, schools, nursing schools, hospitals, and clinics. The director of an orphanage expressed an interest in charting the progress of each child's development. From the discussion that followed, the faculty learned that there was no health record available or maintained for each child. The project for the students then became creating a 2- to 3-page health history form, acquiring file folders, and, while on site, orienting the directors of the orphanage with regard to how to complete and file the charts.

Nursing students will participate with pharmacy students at the grade schools in the deworming clinics. In 2008, the team treated more than 3000 grade school students with antiparasite medication. For this project, pharmacy students take the lead. Nursing students from both the United States and Xicotepec will assess the children's mouths to determine if the children can chew a tablet, need a crushed tablet, or needs to take the medication in the form of a liquid paste.

Xicotepec has a nursing school, and U.S. students will be matched with a Xicotepec students for a field experience in the area indigent hospital and area clinics. Health promotion and disease prevention will be the focus for 1 or 2 days.

The Trip

The trip is well orchestrated and planned by all members of the faculty and Rotary (from both the United States and Mexico) as a team approach. It is important to plan for cultural excursions, experiences with both small and large groups, and free time to experience the

rich tradition of the Mexican culture, the food, the shopping, and the market. Travel to Mexico begins early on a Saturday morning, and the return trip occurs the following weekend on Sunday evening. One night is spent in Mexico City, preferably at the end of the trip.

Liability

Both the students and the health care professors have liability insurance. Students are supervised by faculty, and they provide interventions in the same ways that their licenses allow in accordance with their licensing state in the United States. Because faculty and students are working with local Xicotepec public health and medical professionals, the projects officially belong to the Xicotepec Rotary members. In the case of deworming primary and elementary students, the local Rotarians have obtained the permission of the schools and coordinated the visit; the children's parents are informed and can choose to not have their children treated. A medication administration record is kept for each child, with the child's name, age, grade, height, and weight. The World Health Organization's school-based deworming protocol is followed.

Timeline

The first-year faculty travel to Xicotepec, Mexico, without students for the purposes of experiencing the culture, meeting and getting acquainted with local and U.S. Rotarians, and visiting prospective project sites. Plans are developed and logistics worked out in the next few months. A fall trip may be arranged to firm up the details and to secure sites for the nursing practicum. The faculty must obtain college approval to have the course cross-listed or listed as part of a study abroad program. During the fall semester, the faculty works with experienced faculty in the areas of course development and revision. The course is offered in the spring, and travel to Mexico occurs over spring break. After the trip, course work continues weekly and focuses on the evaluation of projects, the writing of reports, and the planning of presentations. Proposals are written, translated, and sent to the nursing school in Xicotepec. Local Rotarians obtain permission and develop written agreements with project sites as projects are identified.

Advantages and Benefits

The interdisciplinary service-learning project offers numerous benefits to the learner. The "Essentials" document from the AACN emphasizes diversity and cultural sensitivity across the curriculum (American Association of Colleges of Nursing, 2008). An experience of this

nature offers an intense immersion for a nursing student to become culturally aware, to develop cultural competence, to respect diversity, to become aware of global health issues across borders, and to recognize issues of social justice. Students also have opportunities to lead and be members of an interdisciplinary team and to share their knowledge and expertise with other disciplines in an international experience.

Disadvantages and Barriers

Written communication and electronic communication are difficult. Internet cafés are available for communication back to the United States from Mexico. Telephone connections for planning purposes are limited by poor connections and language barriers. Face-to-face interaction with an interpreter is preferred and readily available from project members. Dictionaries are recommended, and any attempt to speak Spanish is welcomed and appreciated. Cell phones are widely used both in Mexico and for travelers to call back to the United States.

International participation and travel are encouraged; however, they are not considered part of the normal teaching load, so release time and extra compensation are not offered. Faculty who volunteer for this experience and who take on the role of leading students are passionate about their field and international experiences. Participation in terms of numbers may be limited for students as a result of financial responsibilities for tuition and travel not being covered by student loans or study abroad programs.

Outcomes

The outcomes are numerous, shared, and unique. The intended broad outcome is that students will experience an interdisciplinary service-learning project on an international level. Students have the opportunity to immerse themselves in the Mexican culture, to learn about the country's rich history, to travel locally, and to observe typical families, food, and customs. Each student will increase their cultural awareness and cultural sensitivity, and they will have moved up on the continuum toward cultural competency. Improvement and growth will be seen in teamwork and leadership skills both within the discipline and across disciplines. Journal writing reflections aim to uncover life-changing experiences.

The Global Experience

In this era of globalization, one of the most important outcomes is the fostering of social consciousness over the career of the student and beyond. The faculty of this

interdisciplinary course are gathering data with open-ended surveys, written opinions, and guided reflections to further develop this international experience. It is hoped that each student will have the opportunity to experience another culture—with its own set of values, poverty, health problems, immigration challenges, and drug violence—and to look at the world with a new set of eyes. By continuing the course upon the return and having students write reports, prepare presentations, and make recommendations for future teams, it is hoped that this social consciousness will be transferred and that it will leave a lasting impression on each student.

During the first class, students were asked to write two questions regarding the international course and the planned experience. Examples included the following:

- ◆ Will I be able to relate and make a difference to the community of Xicotepec?
- ◆ How does the service we provide truly affect the people of Xicotepec?
- ◆ Can individuals truly make a difference in the global community?
- ◆ How will this experience change my thoughts, views, and practice as a professional? How will it affect my everyday life?
- ◆ How can being immersed in a different culture affect one's own sense of culture?
- ◆ What is going to surprise or affect me the most?
- ◆ How much impact does our project have in Mexico?

The first class session after the trip focuses on debriefing. Students are given a set of questions and then asked to write two more. The class is divided into five groups of three to four students and a faculty member to address the following five questions:

1. List two or three community needs you noticed during your time in Xicotepec. How would you collaborate with Xicotepec community members to begin addressing those needs?
2. Most of our projects are discipline based; in other words, they do not require the expertise of more than one discipline to be successful. Can you think of a community need in Xicotepec that need to be addressed with an interdisciplinary effort? If so, briefly outline a design to launch and implement such a project.
3. Was there a difference between what we thought people in Xicotepec needed and what they thought they needed? How did you know? Why does that matter?
4. List a couple of principles that guide your discipline. How do they affect the way you view

social issues? How can you get people in other disciplines—and even other cultures—to adopt some of your disciplinary principles?

5. Did you encounter any ethical issues (personal or professional) as you worked in Xicotepec? If so, how did you resolve them?

Again and again, students demonstrated an increased level of cultural awareness. They expressed concern with preserving the values of the Xicotepec community, and they showed a real desire to plan interventions to assist the community in ways that will be sustainable over time. Each discipline identified and compared the problems of Xicotepec with those of U.S. culture, and, not surprisingly, they identified some commonalities. They also noted major differences with regard to the money available to plan or change interventions.

COLLABORATIVE LEARNING ACROSS BORDERS

Partnership

The Collaborative Learning Across Borders: Partnering Nursing Students, Faculty, and Communities (2002–2006) was a multidimensional program for nursing students and faculty that was designed to explore the role of the nurse in the United States, Mexico, and Canada and to promote cultural competence and the recognition of the health beliefs and values that were common to each country. The project involved two schools of nursing from each partner country: in the United States, the University of Missouri–Columbia, Columbia, Missouri, and the University of Iowa, Iowa City, Iowa; in Mexico, the Universidad Autonoma de San Luis Potosi, San Luis Potosi, Mexico, and the Universidad Autonoma de Nuevo Leon, Monterrey, Nuevo Leon, Mexico; in Canada, Dalhousie University, Halifax, Nova Scotia, Canada, and the University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada. The project was funded through the North American Mobility in Higher Education Program, which is a consortium of the Department of Education (United States), the Fund for the Improvement of Post-Secondary Education, Human Resources and Skills Development (Canada), and the Secretaria de Educacion Publica (Mexico).

The partnership between the lead U.S. and Canadian universities began as a result of a previous connection between the principle investigators. Each country then located their associated partners on the basis of established working relationships and proximity. Locating the Mexican schools of nursing was initially difficult as a result of the language barrier; it was at this point that

the value of a Spanish-language specialist to the partnership was realized. The partnership was developed through a concerted effort toward building teamwork and good communication. The development of relationships among the partners was facilitated by conference calls, face-to-face meetings at yearly consortia meetings, and site visits to each partner university and city. The majority of the team members remained the same throughout the project time frame, which was an important contributor to team building and to the ultimate success of the project. A detailed description of the success of teamwork and communication building and of the challenges faced as part of this project is provided by Kuehn and colleagues (2005).

Nursing Education across Institutions

The Collaborative Learning Across Borders: Partnering Nursing Students, Faculty, and Communities grant included two educational objectives: a shared course called “Cultural Expeditions in Nursing” and a 3-week student exchange.

An important aspect of the first year of the grant was the development of a Memorandum of Understanding. This document provided a clarification of procedures and was required for the grant. It specified the responsibilities and duties of each of the grant partners with regard to the course and the student exchanges. The involvement of each university’s administration in the formulation of the Memorandum of Understanding was helpful to address respective issues as they arose. The Spanish-language specialist was important for the back translation of the document.

The Course

At the initial consortia meeting held in Toluca, Mexico, in 2002, an outline of the Cultural Expeditions in Nursing course was discussed. During the next year, the partners shared documents via e-mail and participated in teleconferences to continue work on the course. All grant partners participated in the course development, and, at each university, one faculty member was assigned to the course to facilitate student participation, to monitor and evaluate students, and to assign grades.

The challenges of a course that was shared among six schools of nursing were enormous. Each partner school was responsible for working with their respective curriculum committees to determine how academic credit would be granted. Some schools were able to use the course for a diversity requirement, whereas for others the course was as an elective or an extracurricular course. The delivery time frame of the shared online

course required negotiation because of the different academic calendars of each school. A common textbook needed to be agreed upon, and important materials needed to be made available in Spanish. Mexican students were expected to communicate in English during online discussions. A degree of English language fluency was required for participation, and English classes continued throughout the duration of the course.

The course had five modules that focused on the history and geography of each country, multicultural awareness, the recognition of specific health care beliefs and values, and exploring the role of the nurse within each country's health care system. The course was offered over 10 weeks, with 2 weeks allotted for each module. The modules included postings about specific questions, discussion boards, short papers, and journal entries.

The Exchanges

Planning for the student exchanges began early on and was a significant part of the first year's work; details were included in the Memorandum of Understanding. Planning for the hosting and sending of students began with the partners in the same country. For example, the University of Missouri-Columbia faculty met with University of Iowa faculty to discuss how exchanges to Mexico and Canada could best be accomplished in addition to how the hosting of students from Mexico and Canada could best be arranged. The academic schedules of all the universities were consulted before final arrangements were made; this was a logistical challenge that required faculty flexibility to meet the needs of each school's academic calendar.

Another major consideration for exchange planning was learning and understanding the documentation requirements for travel. Mexican and Canadian students had more difficulty with visas for travel, whereas the U.S. students' experiences were not as problematic. In all cases, faculty knowledge of travel issues and their ability to provide orientation to students was helpful. In addition, both U.S. schools were able to access resources from their international centers.

Grant funding provided for a limited number of student scholarships. Each university was responsible for how the grant money for student travel would be allocated. The selection of students for exchange travel was done by each partner school and varied from school to school. In general, the factors taken into consideration were overall grade point average, motivation to travel, participation in the online course, and language capacity. To address the language barrier, U.S. and Canadian students traveling to Mexico were expected to have

Spanish-language familiarity and prior classes. In addition, the first week of the 3-week Mexico exchange was at a Spanish-language immersion school. Mexican students traveling to Canada or the United States were given a placement examination to establish their level of English fluency as well as English classes before travel.

Home stays for the exchange students were viewed as an essential component of the program to provide for language immersion and for the unique cultural experience of family life in the foreign country. Organizing and planning for home stays was a new experience for all of the exchange partners. Most of the home-stay families were recruited from nursing faculty; however, the University of Iowa made use of its international programs, which had an established host-family roster.

The schedules of the students during home stays varied from school to school. Museums, historic sites, important civic locations, natural resources, and landmarks unique to the respective region were included in the exchange. Students were also given tours of the learning laboratories of the partner nursing schools along and of area hospitals. Host schools partnered with nurses or advanced practice nurses for shadowing half days. The University of Iowa College of Nursing organized nursing students as hosts for the visiting students. Student partners attended classes and clinical experiences together and spent unstructured time together during lunch and after class. The University of Iowa student hosts had the opportunity to earn leadership independent study credit for their host involvement by completing an additional writing assignment, which was usually a detailed journal with reflective questions.

Successes

The Fund for the Improvement of Post Secondary Education (FIPSE) project was completed in 2006. During the grant-funded period from 2002 to 2006, the Cultural Expeditions in Nursing course was offered three times, and a total of 240 students from the United States, Canada, and Mexico completed the course. Since the grant ended, the course has been offered twice through Dalhousie University, the University of Prince Edward Island, the University of Iowa, and Universidad Autonovrade Nuevo Leon (UANL)-Monterrey.

There were three cycles of nursing student exchanges that involved 41 students and several host families and students in the respective countries. There were 16 faculty exchanges that occurred during the grant period.

The course and exchange student evaluations demonstrated increased cultural self-awareness, which was a project goal. Students stated that they "gained valuable

insight into people” and that they were “more accepting.” Qualitative data from discussions demonstrated that students paused and reflected more on the meaning of diversity to them personally and to their nursing education and future career. One assignment had the students perform a cultural assessment and interview someone who was viewed as having a different culture. One student interviewed an Asian-American classmate and then wrote the following in her journal: “I didn’t realize how much I didn’t get to know this person just simply because of how she looked. Now that I’ve talked with her, I realize how much we have in common, but I never would have known that had I not been forced to take the time to get past my own preconceived ideas.”

Faculty members reported an improved ability to communicate and stated that they enjoyed building relationships with faculty from different countries. These faculty enjoyed working with students from the partner countries as well as watching their own students grow in cultural competence. Among postanalysis comments it was noted that, “It was rewarding to observe students from the different countries talking to one another. Even their complaints about the mandatory student nursing uniforms were the same!”

SUMMARY

International educational opportunities provide students with unique opportunities to broaden their perspectives, to work with other disciplines, to learn from cultural immersion, and to move forward on the journey of cultural competence. This chapter introduced two similar (yet different) experiences for international learning from the same college of nursing. Both projects highlighted several common themes in international experiences for nursing education.

Strong partnerships, a commitment to teamwork, good communication, and a sense of humor were all central to the success of the programs. At times, the author involved with the Xicotepec project was amazed at the discipline-specific cultural issues that arose during the interdisciplinary planning sessions. The partners in the Collaborative Learning Across Borders project often shared a laugh or a sense of commonality based on the “language of nursing” that crosses culture and language barriers.

Another commonality was that each program was a semester in length and that it involved didactic content or a course of study for traveling students. Other nursing programs have included courses as a part of or as a

requirement for study abroad or immersion experiences (Duffy, Farmer, Ravert, & Huittinen, 2003). It has been found that students do benefit from formal language coursework as well as from a familiarity with the cultural history and background of the country that they will be visiting. Classes on cultural competence and self-assessments of cultural awareness were common to both projects.

Like any major project in nursing education, the work of international study abroad is a labor of love. Project development, planning, and meetings all demand faculty time and resources. This may be an important consideration for some schools, especially during a nursing faculty shortage; however, many will find that there is growing interest from central administration to fund and support international educational initiatives.

Student self-awareness, cultural competence, and diversity awareness were evident through journals that were kept by students in both projects. In addition, the students who hosted visiting students during the Collaborative Learning Across Borders project voiced an enhanced appreciation for the Mexican students’ ability to speak English and the commonalities that they noticed.

Partnering community with education is an excellent way to introduce students to service learning and interdisciplinary teamwork. Faculty members undertake the role of designing and planning with community partners, and students engage in the work and the distribution of the work while immersed and engaged in a new culture. A focus on partnership and interconnectedness between the host community and the visiting institution serves to mitigate the concern of possible (neo)colonialization that can occur with service-learning projects (Kirkham et al., 2009; Allen & Ogilvie, 2004).

Because projects of this nature rely heavily on volunteers, it is imperative that partners collaborate and recruit as the projects develop to support the work of the team. International work in one arena often overlaps with other disciplines, and it is the membership of the team that allows each discipline to focus on its area of expertise. This focus allows the knowledge and skills of individuals to be maximized.

Challenges to be met and further discussed include those of language, global health certification, and interdisciplinary course offerings. Language courses are in great demand in the health sciences. The University of Iowa has a global health certificate that recognizes course work and projects that focus on global health. There is the potential to expand this to a degree in

global health, which would be similar to a degree in international studies. This could be expanded and offered to students without having it be concurrent with another degree. Global health courses are often full and could be expanded to meet the growing demand; however, more faculty resources are needed. Interdisciplinary seminars to orient students in the health sciences to global health studies is an option for students to pursue both academically and professionally.

Financial assistance for students is increasingly becoming available for shorter international experiences so that those experiences offered over winter break, spring break, and summer can be considered. Unlike other college students, professional health college students must have faculty travel with them to supervise practicum activities. Debate continues regarding whether the university should fund faculty members' trips or if their expenses should be added to the students' travel costs.

For faculty who are involved in international educational experiences, the benefits far exceed the effort involved. Faculty have a unique opportunity to develop a complex project and then participate in its successful completion through course delivery, international fieldwork, or exchange. Developing friendships with colleagues in other countries, participating in service projects, working closely with students, and experiencing immersion in a different culture are examples of the meaningful benefits of international work that transcend typical collegiate work.

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Using Academic–Service Collaborative Partnerships to Expand Professional Nursing Programs

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Many academic programs and professional organizations have embraced a closer link between nursing service and education to enhance professional nursing education and resultant staff nurse graduate outcomes (Williams et al., 2007). The American Association of Colleges of Nursing (2008) has supported the development of strategic partnerships to expand nursing programs in the light of limited numbers of nursing faculty, insufficient clinical sites to support nursing student education, and academic fiscal constraints. The shortage of clinical sites, faculty, and academic funding for nursing education can be eased by partnerships between service and academic institutions. There is often competition for student placement in certain care areas, and there are uncertain rewards for staff nurses to have students in their clinical work area (Matsumura et al., 2004). Faculty practice is not the norm in academic institutions with high teaching workloads, and it may not be valued or included in retention and promotion criteria. Increasing program capacity is difficult to accomplish without faculty who have current clinical expertise. Service–academic partnerships can enhance faculty practice expertise and add clinical sites that are essential for students to achieve clinical competency. Successful collaborative ventures between academic nursing programs and health care service entities have increased the capacity of academic institutions through resource-sharing endeavors (American Association of Colleges of Nursing, 2008; Kinnaman & Bleich, 2004).

This chapter will explore partnership development between an established academic nursing program and a separate, service-based, clinical program housed within a large health care service provider organization. This partnership used clinically competent specialty nursing faculty employed in health care service to increase the nursing program capacity to meet regional

health care needs while maintaining high student academic and clinical competency outcomes. There were other resource-sharing components of the partnership that facilitated a high level of student achievement. The process to develop the partnership was intensive and focused on meeting each partner's needs.

PARTNER BACKGROUNDS

The California State University system is one of the largest university systems in the United States. It is a 24-campus, state-supported system, with 17 campuses offering registered nurse (RN) entry-level degrees, RN completion Baccalaureate of Science degrees, and Master's of Science in Nursing programs. Increasing the academic institution capacity in state-supported higher-degree nursing programs is limited by a lack of faculty, a shortage of university-based classroom space, competition for clinical sites, and insufficient funding (Russler, 2005). California has one of the lowest ratios of RNs to patients in the nation. It is believed that an innovative model such as the one discussed in this chapter will help to increase the capacity of nursing academic institutions.

California State University, Fullerton (CSUF) is the third-largest California State University campus that serves a growing, diverse urban region of approximately 3 million people. For 25 years, CSUF had an RN completion program. In 1996, the program was targeted for discontinuance as a result of low enrollment. As part of a necessary program expansion effort, three partnership programs were initiated. These programs included a statewide distance baccalaureate RN completion program and two Master's of Science in Nursing advanced practice specialties with nursing anesthetist and nursing administration concentrations. The processes and

outcomes of the advanced practice concentration partnership will be discussed in this chapter.

PARTNERING: DETERMINING THE NEED AND PROCESS

As a result of a statewide RN workforce assessment and the increasing complexity of health care needs, there was a need for advanced practice nurses (APNs) to care for patients of varying acuity levels across hospital, outpatient, and community settings (California Strategic Planning Committee for Nursing, 2005). Partnering between the academic and service sectors to enhance an academic nursing program and to meet community needs involved intensive interinstitutional collaboration that led to formal contracts to enhance both partners' abilities to meet a common goal with mutually

beneficial, long-term, positive outcomes. There are many levels of collaboration (Table 13-1). Each type of collaborative carries different levels of risk and commitment by partnering institutions, and the highest “full partnership” collaborative includes a legal contract. A high level of collaboration or “full partnership” was used to develop a new system of partner program delivery that enhanced the capacity of a new advanced nursing practice concentration as part of a Master's of Science in Nursing program.

Processes for partnership development include developing a common vision and mutually beneficial goals, ensuring that benefits are equitable to both partners, establishing outcome measurements at the beginning of the partnership, ensuring that positive outcomes are shared, and adhering to the mission of both partners (O'Neil & Krauel, 2004). In addition, CSUF

TABLE 13-1 Description and Examples of Various Levels of Collaborative Partnerships

Types of Collaborative Partnerships	Characteristics of Collaborative Partnerships	Examples of Academic–Service Partnerships
Networking partnership Definition: Informal partnering	Low risk to partnering organizations Low commitment Maintain separateness	Professional conference meetings with new or established partners
Coordinated partnership Definition: Partnering to achieve a common purpose	Low risk to partnering organizations Low commitment May be joint or individual endeavor	Clinical rotations altered to meet service demands while achieving student educational needs
Cooperative partnership Definition: Partnering to share resources and information and to alter activities for mutual benefit	High risk to partnering organizations Higher commitment Joint work teams	Use of joint appointments from service in academic classes
Collaborative partnership Definition: Partnering to share resources, to alter activities to enhance the capacity of other partners for mutual benefit, and to achieve a common purpose	Very high risk to partnering organizations Phased-in relationship Work closely together Commit resources and seek joint funding, if necessary	Both partners need a valued commodity or product outcome and an enhanced capacity, such as agreeing to share expert lecturers
Full partnership Definition: Partnering that involves contracts and intensive collaboration to enhance bilateral partner capacity for relatively complex operations with mutually beneficial, long-term, positive outcomes for a common purpose	Very high risk to partnering organizations Legally determined Contractual in nature	Both partners are engaged in developing a new system of delivering a joint program that enhances capacity, such as jointly teaching a graduate specialty option

used four important collaboration principles to establish a working relationship for the partnership (Meleis & Gray, 1998):

1. Mutuality of goals and assumptions;
2. Intense involvement of participants;
3. Clarity of early and ongoing planning; and
4. Reciprocity that included the discussion of the each partner's abilities, resources, and potential approaches to meeting partnership goals.

As these principles were incorporated during partnership discussions, a better understanding of driving and restraining forces was developed. Driving forces for successful education partnerships include common goals and objectives; a high level of interest; ongoing motivation during the planning and initiation phases; previous experience with planning interinstitutional partnerships; and institutional support and resource commitment. Restraining forces for education partnering include turf issues; insufficient administrative or resource commitment; service and academic cultural differences; the inability to define common goals or to reconcile logistics (e.g., scheduling, faculty workload, teamwork); lack of interest, motivation, or energy to sustain the planning phase; resistance to change; and inexperience or insecurity that hinder the collaborative partnership process (Kuehn, 1998). The pros and cons of partnering emerge as a relationship is initiated, and the vision for a mutual goal is established. The partnership process evolves through building relationships, formally assessing needs, planning the allocation of resources, and following through each partnership phase with ongoing verbal and written agreements (e.g., minutes of meetings, memoranda of understanding, formal contracts).

Preplanning Partnerships and Relationship Building

The preplanning phase to explore the possibility of partnerships included establishing a trusting relationship with ongoing communication, documenting the need to offer the program as a partnership, and deciding to commit resources to the ongoing partnership. Both institutions' partnership-planning participants had previously worked together in other forums and respected each others' talents and accomplishments. This assisted with the development of a trusting relationship. Communication started with individual meetings and was followed by formal presentations to administrators at both institutions.

Establishing the Need for the Program. The need for APNs in an advanced practice specialty was established through state and local workforce planning

studies. The California Strategic Planning Committee for Nursing (2005) conducted a study of the RN workforce needs throughout California, which also addressed the need for APNs. This analysis reported that family nurse practitioners, nurse anesthetists, clinical nurse specialists, and nurse-midwives were needed in California as calculated from the intention-to-employ data. National research revealed that almost 60% of patients who required procedures with anesthesia were treated by nurse anesthetists, and there was a growing number of outpatient and pain clinics performing procedures that required either general or regional anesthesia administration. The local need for APNs exceeded the national and state data, and health care services had to recruit from outside of the region. The proposed APN concentration would become part of the first state university-supported, campus-based Master's of Science in Nursing program in Orange County, which is the home base of the CSUF campus.

Resource Planning. The business plan for both advanced nursing practice programs was completed after the partnering relationship was established and goals were decided. The business plan explicated the outcomes, structure, governance, budget, and time period of the partnership, and this was adapted to create a memorandum of understanding (MOU) to outline the shared governance, ongoing commitments, and financial aspects of the partnership. The MOU is a partnership agreement that details the processes used to meet goals that can be reviewed and changed annually. The identification of shared activities and each institution's separate responsibilities ensures accountability. In addition to the MOU, a formal interinstitutional contract was completed. Formal contracts signed by administrators at each institution listed the major partnership goals, and, after sustainability was ascertained, and an evergreen contract (i.e., the termination of the contract must be initiated by one of the institutions) was supported. Formal contracts often take longer to develop because they incorporate the legalities of the relationship and need to be signed by high-level administrators from each partnering institution (e.g., the university president, the chief executive officer of the health care service entity). Both types of written agreements will be discussed later in more detail.

The resource commitment was based on the fiscal requirements and in-kind contributions from each institution for the partnership. The nurse anesthetist program was self-supporting and had substantial in-kind resources, and thus it did not require CSUF to pay faculty salaries or for other student resource or clinical

needs. The program had experienced faculty with clinical expertise, off-campus training facilities, and established clinical affiliations for student practice, including contracts for clinical placement that used physicians and other advanced practice preceptors. Early in the preplanning phase, both institutions completed and shared formal budgets to determine the feasibility of the partnership. After budget deliberations were completed, meetings were held to elicit each partners' perspectives about the infrastructure, instruction, and student and academic service aspects of the partnership.

Partnership Development Phases

There were three phases of developing the partnership after the participants and institutional administrators decided to embark on the endeavor. These included maintaining integrity of the relationship, establishing a project planning team that sought faculty acceptance and input into the partnership, and developing and executing the formal agreements.

Maintaining the Integrity of the Relationship. Ongoing project planning team communication about each group's values, end goals, and accountability were spelled out in written documents that helped to move the process forward. Visualizing the mutual gain from partnering and identifying potential pitfalls were important to maintain the momentum to formalize the partnership.

Project Planning Team and Faculty Participation. The project planning team from each institution met regularly to explore and develop the partnership. This team included administrators and faculty with previous advanced practice program experience. The participants included the department chair of the CSUF nursing program, an advanced practice program consultant, and the director of the advanced practice program. The program had a track record of successfully conducting an advanced practice program on a limited scale. The initial meetings dealt with sharing the vision for the partnership from both partners' perspectives. After the vision was agreed upon, the project planning team members consulted with executive level management at their institutions to discuss the need for the program and also to address the philosophical (i.e., institutional mission compatibility and institutional motives), political, economic, legal, and operational feasibility of the partnership. After the need and feasibility were established, faculty from both institutions met and formed specialty teams to make decisions about course work, student issues, and programmatic elements that needed to be merged within each institution's academic and clinical frameworks.

As faculty worked together, differences in organizational cultures and difficulty with ongoing energy and time commitments to remain involved became evident. Organizational cultures varied with regard to what was valued (e.g., amount of faculty practice), norms (e.g., degree of teaching and learning expertise), and expectations (e.g., explicit course syllabi and program outcome measures). The partnership accepted a unified diversity of cultures that was based on a shared understanding and an agreement about differences in each organization's objectives, policies, procedures, and skill levels (i.e., academic vs. clinical) (Engelke & Marshburn, 2006). A general meeting of academic and service faculty was held, and this was followed by small team meetings that combined academic and service faculty with similar specialty areas to share their perspectives regarding course content.

These meetings highlighted the differences in the clinical and academic viewpoints of each institution's culture. Both partners began to appreciate each other's educational perspectives and to see the partnership's future ability to strengthen student outcomes. For example, CSUF required prerequisite academic research and theory courses for APNs, whereas multiple-role courses were visualized as being important to the partnering clinical faculty. Interinstitutional agreement emerged after both groups of faculty met together and formed small teams to consider the objectives, requirements, and teaching and assessment methodologies for each course. However, the final sculpting of courses within each program was accomplished by an intermediary advanced nursing practice program specialist who worked as a consultant to write the final courses to meet the curricular standards of the university. The use of an outside consultant kept program development moving forward, avoided turf issues, and resulted in a high-level, integrated program outcome.

Establishing Written Agreements. There were two levels of agreements used for partnering with the off-campus advanced practice program: the MOU and a formal contract.

MEMORANDUM OF UNDERSTANDING. The first type of agreement, the MOU, was useful throughout the partnership discussion and implementation. During the planning phases, short MOUs can be used to document iterative agreements that are discussed. This is helpful if there is a long time period devoted to planning the potential partnership, because these signed agreements clarify each institution's perspective on the partnership. Table 13-2 identifies some of the academic changes that must be considered when adding an off-campus program to an academic unit.

TABLE 13-2 Examples of Changes to Accommodate a Collaborative Partnership for an Academic Program

Academic Department Partner	Clinical Service Partner
Increase the infrastructure for student services with additional student recruiters and admissions personnel	Formalize clinical contracts
Assist with student selection (e.g., with the use of shared interview committees)	Assist with student selection (e.g., shared interview committees)
Augment research input for students in the culminating outcome requirements by adding a group seminar experience to add research faculty experience and input to students' work	Increase involvement of clinical faculty with student research
Institute student fee changes to support advanced practice costs of performance examinations and clinical laboratories	Increase faculty involvement with nonclinical curriculum
Share technology (e.g., online software, access to training in technology)	Attend on-campus committees and other student events
Share classroom space	Increase faculty involvement with technology
Change the scheduling of classes to accommodate the new cohort	Work collaboratively to schedule classes

The MOU may be the outgrowth of the initial business plan. The business plan outlines the mission, structure, governance, partnership activities (i.e., joint and separate responsibilities), finances, and timeline for partnership renewal and refinement. In this way, the MOU can explicate shared responsibilities and conflict resolution strategies used during the partnering process. Partners should include a timeline in the MOU to review and refine the partnership (usually every 1 to 2 years).

An important component of the MOU is specifying how often the partners will meet and how the partners will be integrated into each other's institutional structure. For example, outside partners are required to attend the on-campus graduate program and evaluation committee meetings. Partners are voting members of each committee, and their input is solicited for program reviews, updates, and other student issues.

The MOU is a useful way to obtain a signed commitment for day-to-day decisions and expectations that may change over time as the partners' operations change (e.g., a change in a committee name or function) or as program changes occur (e.g., culminating experience options are broadened). The MOU can be revised every 1 to 2 years, and the existence of the MOU needs to be included in the formal interinstitutional contract. Box 13-1 contains some of the important components of an MOU.

LEGAL CONTRACT. The partnership contract is a legal document that outlines all aspects of the relationship, including responsibilities and expected outcomes.

Each institution needs to make decisions about indemnity (institutional protection) clauses and other liability issues. The format for how decisions are made and how the partnership can be dissolved are important parts of the legal contract.

ONGOING COMMUNICATION

Ongoing communication is a partnership imperative for sustainability and quality improvement. The partnership program, student outcomes, and fiscal outcomes are reviewed, and each partner's satisfaction with the agreement and the processes for decisions related to graduate programming is addressed. A collaborative partnership often requires many revisions as the partnership is operationalized. The aim is to eliminate boundaries by jointly working together to execute a program, including assessment, ongoing planning, delivery, and evaluation.

PARTNERSHIP OUTCOMES

This partnership was based on solid relationships and focused discussions between faculty and administrators that resulted in a firm understanding of the contributions of each partner to a mutual goal of delivering competent APNs to meet a community need. Because the partnership was established, MOUs have been used to guide decisions when issues have arisen, and they were

BOX 13-1 Components of a Memorandum of Understanding: Fully Integrated Partnerships

- I. FACULTY STRUCTURE
 - A. Approval and hiring of faculty
 - B. Salaries: Who pays and at what level
 - C. How will course review and faculty evaluation be conducted?
 - D. How faculty will communicate; meeting attendance required
 - E. Process for clinical placement of students and affiliation agreements with clinical sites and preceptors
 - F. Database of faculty qualifications and evaluations
- II. ACCREDITATION
 - A. Who will participate in writing and preparing for accreditation?
 - B. Funding of accreditation costs
 - C. Quality improvement processes
- III. ACADEMIC PROCESSES
 - A. Academic–service communication
 - B. Coordination and review process for student evaluations
 - C. Grading standards and course completion
 - D. Program completion
 - E. Use of technology in the program by students, faculty, and administrators
 - F. Specific details regarding which institution is responsible for course instruction or if there will be joint responsibility
 - G. Program evaluation: Responsibility?
 - H. Course scheduling: Days, times, and responsibility for scheduling classroom space
- IV. STUDENTS
 - A. Numbers of students expected in each cohort
 - B. Database responsibility
 - C. Admission and advising policies: Responsibility and process
 - D. Student services: Library, e-mail, parking, financial aid, and so on
 - E. Professional insurance requirements
 - F. Student liability issues
 - G. Student and faculty health requirements for clinical rotations
 - H. Student registered nurse licensure requirements
 - I. Workers' compensation issues
- V. FINANCES
 - A. Student fee structure
 - B. Payments required between institutions: Faculty salaries, timeline, and so on
 - C. Other estimated costs
- VI. ADMINISTRATIVE STRUCTURE
 - A. Director oversight: Each partner and jointly
 - B. Staff required for administrative, student, and clerical services
 - C. Technology oversight: Staff and administrative
 - D. Mechanisms for conflict resolution
 - E. Facility and space considerations
 - F. Integration of faculty between partnering institutions with regard to administrative decisions, committee input, and so on

reviewed and updated after several years. Partnership faculty meet monthly to discuss student, course, and program issues. Students are given opportunities to work with clinically competent faculty in a wide array of clinical placements. The student capacity of the service partner increased from 20 to 40 students since the inception

of the program, and ongoing sustainability has been established. Although organizational cultures value different aspects of the student experience (e.g., clinical vs. research emphasis), the structural integration of faculty and academic processes has resulted in a richer experience for faculty, students, and administrators.

SUMMARY

This chapter explores the potential benefits of partnership between an established academic nursing program and a separate, service-based, clinical program housed within a large health care service provider organization. This partnership between an academic organization and a service provider enhanced the academic nursing program and helped meet community needs. This chapter provides a model for others who have collaborative partners and wish to enhance educational opportunities and meet community health care needs through collaborative partnerships.

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Creating the Nursing Theory–Research–Practice Nexus

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In his groundbreaking book *A Whole New Mind: Why Right-Brainers Will Rule the Future*, Daniel Pink presents a convincing argument that a “seismic—though as yet undetected—shift” in the way one thinks is “now under way in much of the advanced world” (2006, p. 1). We are currently experiencing a transition from an “Information Age” to what Pink describes as the “Conceptual Age.” The Information Age was the era of the “knowledge worker.” As early as 1959, Drucker (2003) described knowledge workers as people with considerable theoretical knowledge and analytic skills. The Information Age benefited from knowledge workers who were able to reason logically, sequentially, and seedily in linear, logical, and near computerlike ways. The Information Age has been a “rousing success” but is “no longer enough” and “is now in its dying days” (Pink, 2006, p. 30). The Conceptual Age requires a different form of thinking, one that is grounded what Pink refers to as “high concept” and “high touch.” High concept involves being able to see patterns and opportunities, create artistic and emotional beauty, craft satisfying narratives, and synthesize unrelated ideas into a singular novel idea. High touch includes the abilities to empathize with others, to understand the subtleties of human interaction, and to stretch beyond the quotidian in the pursuit of purpose and meaning (Pink, 2006). It is noteworthy that Pink specifically names the nursing profession, along with other “caring professions,” as having ideally suited abilities for the rising Conceptual Age. What is also clear from Pink’s assertion is the notion that, to be successful during the coming Conceptual Age, one must have the ability to think conceptually, because “high concept” is associated with “big thinking.” “Big thinking” is a meta-ability that refers to systems, gestalt, or holistic thinking

while allowing one to contextualize, encapsulate, understand connections, synthesize and reassemble existing ideas, and find new meaning.

Clearly, “high-concept” thinking requires the ability to think and practice theoretically. The ability to function in the emerging Conceptual Age requires a unity of nursing theory with practice and research. However, nurse scholars have expressed concern about the divergent patterns of the development of nursing knowledge. Knowledge in nursing typically has developed in three separate areas: (1) theoretical knowledge; (2) practice knowledge; and (3) knowledge based in research or science. For example, in the development of nursing knowledge, the links between theory and research preceded the links between theory and practice. Initially, there were few links between nursing theory and research; however, during the last 20 years, there has been significant research grounded in and guided by various nursing theories. Despite many early calls by nurse scholars for integrated knowledge (Fawcett, 1978; Fawcett & Downs, 1992; Jacobs & Huether, 1978), knowledge development processes have continued to develop separately. Concerns about the fragmentation of nursing knowledge and calls for “integrated knowledge” continue to be voiced (Chinn & Kramer, 2008; Fawcett, 2005; Kim, 2001; Meleis, 2007). This concern about the lack of knowledge integration leads to the viewpoint addressed in this chapter: if nursing is to be successful in the emerging Conceptual Age as a scientific practice discipline, then nursing theory, practice, and research knowledge development need to be unified into a seamless whole. The bringing together or nexus of nursing theory, practice, and research creates a true unity of knowledge designed to support service to clients as well as the health of society.

BIG THINKING: THE PRIMACY OF NURSING THEORY AS DISCIPLINARY KNOWLEDGE

Disciplines are branches of knowledge or bodies of science and are identified by distinct conceptualizations of the phenomena of concern. As branches of knowledge, disciplines consist of belief systems, philosophies, paradigms, theoretical structures, concepts, and methods that together offer a unique lens for guiding knowledge development and an understanding of phenomena that are the primary concerns of its members. Butcher (2004a) defined the focus of the discipline by combining six central metaparadigm concepts—persons, environment, health, nursing, caring, and transitions—into one clear and concise statement. The primary concern of nursing is “caring of persons experiencing human-health-environmental transitions” (p. 76).

Howard Gardner (2006) places particular emphasis on what he calls “disciplinary thinking” as one of five “prescriptive” ways of thinking or “cognitive abilities” that need to be cultivated in the educational preparation of this generation of students and future professionals. According to Gardner (2006), the other four cognitive abilities that will command a premium in the future are the synthesizing, creating, respectful, and ethical mind. It is interesting how Gardner’s ideas resonate with Pink’s (2006) cognitive abilities for the Conceptual Age. What is of particular relevance here is Gardner’s (2006) cognitive ability: the “disciplinary mind.” The disciplined mind is one that has “mastered at least one way of thinking—a distinctive mode of cognition that characterizes a specific scholarly discipline, craft, or profession” (p. 3).

Gardner (2006) seems to contradict nursing’s recent calls for multidisciplinary, interdisciplinary, and transdisciplinary knowledge development, research, and practice. Gardner (2006) makes the point that one needs to first be grounded in a discipline, which should be the one in which the individual is educated. Having a disciplinary way of thinking enables one to contribute to or engage in scholarly activities with those informed by other disciplinary perspectives. For example, some nurse scholars have mistakenly interpreted the National Institute of Health’s call for interdisciplinary research as articulated in the “road map” to mean relinquishing the nursing perspective and adopting the theoretical views of other disciplines, such as medicine. Rather, what would most contribute to research funded by the National Institute of Health is nursing’s theoretical perspective being incorporated with the theories and evidence from other disciplines.

Having a unique body of knowledge is the very essence of a discipline. In their classic article, Donaldson and Crowley pointed out that “a discipline is not global; it is characterized by a unique perspective, a distinct way of viewing all phenomena, which ultimately defines the limits and nature of its inquiry” (1978, p. 113). If a discipline’s content and contribution to the betterment of society is not distinguishable from other disciplines, then the discipline’s continued existence is questioned. Whether conducting research, collaborating with multidisciplinary, interdisciplinary, or transdisciplinary teams in either practice or research situations, or teaching across disciplinary boundaries, if you do not have a disciplinary lens, then you are bound “to march to someone else’s tune” (Gardner, 2006, p. 3).

Fortunately, as a science and an academic practice discipline, nursing has a unique and distinct content and knowledge base. Nursing theories collectively identify the focus of the discipline and provide a scientific holistic discipline-specific lens for the development and testing of nursing knowledge as well as for guiding clinical situations. Nursing theory in the context of this chapter refers to extant grand theories, conceptual frameworks, and midrange theories developed for the purpose of guiding nursing education, research, and practice.

Theoretical thinking is foundational and essential to all professional nursing activities, whether one is functioning as practitioner, researcher, consultant, administrator, or educator. Theoretical thinking is characterized by the ability to use conceptual frameworks to promote understanding in health and illness situations. A conceptual or “theoretical thinker, is a critical thinker with a goal of discerning patterns, connecting idea, and developing explanatory models to ask and answer the ‘whats,’ ‘why nots,’ and ‘what ifs’” (Meleis, 2007, p. 542). This disciplinary perspective is primary, and it guides all aspects of theoretical thinking. Nursing theories do the following: (1) they provide a perspective for understanding the person that the nurse is caring for; (2) they direct the approach to be taken to deliver care; and (3) they structure critical thinking, reasoning, and decision making in practice (Alligood, 2006). Therefore, nursing conceptual frameworks and theories guide all aspects of nursing research and provide a general outline for organizing nursing knowledge (Fawcett, 2005). Theory gives meaning to knowledge to improve practice by describing, explaining, and predicting phenomena of concern. Nursing theory is the vehicle that is used to operationalize a disciplinary perspective by framing human health experiences with regard to the core assumptions, beliefs,

and concepts of the profession. Theories developed by nursing theorists provide ways to organize knowledge and allow for the integration of knowledge from other disciplines that can inform and expand the sphere of understanding from a distinct nursing perspective by providing a disciplinary lens that is essential for reconceptualizing theories that are shared from other disciplines (Roy, 2007). The synthesis of a theory from another discipline with a nursing perspective ensures that the focus of nursing continues to be addressed in a way that is consistent with the discipline's philosophical, theoretical, and value stance. Phenomena that are seen through the lens of a nursing perspective are not understood in the same way when viewing the same phenomena from a biomedical, sociological, or psychological perspective. In other words, nursing theories provide the disciplinary lens that allows nurses to have a way of "thinking and being in nursing situations" (Butcher, 2004a, p. 88). A number of nursing scholars (Cody, 1994; Fawcett, 1999; Levine, 1995; Mitchell, 1997; Rawnsley, 1999; Reed, 1995) have noted the decreased emphasis on the application of unique nursing knowledge in nursing education and clinical practice. More recently, DeKeyser and Medoff-Copper (2002) commented that "over the decade of the 90s nursing theory seemed to take an increasingly smaller role in the content of schools of nursing" (p. 330) and that "practicing nurses are continuing with their daily routines and are often unaware that the world of nursing theory is changing" (p. 329). Now, a decade into the new millennium, there continues to be more erosion and detachment of nursing knowledge development as the vast majority of published nursing research continues to be conceptualized from theories from other disciplines. More importantly, few practicing nurses use a nursing conceptual framework or theory as the foundation for guiding clinical practice. The continued advancement and very survival of nursing as an emerging profession and an academic practice discipline depend on the ability of all nurses to understand, express, and use nursing's distinctive knowledge base to guide nursing practice, research, and education.

For the past 35 years, all of the major nursing theories have evolved to the point that they provide specific guidance for research and practice. Nursing conceptual systems provide the contextual interpretation of research findings, thereby connecting the experiences that nurses encounter to nursing's disciplinary perspective. The journal *Nursing Science Quarterly* has consistently published nursing theory testing research for the past 22 years. Fawcett (2005) references more than

200 refereed research-based articles that tested Roy's adaptation model and lists more than 300 research-based articles that tested Orem's self-care framework. The presence of just one example of the testing of nursing theory or of application to practice calls into question any claims that the models are untestable or not applicable to guiding nursing practice situations. The real question that should be asked is, "Why do nurse educators, researchers, and practicing nurses continue to opt for adopting primarily biomedical knowledge rather than embracing the knowledge developed specifically for the nursing discipline?"

NURSING THEORY AND PRACTICE

Although promoting human wellness and betterment is nursing's *raison d'être*, practice is nursing's *appel du devoir*. The phrase *appel du devoir*—which means "call to duty"—does not imply subservience to others or unyielding following; rather, it refers to the mandate to do work that is for some greater good (Butcher, 2006). "Nursing exists to serve people" and nursing's "direct and over-riding responsibility is to society" (Rogers, 1970, p. 122). Nursing's obligation to the promotion of human health, well-being, and betterment is met by the work that nurses undertake. Nursing's primary work is in developing knowledge that is designed to guide both research and practice.

Practice is the unifying ingredient of nursing knowledge development. Practice refers to the professional health-related services that facilitate well-being with the use of knowledge while caring for individuals, families, communities, and populations. In the circulated draft of "Nursing's Social Policy Statement: The Essence of the Profession Nursing," nursing is identified as "the pivotal health care profession, highly valued for its specialized knowledge, skill and caring in improving the health status of the public and ensuring safe, effective quality care" and defined as the "protection, promotion, and optimization of health and abilities, prevention of illness, injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and population" (American Nurses Association, 2008, p. 1). The social mandate of the nursing discipline includes the provision of the following knowledge-based services (American Nurses Association, 2008):

- ◆ Promoting health and wellness;
- ◆ Promoting safe and high-quality care;
- ◆ Promoting care and self-care processes;

- ◆ Providing physical, emotional, and spiritual comfort as well as discomfort from pain;
- ◆ Facilitating adaptation to physiological and pathophysiological processes;
- ◆ Assisting clients with dealing with the emotions related to the experiences of birth, growth and development, health, illness, disease, and death;
- ◆ Helping clients find meaning in the health and illness experience;
- ◆ Ensuring linguistic and cultural sensitivity as well as health literacy;
- ◆ Enabling decision making and the ability to make choices;
- ◆ Enhancing relationships, role performance and changes within relationships;
- ◆ Ensuring access to and contributing to cost-effective quality health care systems; and
- ◆ Promoting environmental health and the prevention of disease and injury.

Nursing has a mandate from society to use its specialized knowledge and skills to promote well-being and human betterment. Nursing practice uses knowledge that is grounded in both theory and research to guide care and promote change. The knowledge that nurses use while engaging in practice comes from many sources, and it is initially learned in the courses that are taken as part of undergraduate education. These courses are selected carefully from several disciplines: the biophysical sciences, the social sciences, the humanities, and nursing science. The courses in nursing science present knowledge based in other disciplines as well as knowledge generated by nurses. Because nursing is a discipline, by definition, it manifests an understanding of the person–environment–health relationship from a unique and distinct disciplinary perspective. When nurses are grounded in a clear and distinct philosophical and theoretical disciplinary perspective, knowledge shared with other disciplines can be reformulated and take on new meanings as it is interpreted through the nursing disciplinary lens. Nursing theory illuminates practice by creating the disciplinary knowledge required to guide clinical judgments and actions designed for the attainment of clinical outcomes that contribute to health (Roy, 2007).

However, practice knowledge is not often informed or guided by nursing theory. Johnson (1987) pointed out that many nurses use “private” or “implicit” mental frameworks that are not informed by specific theories. These mental frameworks tend to be disconnected, diffuse, and incomplete, and they are often based on concepts and conceptual schema used by other disciplines (e.g.,

medicine, psychology). Some critics of nursing theory believe that basing nursing practice on nursing theory is too narrow and that nursing is more than what is articulated in nursing theories. However, it is the use of non-nursing theory—not the use of nursing theory—that limits nursing. Practicing from a base of non-nursing theory potentially limits the full extent of a nurse’s contribution to promoting health among individuals who require nursing care. All nursing theories extend beyond any borrowed biomedical, psychological, sociological, or even critical theories (Butcher, 2004a). All nursing theories are inherently holistic; therefore, they provide a base for a practice that is more expansive than any particular sociological, psychological, biological, biomedical, cultural, or spiritual theory. Most nursing theories are inclusive of all these components while at the same time organizing them all into a coherent, systematic, logical, and scientific whole. Conceptualizing and understanding nursing through the lens of a nursing theory opens up new possibilities. Nurses who base their practice on an explicit nursing theory are ensured that they “follow in Nightingale’s footsteps and articulate what nursing is and what it is not” (Fawcett & Bourbonniere, 2001, p. 312).

Nursing theory as a type of knowledge in that era was often considered by practitioners and researchers to be too abstract to be useful. As others have noted, nurses seemed to believe that, for knowledge to be theory, it needed to be obscure and lack immediate use and meaning (Levine, 1995). Therefore, theory was relegated to a place separate from other types of nursing knowledge. However, the abstract language embedded in the conceptual frameworks and theories characterizes all disciplines. Every discipline educates its future practitioners by immersing them in knowledge and a language base that are unique to that discipline. Nursing conceptual frameworks, theories, and classification systems provide the language of nursing. As Cody points out, “Nurses who read in other disciplines take it upon themselves to learn the language. Shouldn’t they be expected to do the same with regard to their own discipline?” (1994, p. 99). The nature of theory requires concepts and a specific language to provide clarity of meaning. The terminology used in nursing conceptual frameworks and theories is abstract or difficult only to one who has not studied or learned the theory.

All theory, by its nature, is abstract, whereas practice, by its nature, is not typically viewed as being abstract. DeKeyser and Medoff-Cooper (2002) point out that an inherent gap must exist between theory and practice; perhaps the problem is not that there is a gap between theory and practice but that there is one in the

expectations of what theory can do for practitioners. An important note is that nursing practice informs the development of nursing theory. Nursing theories are guides to practice and typically are not prescriptive. Each nursing conceptual framework provides a definition of nursing, identifies the major concepts of concern to nursing, and describes the purpose and goal of nursing care. More specifically, theories derived from conceptual framework are designed to guide all aspects of nursing care. A nursing theory gives direction to the focus of assessment by identifying the phenomena of concern; providing a scientific basis for understanding the nature of patient problems; and providing the specifics for guiding all aspects of planning, implementing, and evaluating nursing care.

The reality is that few nurses are educated within a nursing theory perspective, so it is not surprising that few nurses come to use nursing theory in practice. Many practice settings continue to be dominated by physicians and their biomedical model. Throughout nursing history, nursing has adopted or adapted the language of other disciplines to explain nursing phenomena. Not surprisingly, when nursing adopts the language of medicine, nursing is seen as an extension of medicine rather than as a separate and unique discipline. If the nurse uses only knowledge derived from other disciplines (e.g., medicine, psychology), the nurse would have little to contribute to the care of the patient apart from what physicians and psychologists already contribute. If nurses use a particular nursing theory to guide assessment, the nurse would have information distinct from any other member of the team and therefore contribute to a new understanding of the patient's situation that likely is not otherwise addressed. Other nurses argue that nurse educators should abandon nursing theory because other health care professionals do not understand it. They feel that all health care professionals should speak the same language, which really means that "we all need to speak the language of medicine." Why should nurses relinquish their valued knowledge base? Other health care professionals, such as psychologists and social workers, do not abandon their theoretical heritage when working with the multidisciplinary team. Rather, other professionals translate abstract theoretical concepts in a manner that those who are unfamiliar with the theory can understand.

The lack of using nursing theory to conceptualize and guide nursing practice contributes to making nursing knowledge invisible to the public, to other disciplines, and, most of all, to nurses themselves. Fawcett and Bourbonniere (2001) call for nurses to end their

intellectual and practice romance with the knowledge of other disciplines and to "fall in love with nursing knowledge and develop a passion for the destiny of the discipline of nursing" (p. 316).

THE RESEARCH–PRACTICE CHASM

Just as there is a chasm between theory and practice, the idea of applying knowledge from research to practice also implies the crossing of a chasm. The purpose of research is to generate knowledge. Nursing research provides the scientific basis for the practice of the profession. A definition of nursing research requires an understanding of what knowledge is relevant for nursing and particularly of what knowledge is needed to improve nursing practice (Burns & Grove, 2009). The definition advanced in this chapter is that "nursing research is a formal, systematic, and rigorous process of inquiry used to generate and test theories about the health-related experiences of human beings within their environments about the actions and process that nurses use in practice" (Fawcett & Garity, 2009, p. 5). Pedhazur pointed out "it is a truism that methods per se mean little unless they are integrated within a theoretical context and applied to data" (1982, p. 3). Thus, theory, research, and practice are intertwined, with each informing the other. The distinction of Fawcett and Garity's definition is that it situates research within nursing's theoretical perspective by focusing that research on health-related experiences, human beings, and the environment.

In a scientific practice discipline, the role of research is to develop and test knowledge that has been designed to guide practice. Practice is the medium for transferring nursing knowledge from the world of ideas to the world of events (Rawnsley, 2003). The fact that nursing research is often not informed explicitly by theory (i.e., theory isolated) and that it is seldom applied in nursing practice has contributed to the fragmentation of nursing research, theory, and practice. One view advanced by some nurse scholars is that research conceptualized with the use of non-nursing theories from other disciplines does not advance nursing science and does not advance the development of a unique body of disciplinary knowledge. Some of the inattention to theory-testing research comes from the researchers themselves. Researchers who continue to perpetuate the false notion that nursing theory is "untestable" or simply "historical" must not be familiar with the vast amount of evidence that clearly demonstrates not only the testability of nursing theories but also the ability of nursing theory to conceptualize

nursing practice across populations, settings, and patient situations. Although they are optimistic about the increase in the application of research findings, most authors point to significant barriers to research use.

Burns and Grove (2009) note that barriers to research-based practice seem to fall into three categories: (1) the characteristics of the practicing nurses; (2) the support of the health care organization and its administrators; and (3) the quality of the research findings. Common barriers for practicing nurses include difficulties with finding, reading, understanding, and preparing the research for application; being unaware of research findings; being unwilling to change current practice; not valuing the use of research to change practice; or believing that changing practice based on research will have limited benefit. Organizational barriers contribute to creating a research-practice chasm by not providing nurses with access to research journals and evidence-based practice protocols; having low staffing ratios that limit the time that nurses have to make research-based changes; limiting the power that nurses can have with regard to changing practice based on research findings; and not providing the needed financial support or reward for implementing research-based care to patients, families, populations, and communities. More significantly, there is a gap in many areas of practice where there remains a lack of adequate empirical research for guiding practice. Some studies lack rigorous methodologies, have unclear interpretations of the findings, or both.

BEGINNING MODELS FOR INTEGRATING NURSING THEORY, RESEARCH, AND PRACTICE

Increasingly, articles in nursing education encourage faculty to ground nursing knowledge in evidence-based practice, outcomes, research, and theory. These exhortations often emphasize the existing separateness of research, theory, and practice. A unique body of knowledge is the foundation for attaining the respect, recognition, and power granted by society to a fully developed profession and scientific discipline. Furthermore, the autonomy of a profession rests most firmly on the uniqueness, recognition, and recognized validity of the theoretical knowledge of the discipline. Remember Gardner's (2006) notion of "disciplinary thinking" and Pink's (2006) assertion that we are entering a Conceptual Age that requires professionals to have the empathetic ability to care for others and to be able to think conceptually and holistically. The profession and society are served best when the professional discipline of nursing has a body of

knowledge that is unique, coherent, and as seamlessly as possible linking nursing theory, research, and practice. This unique body of knowledge consists of nursing philosophy, metaparadigm constructs, patterns of knowing, paradigms, conceptual frameworks, nursing theories, midrange theories derived from or linked to extant conceptual frameworks and theories, practice models derived from or guided by nursing theories, nursing classification systems, and, finally, empirical indicators linked to the nursing concepts that compose the theoretical landscape of nursing (Butcher, 2004a). This knowledge must have the following characteristics:

1. This knowledge must be organized by theoretically identified concepts, patterns, and relationships.
2. The statements of this knowledge must be generated from and tested by systematic research.
3. Knowledge needs must be identified in practice, and generated knowledge must be translated to practice.

Like practitioners in other disciplines, students are taught the philosophical and theoretical framework of the discipline. A host of nursing theories are integrated fully into all aspects of the curriculum, including clinical courses, where nursing students learn how specific nursing theories guide practice and how nursing theories may be used to conceptualize and test the knowledge derived from practice. Nursing theories and their corresponding practice models are standards of practice across clinical settings. Practice is grounded on research that is conceptualized within the discipline-specific knowledge of nursing. Anything less than full integration will continue the current pattern of separateness.

The ideal model brings together academic researchers, nurse theorists, and practicing nurses to identify knowledge needs, to carry out research projects, to create and refine theory, and to bring research findings systematically into nursing practice. Although few if any real-world examples exist of a fully integrated discipline-specific nursing theory-research-practice model, three subtypes can be identified. The first is the researcher-practitioner collaboration. Two examples of this model come from northern California and involve collaboration among several health care agencies and nurse research experts (Chenitz, Sater, Davies, & Friesen, 1990; Rizzuto & Mitchell, 1988). Another example comes from the Midwest and describes a collaborative research project that began as a utilization project, became a research-conduction project because of the lack of an adequate base for interventions, and concluded as the results of the research were used and evaluated in practice (Blegen & Goode, 1994). Yet another suggestion for increasing the

connectedness of the production and use of research knowledge in practice is offered by Boyd (1993). The nursing practice research method features the relationship between the nurse-researcher-as-clinician and the patient. The research process is a collaboration between the nurse and the patient; it is therapeutic to the patient, and it leads to the development of the nurse. One can question whether the knowledge produced by these efforts is generalizable beyond the setting and patients involved in the project. Even researchers from the “perceived” view call for the creation of knowledge that can be used by all nurses (Schumacher & Gortner, 1992). The greater the need for knowledge that is generally useful for all nurses, the less this approach will be satisfactory.

Another nurse-researcher–practitioner model that is receiving increasing attention is the use of evidence-based practice. Titler (2001) explains that typically evidenced-based practice refers to the use of scientific information from randomized clinical trials as a guide for practice. In nursing, levels of evidence can range from randomized clinical trials to case reports and expert opinions. Concerns have been raised about the narrow hierarchy of what counts as best evidence. Typically, the strongest evidence involves those findings from randomized clinical trials and the meta-analyses of clinical trials, whereas the weakest evidence involves the results of case studies, qualitative studies, and clinical expertise (Burns & Grove, 2009). Dicenso, Guyatt, and Ciliska (2005) present an inclusive view of evidence-based practice that integrates best research evidence, health care resources, patient preferences and actions, clinical settings and circumstances, and the clinician’s judgment into clinical decision making. Therefore, evidence-based practice simply is not the application of research in practice. Thus, the best evidence may be found in research findings that are lower in the hierarchy. Whatever the origins of the best evidence, evidence-based research that contributes to the development of evidence-based protocols, practice guidelines, policies, procedures, or care maps requires researchers’ close collaboration with expert clinicians and evidenced-based nurse researchers.

The second type of collaboration is the theorist–practitioner model. Examples of this kind of collaboration are found in discussions of the implementation of the conceptual models. Practitioners who are using nursing theories in practice have published a wide range of works that describe how particular nursing theories are used to guide practice in specific patient populations (Alligood & Tomey, 2006; Fawcett, 2005; Parker, 2006). A number of published examples (although not

nearly enough) also focus on the implementation and integration of a conceptual model in the organization of a hospital or another patient care facility. Unfortunately, the success of these efforts is difficult to analyze. How can nurses determine whether implementing model A or model B in a hospital leads to better outcomes? Real-world problems are too complex to conclude unequivocally that the model implemented resulted in the changes specified and that the changes enhanced patient outcomes. Fawcett (1999) suggests that nursing needs two dominant provider types, which she labels “nurse scholars.” The first type, prepared in a Doctor of Nursing program, would integrate research and practice when caring for individual clients. The second type, prepared in a Doctor of Philosophy program, would integrate nursing theory and practice with groups of patients.

The third type of collaboration is the researcher–theorist group, which includes the research that is conceptualized within specific nursing theories. Fawcett’s (2005) text includes a comprehensive listing of hundreds of nursing-theory-based research studies organized by each of the major conceptual frameworks and theories. However, little of the nursing-theory-based research is ever actually translated into practice, used by practitioners, or even included in educational programs. Efforts to integrate the vast quality of nursing-theory-based research with practice in practice settings would be a major step toward creating a unified nursing theory–research–practice model.

Silva and Sorrell (1992) suggested that there are four approaches to testing theory: (1) verification through correspondence with empirical research; (2) testing to verify through critical reasoning; (3) testing through the verification of personal experiences; and (4) verification through the assessment of problem-solving effectiveness. If a theory were tested with all of these approaches, it would clearly increase the integration of practice, theory, and research. However, theory testing using any one of these four methods also involves advanced skills that many practicing nurses do not have or feel that they have little time to use.

Although collaboration is generally to be recommended and is essential if nurse educators set out to develop one coherent, seamless body of knowledge, there are limitations to the extent of collaboration that actually can take place. Crossing the differing perspectives of the persons involved is difficult. Practitioners focus on individual and unique patients; researchers focus on systematically collecting knowledge that transcends the individual subjects from whom they collect data; and

theorists focus on general and abstract concepts and the relationships among them. A great deal of time and effort must be expended to enhance communication among collaborators.

This connected approach to nursing knowledge would put to rest the problem of separated areas of knowledge; however, working in teams that draw individuals from multiple settings consumes a great deal of time and other resources. With a highly connected approach to nursing knowledge creation and use, the chasm-spanning activities encompassed by research use would no longer be needed. This would release some resources for use in the collaboration needed for the success of the connected approach.

MODELS FOR CREATING A NURSING THEORY–RESEARCH–PRACTICE NEXUS

Nurse educators, researchers, practitioners, and administrators need to weave together a seamless theory–research–practice nexus so that nursing may continue to provide knowledge-based, quality, safe, cost-sensitive, meaningful, and compassionate care that enhances the health and well-being of all. The term *nexus* conveys the flowing interconnectedness of combining nursing theory, research, and practice into a single, unified entity. Several models have been advanced that provide a foundation as well a description of processes that serve to unify nursing theory, research, and practice.

NURSING AS PRAXIS

Practice that closes the gap between theory, research, and practice may be referred to as a form of praxis. Butcher (2006) and others (Newman 2008; Seng, 1998; Rolfe, 2006) view praxis more broadly as a transformative process of integrating theory, research, and practice. Rolfe (2006) in particular described praxis as a “reflective spiral” in which theory and practice are developed simultaneously, beginning with the practicing nurse generating informal theories about a unique clinical situation, testing hypotheses derived from these theories to modify practice, reformulating theories to address changes in practice, and then retesting new or revised hypotheses. Thus, the role of researcher is not separate from practice nor is theory separate from either practice or research. In Rolfe’s (1996; 2006) nursing-as-praxis model, knowledge used in practice may be either personal knowledge that nurses have themselves acquired in situations in which they have cared for patients; experiential knowledge that nurses have gained from past experiences of being in

similar clinical situations; or propositional knowledge from existing scientific theories, nursing theories, and research. Although Rolfe places greater emphasis on personal and experiential knowledge, the perspective viewpoint advanced here is that, when propositional knowledge is grounded in extant nursing conceptual frameworks and theories, praxis is then discipline specific or, in Rolfe’s words, “a science of the unique” (2006, p. 41).

CHINN AND KRAMER’S MODEL FOR INTEGRATED KNOWLEDGE DEVELOPMENT

A second and even more comprehensive model for integrated knowledge development can be found in Chinn and Kramer’s (2008) ever-evolving development and synthesis of Carper’s (1978) fundamental and enduring patterns of knowing in nursing. The strength of Chinn and Kramer’s work is that they describe methods for knowledge development and “expressions in actions—or in practice” (2008, p. 4) within each of the four patterns of knowing: personal, aesthetic, ethical, and empirical. From a wider view of the necessary knowledge required for practice, empirical knowledge arising from research is only one form of knowledge development. Personal knowledge is created through means that nurture self-knowing (e.g., journaling, meditation) and that can be authenticated through reflection. Personal knowing is expressed in practice in the authentic, genuine, therapeutic use of the self and the sharing of autobiographic stories with patients that reveal meaningful personal insights of the person–environment–health experience. Aesthetic knowledge is created through “envisioning possibilities, rehearsing, and forming the elements of the art into perceivable reality by creating representations of the possibilities” (Chinn and Kramer, 2008, p. 159). Art forms may include poetry, photography, story, fiction, drama, music, dance, or any other work that conveys the meaning, significance, or artistry of the person–environment–health experience. When one understands that “caring is an art form” that “reflects the beauty and artistry of nursing” (Butcher, 2004b, p. 132), then one sees that all caring acts link aesthetic knowledge to nursing practice. Ethical knowledge is created through processes such as values clarification, value analysis, and ethical inquiry. Ethical knowledge takes the format of sets of rule or principles; ethical codes; statements of duties, rights, and obligations; and even ethical theories that are integral to practice in all nurse–patient situations.

Empirical knowledge is created through rigorous, systematic methods of concept, statement, and theory synthesis, derivation, and analysis (Walker & Avant, 2005). Chinn and Kramer explain that empirical knowledge consists of empiric theories, statements of fact and formalized descriptions and interpretations expressed in practice as scientific competence, or competent actions grounded in scientific knowledge and theory. Chinn and Kramer connect nursing theory, research, and practice by stating that “sound empiric knowledge development requires that the research make deliberate choices that link the underlying philosophy about science and nursing, research methods, and practice” (2008, p. 251). The validation and confirmation of empirical knowledge occur through a wide range of qualitative and quantitative research methods designed to generate, test, and validate theory. Specifically, “theory-linked research is designed to develop, refine, or test theory” (Chinn & Kramer, 2008, p. 252). The authors go on to describe two types of theory-linked research: theory-generating research and theory-validating research. The theory–research–practice nexus does not only occur when theory-based research is used to guide practice but also when empiric knowledge (e.g., theories) is validated in practice. Chinn and Kramer (2008) describe how theory can be deliberately used and validated in practice by identifying empiric indicators of abstract concepts, differentiating similar concepts, and identifying new concepts.

In their latest edition, Chinn and Kramer (2008) have developed a new, fifth pattern of knowing: emancipatory knowing. Emancipatory knowing critically examines the social, cultural, and political status quo and aims to figure out how and why particular power structures and dynamics perpetuate advantages for some and disadvantages for others. Emancipatory knowing occurs at the individual level when nurses recognize conditions that are unjust and that limit their abilities and experiences, realize that things can be different, and take actions to change the circumstances of their lives. Nurses also use emancipatory knowing when they take collective action to address issues such as health care inequalities and disparities through social action and political change. Although the authors admit that this new pattern is not yet fully developed in terms of identifying ways to create, validate, and confirm disciplinary emancipatory knowledge, they do illustrate how they see all five patterns as an integrated whole.

Lastly, Chinn and Kramer do address evidence-based practice, and they raise the question: “if practice is to be

both evidence-based and theory-based, what sorts of research evidence will contribute to theory-based practice?” (2008, p. 287). Their answer creates the full nursing theory–research–practice nexus by asserting that “evidence-based practice requires an integration of all knowing patterns” (p. 268) in a way that does not privilege empirical knowing or any other pattern of knowing over another.

CONCEPTUAL–THEORETICAL–EMPIRICAL SYSTEMS

Fawcett and Garity’s (2009) recent elaboration of the conceptual–theoretical–empirical (C-T-E) system offers another promising structure for integrating discipline-specific knowledge with research and practice. The authors point out that the purpose of all research is to generate and test theories. Second, they assert that theories are evidence. When theories are thought of as evidence, it then becomes clear that the evidence required for practice is actually theory (Walker & Avant, 2005). Thus, evidence in the form of theory can be used to guide practice. Furthermore, research and practice are linked when one accepts the notion that research and practice are essentially the same processes. Both research and practice use the same critical thinking abilities and similar problem-solving processes. As Fawcett (2005) points out, “the key to integration of research and practice is the recognition and acceptance of the similarity between the processes of research and the process of practice, and the recognition and acceptance that both research and practice are guided by the same C-T-E system” (2005, p. 594). Fawcett and Garity integrate research as theory development, theory as evidence, and practice as research by defining evidence or research-based practice as “the deliberate and critical use of theories about human beings’ health-related experiences to guide actions associated with each step of the nursing process” (2009, p. 8). There is also a reciprocal relationship among the C-T-E components whereby practical problems that emerge from practice serve as catalysts for research (Fawcett, 2005).

Within the C-T-E system, the “C” component is the conceptual model that guides the theory that generates the theory-testing research. The “T” component is the midrange theory, and the “E” component is made up of empirical research methods, which may be either quantitative or qualitative in design. Although the conceptual model may be from another discipline, clearly discipline-specific knowledge designed to guide practice

is developed when the conceptual model that frames the research is one of nursing's extant nursing conceptual frameworks (e.g., King's conceptual system, Orem's self-care framework, Rogers' science of unitary human beings, Roy's adaptation model). Using extant discipline-specific conceptual models to guide practice knowledge development using the C-T-E system ensures that practicing nurses "think nursing" and that they practice conceptually with the guidance of a scholarly and scientific foundation. Fawcett (2005) offers a number of strategies to integrate the C-T-E system into research and practice, including understanding that every nursing situation is, in essence, a single case study. For each of these case studies, a discipline-specific C-T-E system can be used for research to investigate whether certain interventions have certain outcomes. Thus, nurses engaged in practice are actually nurse researchers. Single case studies can be aggregated for the purpose of quality improvement, and they can contribute to the development of nursing-theory-based evidence for best-practice guidelines.

MIDRANGE THEORY

One of the criticisms of nursing theory is that the nursing-specific conceptual systems are too abstract, thus creating a theory-practice chasm that separates nursing knowledge from practice. A more recent solution to bridging the theory-research-practice gap has been the development of midrange theories. Midrange theories were first suggested by the sociologist Robert K. Merton. The discipline of sociology also initially developed large theories that attempted to differentiate sociology from other disciplines and to explain all of social phenomena with one effort. Merton (1967) responded by suggesting midrange theories and differentiating them from the grand theories. Midrange theories can be used to guide empirical inquiry, because they are between the minor working hypotheses that evolve in abundance during day-to-day practice and the all-inclusive systematic efforts to develop one unified theory that would explain all behavior. Midrange theory, according to Merton, involves abstractions that are close enough to observed data to be expressed in propositions that permit testing with systematic research.

The "T" in the C-T-E system model is midrange theory. Although conceptual models provide the broad frame of reference for research and practice, midrange theory provides a more specific means of articulating general knowledge—confirmed by the

specific results of research projects—to nurses in clinical practice. In general, midrange theory has been described in the nursing literature as follows (Peterson & Bredow, 2009):

1. It is narrower in scope;
2. It is concerned with less abstract and more specific phenomena;
3. It is composed of fewer concepts and propositions;
4. It is more appropriate for empirical testing;
5. It is representative of a more partial or limited view of nursing's reality; and
6. It is more directly applicable to practice.

Typically, midrange theory has developed around concepts that are relevant to nursing practice, such as pain, unpleasant symptoms, self-efficacy, empathy, chronic sorrow, comfort, health promotion, resilience, uncertainty, self-transcendence, informed caring, personal risk taking, illness trajectory, smoking relapse, family caregiving, and attentively embracing story (Chinn & Kramer, 2008; Peterson & Bredow, 2009; Smith & Liehr, 2003). Each midrange theory is more narrow and precise, and yet, as midrange theories develop, they eventually will produce a body of knowledge that covers a broad range of nursing activities. Peterson and Bredow (2009), in their recent article about the topic, identified more than 40 midrange theories regarding phenomena such as unpleasant symptoms, self-efficacy, chronic sorrow, caring, comfort, resilience, uncertainty, chronic pain, transcendence, successful aging, and transitions. This precise, in-depth, and focused knowledge makes midrange theories more attractive to nurses who are engaging in theory-based research and practice.

To make use of the knowledge provided by midrange theories, practicing nurses would need some grasp of research methods; this is the "E" in the C-T-E system. Midrange theories that have been developed and tested by research would contain much more specific descriptions of human responses to health and illness and of the nursing interventions applicable to these responses. Ultimately, the goal of research is the translation of theories into useful practice activities. Fawcett and Garity (2009) explain that findings or evidence generated from midrange testing research can be applied to each phase of the nursing process. Translational research may be best described as the translation or application of empirically adequate midrange theories and research into practice tools and guidelines for the purposes of enhancing health, improving quality of life, and strengthening health care systems.

Liehr and Smith (1999) list five approaches to developing midrange theory:

1. Induction through research and practice;
2. Deduction from research and practice applications of grand theories;
3. Combination of existing nursing and non-nursing midrange theories;
4. Derivation from theories of other disciplines that relate to the disciplinary perspective of nursing; and
5. Derivation from practice guidelines rooted in research.

However, to avoid the further fragmentation of nursing knowledge, midrange theory development should be connected to the theoretical, conceptual, and philosophical systems of nursing. Popper, who was a towering figure in twentieth century philosophy of science, cogently pointed out that researchers always conduct studies within the context of a pre-conceived “horizon of expectations”; the belief held by some researchers that theories are developed without guidance from a conceptual model is “absurd” (1965, pp. 46-47). One way that midrange theory development has been connected to extant nursing knowledge is when midrange theories are derived from nursing theories. Midrange theories have been derived from a number of nursing theories, including the Roy adaptation model, King’s systems theory, and Orem’s self-care model (Butcher, 2004a). Smith and Liehr (2003), in their book about midrange theories, illustrate how particular midrange theories have been developed within one of the three extant paradigms of nursing.

Although the knowledge articulated with midrange theories is much closer to practice, it still must be located and critiqued. Fawcett and Garity’s (2009) text *Evaluating Research for Evidence-Based Practice* describes the C-T-E system model in great depth, provides guidelines for evaluating midrange theories, and gives criteria for evaluating the wide range of empirical research methods used in theory testing and theory-generating research. Nurse educators and group leaders for evidence-based practice projects could provide this necessary assistance; their job would be much easier with midrange theory that had been tested systematically by researchers. Knowledge built in this way is synthesized more easily: the accumulation of knowledge across individual studies occurs as part of the process of conducting research and testing a theory. Individuals who are actively engaged in evidence-based practice could provide an

additional service by formally providing researchers with an evaluation of practice guidelines and protocols; this would provide a test of the pragmatic usefulness of the knowledge.

NURSING CLASSIFICATION SYSTEMS

Nursing classification systems—specifically Nursing Diagnoses (NANDA; NANDA International, 2009), Nursing Intervention Classification (NIC; Bulechek, Butcher, & Dochterman, 2008), and Nursing Outcomes Classification (NOC; Moorhead, Johnson, Maas, & Swanson, 2008)—along with concepts that have arisen from nursing conceptual frameworks are the primary sources for knowledge development, and they provide the language of the nursing discipline. NANDA–NIC–NOC (NNN) provides the concepts and language that enable nurses to work together collaboratively with individuals, families, communities, and members of other disciplines. Clark and Lang pointed out the importance of nursing taxonomies: “If we cannot name it, we cannot control it, finance it, teach it, research it, or put it into public policy” (1992, p. 27). Nursing classification systems provide another way to ground theories within the discipline. Developments in the structure of nursing knowledge (e.g., NNN) hold great promise for capturing midrange theories within a thorough and extensive framework of nursing knowledge. The Iowa Intervention Project has advanced even beyond the taxonomy of interventions and identified a three-dimensional structure underlying these interventions (Tripp-Reimer, Woodworth, McCloskey, & Bulechek, 1996). Taxonomies organize the substance of the discipline, and the taxonomies of nursing diagnoses, interventions, and outcomes provide a full skeletal framework for nursing knowledge. Gardner (2006) points out that taxonomies, theories, narratives, and metatheories are powerful forms of synthesis, and both Pink (2006) and Gardner (2006) illustrate how synthesis is foundational to thinking in the emerging Conceptual Age.

Although Blegen and Tripp-Reimer (2001) do not advocate that midrange theories necessarily be connected to or derived from the philosophical, conceptual, and theoretical knowledge of the discipline, the viewpoint expressed in their article is clear: theory development that links nursing diagnoses, interventions, and outcomes should be informed by the unique body of discipline-specific knowledge in nursing. Nursing theories would suggest explanations and predictions of

relationships between diagnoses of actual or potential health problems, the nursing interventions chosen to deal with these problems, and the patients' eventual outcomes. Each theoretical linkage would need to be tested in systematic research studies. The theories and the framework itself would be modified as this research progressed. The NNN taxonomy provides a structure for theory development and research designed to guide nursing practice, thereby unifying discipline-specific theory, research, and practice.

Nurse educators and nurses formulating evidence-based practice guidelines are important to the goal of incorporating the nursing knowledge produced by theory building and testing in practice. The integration of research and practice occurs when thinking about evidence for practice becomes automatic. Evidence-based practice protocols need to be conceptually linked to the extant conceptual frameworks of the discipline and integrated with nursing's classification systems. It is at this point that evidence-based practice becomes synonymous with theory-based practice. Nurses in practice need to accept the primary ongoing responsibility of seeking out the most current developments in a theory and nursing classification development when applying discipline-specific knowledge in practice or communicating to researchers and theorists the reasons why the knowledge cannot be applied. Nurses in clinical practice provide the final test of the theories and frameworks that organize these theories (Blegen & Tripp-Reimer, 2001).

SUMMARY

As Durant pointed some time ago, "knowledge is power, but only wisdom is liberty" (1957, p. 9). When discipline-specific theory, research, and practice knowledge coalesce into a seamless whole, then perhaps the recognition of nursing as an academic, professional, and scientific practice discipline among peer health care disciplines and the public will be fully realized. Nursing philosophies, paradigms, patterns of knowing, conceptual frameworks, midrange theories, practice models, and classification systems are the wisdom of the discipline. Wisdom is the ability to see things *sub specie totius*—as a whole (Durant, 1957). The Conceptual Age is here, and it calls for a unity, integration, wholeness, or nexus of discipline-specific theory, research, and practice. The time to embrace the wisdom of the discipline is now. Humanity is calling for the service of nursing. Let nurses answer that call with the fullness of all of the available professional wisdom.

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E-Learning

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Many schools of nursing use e-learning strategies as a means of providing access to learning opportunities for nurses. “Almost 3.5 million students were taking at least one online course during the fall of 2006 term; a nearly 10% increase over the number reported the previous year” (Allen & Seaman, 2007, p. 1). Over the last decade, the number of online courses available to nursing students has grown. Although there is not a database that tracks the exact numbers of nursing courses offered online, a recent survey by CDW-Government (CDW-G, 2008) validated the growth of online courses and reported that 74% of campuses offered distance learning opportunities.

The move from traditional face-to-face (F2F) classroom teaching to an online environment is not without controversy. Administrators often view online learning as an opportunity to increase the size of the student population. Some faculty readily embrace the concept and have converted their courses from traditional to online. Other faculty offer blended courses that combine F2F and online learning. Some faculty believe that nursing as a clinical practice discipline can only be taught in an F2F environment. Students are also on both sides of the issue. Regardless of the controversy, a recent report sponsored by the Sloan Center for Online Education stated, “Online enrollments have continued to grow at rates far in excess of the total higher education student population, albeit at slower rates than for previous years” (Allen & Seaman, 2007, p. 1).

The purpose of this chapter is twofold: to summarize the best practices for Web-based education and to introduce the growing popularity of Web 2.0 tools into higher education. The review of best practices serves as a solid foundation for schools of nursing to create Web-based education programs. This review also provides students with criteria to use to assess the quality of Web-based educational programs before selecting an online course or degree program.

Web 2.0 is a changing platform that has evolved and that is causing a major impact on how consumers use the Web. Although this is a new phenomenon, it is heightening the digital divide between students and the faculty. According to McGee and Diaz, “The gaps between students’ and faculty members’ use of technology have widened. The digital divide focused on access and socioeconomics just ten years ago, but today we see a widening divide between parent and child, teacher and learner, and employer and employee” (2007, p. 30).

DEFINITIONS

There are a multitude of terms used to describe Web-based education. Terms such as *online learning*, *e-learning*, and *distance learning* are all mentioned in the literature. According to the e-learning glossary published by the American Society of Training and Development (2008), e-learning is a “term covering a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration.” In many ways, e-learning is more inclusive with regard to Web-based or online courses as well as the new and emerging tools. Another important term that has recently emerged is *Web 2.0*. This term refers to “the use of Internet technology and web design to enhance information sharing and, most notably, collaboration among users. These concepts have led to the development and evolution of web-based communities and hosted services, such as social-networking sites, wikis, blogs.” (American Society of Training and Development, 2008). For this chapter, the focus is e-learning that encompasses Web-based learning (i.e., the majority [80% or more] of the course is available online and does not involve traditional F2F delivery methods) and the incorporation of emerging tools associated with Web 2.0.

BEST PRACTICES

Best practices are the gold standard against which current practice can be judged; they are documented strategies that are perfected within an organization. These best practices are supported by data that demonstrate desired outcomes. Over the last decade, many best practices were defined by a variety of organizations. Some of the best practices were developed through a consensus method that involved a designated group of knowledgeable members of various communities; other best practices were defined by synthesizing research results.

An excellent example of a consensus model for establishing best practices is the Western Cooperative for Educational Telecommunications' (1999) document entitled *Principles of Good Practice for Electronically Offered Academic Degree and Certificate Programs*. Representatives from Western states' higher education regulating agencies, higher education institutions, and the regional accrediting community created these principles to balance access and quality among electronically offered programs. Each of the principles serves as a measure of quality for electronically offered degree or certificate programs. The focus here is on programs rather than individual courses.

These principles focus on three major components: curriculum and instruction, institutional context and commitment, and evaluation and assessment. The curriculum and instruction principles are as follows:

- ◆ Each program of study results in learning outcomes that are appropriate to the rigor and breadth of the degree or certificate awarded.
- ◆ The electronically offered degree or certificate program is coherent and complete.
- ◆ The program provides for appropriate real-time or delayed interaction between faculty and students and among students.
- ◆ Qualified faculty provide appropriate oversight of the program that is electronically offered.

For both students and faculty, it is important to emphasize the principle that highlights the interaction between students and faculty. This is an important consideration, because many believe the myth that Web-based courses are merely correspondence courses that do not require continuous interaction between students and faculty. It is also important to consider when assessing Web-based courses, because many are designed to have students interacting with content rather than with faculty or peers.

The institutional context and commitment principles focus on the institutional mission and roles plus the

necessary resources to support both students and faculty. It is important that an electronically offered degree program fit within the institution's role and mission and that the technology be appropriate to meet program objectives. Faculty must be provided with support services and training in the use of technology. Faculty evaluation mechanisms must also include a consideration of the teaching and scholarship related to electronically offered degree programs. Any electronically offered program must provide necessary learning resources to students (e.g., online full-text journal articles). The institution must provide sufficient resources to allow all students to complete their degrees. Students and student services are particularly emphasized:

- ◆ The program provides students with clear, complete, and timely information regarding the curriculum, the course and degree requirements, the nature of faculty-student interaction, assumptions about technological competence and skills, technical equipment requirements, the availability of academic support services and financial aid resources, and costs and payment policies.
- ◆ Enrolled students have reasonable and adequate access to the range of student services appropriate to support their learning.
- ◆ Accepted students have the background, knowledge, and technical skills required to undertake the program.
- ◆ Advertising, recruiting, and admissions materials clearly and accurately represent the program and the services available.

Sue Day-Perroots, Dean of Extended Learning at West Virginia University, created a basic assessment inventory based on the best practices. Her *Guidelines for Electronically Delivered Programs* is available at the Western Cooperative for Educational Telecommunications Web site at <http://www.wcet.info/resources/accreditation>. Other resources, such as the Southern Regional Education Board Electronic Campus Best Practices document at <http://www.ecinitiatives.org/publications/principles.asp>, have built upon the work of the Western Cooperative for Educational Telecommunications' document.

Benchmarking is a common quality improvement practice in business, and it is a method for identifying best practices. More recently, there has been considerable work by several organizations to promote the use of benchmarking in higher education. Spendolini defined benchmarking as "a continuous systematic process for evaluating the products, services & work processes of organizations that are recognized as

representing best practices” (1992). The benchmarking process is considered to be a search for the implementation of best practices (Camp, 1995).

An example of a benchmarking study is the Evaluating Educational Uses of the Web in Nursing (EEUWIN) Benchmarking Project. This study started with three schools of nursing (Indiana University, University of Kansas Medical Center, and University of Colorado Health Sciences Center) that partnered with a consultant from the Flashlight Program (i.e., the Teaching, Learning, and Technology affiliate of the American Association of Higher Education). The goal of the EEUWIN Benchmarking Project was to help nurse educators begin to evaluate the effectiveness of Web-based courses. The identification of best practices is an outcome of the benchmarking process. Benchmarking also provides information about how one ranks in comparison to the best possible performance, and it reveals performance gaps—both positive and negative—within an organization.

Billings (2000) developed a framework that served as a conceptual basis for the benchmarking study. The framework incorporated three major components: use of technology, educational practices, and outcomes. The most studied aspect of this model was educational practices. Six of the seven best practices identified by Chickering and Gamson (1991) were included: active learning, peer-to-peer interactions, interactions between faculty and students, time on task, respect for diverse learning, and prompt feedback. Outcomes include such variables as convenience, satisfaction, preference for F2F learning, connectedness, professionalism, and computer proficiency.

The EEUWIN project team has conducted several studies based on the benchmarking data set. An early focus was the validation of the model and instrument testing (Billings, Connors, & Skiba, 2001; Skiba, Billings, & Connors, 2003a, 2003b). Reliability estimates (Chronbach alphas) for the benchmarking tool have ranged from 0.90 to 0.94 and from 0.73 to 0.93 for subscales. Successive testing demonstrated positive correlations between educational practices and Web-based outcomes. Other benchmarking studies included an investigation of the differences in the perceptions of undergraduate and graduate students’ experiences in Web-based courses (Billings, Skiba, & Connors, 2005). The results continue to demonstrate that educational practices shape outcomes. The two groups did not differ on many variables. One example was that undergraduates felt more connected and reported having more student–faculty interactions and spending less

time on task and in the course. A more recent study examined the relationship between class size and educational practices and outcomes: “There were significant differences by class size in terms of students’ perceptions of active participation in learning, student–faculty interaction, peer interaction and connectedness” (Burruss, Billings, Brownrigg, Skiba, & Connors, 2009, p. 33).

Another source of best practices is the Sloan Consortium’s Effective Practices wiki. The focus of this wiki is to identify effective practices to meet the Sloan Consortium’s goal: access to learning that is high in quality, affordable, and satisfactory to both learners and providers. To achieve this goal, an institution “demonstrates its quality in five inter-related areas—learning effectiveness, access, cost-effectiveness and institutional commitment, faculty satisfaction, and student satisfaction” (Sloan Consortium, 2008a). These five areas, which are known as *pillars*, form the “building blocks, which provide support for successful online learning” (Sloan Consortium, 2008a). Effective practices are nominated according to the pillars, and they must meet specific criteria: innovation, replicability, potential impact, supporting documentation and evidence, and scope (Sloan Consortium, 2008b).

Another interesting assessment of the quality of online courses is a rubric developed by faculty at Duke University School of Nursing (Blood-Siegfried et al., 2008) as part of a University Center for Instructional Technology Fellowship. The rubric contains five different criteria: organization and design, course content, instruction, interaction, and evaluation and assessment. The interaction component contains valuable criteria, many of which are associated with Chickering and Gamson’s (1991) best practices.

WEB 2.0

For the past few years, the nature of the Web has changed from an information dissemination platform to a more interactive, user-created platform that harnesses the collective wisdom of the online community (Skiba, 2006a). The Web is becoming more engaging and social, making use of social networking, user-generated content, and collaborative tools. Web 2.0 includes the use of social writing, social bookmarking, and networking tools (Skiba, 2006b). There are also tools that allow users to create mashups (Skiba, 2007d), virtual worlds (Skiba, 2007b), podcasts (Skiba, 2006a), and videos (Skiba, 2007a). Social networking includes joining social spaces such as Facebook and MySpace

(Skiba, 2007c) or using Twitter (Skiba, 2008) to participate in microblogging.

The recent *21st Century Campus Study* survey reported “students are using technology most frequently outside of the classroom in preparation for class” (CDW-G, 2008, p. 16). According to this survey, 60% of students use social networking tools like Facebook, MySpace, and Twitter; 75% own laptop computers; and 58% have iPods or MP3 players. Today’s students “want more than a lecture-hall atmosphere from their college experience—they want regular and immediate communication with faculty” (CDW-G, 2008, p. 15). The students who participated in this survey rated their number one desire as being online chats with professors. Unfortunately, less than 25% of campus IT staff reported that online chats were available for students and faculty. It is interesting to note that “37% of students and 25% of the IT staff report that faculty understand technology and fully integrates it into their classes” (CDW-G, 2008, p. 22). Again, this reinforces the observation that “the slow response of faculty to the integration of these tools in curriculum highlights the expanding divide between the digital natives (millennials) and the digital immigrants (educators) in our schools of nursing” (Skiba, Connors, & Jeffries, 2008, p. 229).

The Pew Internet and American Life Project (<http://www.pewinternet.org>) studied the growth of the Internet and its impact on society, work, health care, and education. Recent studies document that 62% of employed adults use e-mail and the Internet at work and have mobile devices like cell phones and personal digital devices to keep them connected to work (Madden & Jones, 2008). In another report about teens and social networking (2007), it was found that more than 55% of teens between the ages of 12 and 17 years use social networking sites (Lenhart & Madden, 2007). However, according to the CDW-G Report, “campuses were not exposing students to common workplace collaborative technologies such as videoconferencing, web conferencing. Podcasts and wikis” (2008, p. 12). It is apparent that there is a disconnect between what the Internet generation is using, what employers want for their future employees, and what higher education is providing in terms of technology. This gap will continue to widen as technology becomes more pervasive in all facets of society. The struggle to use Web 2.0 tools will continue to plague higher education; this will be an important area to monitor and evaluate. There is an immediate need to conduct educational research to examine the impact of Web 2.0 tools on learning (Box 15-1).

BOX 15-1 Web 2.0 Tools

There is currently not a published set of best practices for the use of Web 2.0 tools in higher education. Chickering and Gamson’s (1991) best practices can serve as an initial guide to assess the value of these tools:

- Does the tool promote active learning?
- How does the tool facilitate peer-to-peer communication and interaction?
- How does the tool facilitate faculty-to-student communication and interaction?
- How much time will I spend actually learning versus learning to use or using the tool?
- How does the tool respect diverse styles of learning?
- Does the tool facilitate receiving prompt feedback from faculty?
- Does the tool support high expectations of learning?
- Does the tool interfere with learning?
- Is the tool used more for socializing than learning?
- Is there technical support for the tool?
- Does the tool require purchasing additional software and hardware?
- Does the tool expose me to any personal risks?

SUMMARY

E-learning opportunities are becoming firmly entrenched in the higher education landscape. Chief academic officers reinforce the notion that online learning is considered an essential piece of their long-term strategies (Allen & Seaman, 2007). The Horizon 2008 Report (New Media Consortium, 2008) states there are several significant challenges facing higher education in terms of technology and that three are most pertinent to nursing education. First, there is “a growing expectation to deliver services, content and media to mobile and personal devices” (New Media Consortium, 2008, p. 5). Second, a “renewed emphasis on collaborative learning is pushing the educational community to develop new forms of interaction and assessment” (New Media Consortium, 2008, p. 5). Third, “the academy is faced with a need to provide formal instruction in information, visual, and technological literacy as well as in how to create meaningful content with today’s tools” (New Media Consortium, 2008, p. 6).

There are several key resources that highlight the quality indicators of a successful Web-based course and

also of a successful online program. Best practices have been clearly identified for Web-based courses and electronically offered programs.

If you are a student who is considering taking an online course or seeking an online degree, here are some questions that you should ask while investigating your options:

Web-Based Courses

- ◆ How is the course designed?
- ◆ Is the course designed to take advantage of the Web-based medium?
- ◆ Is the course designed with the use of a particular learning framework (e.g., situated learning, constructivism)?
- ◆ Is the course based on active learning strategies?
- ◆ Does the course provide frequent opportunities to interact with faculty and peers?
- ◆ Is the course designed to be a repository to disseminate knowledge (e.g., text-driven pages, slides, links), or does it foster interactions?
- ◆ Do I have access to library resources such as full-text journals and interlibrary loans?
- ◆ How do I get my books?
- ◆ Does the course respect diverse styles of learning?
- ◆ What are the time requirements?
- ◆ How often do I need to log into the course per week?
- ◆ Does the instructor provide prompt feedback?
- ◆ Is the instructor accessible?
- ◆ Have students been satisfied with this online course?
- ◆ Is there technical support available to help me?
- ◆ Is there a prerequisite course that can help me with the course management platform?

Web-Based Degree Programs

- ◆ Are the requirements for the program clearly explained? Are there times that I am expected to be on campus?
- ◆ Is every course required for the program available online? If so, how often?
- ◆ Does the institution provide some assurance that the program will be in operation so that I can complete my degree in a reasonable time frame?
- ◆ What student support services are available?
- ◆ Can I register online?
- ◆ Can I receive financial aid?
- ◆ How are programs evaluated?
- ◆ Are faculty trained to teach online?

- ◆ Is there sufficient support to help faculty with online courses?
- ◆ Is there technical support available to students?
- ◆ Is the help desk open 24 hours a day, 7 days a week?
- ◆ Are students satisfied with the program?
- ◆ What is the program's retention rate?
- ◆ What supports are provided to create a learner-centered environment for students?
- ◆ Are there any fees or other costs associated with Web-based learning?
- ◆ How does the online program compare with traditional programs with regard to student outcomes?

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SECTION 3

Changing Practice

Nursing Specialties

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Success depends on tracking the patterns of social trends so that one may strategically position to create one's own preferred future. This statement is not an oxymoron but rather a truth that is so basic as to be frightening.

—Lucille A. Joel

The changes and issues that occur in nursing practice are presented in this section by specialty area. Although all nurses share certain perspectives and experiences, the chapters in this section reflect that nurses working in different specialties have a wide range of skills and are faced with different issues. Communicating these differences with each other helps all of us to understand the vast profession that we share. This year, we have added chapters about gerontological nursing, occupational health nursing, genomics, and nursing research. We hope to continue to expand this section to include a wide range of specialties, because we found these to be very interesting additions. If you would like to see other new specialties added to the next edition, we hope that you will take the time to share your ideas by sending your requests to the authors.

In Chapter 16, Lucille Joel provides an elegant debate regarding home care and related issues, and she includes questions that are developing as this arena of care delivery assumes more importance. Home care is slowly moving to a functional social model that is suitable to the needs of some—but not all—consumers. Joel begins her chapter by describing the history of home care in the United States. Although nursing has traditionally dominated the home care scene, this care environment is changing. Individual consumers of home care want more say, but home care is dictated by public policy and overall public preference. The definition and philosophy of home care are being challenged by new consumer

groups, such as the disabled. Joel addresses many questions: To what extent should providers and consumers be able to exercise choice in the selection of a setting for care? Does the consumer have the right to choose home care regardless of cost or only as the least costly option? Joel frames the debate statement with regard to whether the recipients of in-home services should have increased autonomy and responsibility when making decisions about their care. On the pro side is a strong consumer lobby that is complicated by the need to make policy decisions about reimbursement. On the con side are the opinions of providers (especially physicians, who are returning to home care driven by economics and need) and the issues related to the supervision of assistive personnel. The debate is only beginning. Joel's chapter helps us to understand the current situation as the issues continue to emerge and take shape. This is a well-written, informative chapter that should be read by all nurses.

According to Cecelia Gatson Grindel and Mary Grindel in Chapter 17, an aging population living with chronic illness creates the need for rapid change and for the attainment of solutions in adult health nursing. Other universal issues—such as the nursing shortage, an aging nursing workforce, a mandate for patient safety initiatives, and a lack of leadership—complicate the challenges of providing quality patient care. This chapter explores the interrelationships of these universal and intra-agency issues and their impact on the practice of adult health nursing. The

authors also provide an important discussion of the high risk of increased role turmoil and they describe current role reversals for nurse practitioners and clinical nurse specialists. Grindel and Grindel note that the “the CNS may be employed in a primary care site, while the NP may work in acute care.” They contend that, if this trend continues, “nursing education programs will be challenged to develop curricula that support the needed knowledge and skills for these blended roles.”

Chapter 18 is not about a particular specialty but rather about a trend that affects nurses in all specialties. Charlotte Eliopoulos discusses the growing and extensive use of alternative and complementary therapies, which are defined as practices outside of the dominant system of managing health and disease that is taught in American medical schools. Although the rest of the world has long used these therapies, their use is relatively new in the United States. The Office of Alternative Medicine was established in 1992 at the National Institutes of Health, and it became a freestanding entity in 1998 as the National Center for Complementary and Alternative Medicine. Eliopoulos discusses the factors that have contributed to the rapid growth of complementary and alternative therapies in the United States. She states that the introduction of these new therapies offers nurses an opportunity to reclaim the role of healer. New opportunities for nurses in areas such as aromatherapy, herbal medicine, homeopathy, acupuncture, therapeutic touch, guided imagery, and massage therapy are emerging. Nurses can use these therapies to enhance traditional care or to establish private practices. Challenges are also emerging, including the risk that physicians will seek the gatekeeper role for the use of these therapies, licensure issues, and the safe use of these therapies. Eliopoulos urges nurses and nursing to find a strong voice that will help to integrate these therapies with traditional medicine.

Sheila Hass and Ida Androwich provide a detailed review of the definition, standards, mission, and practice standards of ambulatory care nursing and discuss numerous practice issues in Chapter 19. The authors use the ambulatory care nursing conceptual framework to organize “mega” issues into categories such as clinical nursing, organizational and systems issues, and professional roles. A few of these issues are as follows: disease management, syndromic surveillance, diversity of practice settings, the need to incorporate technology and evidence-based practice

precepts, educational preparation, delegation and supervision, the rapid pace of care, telehealth, the need for multistate licensure, and the difficulty of maintaining a common culture across various settings. Despite these issues, the authors believe that there are a number of opportunities and many rewards for nurses in this specialty. This chapter provides an excellent overview of ambulatory nursing and intricately describes these issues for nurses in this specialty.

People who are more than 65 years old comprise 12% of the U.S. population but account for more than 33% of the country’s health care expenditures. Although the aging population is growing rapidly, the number of nurses specializing in gerontology remains small. In Chapter 20, Kathleen Buckwalter provides an excellent overview of the issues related to the care of our aging population. She notes that the so-called “silver tsunami” is recognized as an important public health crisis for Americans and also as a major global health issue. On a positive note, she describes research that has dramatically increased our knowledge of the aging process and our ability to identify “normal” so that we may better detect and treat common conditions. In addition, provider-friendly, evidence-based practice protocols exist to guide gerontological nursing practice. Issues pertaining to a fragmented, uncoordinated health care delivery system are laid bare, and nursing needs to pick up the advocacy gauntlet.

Another specialty that includes the care of a number of older adults in addition to other age groups is hospice and palliative care, which is the topic of Chapter 21. Jeanne Martinez begins with an historical overview of hospice and palliative care. The first hospice in the United States was established in New Haven, Connecticut, in 1974. During the 1980s and 1990s, hospice programs sprang up all across the United States. Martinez details the dovetailing of the nursing specializations in these two areas with the culmination of the National Board for Certification of Hospice and Palliative Nurses in 1999. Continuing definitional issues involving major organizations are reviewed; these issues resulted in the collaboration of five major organizations and the publication of the “Clinical Practice Guidelines for Quality Palliative Care” in May 2004. Definitional and regulatory issues still exist among hospice, non-hospice, and palliative care services, and these issues are deftly explored in this chapter.

In Chapter 22, Cheryl Rodgers, Marilyn Hockenberry, and Rosalind Bryant observe that pediatric nursing's goal of improving the quality of health care for all children faces numerous obstacles, including single-parent families, poverty, and increasing cultural diversity. More than 73 million children less than 18 years old live in the United States, and they represent 25% of the entire population. It is estimated that at least half of the children born during the 1990s will spend part of their lives in families headed by divorced, separated, widowed, or never-married mothers. The authors note that pediatric nurses must understand the influence of culture, race, and ethnicity on the development of social and emotional relationships; childrearing practices; and attitude and beliefs toward health, illness, and treatment practices. This excellent chapter details many emerging pediatric problems, including obesity, type 2 diabetes, injuries, violence, substance abuse, and emotional and mental health problems during adolescence, and it identifies the preventive health care needs of children. The authors note that caring for the increasing number of children with chronic illnesses and implementing innovative nursing care in the face of emerging technology are major priorities for pediatric nursing's future. The authors conclude with a thorough review of the changing roles, future needs, and opportunities of pediatric nursing. This is a must-read chapter for anyone who is interested in pediatric nursing.

Perinatal nursing is discussed next in Chapter 23 by Kathleen Rice Simpson. Perinatal nurses care for mothers and babies during pregnancy, labor, birth, and the postpartum and newborn periods. Few health care events are more joyous than attendance at the birth of a healthy baby. Given that this is a normal event in the lives of most women, the reader might think that the specialty would have few issues, but it is quite the opposite. The changes in the health care delivery system that favor the financial bottom line and convenience have resulted in several challenges for those who practice in this specialty. Simpson does an excellent job of presenting several issues: the continued medicalization of labor and birth; the increased use of technology for healthy women; the ongoing conflict between usual practice and evidence-based care; errors caused by health care providers; increasing nurse-to-patient ratios; the proliferation of convenience as the foundation for care; the lack of education about the impact of the convenience philosophy

among childbearing women; and the forces that challenge nurse-midwives as providers. Although a pregnant woman may plan and prepare for a low-tech birth, during labor, she often agrees to interventions that are unnecessary and that have the potential for injury. The use of drugs to artificially stimulate labor contractions has increased by more than 125% since 1989. This practice and others that are performed in many perinatal units are often used more for the convenience of both the provider and patient than to address a medical need. Unfortunately, adverse outcomes can result from these convenient practices. Simpson urges perinatal nurses to be advocates for pregnant women and to give them the necessary information that they need to make the important decisions during labor and birth. This is an essential chapter for anyone who is interested in perinatal nursing practice.

Perioperative nursing, which is a specialty that is currently facing many challenges, is the topic of Chapter 24. Nancy Girard addresses the huge impact of the current recession: the effect that the loss of jobs and, by extension, health insurance has on people's ability to afford the surgical care that they need. Current major issues that affect perioperative nurses are categorized into four areas and discussed in detail: practice/role issues, skill issues, fiscal issues, and professional issues. For example, more older adults with more comorbidities are undergoing surgery; more surgery is performed in ambulatory care and office settings with minimally invasive technologies; and enhanced imaging devices and robotic technologies have improved the diagnosis and treatment of numerous conditions. These changes and others have challenged the traditional roles of nurses in operating rooms. A new role of registered nurse first assistant has emerged whereby nurses with master's degrees, who are an integral part of a surgeon's practice, provide preoperative and postoperative assessment and management. The perioperative nurse role in the ambulatory setting is highly diversified, and, within the operating room, it is highly specialized. The recent name change of the specialty organization from the Association of Operating Room Nurses to the Association of Perioperative Registered Nurses reflects many of the changes in the specialty. One of the most serious nursing shortages is in this specialty. The author worries that, unless there are effective ways of recruiting students and nurses to the surgical setting, this specialty nursing practice may approach extinction.

Psychiatric nursing is the subject of the Chapter 25 by Gail Stuart, who discusses several areas of vulnerability that nurses in this specialty face: fewer nurses are attracted to the specialty; psychiatric nurses are often viewed as expensive workers who can be replaced; there are few outcome studies that document the nature and effectiveness of care delivered by psychiatric nurses; and graduate nursing programs have less course work in psychiatric illness. Stuart reviews the changes that have occurred in five areas: role, activities, models of care, treatment settings, and evidence-based practice. She first reviews the history of psychiatric nursing and how the role has evolved since the emergence of the specialty in the 1950s. Next, she lists psychiatric practice activities in three groups: direct care, communication, and management. She says that communication and management activities need to be better integrated into the current role of the psychiatric nurse. In the area of model of care, she outlines four stages of treatment and discusses the goals, assessments, interventions, and outcomes of each. This is a helpful model as hospital length of stay continues to decline, because much of psychiatric treatment now occurs in community-based settings. Stuart then discusses the expansion of mental health treatment settings and the challenges and opportunities provided by the change. Finally, she urges psychiatric nurses to articulate the nature of their care and to collect data about the outcomes that they achieve. This is an informative chapter about a specialty that is undergoing a number of changes; psychiatric nurses are challenged to respond.

In the cutting-edge Chapter 26, Virginia Lynch introduces forensic nursing with a review of the global evolution of the practice, its relationship with the various specialties in the forensic sciences, and the current and future applications of forensic nursing science. She also provides an opportunity to explore innovative pathways that will affect the manner in which both victims and perpetrators of criminal violence are processed through the health and justice systems in the new millennium. As an emerging discipline, forensic nursing assumes a mutual responsibility with the forensic medical sciences and the criminal justice system with regard to a concern for the loss of life and function that result from human violence and liability-related issues. Lynch notes that the concept of a nurse investigator represents one member of an alliance of health care providers, law enforcement officials, and forensic scientists in a

holistic approach to the study and treatment of victims and perpetrators of physical, psychological, and sexual violence. This chapter details what is perhaps one of the most interesting of all nursing specialties; it will be a real joy to read for all the sleuths among us.

In Chapter 27, Kenneth Culp and Sandra Ramey introduce occupational nursing to this section for its maiden voyage. They note that the American workforce has been drifting away from production, manufacturing, and agriculture jobs to more service-oriented, professional, and skilled jobs. These changes have shaped occupational health nursing, which has historically focused on the practice of nursing in industrial settings, business settings, and community-based occupational health clinics. The authors provide an overview of how hospitals have now developed specialty resources in occupational health and how many companies contract for services from these acute-care-oriented institutions. Those industries with on-site clinics have scaled back the size of their on-site employee health operations; redirected injury reporting and work absence monitoring to human resource personnel; or reconceptualized the occupational health service to include a team of professionals with nursing, occupational medicine, industrial hygiene, ergonomics, and safety staff. The authors provide an excellent analysis of the specialty of occupational health nursing, and they give fascinating examples of why it has become increasingly complex. Everyone will want to read this treatise about occupational health as a nursing specialty.

In Chapter 28, which is the final chapter of this section, Debra Schutte launches the first included discussion of genomics and nursing research. She provides us with insight into the current issues that affect professional nursing research, practice, and education that have arisen from the ongoing genomics discovery and technology boon. She notes that genomics is the study of all genes in the human genome together, including their interactions with each other and with environmental (i.e., physical, psychosocial, and cultural) influences. However, unanswered questions remain regarding risk perception, decision-making processes, communication, coping, and psychological well-being in the context of genetic information across the lifespan. The authors address how nurse researchers are helping to answer these questions.

As the chapters in this section demonstrate, nurses in all specialties are challenged to keep up with many

health care system changes. As we attempt to streamline our care to save unnecessary steps and cost, we must also continue to provide enough time to attend to the tasks of caring for people. Nurses need to be vocal about the services that must be retained to ensure safety and quality; we also need to help others to see

that nurses are not interchangeable. The nursing profession is large and composed of a vast array of individuals with differing skills and knowledge. We need to acknowledge our similarities and differences as we move forward amid the turmoil of overwhelming change.

Moving the Care From Hospital to Home

LUCILLE A. JOEL

The trend toward community-based services—or, more accurately, toward alternatives to institutional settings—was set into motion by the growing demand for health care in the face of economic pressures to curtail escalating costs. Demographics have become nursing's destiny, with rapidly growing numbers of older adult, disabled, and chronically ill patients; family caregivers being less readily available; and technological advances making the movement of sophisticated medical diagnostics and therapeutics possible outside of the hospital. The initial presumption was that community-based services would be less costly.

Home care has been an active participant and a passive respondent during this transition. It has been aggressive in the use of telecommunications to extend its capability (Kling, 2001), developing community-based primary care programs for special populations and conceptualizing the community as client to tailor personal care services to specific geographic areas (Joel, 2003). Home care has always thrived on creativity and ingenuity. In turn, it has been shaped and reshaped by the fortunes of government funding and internal competition. The result has been two dominant home care markets: patients who have been acutely ill and disabled and chronically ill patients with varying degrees of restorative potential.

THE CONTEXT OF CARE IN THE NEW MILLENNIUM

Success depends on tracking the patterns of social trends so that one may strategically position to create one's own preferred future. This statement is not an oxymoron but rather a truth that is so basic as to be frightening. These trends are set in motion by the society, and they are not debatable (assuming that they are interpreted correctly); however, they are broad enough so that stewards of the society can be creative in their responses. The challenge is to rise above self-interest,

the temptation to protect a field of work, and natural caution about change. After individuals face their own biases, the world looks more logical (if not more acceptable).

The American public is intrigued by high technology, specialization, freedom of choice, and fierce individualism. Considering these qualities, many would best define the American ethic toward health as a basic package of services for everyone, but the guarantee that those who have the resources can obtain more for themselves and their own. By contrast, countries with more socialized systems would say that they want to do the greatest good for the most people. This interpretation may answer a lot of questions about why Americans act as they do.

Many expect health to be a personal responsibility. Because most of us suffer a minor amount of serious illness during our lives, this makes good sense. However, the progress of medical science has created a cohort of the frail and vulnerable who continue to have primary health care needs, but those needs take on a new meaning. The frail older adults, disabled and chronically ill individuals, persons with acquired immunodeficiency syndrome, and low-birth-weight babies are among those whose health becomes a public concern and that creates serious liabilities should it be ignored. Homelessness, poverty, the absence of family, and environmental pollution are also byproducts of industrial and scientific progress, thus complicating the picture and generating a greater need for personal health services.

The financial burden of health care has become substantial for Americans, who continue the search for efficiencies that will allow them to honor a commitment to the needy yet maintain some control over the total number of dollars spent. Americans are not proud or complacent about the fact that 15% of the population (45.6 million people) had no guaranteed access to health care in 2007. However, this statistic does not go far enough with regard to defining gains or offering

solutions. The greatest numbers of uninsured individuals are found in the states of California, Texas, and Florida; 20% of the uninsured are children who are less than 18 years old, whereas 80% are between the ages of 19 and 64 years (Henry J. Kaiser Family Foundation, 2008). There has been an obvious attempt to protect children through state and federal programs, but the adult population fares less well (Table 16-1).

The search to produce access has begged the question of a defined standard in health care, and it has focused almost irrationally on cost. Hospitals were targeted as the major offender given their association with high-tech, aggressive, and defensive diagnostics and therapeutics. Rather than searching for programmatic options that promise a better use of resources, the years since 1982 (i.e., the beginning of the Medicare hospital prospective payment system) have held a flurry of public policy activities with the obvious goal of preserving the status quo in the health care industry to whatever extent possible. Antics included reducing reimbursement for services to the poor so far below cost that few providers would care for them, increasing copayments and deductibles under Medicare to the extent that

seniors pay more out of pocket today than before the program was established, and cross-subsidizing public entitlement programs and the medically indigent through private-sector payers (this practice has since been declared illegal in many states). Over the years, generations of statistical equations have been developed—Diagnosis-Related Groups (DRG); Current Procedural Terminology (CPT's); Resource Based Relative Value Scale (RBRVSs); Resource Utilization Groups (RUGs); Minimum Data Set (MDS); Minimum Data Set 2 (MDS2); Minimum Data Set Plus (MDS+); Operation Application of Special Intelligence System (OASIS); Home Health Resource Group (HHRG)—with the ultimate goal of controlling cost through the prediction of resource use by case-mix methodology. Each of these case-mix methodologies has been gamed by the industry. Americans continue to pursue technical solutions to political problems. Some of the most hopeful programmatic redesigns have surfaced from private sector: home respite services to ease caregiver burden, case management, a focus on self-care, sensitivity to consumer preference, and seamless programs that give individuals access to all services through a single point of entry. These eventually became part of public entitlement programs, but their roots can be traced to the private sector.

The irrational focus on cost with questionable gains in access is being outpaced by a more recent emphasis on quality. Medicare, which provides coverage for older adults and disabled individuals, has put 10 reasonably preventable conditions on an initial list of “never events” (so named because they are never supposed to happen). Medicare is refusing to pay when patients receive incompatible blood transfusions, develop infections after certain surgeries, or must undergo a second operation to retrieve a sponge left behind during the first. Serious bed sores, injuries from falls, and urinary tract infections caused by catheters are also on the list. Officials believe that these regulations could apply to several hundred thousand hospital stays of the 12.5 million people covered annually by Medicare. The policy will also prevent hospitals from billing patients directly for costs generated by medical errors (Centers for Medicare and Medicaid Services, 2008).

As the largest insurer in the country, Medicare's decision to refuse payment for preventable conditions has already influenced both public and private insurers to set similar criteria. During 2008, there have been announcements by four state Medicaid programs that they will not pay for as many as 28 never events. Some of the country's largest commercial insurers have

TABLE 16-1 Health Insurance Coverage of the Total Population, United States, 2008

Source	Number	Percent
Employer	159,311,384	53%
Individual	14,541,782	5%
Medicaid	39,296,423	13%
Medicare	36,155,452	12%
Other public insurance	3,253,122	1%
Uninsured	45,657,193	15%
Total	298,215,356	100%
Total population of United States, 2008	307,670,941	

Percentages may not sum to 100% as a result of rounding effects.

For current Medicaid and Medicare enrollment figures, please refer to the “Medicaid & State Children's Health Insurance Program (SCHIP)” and “Medicare” sections, respectively, which report enrollment data from the Centers for Medicare and Medicaid Services.

SCHIP and individuals eligible for both Medicare and Medicaid (dual eligibles) are included in the Medicaid numbers.

“Other public insurance” includes individuals who are covered through the military or Veterans Administration in federally funded programs such as Tricare (formerly CHAMPUS) as well as some non-older-adult Medicare enrollees.

Source: Henry J. Kaiser Family Foundation. (2008). *State health facts*. Retrieved November 16, 2008, from <http://www.statehealthfacts.org/index.jsp>.

followed suit, including WellPoint, Aetna, Cigna, and Blue Cross Blue Shield plans in seven states. In addition, several state hospital associations have reached voluntary agreements that members will not bill for medical errors. A precedent was set in April 2008, when Maine became the first state to ban the practice statutorily (Sack, 2008).

These governmentally mandated Medicare measures are not projected to yield large savings: they will save approximately \$21 million per year (\$110 billion was spent on inpatient care in 2007). However, they carry great symbolism with regard to the efforts to revamp the country's medical payment system, which has long been criticized as driving up costs through perverse incentives that reward volume and that compare hospitals against themselves rather than against a national standard (Sack, 2008).

This Medicare hospital initiative is part of a larger pay-for-performance trend, which supports the idea that you should pay more for quality than for lack of quality. Pay-for-performance makes use of both the carrot and the stick. Medicare now grants bonuses to doctors and hospitals that report quality measures, and it is experimenting with rewarding physicians who follow protocols for treating diabetes, coronary artery disease, and congestive heart failure. The Medicare Payment Advisory Commission, which is an arm of Congress, recently recommended reducing payments to hospitals with high readmission rates (Advisory Board Company, 2008). This trend is permeating every area of health care; it is moving fast, and it will not stop because it is in total synchrony with consumer preference. The public realizes that there will always be some negative consequences of health care, but they are not willing to accept them as unavoidable.

When searching for some landmark event that ushered in this era of consumer confidence in pursuit of quality, it is thought that the Health Security Act of 1993 may have been that wake-up call for the public conscience. The bill included many of the programs that since have offered some response to public discontent. Clear distinctions between levels of care are becoming common: intensivist, critical care, acute, subacute, skilled, intermediate, custodial, ambulatory, home care, independent, and assisted living. Assisted-living programs with a broad range of onsite and in-home services are popular, and they are gradually becoming an integral part of public entitlement programs. The Health Security Act also proposed movement away from the medical model and toward functional ability as a major indicator for defining the need for home care services. Broader

definitions of home and community care included companion and chore services. In its vision, this bill was often brilliant, even if its process was politically naive.

As we move deeper into the millennium, we are confronted with hospitals and providers that are under scrutiny; this scrutiny that will more deliberately move into every other segment of the industry, including home care.

THE HOME CARE INDUSTRY

A definable sequence of events over the past 40 years has shaped modern home care and generated the dilemmas that this segment of the industry faces today. Titles 18 and 19 of the Social Security Acts created Medicare and Medicaid. Within those entitlements, home care was recognized as reimbursable, but this reimbursement was not at first mandatory. In 1971, subsequent legislation made home health services mandatory as covered benefits under these programs; in 1972, service was expanded to disabled patients; and, in 1978, service to patients with end-stage renal disease was provided. In time, the elimination of the prior hospitalization requirement and a more flexible redefinition of the term *homebound* followed and brought home care into its own. The Medicare hospital prospective payment system of 1982 heightened the use of home care. Incentives were offered to hospitals for the early discharge of patients, and referral to home care was the natural consequence.

Certified home health agencies vary with regard to their structures, sponsorships, and auspices. The major types of agencies are visiting nurse associations (freestanding, nonprofit), public agencies (governmental), hospital-based agencies (operating unit of a hospital), and proprietary agencies (freestanding, for-profit). In 2006, visiting nurse associations numbered 459 and represented about 4% of all agencies, whereas in 2005 public home health agencies numbered 1043 for about 12.6% of the national total. Visiting nurse associations and public agencies have experienced significant decline in recent years. In 1975, they were 23% and 55% of the home care market, respectively. Freestanding proprietary (52.5%) and hospital-based agencies (18.2%) have grown the most in recent years, until 1998, when all of these traditional agency types showed a decline. The National Association for Home Care believes that the 31.5% decline in agencies since 1998 is the direct result of changes in Medicare home health reimbursement that were enacted as part of the Balanced Budget Act of 1997 (Intensive Home Healthcare, 2003; Table 16-2).

TABLE 16-2 Number of Medicare-Certified Home Care Agencies by Auspice, 1967 to 2006

Year	Freestanding Agencies							Facility-Based Agencies		Total
	VNA	COMB	PUB	PROP	PNP	OTH	HOSP	REHAB	SNF	
1967	549	93	939	0	0	39	133	0	0	1753
1975	525	46	1228	47	0	109	273	9	5	2242
1980	515	63	1260	186	484	40	359	8	9	2924
1985	514	59	1205	1943	832	4	1277	20	129	5983
1990	474	47	985	1884	710	0	1486	8	101	5695
1991	476	41	941	1970	701	0	1537	9	105	5780
1992	530	52	1083	1962	637	28	1623	3	86	6004
1993	594	46	1196	2146	558	41	1809	1	106	6497
1994	586	45	1146	2892	597	48	2081	3	123	7521
1995	575	40	1182	3951	667	65	2470	4	166	9120
1996	576	34	1177	4658	695	58	2634	4	191	10,027
1997	553	33	1149	5024	715	65	2698	3	204	10,444
1998	460	35	968	3414	610	69	2356	2	166	8080
1999	452	35	918	3192	621	65	2300	1	163	7747
2000	436	31	909	2863	560	56	2151	1	150	7157
2001	425	23	867	2835	543	68	1976	1	123	8861
2002	430	27	850	3027	563	79	1907	1	119	7007
2003	439	27	888	3402	546	74	1776	0	113	7265
2004	446	36	932	3832	558	69	1695	1	110	7679
2005	461	36	1043	4321	566	74	1618	2	103	8224
2006	459	31	NA	NA	NA	NA	1503	2	99	9284

VNA, Visiting nurse associations are freestanding, voluntary, not-for-profit organizations governed by a board of directors and usually financed by tax-deductible contributions and earnings.

COMB, Combination agencies are combined government and voluntary agencies. These agencies are sometimes included with counts for VNAs.

PUB, Public agencies are government agencies operated by a state, county, city, or another unit of local government that has a major responsibility for preventing disease and for community health education.

PROP, Proprietary agencies are freestanding, for-profit, home care agencies.

PNP, Private not-for-profit agencies are freestanding and privately developed, governed, and owned not-for-profit home care agencies. These agencies were not counted separately before 1980.

OTH, Other freestanding agencies do not fit one of the other categories for freestanding agencies.

HOSP, Hospital-based agencies are operating units or departments of a hospital. Agencies that have working arrangements with a hospital or perhaps that are even owned by a hospital but operated as separate entities are classified as freestanding agencies under one of the other categories.

REHAB, These are agencies based in rehabilitation facilities.

SNF, These are agencies based in skilled nursing facilities.

From Centers for Medicare & Medicaid Services. (2008). *National health expenditure projections 2007-2017*. Retrieved November 16, 2008, from <http://www.cms.hhs.gov/NationalHealthExpendData/Downloads/proj2007.pdf>.

Home care agencies are also dependent on governmental funding, with more than 66% of revenue coming from Medicare (31.6%), Medicaid, and other local and state government funds (34.8%) in 2006 (National Association for Home Care & Hospice, 2001; Table 16-3).

The Balanced Budget Act of 1997 imposed new restrictions that were designed to reduce the growth in Medicare home care expenditures. An interim payment system created new beneficiary limits and caused a 34%

decrease in Medicare spending for home care during the fiscal years of 1998 to 2000 (National Association for Home Care, 2001). The Balanced Budget Act rules and regulations further decimated the home care industry by designating 1994 as the base year for rate setting, thus turning back the clock to a period when cost-consciousness was less common among home health agencies. Meanwhile, those agencies that had begun to monitor costs and institute efficiencies early on were

TABLE 16-3 Sources of Payment for Home Health Care, 2002 and 2006*

Source	2002 Percentage	2006 Percentage
Total	100.0%	100.0%
Medicare	31.6%	37.0%
Medicaid [†]	13.3%	19.0%
State and local government	15.8%	19.9%
Private insurance	18.6%	12.0%
Out-of-pocket payments	18.0%	10.0%
Other	3.0%	3.0%

*Percentages may not total 100.0% because of rounding.

[†]Medicaid figures do not include expenditures for non-health services (e.g., personal support services); they represent only the federal share of Medicaid.

From Centers for Medicare & Medicaid Services, Office of the Actuary. (February 2008). *National health care expenditures, 1990-2012*.

penalized for their good business practices. This entire regulatory scene limited the profitability of home care and created a situation in which care was given to public entitlement recipients at a price less than cost. The severest effects of the Balanced Budget Act fell on the sickest and highest-cost patients by forcing them to opt for higher-cost skilled nursing facilities or hospital care (Mackin & Forester, 1999). The future was seen as offering no better circumstances: home care is costed on a prospective payment system model with Outcome and Assessment Information Set as the clinical data set and the Home Health Resource Group as the case-mix methodology. More optimistically, the best hope for the industry may be the prospective payment system with its capitated rates. Such arrangements can provide the opportunity to distance home care from the medical model, thereby allowing dollars to be used for personal assistance to normalize living. Whether offered through managed care or case-mix methodology, packages of services can be integrated and financially bundled to hopefully allow the agency or the case manager to make decisions that are personalized and that hold the best promise for quality of life. Economic survival and quality of life can coexist peacefully only when providers have the freedom to be creative in partnership with the recipient of services, when new technologies are called into play to improve the human condition, and when atypical support systems are encouraged when they contribute to the desired outcomes. This flexibility will require not only a change in reimbursement strategies

but also a major reformation of public policy and a shift in the current philosophy of care.

Despite a great dependency on public dollars, those dollars have not been extensive. In 2003, freestanding home health services accounted for only 3% of total personal health expenditures in the United States, whereas hospital and clinical services offered by physicians and other providers made up 61%. One should note that hospital-based home care is included with hospital expenditures (Heffler et al., 2004). The number of Medicaid home care recipients has continued to increase gradually, but Medicare numbers only began to rebound in 2001 (National Association for Home Care, 2001).

By 1998, 90% of home care agencies were estimated to have costs that exceeded revenue by 32% for services to Medicaid recipients. Visiting nurse associations and hospital-based agencies were the most dependent on government funds, with 80% of their revenues coming from this source. By comparison, only 55% of the revenue of for-profit organizations came from public entitlements. In fact, since the Balanced Budget Act, the number of Medicare clients served through home care and the number of visits per Medicare client have decreased, whereas the presence of this population has increased in skilled nursing and subacute facilities. The numbers of Medicaid recipients have held constant (National Association for Home Care, 2001).

These figures are important for making some predictions about the future of home care. Medicare serves clients with episodic problems where there is a need for skilled nursing services, and the client is expected to return to self-care through rehabilitative efforts. Many potential Medicare home care recipients have been redirected into nursing homes, rehabilitation facilities, and subacute care, where treatment can be more vigorous and progress while being monitored more closely. If the Medicare home care market becomes overshadowed by Medicaid, long-term patients will dominate the market.

This situation would be the natural course of events; however, consumer preferences are poised to intervene. The American Association of Retired Persons is moving forward briskly in support of public entitlement programs where “money follows the person” as opposed to the “person following the money.” Opinion polls of the American Association of Retired Persons membership show that most elderly Americans prefer to “age in place,” spending their declining years in their own homes if the services and dollars to do so are available. Data about the appropriation of state Medicaid monies are not readily available, but, using the example of

New Jersey in 2002, almost 85% of public long-term care dollars went to nursing homes as compared with about 15% to home care and community-based services. Although this distinction is startling, it represents progress from 1997, when nursing homes received almost 93% and community services received slightly more than 7% (Auerbach, 2004).

Progress has been incremental but deliberate and state based. Policy changes include the fast-track processing of clients for home care and community service eligibility and a single entry point for institutional and community-based services (Washington and Colorado); options-based counseling that reveals all of the choices open to a client and that supports their personal decisions (Wisconsin); a global budget that holds funds for community and institutional care to minimize governmental competition and cash given directly to the consumer in lieu of prepaid services, thus allowing for more flexibility in the choices needed for community living (Oregon); and senior foster care and counseling to help nursing home residents to transition back to the community (New Jersey). Arkansas, Florida, and New Jersey have been part of the Cash and Counseling Demonstration Program that provides Medicaid recipients with a cash allowance based on the need for community or home care along with assistance to manage these funds. A control group receives traditional Medicaid services. Preliminary results show much higher satisfaction with the overall care arrangements in the experimental group as compared with how individuals in the control group were spending their lives. The Independent Choices Program in Oregon is comparable except that it assumes that the participants have the ability to manage their own finances without a fiscal intermediary. Similar strategies have been implemented in Texas, Arizona, Vermont, and Michigan (Auerbach, 2004). These are only a few of the programs that promise a robust future for home care, but they require the design of new products and services and an active role for home care advocates with regard to lobbying the legislature and educating the government and the consumer about what is possible. The Money Follows the Person Rebalancing Initiative will die with the 2008 Congress and be reintroduced in 2009.

The caregivers who provide home care are both formal and informal. Unpaid help—especially family members—is the backbone of home care in the United States. Because the Bureau of Labor Statistics and the Centers for Medicare and Medicaid Services count workers in different ways, much of the data is imprecise. However, the general nature of the workforce and the

inevitable problems are clear. The largest numbers of workers are home care aides and registered nurses. There were almost 800,000 personal and home care aides in 2006, and a 51% increase is needed by 2016. Between 1998 and 2002, the numbers of full-time equivalent home care aides decreased by 35%. The Centers for Medicare and Medicaid Services recorded a decrease of 156,394 full-time equivalents in home care personnel from December 1997 to December 2003. In summary, a workforce growth of 8.7% annually from 1993 to 1997 was followed by an overall decline of 10% from 1997 to 2000 (National Association for Home Care, 2001).

The profile of the home health aide is remarkably consistent. Studies describe a middle-aged, female, disproportionately minority workforce with low education, low pay, and a high degree of part-time employment. No consistent federal rule exists for the education of home health aides as compared with the standard that exists for nursing assistants in skilled nursing facilities, and requirements vary from state to state. The relatively low skill requirements, low pay, general absence of benefits, and high emotional demands of the work result in high replacement needs. For these same reasons, many people are reluctant to seek jobs in the occupation. Whereas registered nurses were once more highly paid in home care than in hospital nursing, this is not the current case. However, registered nurses have always expressed particular satisfaction with the high degree of professional autonomy in home care practice.

The case for home care is often based on arguments of cost-effectiveness. The hospital per diem charge or subacute/skilled nursing daily rate is compared with the charge for a home visit. This logic is specious, given the fact that these are not comparable services. However, specific clinical situations have been analyzed carefully and inclusively and have been found to be particularly suited to home care. These situations include low-birth-weight babies, ventilator-dependent adults, oxygen-dependent children, chemotherapy in children, intravenously administered antibiotics for osteomyelitis and cellulitis, congestive heart failure, and psychiatric care. In these situations, significant dollar savings occurred by moving treatment to the home. Alternatively, more expensive institutional care was shortened or readmissions were averted when home care was provided.

THE ISSUES

The issues in home care do not stand alone but are affected immensely by other aspects of the health care industry and consumer choice. Whether the movement

of health care services into the community is a response to the declining use of hospitals or is primarily the result of other factors, it is a trend that seems irreversible. The hospital length of stay continues to decrease, but at a slower pace: in 1996, it was 5.5 days; in 1997 and 1998, it was 5.3 days; in 2002, it was 4.9 days; and in 2007, it was 4.8 days (National Center for Health Statistics, 2009). Even when hospital-based subacute care is factored into the calculations, only a modest increase in the length of stay and a continuing pattern of decline occur.

Community-based service in the form of home care and the public health have long and proud traditions. These services are not newcomers, but they took on new significance with the social pressure to curtail cost and the favorability of those service settings that seem to be less expensive. Some original presumptions have proved to be naive. When medical intensity is great or functional ability is so seriously compromised that continuous care is required, home care can be costly, but the decision still rests with the person. However, subacute care has appeared to fill some of these gaps. At the other end of the spectrum, the less needy have chosen assisted living, which does not always eliminate the presence of home care. With these new levels of care as options, the arguments for personal choice and humane and compassionate care are gaining in prominence. Home care is best suited to reinforce and complement the care provided by family, friends, and community resources, and it can be the optimum venue for the preservation of dignity and independence. The home continues to be the best place to maintain control over one's own life.

Confusion with regard to roles and responsibilities will be part of any transition from the medical model to a social model. New patterns of accountability and authority are not only inevitable but also necessary to do the most with the least for the most needy. This seems to be the manner in which public policy is reshaping this segment of the industry. Questions will arise about who has the right to authorize services; where the quality controls are, how quality will be defined, and who is responsible for the practice of nonprofessionals who provide 80% of the hands-on care. Note that this percentage may decrease if more skilled nursing patients choose subacute options in hospitals and nursing homes. Most especially, the supervisory issues involving home health aides have become public and frightening.

Nursing has long dominated the home care scene. The roots of many of the most illustrious leaders can be traced to home care. The home has often been touted as the setting that provides the best showcase for nursing practice: autonomy, equality, and respect. The pioneering

home care agencies were nurse managed and nurse controlled, and they were built on a social model that went far beyond the diagnosis and treatment of illness. Can this tradition be recaptured and sustained as home care responds to governmental policy and public preference?

The wild card in the equation continues to be the consumer or, just as often, consumer advocates. Consumerism has become militant, and the reaction is no longer new or unexpected. Recipients of care have become uncomfortable with deferring to professionals. The historic practice of "protecting the public from themselves" has been seriously called into question as consumers have access to more information. Direct access to diagnostics and therapeutics is growing. Consumer satisfaction and dissatisfaction as expressed to insurers (particularly in managed care plans) are a driving determinant in who does what and which providers and facilities will be included in a network. The goodwill of plan members is necessary if they are to continue their subscriptions. Medicaid has moved rapidly toward managed care through state waiver programs; Medicare is moving at a slower but deliberate pace.

Chiefly derived from consumers and their advocates, a broad definition of home care is becoming popular and receiving much favor in managed care plans, where functional ability and quality of life can be addressed with more latitude. Case management is a natural complement to this social approach, and this involves monitoring abuses and educating the recipient of care with regard to the pros and cons of different choices. In 1993, the President's recommendations to the Congress for long-term care entitlements included personal assistance provided to persons with functional impairment where they live, where they recreate, where they work, and where they do business. The intent was to normalize life through personal assistance suited to the preference of the individual (White House Domestic Policy Council, 1993). This was the beginning, and it demonstrates that this broader vision of home care and in-home services exists and enjoys the support of most recipients. The extreme application of this principle to nursing homes could involve separating personal care and nursing services from nontherapeutic and hotel services so that the client or the client's agent (usually the family) may choose what suits the client best, thereby controlling resources: the ultimate weapon.

Issues of Control

As the home and community become the prevailing sites for care, the control of the medical establishment declines, and this includes nursing. Some may say that

consumer demand for more control was the catalyst of this reformation rather than its byproduct. Consumer allegations of forced dependence on entering the health care system and frequent distrust of provider professionals should have been anticipated consequences of specialization and high technology. As the personal relationship between the provider and the patient began to erode, the vulnerable easily came to feel victimized.

The position of the consumer is strengthened further by the growing trend to have public entitlement recipients (i.e., Medicare, Medicaid, Tricare, and the Federal Employees' Health Benefit Plan) use their resources to "buy" into a managed care plan of their choice. This ability to choose is compromised when managed care plans may be designed primarily for the poor, and choice often is limited to providers and facilities that cannot attract a middle-class or private-payer client base. To avoid this situation, many state laws require that plan subscribers must include a mix of Medicaid and non-Medicaid recipients.

Discussion inevitably leads to issues of "turf protection," and the public patience has worn thin on this topic. A medicalized system has concentrated services in settings where the balance of power weighs in the direction of the industry and provider professionals. Public dissatisfaction with this paradigm was slow coming but long building. The issue surrounds who defines the nature and context of services. The Agency for Healthcare Research and Quality (formerly the Agency for Health Care Policy and Research), the Patients' Bill of Rights, Final Directives, and the Patient Protection Bill are examples of public policy and agencies intended to guarantee the ability of consumers to make their own informed choices. The dramatic growth of the complementary health market is another consumer strategy to avoid medicalization. Although the migration to home care was motivated primarily by cost, what it will be is based on public preference.

The frail and chronically ill have been the major recipients of home care, and they have frequently also been poor. Today they are joined by those in a recuperative mode, who are in a position to demand more and different services, including having access to more personal resources, private insurance, and workplace benefits. In addition, younger disabled persons object to the terms *home* and *care* because of the connotations that have become associated with them in modern society. They prefer to reserve the term *care* for relationships of intimacy and affection, and they note that assistive services should not be limited to the home in the usual sense of the word. Rather, services that allow one to

maintain a home in the community should help one to live and flourish wherever that is. Rather than promoting a "caring in place" philosophy, services should follow a person from the home to places where that person can be productive, recreate, socialize, or do business. Advocates for the disabled—an often younger and more militant constituency—contend that the recipient of services should be able to select those who will act in an assistive capacity to them and decide whether family is an option. This is contrary to the traditional view, which bases the authorization of services on the potential for rehabilitation or the need for skilled nursing as determined by professionals. The expanded definition of the term *homebound* was a breakthrough, but rigid interpretation still prevails. More latitude has been observed in state-funded or Medicaid-waiver programs, where personal assistance and functional impairment are the priority. This has also been the response in programs created to substitute for nursing home confinement.

The ability of home care personnel to provide some rather technically complex care and the frequency and immediacy of supervision, if any, are controversial issues. Many arguments for the increased use of non-professional personnel hinge on the ability of the disabled to direct their own care, thereby maintaining control. One such situation is the creation of a category of worker called the *home care medication aide*. The proposal is that the medication aide should be able only to help cognitively intact home care patients who are able to recognize their medications and understand their use and side effects. Other controversy focuses on the delegation of specific activities by the professional, most notably the nurse. In Oregon, non-nurses may perform nursing functions if they have been taught by a nurse on a patient-specific and procedure-specific basis (Oregon Department of Human Services, 2008).

THE DEBATE

Statement: Recipients of in-home services should have increased autonomy, flexibility, and commensurate responsibility with regard to making determinations about their care.

Pro

The medical model is increasingly out of step with the restructuring delivery system. Primary health care, integrated systems, and community-based services are moving quickly toward a new paradigm that values self-care, personal responsibility, prudence in resource use, and

increased commitment to the common good, which is the true test of community. Frail older adults, who make up one major market for in-home services, are more concerned with functionality and their perception of their own health than they are with illness; illness only becomes a priority when it gets in the way of living. The Clinton administration report on health care reform in 1993 recommended eligibility for assisted-living arrangements and home health services on the basis of measurable functional impairments as opposed to medically defined problems and a shift to personal, client-directed care, with the standard being that the persons providing service—to whatever extent possible—be selected, trained, supervised, and evaluated by the recipient (White House Domestic Policy Council, 1993). This idea is present in the more recent restructuring of long-term care that was discussed previously, with home care being one dimension.

Realistically, a fence may have to be put around the liberties and choices allowed within the context of home care, especially where public dollars are used. A cap on the total amount of funding available during a preestablished period is one approach. Caution would have to be taken so that inadequate funding does not violate the spirit of flexibility and choice. Withholding funding is a common backdoor strategy to reach a goal without the unpleasant policy decisions that would be required with a more forthright approach. Examples abound, but two should suffice, given their familiarity to the reader. Few if any restrictions are placed on the services provided to Medicaid recipients. However, the fees paid to the provider are so low that few providers accept these patients. Abortion is legal, but the poor are denied the public dollars to access the procedure.

The tough policy decisions to allow the consumer to retain maximum control will be slow in coming. The first challenge requires the honesty to separate the control and funding aspects. Although only a finite number of dollars may be available to an individual, allowing decisions about the use of those dollars could honor the spirit of consumer choice. Allowing flexibility may lead to some creative options. Pooling resources in a setting such as a group residential home may pay for more services and consequently more freedom; for the more acutely ill or those who are recovering from acute illness, fluid movement between levels of care—including the home—can be within a predetermined spending cap. This could be accomplished through managed care plans that have the proper policies and benefit structures. In many ways, this is the broader application of the true hospice concept. The consumer most comfortably

makes these decisions if case management—at best, independent case management—supports them. A case manager engaged by the payer could be subject to a conflict of interest: the need to hold a job versus the need to advocate for the client.

Con

Consumer militancy and the growing political influence of older adults and younger disabled persons has led to a gradual restructuring of home care to distance it from the mainstream of health care, to broaden the definition of home care and in-home assistance, and to increase the consumer's right to engage and dismiss services.

A first wave of consumerism predated the dramatic onslaught of acute and subacute clinical situations into the home. With the appearance of this new clinical population in the home, more justification appeared for medicalization. Physicians who once abandoned home practice are returning to that setting, some out of economic motivation and others as a response to consumer need. The federal government has approved Medicare reimbursement to physicians for their supervision of the medical regimen in home care on the basis of the observation that much of home care has become so medically dependent that close supervision is not only justified but also necessary.

Putting aside the apparent medical needs in home care, there remain the chronically ill, frail, and disabled. These populations traditionally have used significant amounts of nonprofessional and assistive services in the home. Surveys indicate that home health agencies rely on part-time, temporary workers, and they agencies have been assigning heavier case loads, which has resulted in the alienation of the workforce. A high turnover rate is common among home health aides, and this can lead to a lack of reliability and inconsistency of services. Observable quality-of-care problems follow, such as incomplete work, inadequate skills for even simple activities, failure to carry out orders, client injury or abuse, exploitation of the client, theft, and absenteeism. Given the frequency of such incidents and the basic vulnerability of many home care recipients, closer professional controls can be justified. Little state-to-state consistency exists with regard to maintaining records of disciplinary actions, requiring criminal background checks, or imposing any standard for training or competency testing.

Despite the outcry for consumer empowerment, the American public has always found comfort in the medical establishment and the assurance that

professionals would act in the public's best interest. A clear distinction in home care exists between those situations in which medical necessity drives the use of resources and those in which functional ability and basic services to compensate for functional deficits are needed. Just such a distinction differentiates Medicare and Medicaid as well as episodic versus continuing care. Whether these distinctions should be perpetuated and how they should be recognized (if at all) in the process of authorizing services for the public is a serious question that is more rooted in philosophy than financial expedience.

BEYOND DEBATE

Home care—not unlike other segments of the health care industry—is experiencing a struggle over “consumer control and choice”: the definitions to describe it, the public policy to allow it, the dollars to fund it, the economic models to distribute those dollars, and the provider systems to actually make it happen. This observation forces many issues (please note that this list is not exhaustive):

- ◆ Putting aside economic motivation, what are the appropriate criteria for maintaining a patient in the home?
- ◆ To what extent should providers and consumers be able to exercise choice in the selection of a setting for care?
- ◆ How appropriate is the medical model for the home care population?
- ◆ If home care is a cost-efficient proxy for a hospital or nursing home, how is the break-even point identified, and what happens when it is reached?
- ◆ Does the consumer have the option to choose home care regardless of cost or only as the less costly option?
- ◆ Who is responsible for the supervision of volunteers in the home—including family members—if they undertake medical or nursing activities?
- ◆ Are family members supervised, or are they the supervisors?
- ◆ To what extent can activities be delegated?
- ◆ The expanded use of volunteers and family caregivers raises questions about caregiver burden and new categories of reimbursable services, either through dollars paid or tax credits allowed.
- ◆ The many relatively unskilled in-home services create a market for new categories of work, such as companion care and chore care. Who supervises this work?

SUMMARY

The dispute over turf ownership in home care or in any sector of health care pits the consumer against the government and its agents, the industry, and the professions. Slowly, over time, home care and in-home services are moving to a functional and social model that is more suitable for the needs of some. At the same time, a large constituency of the acutely ill have a real need for continuing medical expertise in the home, and they are confronted with decisions beyond the capability of most laypeople. The challenges will be to see the distinctions and to accommodate them. This was the original premise for the division between the Medicare and Medicaid populations, so there may be something that nurses can learn from past practice, including when such practice has outlived its usefulness.

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Adult Health Nursing Practice: Recent Changes and Current Issues

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Within the complex health care environment, many forces affect the practice of adult health nursing. Universal issues initiate intra-agency dynamics within a variety of practice settings that complicate the achievement of goals for a healthier America. An aging population living with chronic illnesses creates the backdrop for the need for rapid change and for the attainment of solutions. Other universal issues—such as the nursing shortage, an aging nursing workforce, a mandate for patient safety initiatives, a lack of administrative and clinical leadership, and the increased use of technology—complicate the challenges to provide quality patient care. This chapter will explore the interrelationships of these universal and intra-agency issues and their impact on the practice of adult health nursing. The ultimate goal is to provoke discussion and problem solving among nurses and the other health care professionals who shoulder the burden of these issues.

THE AGING POPULATION

The reality of the aging population in the United States is not news. However, a closer look at these statistics gives some perspective regarding the health care needs of the future and the impact they will have on the need for health care services. In the year 2008, the number of citizens 65 years old or older was approximately 38.7 million; those 85 years old or older numbered approximately 5.4 million. Projections for 2050 suggest that the number of individuals 65 years old and older will reach over 88 million, whereas those 85 years old and older will triple to reach approximately 19 million citizens (U.S. Census Bureau, 2008). Although a large majority of those who are more than 65 years old report good to excellent health (Federal Interagency Forum on Aging Related Statistics, 2008), their health care needs

will increase, and the demand for adult health nurses will grow as primary health and acute patient care services are required by these older individuals.

Exploring mortality and morbidity statistics provides insight into the future health care needs of older adults. The leading causes of death among those 65 years old and older included heart disease, cancer, cerebrovascular disease, chronic lower respiratory diseases, Alzheimer's disease, influenza, pneumonia, and diabetes mellitus. Technologies and advances in pharmaceutical agents have improved patient outcomes for cardiovascular disease mortality, whereas the death rates for the other diseases have remained relatively stable over the last two decades (Federal Interagency Forum on Aging Related Statistics, 2008). However, chronic illness is frequently encountered by the elderly. According to data from 2005 and 2006, the leading chronic diseases were hypertension, arthritis, heart disease, and cancer. Reports of difficulty with performing certain physical tasks increase after the age of 65 years. Forty-two percent of individuals 65 years old or older report having a functional limitation. Twelve percent of those who are more than 65 years old report having difficulty performing more than one instrumental activity of daily living (Federal Interagency Forum on Aging Related Statistics, 2008). An increasing need for health care resources, including the services of adult health nurses, will be required to meet the demand for care for the ever-growing older adult population.

DIMENSIONS OF THE NURSING SHORTAGE

The shortage of nurses is not a new issue; the predicted shortage has been in the limelight for several years. In 2009, Buerhaus and colleagues released *The Future of the Nursing Workforce in the United States: Data, Trends and Implications*. According to this report, the shortage of

registered nurses in the United States could reach as high as 500,000 by 2025 (Buerhaus, Staiger, & Auerbach, 2009). The U.S. Bureau of Labor Statistics estimates that more than 1 million new and replacement nurses will be needed by 2016 (Dohm & Shniper, 2007). The vacancy rate nationally is currently at 8.1% (American Hospital Association, 2007). Despite these dire projections, surveys completed in 2002 ($N = 1442$) and 2004 ($N = 657$) revealed that nurses completing the 2004 survey perceived less of a gap between supply and demand for nurses than those responding in 2002 (Buerhaus et al., 2005). In addition, fewer nurses (41%) in the 2004 study thought that salary and benefits were the main causes of the shortage.

Several factors continue to influence the nursing shortage. Most notable are the aging workforce and the many and varied career options for young men and women. Associated with these career options are working conditions that do not include working weekends, holidays, and night shifts. The occupational employment projections indicate that registered nurses (RNs) are predicted to experience the largest numeric increase in new jobs: an increase of 587,000 jobs between 2006 and 2016 (Dohm & Shniper, 2007). It is also projected that the demand for RNs will be greater in physician offices and home health care service offices. In addition, nurse practitioners will be in greater demand to serve as cost-effective primary care providers in rural areas and inner cities (Dohm & Shniper, 2007).

Cultural diversity in the U.S. population has changed radically during the last decade, yet, in 2004, the U.S. RN population remained significantly less ethnically and racially diverse than the overall U.S. population. In 2004, the number of white, non-Hispanic individuals in the United States accounted for 67.9% of the overall population; however, 88.4% of RNs identified as white and non-Hispanic (Health Resources and Services Administration [HRSA], 2006). Nurse recruitment efforts to attract men and women of representative cultures in the United States are essential to best serve these populations.

The most common initial preparation for nursing is the associate's degree. In 2004, 30.5% of entry-level nursing graduates were prepared with a Bachelor of Science in Nursing (BSN). The National Advisory Council on Nurse Education and Practice (NACNEP, 2008) recommends prioritizing funding for initiatives to increase the proportion of BSN-prepared nurses in the workforce. Rationale for this recommendation seems to be twofold: (1) BSN-prepared nurses have a broader, more in-depth education based in areas such

as liberal arts and instruction in community health, public health, research, nursing leadership, and nursing management; and (2) data indicate that the BSN-prepared nurses in the workplace improve patient outcomes. Efforts should be made to encourage nurses prepared at the associate's degree and diploma levels to attain a BSN to enhance their preparation to work in the rapidly changing health care environment.

Job dissatisfaction has been a source of nurse attrition. More specifically, nurses perceive that their time at the bedside has diminished as a result of increased documentation requirements and activities unrelated to direct patient care. One study found that most medical-surgical nurses spend 35.3% of their shifts completing documentation, 17.2% performing medication administration, 20.6% coordinating care, 7.2% assessing, and 19.3% providing patient care (Hendrich, Chow, Skierczynski, & Lu, 2008). On a more positive note, other studies have revealed that hospital nurses are satisfied with their jobs (HRSA, 2006; NACNEP, 2008; Buerhaus et al., 2005). Blakeney reported that nurses were satisfied with their interactions with other RNs, their professional statuses, and their professional development opportunities but dissatisfied with decision-making opportunities, tasks, and pay (NACNEP, 2008).

Media and legislative attention have been given to the ongoing and ever-intensifying nursing shortage. As a result, schools of nursing have seen increased enrollment that has been limited only by the shortage of nursing faculty, clinical nursing instructors, and sufficient resources for clinical experiences. Even with legislative and media attention that have drawn more applicants into nursing programs, there is evidence to suggest that the current nursing shortage will continue to be a significant factor well into the future.

Aging Workforce

In the midst of financial constraints in health care, hospital restructuring, work redesign, and recruitment and retention issues, the aging of the nursing workforce—including those in academic roles—has contributed to the escalating shortage of nurses. The nursing workforce is projected to peak at 2.3 million in 2012 and to then shrink to 2.2 million by 2020, when the HRSA forecasts that there will be a need for 2.8 million RNs (Steeffel, 2004). A factor that will contribute to this impending decrease in the number of RNs will be the retirement of a large number of nurses. The RN population under the age of 30 dropped from 9% of the nursing population in 2000 to 8% in 2004 (HRSA, 2006).

The HRSA (2006) reported that the average age of nurses is 46.7 years; the average age of nursing faculty is 55 years (American Association of University Professors, 2006). After many years of dedication to the nursing profession, these nurses are leaving the workforce to enjoy the pleasures of retirement. Because medical-surgical nursing is the largest specialty in nursing, adults who are in need of nursing care will be most affected by this deficit.

Recruitment and Retention

Since 2001, an increase of 185,000 hospital-employed nurses has been realized, but this increase has not eliminated the current nursing shortage (Buerhaus, Staiger, & Auerbach, 2004a). Supporting this reality are the results of two recent national surveys of RNs and physicians that were conducted in 2004. Researchers found that a clear majority of these nurses (82%) and physicians (81%) perceived that there were shortages of RNs in the hospitals in which they worked (Buerhaus et al., 2004b; Konelan et al., 2004).

Buerhaus and colleagues (2004a) examined the demographics of new nurses entering the workforce in 2003. A significant number of these new nurses were older women and, to a lesser extent, foreign-born RNs. Two new demographic groups also joined this workforce: younger people (particularly women in their early 30s) and men (Buerhaus et al., 2004a).

The real challenge of recruitment lies in attracting young people who are committed to providing care to individuals, families, and communities. Currently, many applicants come into nursing seeking a career that offers job security. However appealing job security is, the desire to care for others should be the attraction of nursing. Clearly the nursing profession fails to market the exciting challenges of providing care, solving patient care issues, leading changes that enhance patient outcomes, and using life-saving technologies to monitor patients' progress. Instead, nurses talk about working holidays and weekends, nursing shortages, heavy workloads, and poor management. This picture of the nursing workplace surely will not draw dynamic young men and women to the nursing profession.

Private-sector initiatives have resulted in strong RN employment growth over the last few years (Buerhaus et al., 2004a). Although these initiatives have been effective, a sustained effort to attract men and women with diverse cultural backgrounds to the nursing profession must be achieved. Employment opportunities in the developing world of technology, international business, marketing, and many other professional fields are

endless. The challenge is to create a vision of nursing as a profession that is stimulating and challenging and that offers opportunities for professional growth, development, and personal satisfaction. Reaching out to children and young adults of diverse cultures to share this vision is essential for stimulating interest in careers in nursing.

The retention of new and seasoned nurses needs to be addressed. As noted previously, the average age of nurses is approximately 47 years. As the nursing workforce ages, many nurses (particularly those 50 years old and older) are struggling to meet the physical demands of the job. Creative strategies are needed to keep these experienced nurses in the workplace. Innovative scheduling should be tested. For example, an 8-hour shift may be more manageable than a 12-hour work day. Shift-sharing might work in some institutions. Allowing two nurses to share a 12-hour shift, with each nurse working 6 hours, would reduce the physical toll of patient care. The availability of working 6-hour shifts might keep some nurses employed part-time as opposed to retiring and leaving the work force. Strategies to keep the aging nursing workforce employed should be tested and disseminated.

The retention of newly registered nurses is also vital. Much attention is being given to the reality of lateral violence (LV), which is also called *horizontal violence*; nurses refer to this concept as "nurses eating their young." Unfortunately, LV is alive and well in the workplace. The percentage of new RNs who leave their positions within the first 6 months of employment as a result of LV approaches 60% (Griffin, 2004). LV has been defined as nurses overtly or covertly directing their inward dissatisfaction toward either those less powerful than themselves, themselves, or each other (Griffin, 2004). Alspach (2007) stated that LV is exhibited in a variety of unkind, antagonistic interactions that occur among nurses who are peers in the workplace.

The loss of new nurses is a staggering financial burden on the employer. Recent reports have indicated that the cost of nurse turnover ranges between \$22,000 and \$64,000 per nurse (Jones & Gates, 2007). A recent survey sponsored by the Robert Wood Johnson Foundation found that the replacement costs for nurse positions are equal to or greater than two times a staff nurse's salary. The national average salary for a medical-surgical nurse is \$46,832; thus, the cost of replacing just one medical-surgical nurse is \$92,442; this cost includes advertising, interviewing, increased use of as-needed or travel nurses, overtime, lost productivity, training, and terminal payouts (Robert Wood Johnson Foundation, 2006). Nurses who experience LV also suffer. These

nurses can experience physical symptoms, such as weight loss or gain, hypertension, cardiac palpitations, and irritable bowel syndrome (Rowell, 2007). In addition, job dissatisfaction and psychological distress increase (Longo & Sherman, 2007). A two-pronged approach to identifying strategies to alleviate LV is warranted. First, nurse managers should create a work environment in which LV is not tolerated. Many strategies could be implemented wherein the work environment is supportive and caring. A no-tolerance policy toward LV should be in place and enforced. The second approach should come from the direction of the new RNs. They should be encouraged to report LV and ensured that these reports will not result in further LV on the unit. In addition, they should be taught ways of addressing LV should the situation arise. Now is the time for nurses to stop eating their young.

Mentorship has been proposed as a potentially effective approach to the retention of new RNs. In a survey of 657 nurses, half of the respondents indicated that mentorship programs for new graduate nurses were valuable and effective retention strategies (Buerhaus et al., 2005). The Academy of Medical-Surgical Nurses (2008a) sponsors the Nurses Nurturing Nurses (N3) Mentorship program. The N3 program can be used in two ways: (1) as an online, one-to-one mentorship program with a new RN and an experienced nurse mentor; and (2) as a hospital-based program wherein an N3 coordinator within the agency links mentors (experienced nurses) and mentees (new RNs) for a year-long mentorship experience. Mentorship programs have the potential to affect the retention of new nurses. However, their success is dependent on several factors. As noted previously, approximately 60% of new RNs leave their first jobs within the first 6 months of employment (Griffin, 2004). Mentorship relationships must be established early in the employment process, preferably during the orientation of the new nurse. Ideally, the mentor does not work on the mentee's unit, has no line authority or input regarding the new nurse's employment, and has experience that relates to the new nurse's practice area. In addition, both the mentee and the mentor must be committed to the relationship for the first year of the mentee's employment. They must develop regular and ongoing open communication patterns that allow the new nurse to honestly discuss the challenges in the workplace, including incidences of LV. Often, the mentorship relationship is sidelined by many distractions in the professional and personal lives of both the mentee and the mentor. As the relationship dissolves, so does the support system for the new nurse.

Hospitals are testing many strategies to increase the retention of new nurses. Nurses who are leading these retention efforts should publish information about effective strategies for nurse retention. Disseminating successful approaches to nurse retention will enhance job satisfaction for new nurses and relieve the financial burden of attrition.

Decreasing Employer Loyalty

The trend toward outsourcing for services and away from employer loyalty (Shaffer, 2000) was inspired by the large-scale corporate downsizing of the late 1980s that provided the impetus for a "guerilla" workforce comprised of deal-hungry professionals conditioned to signing bonuses, stock options, and higher-than-scale salaries. Over the last decade, the intensifying nursing shortage has created a highly competitive and lucrative market for new graduate nurses. Employers eager to fill open positions have resorted to offering huge sign-on bonuses and creative benefits packages to attract applicants from a pool of potential employees that is inadequate to meet staffing needs regionally or nationally. Employers lose out when new graduate nurses "game the system" by accepting positions; receiving incentives, bonuses, orientation, and training; and then leaving after 1 year only to obtain employment with another employer willing to provide similar incentives. Although new nurses are still being courted by clinical agencies, there is some moderation in the incentives for employment, because employers have recognized the problems and the less-than-acceptable outcomes of some recruitment strategies.

Until recently, clinical agencies have focused on the recruitment of nurses rather than the retention of their experienced staff. Significant sign-on and retention bonuses are being offered to lure both new graduates and experienced nurses to employment sites. Most agencies have come to realize that an experienced nursing staff is an invaluable asset and thus have initiated strategies to retain these knowledgeable and committed nurses. Many have implemented strategies to create and maintain a positive workplace environment, which is a key ingredient for the retention of experienced nurses. Retention is a two-pronged initiative that should focus on the retention of experienced nurses as well as the retention of new nurses. Providing a positive work environment wherein the nurses can give quality nursing care, have input to the provision of nursing care, and have opportunities to grow as valued nurse experts is an essential ingredient to the retention of both experienced and new nurses.

PATIENT SAFETY, PATIENT OUTCOMES, AND THE WORKPLACE ENVIRONMENT

Quality initiatives are invading the workplace, and medical-surgical nurses are finding themselves in the center of many of these initiatives. The Institute for Healthcare Improvement (2008) has recommended 12 quality initiatives through their 100K Lives Campaign and now the 5M Lives Campaign. Many of these recommendations have now been adopted by regulatory agencies such as The Joint Commission and the Centers for Medicare and Medicaid Services. The Centers for Medicare and Medicaid Services will not be paying for selected complications that occur during a hospitalization if the complications are considered preventable, such as surgical infections and patient falls (Centers for Medicare and Medicaid Services, 2009). Administrations feel the pressure of these financial implications, and bedside nurses are affected, because they are the key health care providers that influence the safety of each patient.

In January 2008, the NACNEP published *Meeting the Challenges of the New Millennium*. In this report, the NACNEP highlighted nursing challenges in a rapidly changing, complex work environment, including the necessary nurse skills and resources, the educational preparation of RNs, and the improvement of the work environment. The NACNEP recognized the need for more nurses but stated that this alone is not enough. The ever-changing health care environment, the economic challenges, and the ongoing efforts for the improvement of health care highlight the complexity of the current health care environment. In addition to these organizational challenges, consumers are demanding quality care, and they are interested in patient outcomes as they make health decisions. The NACNEP stresses the need to build a nurse workforce with the skills and abilities required for this increasing challenging health care environment. Nurses should be equipped with new capabilities that include critical thinking skills to rapidly acquire and assimilate new information to make appropriate patient care decisions; the skills and knowledge required to adopt innovations in patient care; and increased cultural competence that corresponds with the cultural diversity of the population (NACNEP, 2008). Schools of nursing can take the lead in providing these new capabilities for nurses by testing innovative teaching strategies that support the development of these new skills. Health care agencies will need to adapt their educational programs to include the development of these new skills in their current

staff. Ideally, a partnership between education and academia could be created to enhance the skills that nurses need to work in the complex health care environment.

In recent years, much has been written about patient safety and outcomes. Although some improvements have been made during the last decade, barriers to adequate and effective change toward enhanced patient safety and outcomes in the environment still exist. These barriers include a punitive environment in hospitals, physicians' denial of the scope of the problem, a lack of national leadership to effect change, and a lack of systems thinking (Buerhaus et al., 2004a). A health care delivery system that is decentralized and fragmented also contributes to unsafe conditions for patients (Kohn, Corrigan, & Donaldson, 2000). Threats to patient safety emerge from organizational management practices, workforce deployment practices, work design, and organizational culture (Page, 2004).

The primary role of adult health and medical-surgical nurses is to provide quality care that results in positive patient outcomes. Evidence that supports the relationship of nursing care to patient outcomes is increasingly documented in the literature.

The workload of the adult health nurse has been acutely affected by the nursing shortage and increased patient acuity. As a result, patient safety is threatened by factors such as inadequate nurse staffing, high patient-to-nurse ratios, and extended working hours. Research has indicated that, for each additional patient per nurse, there is a 7% increase in the likelihood of a patient dying within 30 days of hospital admission (Aiken et al., 2002). Low nurse staffing has been associated with hospital-acquired pneumonia, urinary tract infection, sepsis, nosocomial infections, pressure ulcers, upper gastrointestinal bleeding, shock, cardiac arrest, medication errors, falls, and longer-than-expected lengths of stay (Needleman & Buerhaus, 2003). Better hospital outcomes are associated with more nurses (Aiken et al., 2002; Needleman & Buerhaus, 2003; Needleman et al., 2002). Extended working hours also affect patient safety (Aiken et al., 2002). Rogers and colleagues (2004) concluded that the risks of making errors were significantly increased when work shifts were longer than 12 hours, when nurses worked overtime, or when nurses worked more than 40 hours per week.

In 1999, California became the first state in the United States to require mandatory safe licensed nurse-to-patient ratios in all units of acute care facilities (Shindul-Rosthschild et al., 2003) at a time when no evidence for a specific minimum nurse-to-patient ratio in acute care hospitals existed (Lang et al., 2004). Lower

nurse-to-patient ratios are associated with lower failure-to-rescue rates, lower inpatient mortality, and shorter lengths of stay (Aiken et al., 2002; Lang et al., 2004). Furthermore, nurse staffing or individual nurse workload has a definite and measurable impact on patient outcomes, such as nosocomial infections, lengths of stay, medical errors, nurse retention, and patient mortality. The hours of patient care made possible by staffing practices have been shown to be a significant predictor in the rate of patient falls, the development of pressure ulcers, respiratory and urinary tract infections, and patient and family satisfaction (Yang, 2003).

Many nursing organizations have developed position statements to address nurse-to-patient ratios. The Academy of Medical Surgical Nurses published its position paper "Staffing Standards for Patient Care," which highlights the fact that the needs of the patient population must be clearly understood and addressed to determine a nurse-to-patient ratio that ensures quality patient care. The Academy of Medical-Surgical Nurses opposes the establishment of predetermined or fixed patient-to-nurse ratios; rather, a methodical process must be used to assess patient needs and to determine an appropriate delivery system (Academy of Medical-Surgical Nurses, 2008b). The American Organization of Nurse Executives also does not support mandated staffing ratios, because "staffing is a complex issue composed of multiple variables, mandated staffing ratios, which imply a 'one size fits all' approach, cannot guarantee that the healthcare environment is safe or that the quality level will be sufficient to prevent adverse patient outcomes" (2003, ¶4).

From a positive perspective, the nursing profession is heralding quality nursing care and describing essential elements to support that care. The Nursing Organization Alliance recently identified the essential elements of a healthful work environment for nurses (Grindel, 2005):

1. A collaborative practice culture;
2. A communication-rich culture;
3. Adequate numbers of qualified nurses;
4. The recognition of the value of nursing's contributions;
5. Expert, credible, and visible nursing leadership;
6. A culture of accountability;
7. Professional development opportunities; and
8. Shared decision making at all levels within the agency.

These elements are broad in nature to allow for interpretation within the context of each health care agency. Research is needed to establish whether these elements

do indeed foster a healthful work environment across a variety of agencies. In the meantime, they can guide administrators and adult health nurses in assessing the "healthiness" of their workplace environment.

The bright star in heralding excellence in nursing care is the Magnet movement. The American Nurses Credentialing Center, which is a subsidiary of the American Nurses Association, recognizes health care delivery institutions that have the structure and processes that support the best in nursing care. Many health care institutions have achieved Magnet status; many more are in the process of implementing strategies to meet the criteria for this recognition. Other agencies will never apply for Magnet status, because they lack resources to meet the criteria. However, there are legitimate questions to be pondered regarding the Magnet movement. Will patient care in non-Magnet institutions be compromised by the attraction of nurses to Magnet agencies? What criteria can non-Magnet institutions meet to demonstrate that the quality of nursing care in their agency is good even though they lack Magnet recognition?

Although strides have been made to create work environments that are conducive to quality nursing care, much remains to be done. A decade has passed since hospital restructuring to increase productivity and decrease cost changed the delivery of services. The initiatives of the early 1990s had a negative impact on patient outcomes, patient safety, and nursing practice. To turn these negative outcomes around is taking time, but time is of the essence when patient care is compromised.

Lack of Leadership

During the past decade, restructuring and reengineering initiatives have been undertaken to decrease costs and increase productivity, yet the results of these initiatives have not always had positive results. In some instances, patient care quality declined as full-time employment for nurses and nursing hours decreased (McCloskey & Diers, 2005). Nursing leadership was reduced at many levels, including among nurse managers, who were given the oversight of multiple patient care units and staff that included nurses, housekeepers, dietary aides, and so on (Aiken, Clarke, & Sloane, 2001; Sovie & Jawad, 2001). As a result of these restructuring initiatives, nurses perceived a decline in the power and authority of chief nurse officers (Aiken, Clarke, & Sloane, 2000) and lost trust in hospital administration (Decker, Wheeler, Johnson, & Parsons, 2001; Ingersoll et al., 2001). Cummings (2006) reported that the physical and emotional health of nurses was negatively

affected by hospital restructuring. However, nurses who worked for resilient nurse leaders reported positive health and well-being and identified opportunities to provide quality patient care, whereas those who did not reported greater negative effects of hospital restructuring. Duffield, Kearin, Johnston, and Leonard (2007) concluded that the loss of key management positions may affect an organization's ability to ensure safe and adequate patient care. During the past few years, there has been some moderation with regard to the scope of restructuring in most health care organizations. However, continued change is inevitable as hospitals continue to manage costs and ensure quality. An important link for their success is nursing leadership. A lack of strong nursing leaders fosters an environment in which the focus is on managing daily activities rather than on creating an efficient, effective environment that emphasizes patient safety, quality care, and positive patient outcomes. Adult health nurses who work in fragmented health care delivery systems feel powerless to initiate effective change; thus, the voice of the nurse in patient care is diminished (Page, 2004).

No one really doubts the valuable contributions of adult health nurses to the well-being of patients. Strides are being made in health care systems to enhance patient care by improving the work environment of nurses, but the reality is that these improvements are not happening as quickly as they should. One can speculate that several factors enter into the slow progression of change and systems improvement. The scarcity of creative leaders who can envision a new direction and who have the skills to direct change restricts progress. Organizational structures that place nursing in positions that do not allow for input into the direction of the institution smother even the best nursing leaders. Resources may not be available to initiate creative health care delivery systems that improve patient outcomes and satisfaction. Overcoming these barriers is not an easy task nor is it an area that adult health nurses feel that they can or should tackle. Thus, these nurses continue to work in inadequate patient care environments until burnout or job dissatisfaction leads them to leave nursing or to choose other nursing employment.

ROLE TURMOIL IN NURSING

New and Emerging Roles in Nursing

For decades, nursing has struggled with the diversity of entry-into-nursing education programs. In 1964, the American Nurses Association declared that the

baccalaureate degree should be the entry level of education for nurses. However, this goal has never been reached. The demand for nurses in the workforce is keeping enrollments high in all three entry-level nursing education tracks: diploma, associate's degree, and baccalaureate degree. The dilemma lies in the fact that research is providing evidence that educational preparation can make a difference in patient outcomes. Aiken and colleagues (2003) found that, in hospitals with higher proportions of nurses educated at the baccalaureate level or higher, surgical patients experienced lower mortality and failure-to-rescue rates. As noted previously, the NACNEP recommends that partnerships be made to connect associate's degree and diploma programs with programs that grant bachelor's degrees to transition associate's degree and diploma graduates to baccalaureate programs for the completion of the Bachelor's of Science in Nursing.

On the graduate education scene, two relatively new degree programs have been introduced by the American Association of Colleges of Nursing (AACN): the Doctorate in Nursing Practice (DNP) and the clinical nurse leader (CNL). The AACN (2007) introduced the CNL as a role that would address the leadership need in nursing. The CNL is prepared at the master's degree level and is expected to be a leader in the health care delivery system in all settings in which health care is delivered. The CNL provides and manages care at the point of care; recipients of this care delivery include individuals, clinical populations, and communities. The CNL role is not designed to be a management role; rather, its focus is leadership in the care of the sick in all environments (AACN, 2007). In its last update on September 5, 2008, the AACN (2008a) reported that 67 schools of nursing offer the CNL master's degree; 27 of these schools indicated that their programs are provided online or partially online (AACN, 2008a). The initiation of the CNL role sparked controversy from several domains. After a systematic analysis that compared the competencies of the CNL with those of the clinical nurse specialist (CNS), the National Association of Clinical Nurse Specialists (NACNS, 2005) voiced concerns about the CNL role, noting that the proposed competencies of the CNL duplicated the competencies of the CNS. The NACNS notes that individuals who are being prepared as CNSs do not clearly articulate the differences between the role of the CNL and that of the CNS. The NACNS cautions employers of CNLs and CNSs to clearly distinguish between the two roles. Although the competencies may be similar, the CNL is not classified as an advanced practice nurse and currently is not eligible to sit for

CNS certification. Leadership at the clinical level is certainly needed in health care at this time, and CNLs may fill this gap. Time will tell as outcomes are reported regarding the impact of the CNL in the management of care across settings.

The DNP is the terminal practice-focused doctorate in nursing; this is in contrast with the PhD, which is an academic, research-focused doctorate. The AACN's position statement is that the DNP graduate is prepared for the highest level of nursing practice beyond the initial preparation in the discipline (AACN, 2004). The DNP education focuses on seven essential areas, one of which is advanced practice nursing (AACN, 2006). Essentially, the DNP was designed to transform the current advanced practice nursing roles: CNS, nurse practitioner, certified nurse-midwife, and certified registered nurse anesthetist. Much controversy existed as the DNP role was introduced to the nursing community, and questions arose that demanded answers. What effect does the DNP role have on existing advanced practice roles? Will clinical agencies hire DNPs? What added value do they bring to the clinical arena? Will the number of PhD-prepared nurses decline? If so, what impact will that have on the expansion of nursing science? Will DNP nurses be eligible for tenure in academic institutions? What effect will the DNP role have on certification processes? Many of these questions have not been fully answered. However, the AACN did clarify that DNP programs that were preparing advanced practice nurses must provide educational programs that prepared the graduate to sit for national specialty advanced practice nursing certification (AACN, 2006). It is too early in the evolution of the DNP role to accurately describe the employment patterns of DNP graduates. However, many are choosing academic settings, whereas others are exploring opportunities in clinical arenas. Over the next 10 years, many DNP graduates will move into the workplace. The AACN (2008b) has posted a list of 78 schools of nursing that have developed DNP programs, and this number is growing. The nursing profession must monitor the effect of these DNP graduates on patient care, nursing leadership, and the faculty shortage.

Finally, the roles of the CNS and the nurse practitioner are experiencing some alterations in the workplace. The need for the CNS in acute care settings is clearly recognized and valued in acute care agencies, and the role of the nurse practitioner is accepted by the public and greatly used in primary care settings. Currently, the employment patterns for nurse practitioners and CNSs are changing. Today, the CNS may be employed in a

primary care site, whereas the nurse practitioner may work in acute care. If this trend continues, nursing education programs will be challenged to develop curricula that support the needed knowledge and skills for these blended roles.

Lack of Clinical Leadership

The Institute of Medicine reported that clinical nursing leadership has been reduced at multiple levels (Page, 2004). Leadership models are needed that will assist staff nurses and nurse managers with successfully balancing "high tech" and "high touch" in today's technological age of health care delivery (Bathrick et al., 2002). New skill sets and behaviors, including innovation and leadership, are required of nurses who are entering practice. There is a new definition of what it means to care for patients: the paradigm of caring has shifted from a "do everything" mentality to that of transferring the skills of self-care to patients and their support systems. Nurses must accept the mandate for patient teaching and skill-set transfer in their practice and focus on getting patients out of the hospital and on their own as quickly as possible (Porter-O'Grady, 2003).

With nursing practice now being defined by service portability, the profession needs leaders within the clinical setting who are able to shift the culture and entrenched view of nurses who practice with a residency-based mode of service delivery. There are those who remain focused on tasks and who are disheartened by not being able to get all of the previously expected work done as a result of today's health care delivery models that involve shorter lengths of stay and greater acuities (Porter-O'Grady, 2003). Direct patient care cannot be the only facet of patient care that is valued by the staff nurse; an infrastructure that supports the new self-care paradigm of the practice of nursing (i.e., system improvement activities such as evidence-based practice and the implementation of policy and standards of care) must be developed and strengthened to ensure excellence in nursing care. Crow (2006) proposes that organizational structures that involve a partnership between administrators and point-of-service staff would serve as strong foundations for evidence-based practice. In addition, staff autonomy has been identified as a component for enhancing the infrastructure of the practice of nursing. Staff nurses have reported being more autonomous with regard to making decisions about patient care as compared with decisions related to the operation of the unit (Mrayyan, 2004). A strong relationship between nurse managers'

actions and nurse decision making related to patient care and unit operation was noted. It was concluded that nurse autonomy could be increased by more effective support from nurse managers (Mrayyan, 2004). Similarly, Gifford and colleagues (2007) concluded that managers have an integral role in nurses' use of research.

Some nursing leaders are discussing the fact that nursing is in need of staff nurses who are willing to take leadership roles on the unit (C. G. Grindel, personal communications, Summer, 2004). Staff nurses are not always willing to lead self-governance activities, to direct evidence-based practice initiatives, or even to serve as charge nurses. This lack of unit-based leadership is of great concern, because quality care and positive patient outcomes do not happen without leadership within the nursing staff. This phenomenon deserves exploration. Is it a lack of preparation to assume leadership roles, or is it a characteristic of the current generation of nurses to avoid such opportunities? A better understanding of this lack of leadership at the staff level is essential to develop strategies that foster leadership within the workplace.

A culture of clinical leadership is needed. Medical-surgical nurses own the quality of patient care that is delivered in their workplace. Part of the responsibility of ownership is improving the way things are: improvement in the delivery of care. Medical-surgical nurses cannot stand by and let problems in the workplace go unresolved. As professional nurses, medical-surgical nurses must take the lead for the improvement of patient care on their units. A philosophy that supports clinical leadership on the unit should be fostered. Nurses should be encouraged to improve processes within the workplace. They should refresh their knowledge regarding problem solving, change implementation, and conflict resolution so that they can improve the world in which they work while improving patient outcomes. Imagine the world of adult health care if all medical-surgical nurses acted like they owned the quality of patient care that they delivered!

IMPLICATIONS FOR ADULT HEALTH NURSES

Ensuring quality health care for the American public is the responsibility of consumers, health care providers, legislators, health care systems, and insurers. Medical-surgical nurses are faced with many challenges as they strive to do their part to ensure quality health care as demonstrated by positive patient outcomes; however, these nurses do make a difference in patient outcomes

and in the workplace. Expert nurses caring for adult populations must do the following:

- ◆ Be on the cutting edge of practice through continuous professional development and the implementation of evidence-based practice;
- ◆ Maintain a focus on the skills, abilities, and contributions of nurses to the well-being of the public;
- ◆ Assume clinical leadership roles within the workplace;
- ◆ Test patient care delivery models to enhance patient safety and efficiency and to promote better patient outcomes;
- ◆ Test strategies to improve the environment of the workplace;
- ◆ Market an image of nursing that highlights the challenges and excitement of the career, with a focus on minorities and on children in elementary school;
- ◆ Implement health-promotion strategies for healthier American citizens, particularly older adults;
- ◆ Participate in research regarding the effect of quality nursing care on patient outcomes; and
- ◆ Be politically active to ensure the passing of legislation that supports health promotion and health maintenance for the American public.

Nursing education can contribute to the advancement of medical-surgical nursing practice by doing the following:

- ◆ Exploring employment trends for adult health nurses to adjust nursing education programs as needed;
- ◆ Collecting data regarding the effectiveness of the CNL and DNP roles as they relate to the delivery of care;
- ◆ Strengthening the development of leadership skills in nursing education programs at all levels;
- ◆ Educating nursing students to provide care within the new self-care paradigm of the delivery of patient care (i.e., transferring the skills of self-care to patients and their support systems); and
- ◆ Focusing on research from the perspective of evidence-based practice, outcomes measurement, and program evaluation.

SUMMARY

To best serve patients, patients' families, and the community, medical-surgical nurses must be active participants in change in the workplace. Their knowledge and skills must incorporate the latest developments in health care practices and technologies. These nurses

must have a voice in the implementation of patient care by taking clinical leadership roles in the workplace. The specialty organizations for adult health care must support their constituents by presenting them with the latest developments in medical-surgical patient care and by keeping them abreast of the evolution of new practice models, the latest research on adult patient outcomes, and that legislation that affects health care. Finally, medical-surgical nurses must believe that they own the quality of patient care that they provide in the workplace. Ownership implies caring, quality, and the enhancement of that which is owned. Medical-surgical nurses who own the quality of their practice will provide the best in quality for those for whom they care.

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Alternative and Complementary Therapies: Recent Changes and Current Issues

CHARLOTTE ELIOPOULOS

Be it the woman using ginger to control morning sickness, a senior citizen group that wants to reduce the risk of falls by establishing a daily tai chi routine, or the surgical patient who asks for therapeutic touch to be performed postoperatively to speed the elimination of anesthesia, clients in virtually all practice settings are challenging nurses with the use of complementary and alternative medicine (CAM).

In the United States, 36% of adults are using some form of CAM; when megavitamin therapy and prayer specifically for health reasons are included, that number rises to 62% (National Center for Complementary and Alternative Medicine, 2008). Consumers are demonstrating their support for new CAM modalities not only philosophically but also financially, spending as much for these therapies as they do for all out-of-pocket physician expenditures; the amount spent on CAM now exceeds \$27 billion (Rosenbaum, 2007). The consumer-driven growth of CAM poses interesting possibilities for nurses if they are ready to meet the challenge. A proactive approach is essential to promoting quality with regard to the use of new modalities and to ensure a strong role for nursing in the integration of CAM into conventional practice settings.

THE GROWTH OF COMPLEMENTARY AND ALTERNATIVE MEDICINE

By definition, CAM consists of practices that are outside of the dominant system for managing health and disease and that have not been taught in American medical schools or practiced in U.S. hospitals (Barnes, Powell-Griner, McFann, & Nahin, 2004). Although nearly 90% of the world population uses what Americans consider CAM as their primary source of medical care and have been doing so for centuries before America was discovered, CAM is relatively new to the United States (Box 18-1). It was just in 1992 that

the National Institutes of Health established the Office of Alternative Medicine for the purpose of evaluating the growing use of CAM. The Office of Alternative Medicine became a freestanding center within the National Institutes of Health in 1998, and it was renamed the National Center for Complementary and Alternative Medicine. The center has categorized CAM into five major categories of practice (Box 18-2):

1. Alternative medical systems
2. Mind-body interventions
3. Biologically based therapies
4. Manipulative and body-based methods
5. Energy therapies

Many factors are responsible for the increasing use of CAM, not the least of which is consumers' dissatisfaction with the experience of using conventional medicine. During the same period in which conventional care has become characterized by skyrocketing costs, abbreviated hospital stays, and 5-minute impersonal office visits, CAM practitioners have created practices in which the consumer is treated with a holistic, non-rushed approach in an appealing environment (i.e., pleasant scents, sights, and sounds versus the cold sterility of the usual conventional practice setting).

In addition to being a "feel-good" experience, CAM has proved to be effective for the treatment of many conditions without the side effects or risks of medications and other conventional treatments. Popular CAM treatments include the following:

- ◆ Green tea to protect against rheumatoid arthritis (Kim et al., 2008);
- ◆ Acupuncture to reduce dyspnea in people with chronic obstructive pulmonary disease (Suzuki et al., 2008);
- ◆ Chiropractic care for low back pain (Lawrence et al., 2008); and
- ◆ Ginkgo biloba for the improvement of cognition (Birks & Grimley, 2009).

BOX 18-1 Facts About the Use of Complementary and Alternative Medicine in the United States

Nearly 40% of Americans use alternative therapies. The highest use is among the following groups:

- Women
- Older adults (a direct correlation was found between the use of mind-body therapies and age)
- Well-educated individuals
- Persons who have been hospitalized within the previous year
- Former smokers
- African-American adults, when megavitamin therapy and prayer were included in the definition of complementary and alternative medicine

Individuals use these therapies for the following reasons:

- They believed that, in combination with conventional care, complementary and alternative medicine would help their condition (54.9%).
- They had curiosity or interest in these therapies (50.1%).
- They thought that conventional medicine alone would not help them (28%).
- They received a recommendation from a conventional practitioner (26%).
- They saw these therapies as less expensive options to conventional care (13%).

The most common problems that complementary and alternative medical therapies were used to treat were the following:

- Back pain or problems
- Neck pain or problems
- Joint pain or stiffness
- Anxiety
- Depression

Data from Barnes, P., Powell-Griner, E., McFann, K., & Nahin, R. (2004). Complementary and alternative medicine use among adults: United States, 2002. *Advance Data from Vital and Health Statistics*, 343. Gaithersburg, MD: National Center for Complementary and Alternative Medicine.

The Web site of the National Center for Complementary and Alternative Medicine (www.nccam.nih.gov) offers reports about research that the Center has supported to investigate CAM treatments for various conditions; this Web site is regularly being updated.

Today's increasingly well-informed, health-conscious consumers desire interventions that can promote wellness and stimulate the healing capabilities of their own bodies rather than merely treat symptoms. They

BOX 18-2 Categories of Complementary and Alternative Therapies

1. Alternative medical systems

Alternative medical systems are built on complete systems of theory and practice. Often these systems have evolved apart from and earlier than the conventional medical approach used in the United States. Examples of alternative medical systems that have developed in Western cultures include homeopathic medicine and naturopathic medicine; examples that have developed in non-Western cultures include traditional Chinese medicine and Ayurveda.

2. Mind-body interventions

Mind-body medicine involves the use of a variety of techniques that are designed to enhance the capacity of the mind to affect bodily functions and symptoms. Some techniques that were considered complementary and alternative medicine (CAM) in the past have become mainstream, such as patient support groups and cognitive-behavioral therapy. Other mind-body techniques are still considered CAM, including meditation, prayer, mental healing, and therapies that involve creative outlets such as art, music, or dance.

3. Biologically based therapies

Biologically based therapies in CAM involve the use substances found in nature, such as herbs, foods, and vitamins. Some examples include dietary supplements, herbal products, and other natural but as yet scientifically unproven therapies (e.g., using shark cartilage to treat cancer).

4. Manipulative and body-based methods

Manipulative and body-based methods are based on the manipulation or movement of one or more parts of the body. Some examples include chiropractic or osteopathic manipulation and massage.

5. Energy therapies

Energy therapies involve the use of energy fields. There are of two types:

- **Biofield therapies** are intended to affect the energy fields that purportedly surround and penetrate the human body. The existence of such fields has not yet been scientifically proven. Some forms of energy therapy involve the manipulation of biofields by applying pressure or manipulating the body by placing the hands in or through these fields. Examples include therapeutic touch, Reiki, and Qigong.
- **Bioelectromagnetic-based therapies** involve the unconventional use of electromagnetic fields, such as pulsed fields, magnetic fields, or alternating or direct current fields.

From the National Center for Complementary and Alternative Medicine (2008). *The use of complementary and alternative medicine in the United States*. Retrieved September 28, 2008, from http://nccam.nih.gov/news/camsurvey_fs1.htm.

appreciate having an active role in their health care and being empowered to affect their own health status.

The baby boomers have played a role in the popularity of CAM. This generation, like no other, has demonstrated an interest in diet, exercise, and other health-promoting measures, and it is unwilling to accept disease and disability as expected outcomes of aging. These individuals desire that which is natural, they appreciate the mind-body connection, and they have a heightened sensitivity to their spiritual dimensions. Unlike previous generations, which showed a blind obedience to the medical establishment, baby boomers have challenged authority and redefined the professional-client relationship. Natural, holistic therapies that empower and that actively engage individuals in activities to promote health and well-being are well received by this group.

NURSING AND COMPLEMENTARY AND ALTERNATIVE MEDICINE

Nurses have historically been identified as healers; this was the foundation on which the profession was built. As the profession grew, there was a legitimate need for nursing to become more science based, and it did so rather successfully. However, nurses now must question whether the pendulum has swung too far in the direction of science and technology. In many settings, nurses can recite a patient's laboratory results, yet they know nothing of that patient's unique life story; they can provide a treatment to the patient, yet their minds and hearts are elsewhere; they may sense that the patient could benefit from their presence, yet they retreat to the desk to satisfy documentation requirements.

CAM offers an exciting arena for nurses to reclaim their role as healers. The basic principles that are woven through CAM are consistent with nursing's views of health and healing (Eliopoulos, 1999):

The body has the ability to heal itself. Florence Nightingale promoted this principle when she wrote that medicine and surgery can remove obstructions, but nature alone cures (Nightingale, 1859). Nursing has long assisted individuals with getting their bodies and minds into the optimal states for healing to occur. Health and healing are related to a harmony of mind, body, and spirit. Long before CAM was recognized in the United States or the term *holistic* was commonly used, nursing attended to the needs of the whole person. Whole-person

care is the thread that is woven through the nursing process.

Basic good health practices build the foundation for healing.

In most practice settings, nurses are the primary professionals responsible for assessing and planning for all aspects—physical, emotional, socioeconomic, spiritual—of the individual. Nurses educate, counsel, and coach individuals with regard to diet, exercise, safe medication use, lifestyle modifications, and other practices that promote good health.

Healing practices are individualized. Learning about the uniqueness of each patient through comprehensive assessment and planning and implementing care that is tailored to fit the patient are basic nursing standards of practice that foster individualized care.

Clients are responsible for their own healing. The promotion of self-care and maximum independence are highly valued foundations of nursing practice.

As can be seen, the principles embraced by CAM are consistent with those long advanced by nursing. These basic principles of healing that guide CAM offer nursing an opportunity to highlight nurses' historical and special role as healers in this new arena.

CAM offers nurses the potential for innovative practice models. Increasing numbers of nurses are obtaining training in aromatherapy, herbal medicine, homeopathy, acupuncture, acupressure, therapeutic touch, guided imagery, massage therapy, and other modalities. Advanced preparation or certification in a specific modality enables nurses to offer a wider range of services to clients in traditional care settings, as evidenced when a nurse in a primary care setting helps an individual correct incontinence with the use of biofeedback or when a nurse in an intensive care unit assists a patient with controlling pain with the use of therapeutic touch and guided imagery. These new skills also enable nurses to establish private practices in which clients contract directly with nurses for specific therapies (e.g., therapeutic touch, stress-reduction classes), wellness counseling, coaching for effective living with a chronic condition, or guidance with regard to the integration of CAM and conventional therapies.

CHALLENGES

Exciting new opportunities within the realm of CAM can be accompanied by new problems for nurses to address. Although many of the interventions used within CAM are healing modalities that nurses are

competent to practice independently, the risk exists that physicians will seek a gatekeeper role that requires that CAM therapies be ordered and managed through them. The medical model is the paradigm in which physicians have been socialized, so it is understandable that they would gravitate toward a physician-led and physician-controlled approach to CAM. Furthermore, it is understandable that the health care system would support a physician-led model for the reimbursement of CAM services (i.e., CAM therapies would require a physician's order to qualify for reimbursement). The implications could be that a qualified nurse in a conventional practice setting would be restricted from performing therapeutic touch, recommending an herbal alternative, performing acupuncture, or obtaining reimbursement for these activities without a physician's order. Because most CAM therapies are not medical procedures, the wisdom of a physician-directed paradigm is questionable.

Rather than a physician-directed paradigm, nurses could be working in settings that are directed by non-physician CAM practitioners. For example, a healing center that offers the services of an acupuncturist, a homeopath, and a hypnotherapist may employ a nurse. Confusion may arise with regard to delegation, direction, and supervision of the nurse. Strong role models of nursing will be needed to work in collaboration with CAM practitioners without allowing those practitioners to determine nursing practice or to delegate inappropriately to nurses.

Licensure issues could develop for nurses who practice CAM. The area of massage therapy exemplifies the potential complications that could arise. How much of a massage can a nurse perform as part of caregiving before it becomes a therapeutic massage that requires licensure as a massage therapist? Would a nurse who is a licensed massage therapist and who works exclusively performing massage therapy meet state practice requirements to maintain a nursing license? These questions are already surfacing in various states, and they are likely to be compounded as nurses increasingly practice CAM modalities.

Nurses may need to assume leadership to help consumers to use CAM safely. As mentioned previously, most consumers are using CAM without the knowledge of their conventional practitioners. Many consumers are influenced to make decisions regarding their use of CAM by advertising claims and testimonials. They may see a television commercial that describes an herbal preparation that can "melt pounds away," or they may

have a neighbor who is a distributor for a magnet company advise them about the benefits of magnets for pain control. Consumers could be tempted to self-diagnosis and to seek CAM remedies without the benefit of a comprehensive evaluation, thereby delaying the diagnosis and treatment of medical conditions; they could also use CAM therapies that could prove to be harmful to them, as may happen with herb-drug interactions. A strong advocacy role for nurses will be essential to protecting consumers in this new arena.

SUMMARY

Nurses need to play an important role in developing the new paradigm that emerges as CAM therapies become more accepted and as they are used as part of the conventional health care system. Although CAM is widely used in holistic practices, it is not the same thing as holistic care. Substituting a CAM modality for medical technology without identifying the interrelationships and the factors that affect the bio-psycho-social-spiritual dimensions of the person is not holistic care. Rather, such care is a continuation of a fragmented system of health care delivery with the use of a different set of treatment modalities. Nursing must be a strong voice for the promotion of a holistic model that integrates the best from both CAM and conventional medicine.

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Ambulatory Care Nursing: Challenges for the Twenty-First Century

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The ambulatory care setting offers numerous opportunities for nurses to practice in a variety of roles. Between 1980 and 2004, registered nurses employed in ambulatory care settings increased by 168.7% from 103,362 to 277,774. In 2004, 11.5% of registered nurses in the United States were estimated to be employed in ambulatory care settings as compared with 9.5% in 2000. Increases in the numbers of nurses employed in ambulatory care settings are related to the movement of specialized procedures and surgeries into such settings, early hospital discharge, and the management of chronic illnesses by nurses in ambulatory care. Approximately half of the nurses working in ambulatory care settings are in staff nurse roles, whereas about 20% are in advanced practice roles such as nurse-midwife, nurse practitioner, certified nurse anesthetist, or clinical nurse specialist (Health Resources and Service Administration, 2006).

After hospital nurses, ambulatory care nurses are the youngest of nurses. The expanded life expectancy of the U.S. population coupled with increases in the incidence of chronic illnesses has led care to be moved out of hospitals, with an expanded demand for ambulatory care nurses. Forecasts for future full-time equivalent nurse demand between the years 2000 and 2020 indicate an anticipated increase of 70% in the need for nurses in outpatient settings; this is second only to the growing demand for home health care nurses.

Statistics at the national level demonstrated that nearly 4.9 million health care workers were employed in ambulatory care in 2004 (<http://www.stat-usa.gov>). Exact figures are difficult to obtain for nursing in these roles because of the tremendous growth in primary care settings. Thus, given the size, growth, and importance of this field in nursing, defining the practice would appear straightforward. However, this is not the case. In fact, one of the most difficult challenges facing ambulatory nursing is defining the role of the ambulatory

nurse and demonstrating the value of the care provided by ambulatory care nurses. This chapter focuses on the definitional aspects of the ambulatory care nursing role, and it identifies and discusses the issues that face nurses who are practicing in this field.

DEFINING AMBULATORY CARE NURSING

Verran (1981) is credited with an early interest in the delineation and definition of ambulatory care nursing. In her seminal study, she used a Delphi methodology and ambulatory care nurses' expert opinions to delineate seven "responsibility areas" of the ambulatory care nurse role. Other researchers have continued this effort (Haas & Hackbarth, 1995a; Hackbarth, Haas, Kavanagh, & Vlasses, 1995; Hastings & Muir-Nash, 1989; Hooks, Dewitz-Arnold, & Westbrook, 1980; Joseph, 1990; Parrinello & Witzel, 1990; Pinkney-Atkinson & Robertson, 1993).

The American Academy of Ambulatory Care Nursing's *Administration and Practice Standards* originally stated that ambulatory care nursing is operationally defined as "nursing practice in an ambulatory care setting. Nursing care provided to patients with institutional episodes of care of less than 24 hours" (1993, p. 19). Unfortunately, although this definition delineates nursing practice by the environment in which the nurse practices and the amount of time that the nurse spends with the patient, it is not useful for capturing essential characteristics and role elements.

The need to depict ambulatory nursing as it is practiced today for nurses, other health care providers, policy makers, and the public led the American Nurses Association and the American Academy of Ambulatory Care Nursing (AAACN, 1997) to establish a joint task force to write a monograph about ambulatory care nursing: *Nursing Ambulatory Care: The Future is Here*. As

part of this charge, the task force developed a conceptual definition of ambulatory care nursing. In the absence of a rich and recent literature from which to cull the universal characteristics of ambulatory care nursing, members of the task force were asked to assemble focus groups in their ambulatory care organizations. Each focus group responded to the question, "What are the universal characteristics of ambulatory care nursing?" Commonly occurring themes in the reports that were reviewed assisted the task force with the evolution of a conceptual definition of ambulatory care nursing.

Using the American Nurses Association (1995) *Social Policy Statement* as a foundation, the task force developed the following definition:

Professional ambulatory care nursing includes those clinical, management, educational, and research activities provided by registered nurses for and with individuals who seek care for health-related problems or concerns or seek assistance with health maintenance and/or health promotion. These individuals engage predominantly in self-care and self-managed health activities or receive care from family and significant others outside an institutional setting.

Ambulatory care nursing services are episodic, less than 24 hours in duration, and occur as a single encounter or a series of encounters over days, weeks, months, or years. Ambulatory nurse-patient encounters take place in health care facilities as well as in community-based settings, including schools, workplaces or homes.

They occur as personal visits or as encounters using the telephone and other communication devices. Ambulatory care nursing services focus on cost-effective ways to maximize wellness; prevent illness, disability, and disease; minimize symptoms of acute minor ailments; and support patients in the management of chronic disease to effect more positive health states throughout the life span up to and including a peaceful death (American Nurses Association & American Academy of Ambulatory Care Nursing, 1997, pp. 13-14).

The AAACN is "the association of professional nurses and associates who identify ambulatory care practice as essential to the continuum of high quality, cost-effective health care" (AAACN, 2010). The mission of the AAACN is to advance the art and science of ambulatory nursing. The AAACN was established in 1978 by a group of nursing directors and supervisors in ambulatory care who recognized the need for well-prepared nurse administrators in the expanding arena of ambulatory care. The AAACN was originally called the American Academy of Ambulatory Nursing Adminis-

tration; the name was changed in 1993 to reflect the commitment of the organization to the development of all nurses working in ambulatory care. As part of this commitment, the AAACN publishes and updates standards for ambulatory care nursing.

The seventh edition of the *Ambulatory Care Nursing Administration and Practice Standards* (AAACN, 2007) reflects ten standards. These ten standards "reflect current professional norms, practices, and expectations, and recognize the constantly evolving landscape of our professional practice systems" (p. 5). The standards are designed to be used with specialty practice nursing organization standards such as those promulgated by the American Nurses Association. The standards address issues such as the structure and organization of ambulatory care nursing; staffing; competency of nursing staff; nursing practice; continuity of care; ethics and patient rights; environment; research; and performance improvement. Each standard includes a rationale for the standard and distinct measurement criteria by which to address and clarify the contribution of nursing. The AAACN standards are presented as recommendations, and they are intended to be adapted to fit many diverse ambulatory care settings. Because ambulatory care practice is always expanding and changing, the AAACN is committed to revising, updating, and promulgating its standards. Examples of diversity in practice roles are beginning to appear in the literature in response to challenges presented by managed care and by an aging, chronically ill population. Schroeder, Trehearne, and Ward (2000a) define and justify an expanded role for the nurse clinician in managed care, and they delineate the impact of this role on costs, quality, and the provider as well as on patient satisfaction (2000b).

CURRENT ISSUES IN AMBULATORY CARE NURSING

In addition to the need for definitional clarity of the ambulatory nursing role, there are also several issues related to ambulatory care nursing. The Ambulatory Care Nursing Conceptual Framework (Figure 19-1) is used to organize these current issues. Several ambulatory care nursing "mega" issues (Futch & Phillips, 2003) fall under each of the ambulatory nursing roles.

The following issues are under the clinical nursing role:

1. Patient preferences and privacy
2. Health literacy

Ambulatory Care Nursing Conceptual Framework

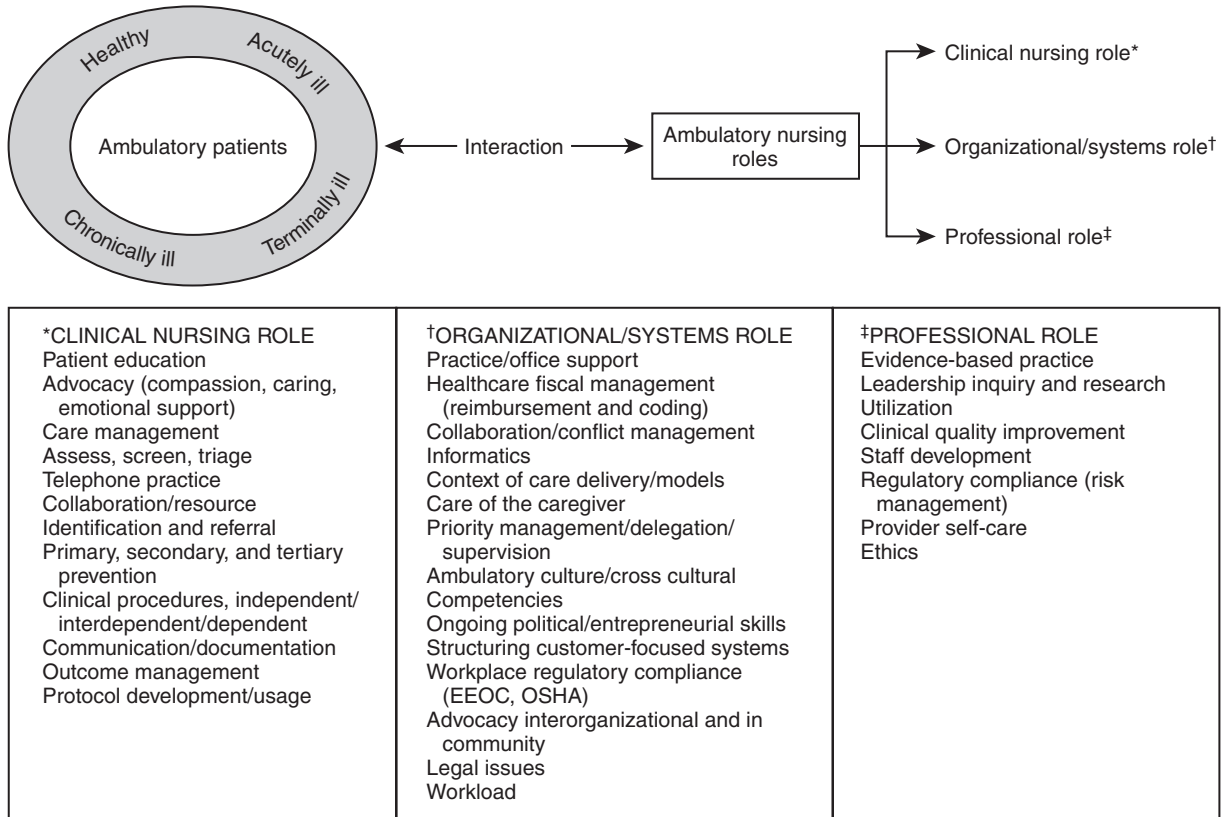


FIGURE 19-1 Ambulatory nursing roles. (From American Academy of Ambulatory Care Nursing. (2007). *Ambulatory Care Nursing Administration and Practice Standards*, 7th edition. Pitman, NJ: AACN. Reprinted with permission of the publisher, American Academy of Ambulatory Care Nursing, East Holly Avenue, Box 56 Pitman, NJ, 08071-0056; Phone 800-AMB-NURS; Fax 856-589-7463.)

3. Disease management
4. Syndromic surveillance
5. Documentation challenges in nursing practice that lead to a limited understanding of ambulatory nursing practice
6. Telehealth practice

The following issues are under the organizational/systems role:

1. Diversity of practice in ambulatory care settings, including the use of varied conceptual models of health and evolving issues that involve the costs of ambulatory care for the individual patient
2. The need to incorporate technology, compliance programs, and evidence-based practice protocols into the delivery of care

3. Time management and the rapid pace of ambulatory patient encounters

4. The increased need for delegation to and the supervision of unlicensed assistive personnel

The following issues are under the professional role:

1. The nursing shortage and the limited number of nurses with baccalaureate or advanced academic preparation practicing in ambulatory care
2. The need for continuing development and the demonstration of competencies
3. The need for a multistate compact for professional nurses and for attention to be paid to other legislative regulation issues that have an impact on ambulatory nursing practice

Patient preferences and privacy issues fall under the clinical nursing role. E-mail is commonplace in most

environments, but health care professionals have been slow adopters, often out of concerns for patient privacy. Rodriguez (2007) presents an evidence-based methodology used by the nursing department to develop and implement guidelines for the safe and effective practice of e-mail communication between patients and nurses. In a climate of concern for patient safety and the public recognition that the quality and efficacy of all medical care is not equal, patients are assuming increased roles in managing or comanaging their own health care. Many states (e.g., Illinois) have passed legislation to support consumers with regard to their evaluation of health care options. The governor of Illinois recently signed a consumers right-to-know bill into law that requires health care organizations to make price and performance information for outpatient procedures available to consumers (New law gives Illinoisans, 2005). In 2003, 294,355 ambulatory surgeries were performed. Seventy-five percent of Illinois registered voters said the posting of charges and performance information would affect their decisions, thus creating competition and potentially lowering prices and improving quality. The Illinois Department of Public Health posts mean charges for 30 outpatient ambulatory surgery procedures.

Most of the literature that focuses on patient safety is hospital based and concerned with medication errors, yet little work has been completed regarding errors outside of the hospital setting. Wakefield (2000) urges nurses in outpatient settings to evaluate their practice for sources of error and to participate in initiatives designed to improve patient safety.

In 2002, the National Quality Forum published a report, *Serious Reportable Events in Healthcare*, that defined 27 “never events”: “adverse events that are serious, largely preventable, and of concern to both the public and healthcare providers” (National Quality Forum, 2008, ¶1). As of October 1, 2008, Medicare stopped reimbursing hospitals for care provided as a result of these never events (i.e., hospital-acquired conditions). Medicare’s initial list of hospital-acquired conditions included the following: falls; mediastinitis (an infection that can occur after heart surgery); urinary tract infection as a result of the improper use of catheters; pressure ulcers; vascular infections that result from the improper use of catheters; objects left in the body after surgery; air emboli; and blood incompatibility that result in patient death or serious disability (Centers for Medicare & Medicaid Services, 2008). Several states require the mandatory reporting of never events. Surgery, dialysis, chemotherapy, and invasive screening procedures are performed in ambulatory settings;

therefore, ambulatory care nurses need to proactively establish evidence-based protocols for many of these hospital-acquired conditions (e.g., falls, pressure ulcers, infections) to enhance safety for ambulatory care patients and to decrease the incidence of never events. The cornerstones of the prevention of infection never events are hand washing (Stiefvater, Vigil, Jones, & Yocke, 2006) and the implementation of evidence-based practices (Haas, 2008; Titler, 2008).

Disease Management

Along with the increasing life expectancy of the population is an increase in the number of individuals who suffer from medically complex chronic diseases and disorders that result from genetic predispositions and unhealthy lifestyle choices. Consequently, an ever-increasing part of the role of the nurse in ambulatory care is to guide patients as they make choices about their health care options and lifestyles. This requires skill with regard to assessing patients’ information needs and the ability to elicit preferences and convey factual information in a manner that is useful to patients’ decision-making process. Slater, Phillips, and Woodard (2008) present an interdisciplinary team approach to disease management for patients with chronic heart failure. This telephone program is cost-effective, and it has decreased admissions, lengths of stay, and emergency department visits. Health literacy—the degree to which individuals have the capacity to obtain, process, and understand basic health information and to navigate the health care system (U.S. Department of Health and Human Services, 2000)—must also be assessed and addressed by ambulatory care nurses. Poor health literacy can increase health disparities when patients do not access disease prevention services or when they lack comprehension of medical information about their disease conditions and the services available (Atwood, 2008; Pawlak, 2005; Sklenar, 2008).

Although case management has been used for many years to focus on public health issues, more recently the concept of population-based management has been used to convey approaches that focus on populations identified by disease, payer, geographic location, or other demographic characteristic. Nurses in ambulatory care settings are increasingly involved in identifying inclusion criteria, interventions to be provided, and outcomes to be measured and tracked for these various populations. Boville and colleagues (2007) discuss the implementation of the chronic care model by nurse practitioners in ambulatory care for the management of chronic disease. Francavilla (2008) discusses a

registered-nurse-managed anticoagulation clinic for the improvement of patient outcomes.

Syndromic Surveillance

The term *syndromic surveillance* applies to surveillance with the use health-related data (typically symptom clusters) that precede a given diagnosis and signal a sufficient probability of a number of cases or a potential population outbreak that would warrant further response. Although historically syndromic surveillance has been used to target the investigation of potential cases, public health officials are increasingly exploring the usefulness of syndromic surveillance methods to detect outbreaks associated with bioterrorism. This has implications for ambulatory nursing practice, because ambulatory care nurses are often in settings in which patients would show early symptoms. They are in a position to evaluate syndromic surveillance systems for the early detection of outbreaks and to provide guidance to communities with regard to defining their needs and priorities for these systems, particularly in response to the threat of terrorism.

Documentation Challenges in Practice

The nature of ambulatory practice—with its relatively rapid pace for patient encounters, high patient volume, and scheduled time constraints—often does not permit for the comprehensive documentation of nursing care. The use of the nursing elements of the Nursing Minimum Data Set (Werley & Lang, 1988) in ambulatory practice remains limited. Unfortunately, with no paper or electronic documentation trail, justifying the value of nursing is problematic, and the care provided by nurses in these settings becomes invisible. Documentation concerns identified more than a decade ago still exist today (Androwich & Phillips, 1992). These concerns include the limited use of standardized nursing terminology and elements of the Nursing Minimum Data Set in practice settings, documentation systems designed primarily for physicians, no classification scheme for interventions or outcomes, and the limited use of the problem list. Unfortunately, when nursing interventions are documented, the assessment data that led to the individual nursing judgment are often omitted; thus, the link to patient outcomes remains unknown. In addition, no generally accepted methods of measuring productivity, nursing intensity, or patient condition severity exist in the ambulatory setting nor have nurses defined the concept of an episode of care in a manner that could link visits within an episode of care to determine the effectiveness of specific interventions for achieving certain outcomes.

Documentation needs to be captured in an automated patient record to link encounters in a meaningful, retrievable manner. This inability to link visits into meaningful units is an issue when goals are set over a period of time. Many of the nursing interventions that are identified for a pregnant woman occur over the duration of the pregnancy and into the postpartum period. When the single visits are documented but not linked to related visits, there is an inability to demonstrate an effective outcome that can be linked back to the nursing care received.

Today, as electronic documentation is increasingly available in an ambulatory care setting, nurses will need to be at the table when decisions are made about the purchase and programming of an electronic documentation system. They need to determine the best method conceptually to examine and capture an entire episode of care and to ensure that the knowledge and expertise brought by the nurse is captured in the electronic record. As evidence-based practice (EBP) protocols are developed and implemented by ambulatory care nurses, key process and outcome indicators need to be specified within each protocol and coded in standardized terminology so that the effectiveness of processes and outcomes can be tracked and reported. Such EBP protocols should contribute to patient safety and the prevention of errors; the aggregation of this data will provide an understanding of ambulatory nursing work, aid in knowledge development and decision making, and depict the value of ambulatory care nurses. Ambulatory nurses need to be involved in the selection of EBP content for use in the electronic health record. It is important that this content be integrated into the record in a manner that supports the workflow processes. EBP content needs to be current, robust (developed through a rigorous, reproducible method), and available at the point of care.

Telehealth Nursing Practice

The telephone communication dimension (Haas & Hackbarth, 1995a; Hackbarth et al., 1995) of the ambulatory care nurse role is an aspect that is unique to ambulatory nursing practice, and it is a major patient satisfier. However, ambulatory care nurses have concerns about this role dimension. Some of these concerns are related to the amount of education that they receive regarding telephone communication, particularly telephone triage and telephone advice, both of which have a high liability risk potential. The assessment of the client over the telephone requires a high level of assessment skills, including the ability to

identify nuances in each situation; well-developed communication and decision-making skills; and proficiency in documentation. Nurses in ambulatory settings need to collaborate with physicians and other members of the health care team to establish protocols that include health promotion, disease prevention, and the treatment of symptoms. Finally, nurses need to be educated with regard to documenting all telephone communication appropriately. The AACN has developed and promulgated the *Telephone Nursing Practice Administration and Practice Standards* (1997). In 2007, the AACN offered a fourth edition of these standards, *Telehealth Nursing Practice Administration and Practice Standards*, as well as the Telehealth Nursing Practice Core Course, which includes a manual that focuses on essential competencies to prepare ambulatory care nurses to perform telephone nursing practice (TNP) (AACN, 2003). National certification in TNP is available through the National Certification Corporation. Haas and Androwich (1999) used the Nursing Intervention Classification to enhance understanding of the breadth and depth of nursing practice via communication devices. They proposed four telephone interventions to reflect the complexity of TNP: telephone consultation; telephone follow-up; surveillance: telephone; and triage: telephone. These telephone interventions can be used to educate nurses with regard to telephone practice and to evaluate the performance of telephone practice nurses; they can also be used to provide formats for paper and electronic documentation.

There is little research that addresses patient safety in telehealth. The safety issues associated with telehealth are complex and include not only issues with malfunctioning equipment but also concerns regarding potential adverse effects on patient management decisions through delayed or missing information, misunderstood advice, or inaccurate findings resulting from patient or caregiver error (Demiris, 2004). Themes for future telehealth research include cost-effectiveness, standard outcomes, and standard methodologies to support telenursing (Schlachta-Fairchild, Elfrink, & Deickman, 2008).

TNP has faced many challenges related to difficulties with securing reimbursement for this practice. In managed-care organizations, TNP prevents unnecessary patient visits to the primary care office or the emergency department and thus conserves resources for the managed-care plan. In predominantly fee-for-service or preferred provider organizations, there are incentives to encourage patient visits, especially to the primary care practice. Therefore, in this environment, there is no way

to pay for TNP or to carve out specific practice time for TNP. The primary care environment is also the kind of environment in which nurses may end up doing TNP on the run without the education necessary to do so and also without TNP protocols in place. In a follow-up survey of pediatric clinic callers (approximately 85% were managed-care clients), Greenberg (2000) found that respondents were satisfied with their interactions with the nurses; 80% reported that, without the telephone interaction, they would have sought medical care elsewhere. In this study, TNP was performed by “specially trained and experienced registered nurses using approved, written clinic-specific protocols” (Greenberg, 2000, p. 117). This study also documented cost savings for the pediatric clinic.

The term *demand management* is given to a method of care delivery and a marketing initiative that was once used predominantly by managed-care organizations but that is now common in many types of ambulatory care organizations. Kastens defines demand management as “the provision of health information to consumers, creating an educated and empowered member who accesses and participates in medical decisions to assure that the right kind of care is provided at the right time” (1998, p. 321). Kastens maintains that demand management is essential for managing the well population and for acute or chronically ill patients. Demand management centers include nurse triage and advice and physician referral. Many demand management centers use established protocols for nurse triage and advice.

ORGANIZATIONAL/SYSTEMS ROLE

Diversity in Practice

A marked diversity exists with regard to the types of settings in which ambulatory care is delivered. Among the major private sector ambulatory care settings are university hospital outpatient departments, community hospital outpatient departments, physician group practices, health maintenance organizations (HMOs), physician offices, and nurse-managed centers. Ambulatory care settings that are publicly funded include community health clinics; the Indian Health Service; and community and migrant worker health centers. Within each of these distinct settings, the philosophy of care and the model of care delivery may have a different model of health as a foundation. Smith (1981) defines four such models of health: the clinical model, the role-performance model, the adaptive model, and the eudaimonistic model, any of which could be operative in a given setting.

Not surprisingly, the clinical or medical model is frequently the driving force in physician group practices and even in university hospital ambulatory care and community hospital ambulatory care. However, somewhat surprisingly, the clinical model predominates in many HMOs (Haas, Hackbarth, Kavanagh, & Vlasses, 1995). HMOs, by definition, should be more focused on health promotion and disease prevention.

Diversity in types of settings, models of health, and the consequent models of care delivery is an issue for nursing when nurses who work in a setting find that they have difficulties working under the prevailing model and philosophy. Furthermore, they may have difficulty identifying this lack of congruence in values as the root of the problem. Nurses will say, "I want to have time to do health promotion with my clients, yet I have so much paperwork and clerical work that I just can't get to it"; "I want to work with the vast array of patient and family problems, but all I have time for is their physical ailments"; or, "I want to work as a colleague with the physicians and really get into health promotion." Operative in each of these situations is a clinical model of health driving the practice model; consequently, the scheduling of patient visits and the provider's time are dictated by this view of health.

Solutions to this issue involve educating nurses about the many and various types of ambulatory care settings; educating nurses and physicians about multiple models of health with their practice implications; and enhancing the care provider's ability to determine operative models of health in different settings. The optimal outcome would be health care professionals who will choose a practice setting for employment where there is a good fit between their professional goals and the mission, philosophy, model of health, and care delivery model of the organization. If there is not a good fit, at least the professional enters the organization with an understanding and awareness of the model currently operating and, if needed, the wherewithal to initiate change.

As more acquisitions and mergers occur, health care networks will encompass multiple health care organizations and agencies. Conceivably, networks will include several different types of ambulatory care agencies. For example, an academic health center may have in its network one or more HMOs, a university hospital outpatient center, a community hospital outpatient center, and two or more physician group practices. Ambulatory patients will move between these settings. Patients may receive primary care in an HMO, a physician group practice, or a community hospital outpatient center and then be referred to the university hospital outpatient center for consultation with specialists. Referrals may be

made from the university hospital outpatient center back to the original primary care referral source. Ambulatory care nurses working in each of these agencies will need excellent negotiation skills, and, furthermore, they will need to be experts at assessing the cultures of each of the agencies with which they interact. A seamless system of care demands that the culture and requisite practices of each agency not impede a patient's progress. At this point in time, nurses are but neophytes with regard to understanding organization culture. The survival of evolving health care networks will depend on the management and blending of multiple organizational cultures with and among settings.

Incorporating Technology and Evidence-Based Practice

Nurses are surrounded with an overwhelming increase in technological capabilities: Web-based information retrieval and storage, telehealth delivery modes for patient education, and clinical decision support systems that automate care processes. Teich and Wrinn (2000) describe systems in which results reviews, electronic record keeping, referral processing, secure messaging, prescription order entry, testing and decision support in the form of alerts are possible, all with the use of a Web-based portal. The development and use of these systems will likely affect the role elements of nurses in ambulatory care settings. With many of the coordination-of-care activities that would normally belong to the registered nurse becoming automated, how will the ambulatory care registered nurse of the twenty-first century reshape the role? Kerfoot (2000) identifies a technical intelligence quotient as a survival skill for the new millennium. She defines this technical intelligence quotient as not merely being aware of how a specific technology works but rather as understanding the relationships among the technology, the users, and the affected systems and how they interact to produce outcomes.

This leads to a discussion of EBP. Many ambulatory care settings are a part of a health care system that has attained Magnet recognition or is on the Magnet journey. Achieving Magnet status has accelerated the development of EBP in both nursing and ambulatory care settings. According to Titler, EBP can be defined as follows:

Conscientious and judicious use of current best evidence in conjunction with clinical expertise and patient values to guide health care decisions. Best evidence includes empirical evidence from randomized controlled trials; use of information from case reports, scientific principles and expert opinion (2008, p. 126).

The goal of EBP is to provide state-of-the-science care for patients and families. The national focus on safety and error prevention has also accelerated the development of EBP in nursing. The availability on the Web of established EBP guidelines and synthesized reviews that yield recommendations for EBP guidelines has made the development of EBP protocols less time consuming (Haas, 2008). Incentives for embracing EBP include the need to prevent errors and enhance patient safety, cost avoidance (now that Medicare will no longer reimburse for never events), and enhanced risk management.

Time Management and the Rapid Pace of Care in Ambulatory Care Settings

The high volume of patients with which the nurse must interact affords a limited time for each patient. The nurse must make rapid assessments, plan nursing care, and execute that plan in quick order. This leads to a continuing tension between the available time for an encounter and the ideal time needed for a complete nursing assessment. The nurse has difficulty being the patient's advocate if there is no time to spend understanding what the patient's needs, values, and preferences are. Added to this is the demand that nurses in ambulatory care be constantly multitasking. Nurses may perform higher-level care and at the same time find that they cannot spend as much time on teaching, referrals, and care coordination when they also have to do the work of nursing assistants in some clinics.

Continuity of care, which the extent to which the same provider is seen during a sequence of encounters, has been given attention, with the number of physician providers seen as a determinant of the quality of primary care (Spooner, 1994). If nursing care can affect patient outcomes in ambulatory practice, then it is necessary to develop models of care delivery to ensure similar continuity. Dickey recommends visit planning in ambulatory care: "The primary purpose of visit planning is to improve recognition, and ultimately treatment of patients' major health needs regardless of when or how the patient presents" (1998, p. 89). Steps in visit planning include the following:

1. Twenty-four to 48 hours before seeing a patient, an experienced ambulatory care nurse previews the chart, updates the problem list, and makes a preliminary visit plan.
2. During the visit, the nurse obtains a clear, concise understanding of the reasons for the visit and develops a final visit plan on the basis of the patient's needs.

3. Throughout the process, the nurse manages the patient flow and serves as a patient advocate.
4. Exit visit planning occurs at the conclusion of the provider's portion of the visit.

During the exit interview, the nurse has the opportunity to go over the visit with the patient, to assess learning needs, and to correct any misapprehensions that the patient may have with respect to future therapeutic plans, medications, and educational needs. Hartley (2002) recommends the use of the patient-administered Primary Care Assessment Survey (Safran et al., 1998) while patients are waiting to be seen. The results of this survey can be used to improve ambulatory care outcomes such as accessibility, continuity and comprehensiveness of care, integration of care, patient-provider interaction, and patient trust of provider. Oermann, Masserang, Maxey, and Lange (2002) performed a quasi-experimental design research intervention study in which they provided education about patients' health problem via videotape while patients were waiting to be seen. Patients who received the taped education were significantly more satisfied with the education received during their visit. Findings such as these have the potential to leverage nurses' time as educators and coordinators of patient care in ambulatory settings.

Frequently, nurses in ambulatory care are used to leverage the physician's practice, and little value is placed on the dimensions of the nursing role or the nursing interventions themselves. A number of differentiated nursing practice models can be used to address this (Hermann, 1993; Schroeder et al., 2000a). In the model described by Hermann, nursing practice is diversified to incorporate registered nurses with different educational preparation and practice experience. The three levels of nursing are the staff registered nurse, who usually has an associate's degree or a diploma prepared, who typically supervises unlicensed personnel, who provides basic triage patient education, and who administers medications; the registered nurse II, who has a Bachelor of Science in Nursing (BSN) and who functions with a broader yet still limited scope; and the clinical nurse specialist or nurse practitioner.

Delegation and Supervision

Nonlicensed assistive workers have traditionally been used in ambulatory care settings. As in inpatient settings, there is a push in ambulatory care to maximize the use of assistive personnel. A movement even exists to remove all professional nurses from some ambulatory care organizations on the basis of the misinformed assumption that nursing care in ambulatory settings is

strictly technical care that can be provided by technicians at a lower cost. This movement is further reinforced by the fact that there are limited ways to calculate nursing intensity in ambulatory care and to predict the level of nursing staff needed (Haas & Hastings, 1998).

Patient care delivery roles are available for assistive personnel and professional nurses in ambulatory care. Assistive personnel should be performing lower-level nursing activities that do not require discretionary judgment or critical thinking. Nurses who work in ambulatory care want to delegate many activities that fall under the dimensions of enabling operations and technical procedures (Haas & Hackbarth, 1995a). The delegation of these dimensions would allow the professional nurse time for higher-level activities in dimensions such as teaching, care coordination, and community outreach. Nurses who work in ambulatory care also need time to delegate and supervise assistive personnel. Currently, no empirical data give direction with regard to the optimal number of assistive personnel that one nurse can supervise in the ambulatory setting. Many nurses working today grew up under primary nursing in hospitals; they have little experience with the delegation and supervision of assistive workers, and many mistakenly believe that assistive workers are working toward their licenses. Consequently, these nurses are reluctant to delegate to assistive personnel for fear of what may happen not only to patients but also to their licenses and their livelihoods.

As more assistive workers are incorporated into delivery models in ambulatory care organizations, nurses will need to be educated with regard to delegation and supervision, and evaluation studies will be necessary to identify optimal staffing ratios, including optimal spans of control. Haas and Gold (1997) recommend effective supervision strategies:

1. Know your assistive workers, their role expectations, and their levels of competency. (In ambulatory care, there is marked confusion and blurring of scopes of practice between licensed practical nurses, nurse's aides, and medical assistants.)
2. Allocate time for supervision, rounding, and evaluating care delivery.
3. Develop open communication channels.
4. Adhere to patient care and work performance standards.
5. Give timely feedback (both positive and negative), and make time for sharing improvement strategies.

A need also exists for nursing intensity indexes and systems in ambulatory care so that client demands for

nursing care can be tracked and appropriate staffing planned and budgeted (Haas & Hackbarth, 1995b; Hastings, 1987; Verran, 1986). Cusack, Jones-Wells, and Chisholm (2004) provide an excellent review of current thinking with regard to condition severity/intensity tools, and they outline the process used in one oncology setting to develop an ambulatory intensity system. Jones, Cusack, and Chisholm (2004) delineate the implementation of an ambulatory intensity system in an ambulatory oncology center, and Cusack, Jones, and Chisholm (2004) find that the process of applying the ambulatory intensity system tool daily supports the making of conscious decisions regarding delegation to non-nursing personnel. In ambulatory care, Griffin and Swan (2006) use a case exemplar to demonstrate the effect of registered nurse staffing by comparing workload indicators with nurse-sensitive performance indicators. Caveats to consider regarding assistive workers are that assistive workers are more costly than professional nurses when there is insufficient work to occupy their time for an entire shift. When assistive workers are in a delivery model, a significant portion of professional nursing time will be consumed with delegation and supervision; thus, when the bulk of the care needs are higher level, hiring a nurse who can do all care and who does not require supervision may be more cost-effective. For example, there will be more activities that can be assigned to assistive workers in high-volume clinics (e.g., general surgery, ophthalmology) and perhaps less work for them in a setting such as an oncology clinic, where chemotherapy is being given and where the emotional support, care planning, and education needs are many.

PROFESSIONAL ROLE

The nursing shortage and the level of educational preparation of ambulatory care nurses pose significant challenges. Buerhaus and colleagues (2008) predict that there will be a half million vacant nursing positions by 2025. In addition, a significant nursing faculty shortage exists, so nurse educators cannot prepare all of the individuals who aspire to be nurses today. This will adversely affect ambulatory care, where nurses are typically recruited from acute care after years of experience. If one waits to recruit, there may be few or no nurses available in years to come. In addition, significant numbers of nurses who are currently working in ambulatory care have many years of nursing and ambulatory care experience; however, many also have less than baccalaureate preparation as their highest level of nursing

education (Health Resources and Service Administration, 2006). With the expansion of ambulatory nursing roles comes increasing expectations that ambulatory care nurses coordinate care within the health care network and the community. However, nurses without baccalaureate preparation have not had formal coursework or clinical experiences with community health nursing. Adding to this problem is the fact that significant numbers of currently practicing ambulatory care nurses do not belong to any professional nursing organizations (Haas & Hackbarth, 1995a). Therefore, continuing education through programs, newsletters, and collegial information sharing is less available to ambulatory care nurses who are not members of professional organizations. Short-term solutions have included the push to have ambulatory care nurses get certified by the American Nurses Credentialing Center. Preparation for certification has been an initiative of the AACN, and, when ambulatory care settings are on a Magnet recognition journey, this too provides incentives for nurses to seek American Nurses Credentialing Center certification. Although during a shortage there are fewer acute care nurses electing to move to ambulatory care, more attention is being paid to successfully transitioning acute care nurses into ambulatory care settings. Swan (2007) provides information about key skills, competencies, and strategies for successful transitions. However, to provide for the future, current ambulatory care nurses must work with educators in baccalaureate nursing programs to develop hands-on student clinical experiences in ambulatory care and to develop ambulatory care nurses as preceptors for baccalaureate students (Haas, 2009).

The issues of basic nursing preparation and continuing education and development for nurses practicing ambulatory care present challenges. However, without ongoing education, it is becoming increasingly difficult for the non-master's prepared nurse to compete with holders of Master's of Business Administration degrees for management positions in the ambulatory setting. Creative mechanisms are required to provide incentives for nurses to enhance their formal educational preparation and to keep current with regional and national practice issues and trends. Clinical ladders and professional nursing advancement programs offer mechanisms that provide incentives and rewards for nurses who seek educational opportunities to enhance their practice. Distance learning through videoconferencing, teleconferences, and online computer course work offer opportunities for formal for-credit coursework and continuing education. Learning through distance

education formats provides accessibility and flexibility for nurses no matter the size or location of their practice environment. The challenge is to get sufficient credible distance learning programming prepared in a timely fashion. As the complexity of patient needs increases in ambulatory care, the need for developing and measuring nursing competencies increases. The use of simulation in ambulatory settings is increasing, especially as the opportunities to enhance communication through simulation is recognized. The need for more BSN nurses to work in ambulatory care organizations has been identified, yet there is currently no way to provide for the employment of new BSN graduates in ambulatory care.

Ambulatory care organizations may be more willing to hire new nurse graduates if those nurses were educated about nursing practice in ambulatory care. For example, BSN students should have parallel ambulatory care clinical experiences. Students should spend as much time caring for pediatric, obstetric, mental health, and elderly clients in ambulatory settings as they do in hospital settings. As patients with increasingly complex problems are cared for in ambulatory care settings, nurses must be concerned about patient outcomes. It has been demonstrated that the presence of BSN-prepared nurses in acute care enhances patient outcomes (Aiken et al., 2003).

Need for the Intrastate Nurse Licensure Compact

As TNP became more and more prevalent, it became obvious that there were potential violations of state Nurse Practice Acts by nurses who were consulting, providing surveillance, triaging, or following up with patients who resided across state lines if the nurse was not licensed to practice nursing in the state in which the patient was living.

The current licensure system does not address issues such as the following, which have come about as a result of health care restructuring, technological advances, and increasing consumerism (Hutcherson & Williamson, 1999):

1. Increases in multistate and national health care systems
2. Movement toward community-based care
3. Increases in managed care, the use of telephone triage, and telephone consultation
4. Increases in the automated monitoring of patients and telehealth modalities in the delivery of care
5. Growing expectations of consumers to be included in health care decision making

Legal authority for practice is a concern for any professional nurse who provides care for clients in a state in which the nurse is not currently licensed; this is an issue for nurses who work in integrated delivery systems, nurses who work in tertiary referral health care systems, telephone practice nurses, flight nurses, and nursing faculty. Current state licensure laws do not address adequately whether states have the authority to regulate the practice of a nurse who is physically located in another state. The nurse licensure compact allows a nurse to have one license (in the state of residency) and to practice in other states that have enacted the compact as long as the individual acknowledges that he or she is subject to the practice laws and discipline of each state. Under the compact, practice across state lines would be allowed (either physical or electronic) unless the nurse is under discipline or involved in a monitoring agreement that restricts practice across state lines. To achieve mutual recognition, each state would have to enter into an interstate compact that allows nurses to practice in more than one state (National Council of State Boards of Nursing, 2005). "An interstate compact is an agreement between two or more states established for the purpose of remedying a particular problem of multi-state concern" (Garner, 2004). An interstate compact supersedes state laws and may be amended by all party states agreeing and then changing individual state laws (National Council of State Boards of Nursing, 2005).

The National Council of State Boards of Nursing believes that the mutual recognition model of nurse licensure enacted through the interstate compact is the preferred regulatory model because it does the following:

1. It maintains the state-based regulatory system;
2. It can be implemented incrementally on a state-by-state basis;
3. It can be implemented without uniform requirements for licensure in each state;
4. It meets the demands of integrated delivery systems;
5. It meets the challenges of technological advances in telehealth; and
6. It meets the need of the public for access to nursing care.

The benefits of the interstate compact include the following:

1. It enhances nurses' mobility;
2. It maintains a state-based system of licensure and discipline;
3. It does not change practice laws in each state and allows each state Nurse Practice Act to maintain

the authority to regulate nursing practice in the individual state;

4. It deals only with licensure issues; and
5. It expands consumer access to qualified nurses.

As of 2008, 23 states had adopted the interstate compact, and legislation is pending in other states. With the nursing shortage, many states are considering the compact to make it easier for nurses to move quickly into other states. The interstate compact requires that nurses obtain only one license in the state of residency; that nurses agree to abide by the state Nurse Practice Act in their home states and in the states in which their clients reside at the time that care is provided; and that, if an incident occurs, the home state and the remote state can take disciplinary action and be able to exchange investigative information. Advantages of the one-license concept include reduced barriers to interstate practice for nurses; cost-effectiveness and simplicity for the licensee; unduplicated listing of licensed nurses (i.e., national data about the nursing population would be accurate); improved tracking for disciplinary purposes; and increased interstate commerce.

Many nursing and health care organizations support the nurse licensure compact (www.ncsbn.org). However, some organizations have concerns about mutual recognition and the interstate compact. The issues include a lack of uniform requirements for licensure in each state; confidentiality and information sharing problems, particularly with regard to discipline issues (however, less than 1% of all licensed registered and practical nurses experience final disciplinary actions in a given year [National Council of State Boards of Nursing, 2005]); the potential that the compact could facilitate strike breaking; access to laws, rules, and other practice-related information; licensure linked to the state of residence; and the need for a separate compact and time line for advanced practice nurses. (So much variability exists among states with regard to the scope of practice of advanced practice nurses that a separate compact is being devised for their practice.)

Challenges involving the interstate compact begin with informing all nurses about the need for and benefits of the time line for the enactment of the interstate compact. Current information is available on the National Council of State Boards of Nursing Web site (<http://www.ncsbn.org>). The American Organization of Nurse Executives (<http://www.aone.org>) also has information about multistate licensure, as does the American Academy of Ambulatory Care Nurses (<http://www.inurse.com>).

SUMMARY

Although concerns and challenges abound in the rapidly evolving world of ambulatory care nursing, they also provide multiple opportunities for nursing. Experienced ambulatory care nurses consistently say that they would work in no other field of nursing. The opportunities to provide primary health care and to build long-term relationships with patients, families, and health care colleagues are but a few of the rewards of working in ambulatory care nursing.

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Gerontological Nursing: Recent Changes and Current Issues

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As will be shown in this chapter, this century's aging explosion has brought both good and bad news in terms of gerontological nursing, and it has created more demands, challenges, and opportunities. Currently, individuals 65 years old and older compose approximately 12.4% of the U.S. population, so there are about 36 million Americans in this age group. By 2030, this number will double to about 20% of the population or 72 million older adults (He, Sengupta, Velkoff, & DeBarros, 2005), with the oldest old (individuals 85 years old and older) comprising the fastest-growing cohort of the elderly population. America is also becoming a more diverse nation, and older adults reflect this increasing diversity; they bring new challenges to provide culturally competent care for ethnic elders and aged immigrants, who may speak limited English and who may not understand or may be fearful of the current health care system. The so-called "silver tsunami" is recognized as an important public health crisis for Americans and as a major global health issue.

On the positive side, recent research has dramatically increased current knowledge of the aging process and improved the ability to recognize "normal" aging; this will help health care personnel to better detect and treat common conditions such as pain and the behavioral symptoms associated with dementia. In addition, the availability of provider-friendly evidence-based practice protocols to guide gerontological nursing practice has also increased significantly during recent years. However, despite enhanced federal and private foundation investment in gerontological nursing, too few adequately prepared professional nurses are still available to address the growing health care needs of older adults in the United States and internationally.

To address this challenge, in 2007, the Institute of Medicine (IOM) undertook a consensus study designed

to characterize the optimal health care workforce for older Americans. Published in 2008 as *Retooling for an Aging America*, the report addressed questions about the projected health status and health care services needed by older Americans, the best use of the health care workforce, how the health care workforce should be educated, and how public programs like Medicare and Medicaid can be improved. Findings from this report have tremendous implications for gerontological nursing and are cited throughout this chapter.

Costs related to caring for older adults are as staggering as the care implications that have resulted from demographic projections. Those individuals 65 years old and older account for well over one third of the country's personal health care expenditures, and that number is expected to grow (DeFrances & Hall, 2005). Indeed, by 2030, the nation's health care spending is projected to increase by 25% as a result of demographic shifts (IOM, 2008). These costs are associated not only with vast increases in the numbers of older adults and the high costs of their medications but with the complexity of their mental and physical health needs, including multiple chronic diseases (e.g., arthritis, heart disease, diabetes) and acute exacerbations that occur over time. In the United States, more than 125 million people are living with chronic illnesses (Adams & Corrigan, 2003), and these individuals account for about 75% of total health care spending (Hoffman, Rice, & Sung, 1996). Medicare beneficiaries with four or more chronic conditions reportedly account for 80% of Medicare spending; this was \$402 billion in 2006 alone (Paulsen et al., 2007).

Older adults also consume the highest percentage of health care services. As noted, adults who are more than 65 years old currently represent 12.4% of the population, yet they account for 26% of all physician office visits, 35% of all hospital stays, 34% of prescriptions,

38% of all emergency medical services responses, 70% of home health services, 90% of nursing home use, and 80% of all deaths. By the year 2020, a staggering 2.4 million impaired older persons are projected to be using community services (IOM, 2008).

A consideration of the costs and needs for services for older adults today and in the future in large part shapes the content of this chapter as well as the challenges faced by gerontological nursing. Specifically, this chapter moves from general health system issues that affect geriatric care to those that are more specific to gerontological nursing. Recent changes and issues related to the following will be highlighted: the current health care system, interdisciplinary team care, the lack of faculty prepared in geriatrics, the need for more geriatric content in undergraduate curricula, the expanding role of gerontological nurses, the need for knowledge about older adults among nongeriatric nurses, advanced practice preparation in gerontological nursing, the need for more gerontological nursing research, blended versus separate roles for geriatric clinical specialists and nurse practitioners, and the newly developed advanced practice registered nurse regulatory model. The content is presented in a format whereby each issue is set forth and followed by recent changes that are intended to address that issue.

ISSUE: A FRAGMENTED, UNCOORDINATED HEALTH CARE DELIVERY SYSTEM, ESPECIALLY FOR OLDER ADULTS WITH CHRONIC ILLNESSES

As described previously, older adults use a high percentage of health care services across the continuum of care, from community-based home care and social services to residential care and assisted living to subacute care and long-term care. The current health care system is focused primarily on acute care, and it is unprepared to provide care for older adults with chronic care needs. This is particularly unfortunate, because 82% of Medicare beneficiaries have at least one chronic condition, and 66% have several chronic conditions (Wolff, Starfield, & Anderson, 2002).

To address this issue, gerontological nurses must play an active role in the transformation of the current fragmented health care system. Maas (2004) called for new paradigms of care that are holistic, with an array of strategies that meet the needs of older adults and that include higher staff-to-resident ratios, health promotion, the prevention of illness and disability, the

management of chronic illness, assistance with functional independence, and the prevention of avoidable medical errors. Nowhere is this more true than in the long-term care system, where shortcomings are becoming a more visible, serious, and costly problem. Despite strong evidence of the positive influence of geriatric nurse practitioners (GNPs) on resident outcomes and cost-effectiveness, they are still underused in long-term care systems; however, they are playing an increasingly larger role in models such as Evercare, which is described later in this chapter (Rantz et al., 2001). Other issues of relevance to gerontological nursing in long-term care (e.g., the forthcoming 3.0 version of the Minimum Data Set, quality initiatives, culture change) are presented in Chapter 44 of this book.

Recent Changes

In response to the challenges created by the current health care system, new nursing models for the delivery of care to older adults in acute, long-term care, assisted living, and home and community settings have emerged (Mezey, Boltz, Esterson, & Mitty, 2005), such as managed long-term care programs (e.g., Visiting Nurse Service CHOICE), nurse-managed clinics, mobile health units, and telenursing (Ebersole & Touhy, 2006). The concept of “aging in place” is long overdue and highly desired by older adults, and it allows nurses to develop new models across the continuum of care (Rantz et al., 2005). Allowing older adults to remain in their homes has implications for gerontological nurses who must educate and support family members and provide them with caregiving skills and the ability to negotiate complex care systems.

Several of the more established nurse-driven models, especially in acute care settings, continue to evolve and expand. One such hospital-based model is Nurses Improving Care to Health System Elders (NICHE), which was designed to provide more specialized services to older adults, who are the biggest consumers of hospital services. NICHE is a national nursing program developed by the Hartford Institute for Geriatric Nursing at New York University that provides hospitals with a number of organizational tools, performance improvement activities and measures, and evidence-based resources (e.g., clinical protocols, staff development programs specific to the care of older adults). The NICHE program involves the use of the Geriatric Resource Nurse model, which includes the assessment of the institution, clinical rounds, consultations, geriatric nursing interest groups, nursing staff education

about common geriatric syndromes, and the evaluation of patient outcomes and lengths of stay related to specialized geriatric nursing care (Mezey et al., 2005). It also includes a Geriatric Syndrome Management model in which advanced practice geriatric nurses assist with the assessment and management of common syndromes such as falls, delirium, and incontinence (Mezey et al., 2005). The Acute Care for the Elderly (ACE) model is another component of NICHE. The ACE model integrates geriatric assessment into the care of hospitalized older adults with the use of interdisciplinary teams. Typically, ACE units incorporate more home-like features than traditional hospital units and encourage older patients to be more actively involved in their own care. Interested readers are referred to <http://www.nicheprogram.org> for more information about these programs.

The Medical Home model of care delivery is evolving as the “centerpiece of a primary-care based approach to health care reform” (Backer, 2007, ¶1). The concept, which was first introduced in 1967, is currently gaining increasing attention and support from the medical community. It includes an ongoing relationship between a provider and a patient based on the patient’s needs and priorities, around-the-clock access to medical consultation, respect for a patient’s cultural and religious beliefs, and a comprehensive approach to care and the coordination of care through providers and community services (Association of American Medical Colleges, 2008). This patient-centered approach to care is something gerontological nurses have long championed but which physicians are apparently just rediscovering. Among the characteristics of the medical home is a team approach to care in which the physician leads a team of individuals (e.g., nurse practitioners, nutritionists) at the practice level who collectively take responsibility for ongoing care. GNP’s will be challenged to establish their roles and responsibilities within the Medical Home model in the very near future.

A number of models for nursing home care that involve the use of the skills and expertise of advanced practice nurses (APNs) have also emerged during recent years. Some, such as the Wellspring model, share the services of an APN who provides consultation and educational services among facilities. The Evercare model, which was mentioned earlier in this chapter, is operated by United Health Care; it is a for-profit variation of a Medicare+Choice health maintenance organization. United Health Care is paid a fixed capitated amount for every nursing home resident who is

covered. The underlying premise of the model is that, by providing more intensive primary care with the use of nurse practitioners, the use of more costly services (e.g., hospitalization) will be reduced. The evaluation of the model found that it can prevent the occurrence of hospitalizable events and allow cases to be managed more cost-effectively, at a savings of about \$103,000 per year in hospital costs per nurse practitioner (Kane et al., 2003). Finally, the Pioneer movement has grown in public recognition during recent years, and it has advanced the themes of patient-centered care and culture change in nursing homes (see Chapter 44).

One of the newest and most promising new initiatives is the Nursing Home Collaborative (NHC), with Cornelia Beck serving as national coordinator. The goal of this program is to improve the quality of nursing care for and quality of life of nursing home residents through organizational development and human capital development strategies. Plans include the development of a registered-nurse-led, nursing-focused, not-for-profit, sustainable business to help nursing homes achieve recognition of excellence for the care of frail older adults. A suite of products and services are currently under development in collaboration with the Magnet program at the American Association of Colleges of Nursing (AACN). An important focus of the NHC is the key leadership role of registered nurses for providing quality resident care. The development of a business plan and business case for the products and services is under way, and, over the next 5 years, the NHC will test products and services and their delivery to the nursing home industry.

ISSUE: INTERDISCIPLINARY TEAM CARE IN GERIATRICS

The advantages of interdisciplinary team care for older patients are well known. Despite this understanding, the transfer of knowledge from research and team care programs into clinical practice has lagged.

Recent Changes

Gerontological nurses are important members of interdisciplinary care teams dedicated to improving the lives of older adults, especially those with chronic illnesses. Five innovative interdisciplinary care models funded by the Hartford Foundation have emerged to address the issue of the slow transfer of knowledge about interdisciplinary team care into practice. These models, which are highlighted next, also help to confront current

problems with the current costly and inefficient health care system (John A. Hartford Foundation, 2007).

The Care Transitions model focuses on the coordination of care when patients move among health care settings. The Care Management Plus model augments the care manager role through information technology systems that facilitate care coordination. The Senior Health and Wellness Clinic model delivers ambulatory, community-based primary care by reinforcing team care among multidisciplinary providers in outpatient clinics. The Virtual Integrated Practice model allows practitioners in solo or small practices to become members of interdisciplinary teams in a range of practice settings. Finally, the Senior Resource Team model, which includes a GNP as well as a geriatrician and a pharmacist, provides interdisciplinary consultation in primary care practices. These models, in which gerontological nurses can play a vital role, promise to improve care while controlling costs. They are currently being widely disseminated and replicated.

COROLLARY ISSUES: AN INSUFFICIENT NUMBER OF NURSING FACULTY WITH GERIATRIC TRAINING AND THE NEED FOR MORE GERIATRIC CONTENT IN UNDERGRADUATE CURRICULA

Mezey (1995) advised that the failure to produce adequate numbers of faculty to teach gerontology adversely affected the care of older adults. Now, during the early twenty-first century, faculty shortages are even greater than had been anticipated. Indeed, at present, only 29% of baccalaureate programs have a faculty member who is certified in geriatrics (Institute of Medicine, 2008). This presents challenges in terms of how gerontological nurses can be educated by faculty without preparation in the field, and it highlights the issue of how the next generation of nursing faculty with gerontological nursing expertise will be developed. Because of the sheer numbers of older adults using the health care delivery system and the complexity of the clinical problems that they present, it is imperative that faculty be prepared clinically and theoretically to teach gerontological courses.

Happily, a comparison of findings related to gerontological nursing content in baccalaureate nursing programs between 1997 and 2003 revealed the incorporation of greater gerontological content in curricula and more diversity among the clinical sites used for gerontological teaching experiences (Berman et al., 2005).

However, there is still a long way to go in terms of ensuring that the nursing workforce is adequately prepared to care for an aging society.

Recent Changes

A number of significant activities and programs are underway to address faculty and curricular challenges in gerontological nursing. For example, in 2000, the AACN and the Hartford Institute of Geriatric Nursing published *Older Adults: Recommended Baccalaureate Competencies and Curricular Guidelines for Gerontological Nursing Care*, which promoted the incorporation of gerontological nursing content into baccalaureate curricula. These competencies and guidelines are currently under revision. A related recent advance is the 2008 update of the AACN's *Essentials of Baccalaureate Education for Professional Nursing*, which defines the essential elements of baccalaureate education and provides a comprehensive set of core standards for nursing programs. For the first time, geriatrics is part of this significant document.

Another new development is the Geriatric Nursing Education Consortium (GNEC), which is administered by the AACN with funding from the Hartford Foundation. The GNEC is designed to improve the care of older adults by enhancing both senior-level undergraduate curricula and faculty development. Six faculty development institutes have been held nationwide since 2007, and nine evidenced-based learning modules have been developed, along with CDs that contain teaching resources (e.g., content slides, case studies). The goal is to train up to 700 faculty nationwide. The GNEC uses a train-the-trainer approach to support baccalaureate nursing faculty as they champion geriatric education and curricular changes and train others to do so as well.

Additional faculty resource materials have recently been developed by the Hartford Institute for Geriatric Nursing and the AACN for use by faculty who wish to increase gerontology content in their curricula. These include a new series of Web-based interactive case studies, photographs depicting geriatric care, and a document entitled *Caring for an Aging America: A Guide for Nursing Faculty*. These resources can be accessed at www.aacn.nche.edu/Education/Hartford/.

Four new Centers of Geriatric Nursing Excellence were funded by the John A. Hartford Foundation in 2007 at Penn State University, University of Minnesota, Arizona State University, and University of Utah. These Centers are specifically designed to prepare more than 500 nursing faculty members with geriatric expertise,

and they will help to address the issue of the lack of geriatric-prepared faculty.

ISSUE: EXPANDING CLINICAL AND LEADERSHIP ROLES OF GERONTOLOGICAL NURSES

Gerontological nurses play an important role in assisting older adults with navigating the continuum of care across multiple settings, agencies, and providers. Their role is complex and broad, and it includes establishing centers of excellence for geriatric care, identifying best practice models for geriatric syndromes, implementing and evaluating practice guidelines, establishing methods to improve care coordination and case management, and defining interdisciplinary collaboration strategies and practice models (Fabiszewski, 2005).

Gerontological nurses are also increasingly challenged to make economically sound and resource-sensitive care decisions. As nurses assume case management and care coordination roles, they must consider cost and make tough decisions about the allocation of resources. To do so, they must be aware of what services cost and help older adults and their family members to make wise, cost-effective choices while ensuring that they receive needed services. Managed-care contracts remain a challenge for gerontological nursing in terms of providing care within a capitated budget in that gerontological nurses must often assume a gatekeeping function and make difficult decisions about the type of services older adults will receive within limits set by the Centers for Medicare & Medicaid Services. This has tremendous implications, especially for the management of chronic illnesses outside of the hospital setting and for the use of costly treatments and procedures.

As noted previously, the expanding role of gerontological nurses requires a sophisticated knowledge of geriatric syndromes, costs, and services. However, most registered nurses who work in nursing homes are prepared only at the associate's degree (AD) level. Many AD curricula do contain content that addresses gerontological nursing; however, most do not contain a specialized gerontological nursing course. Curricula also lack content and practice in nursing leadership and advanced health assessment, which leads to concerns about how nurses prepared at the AD level can be expected to assume a supervisory level position or to coordinate comprehensive assessments that are required in nursing homes and hospitals. Without

expertise in gerontological nursing and leadership skills, inadequate staffing, turnover, and failure to adopt and sustain evidence-based interventions will continue to plague long-term care settings (Fleming & Kayser-Jones, 2008).

Recent Changes

In 2007, recognizing the need for improved geriatric content in the more than 900 AD nursing programs that produce about 60% of all new nursing graduates, the Hartford Foundation granted the Community College of Philadelphia (Elaine Tagliareni, Principal Investigator) funds to conduct a national survey to identify the current status of and gaps in geriatrics in AD programs. The grant also provides support for an environmental scan to integrate geriatrics into the curricula, to convene a task force to strengthen geriatric nursing practice, and to develop white papers regarding gerontological curriculum integration, faculty expertise, and clinical experiences in AD programs.

More recently (2008 to 2011), with support from the Hartford Foundation and in collaboration with the nine funded Centers of Geriatric Nursing Excellence, Sigma Theta Tau International created a Geriatric Nursing Leadership Academy. This 18-month mentored leadership program prepares nurse leaders to direct interprofessional teams to work to improve health care quality for older adults and their families. Leadership and scholarship resources are being developed to provide nurses nationwide with geriatric competencies.

ISSUE: THE NEED FOR GERIATRIC KNOWLEDGE AMONG NONGERONTOLOGICAL NURSES

All nurses are expected to have increased expertise in the care of older adults; regardless of the setting in which they work, they will be caring for very sick individuals with complex illnesses, many of whom want to die at home or in other nonacute care settings. This means that knowledge related to normal and pathological aging, geriatric syndromes, and palliative and end-of-life care will be needed, yet only one third of baccalaureate programs require exposure to geriatrics (Institute of Medicine, 2008).

Recent Changes

Formed in 2000, the End of Life Nursing Education Consortium is a collaboration between the City of Hope and the AACN. The Consortium provides monthly

courses regarding end-of-life and palliative care for nurses and nurse educators that are held in various locations throughout the United States. Nurses acquire knowledge and are given resources to share with their colleagues.

In another successful effort to provide nongeriatric nurses with important information, the *American Journal of Nursing*, together with the Hartford Institute for Geriatric Nursing at New York University's College of Nursing, regularly publishes the "Try This: Best Practices in Nursing Care of Older Adults" series of assessment tools. They also provide a more translational-focused "How to Try This" series of articles and demonstration videos about the care of older adults for which continuing education credit is available. The goal of this effort is to provide information that is accessible, easily understood, and easily implemented by all direct-care nurses. Each "Try This" issue is a 2-page document that highlights why the topic is important for the care of older adults, and it offers an assessment tool that can be administered in 20 minutes or less. More information about these free, Web-based offerings is available at www.NursingCenter.com/AJNolderadults or www.hartfordign.org/Resources/Try_This_Series.

In addition, the AACN and the Hartford Institute have jointly developed core competencies for adult and family nurse practitioners related to gerontological content (John A. Hartford Foundation Institute for Geriatric Nursing, n.d.). The goal is that all advanced practice nurses would have increased competency with regard to caring for the elderly, with clear guidelines for the appropriate point of referral to geriatric advanced practice nurses.

The Hartford Foundation established a geropsychiatric nursing collaborative with investigators from the Hartford Centers in Iowa, Pennsylvania, and Arkansas in partnership with the American Academy of Nursing. The goals of this collaborative are to establish a core set of geropsychiatric nursing competencies for all levels of nursing education that will articulate the essential knowledge and skills required by all nurses to ensure that high-quality mental health care is provided to older adults. In addition to the competencies, curricula will be developed for basic, graduate, postgraduate, and continuing education nursing programs.

Finally, in an effort to infuse more geriatric content into the practice of nongerontological nurses, in 2002, a 5-year initiative entitled Nurse Competence in Aging was funded by Atlantic Philanthropies through a grant to the American Nurses Association. This initiative

represents a strategic alliance among the American Nurses Association, the American Nurses Credentialing Center, and the Hartford Institute for Geriatric Nursing. The project engaged 55 specialty nursing organizations to enhance geriatric education and to create competencies that target nurses who are practicing within each specialty. Results from this important project were published as a special supplement in the November/December 2007 issue of *Geriatric Nursing*. A Web-based geriatric resource center is also available at www.GeroNurseOnline.org.

ISSUE: THE NEED FOR MORE ADVANCED PRACTICE PREPARATION IN GERONTOLOGICAL NURSING

An increase in the number of individuals prepared with graduate degrees in gerontological nursing is required, because these nurses are viewed as the appropriate providers or coordinators of care services for older adults. Historically, the advanced practice gerontological nurse was a master's-prepared individual with clinical specialization in gerontological nursing. During the 1970s, only a few programs at the master's level were preparing GNPs; this education was not embraced by the nursing community until the mid to late 1980s. Now, two advanced clinical practice roles exist in which gerontological specialization are developed: the gerontological clinical nurse specialist and the GNP. However, even with the expansion of these two graduate preparation options, the number of individuals prepared with gerontological nursing specialization falls far below known needs, with less than 1% of nurses currently certified in geriatrics (Institute of Medicine, 2008).

Recent Changes

In 2001 (and with renewal in 2005), the John A. Hartford Foundation awarded the AACN a Creating Careers in Advanced Practice Nursing grant, which provided funds to schools of nursing for exemplary students with leadership potential and dedication to the care of older adults. Scholarships have been awarded to 231 APN students from 32 schools nationwide to improve the care of older adults through advanced preparation in geriatric nursing, networking, mentorship, and leadership development opportunities. Evaluation suggests that graduates are becoming expert clinicians, leaders, role models, and mentors and that the Creating Careers program has helped to both attract and retain geriatric APN students.

ISSUE: THE NEED FOR MORE GERONTOLOGICAL NURSING RESEARCH

In the July 2000 issue of the *Journal of Gerontological Nursing (JGN)* in an article entitled “Improving Care for the Frail Elderly: The Challenge for Nursing,” Neville E. Strumpf, PhD, RN, C, FAAN, wrote about peer-reviewed interdisciplinary and gerontologic nursing journals. She concluded that, “In both [the *Journal of Gerontological Nursing* and *Geriatric Nursing*] the papers are almost exclusively by nurses, but quality varies and the paucity of programs of research or concentrated scholarly activity are evident” (p. 38). In this same article, Dr. Strumpf identified the challenges that face gerontologic nursing, among them “a modest science” and a “limited availability of information”; she also offered solutions, such as the need to “expand our scholarly base and intellectual leadership” and to “disseminate findings broadly” (p. 40). In that same journal issue, others at the forefront of geriatric nursing noted that “geriatric scholarship is underrepresented in academic nursing and in nursing practice” (Mezey, Fulmer, & Fairchild, 2000, p. 29). Unfortunately, at the time, these eminent geriatric nursing leaders were right. Early research in gerontological nursing was largely atheoretical and plagued by small sample sizes and a lack of rigorous designs and analyses. However, things are changing for the better, as discussed in the following Recent Changes section.

In addition, an ongoing threat to the future of gerontological nursing is the dearth of students entering doctoral programs who have gerontological experience to guide research that is relevant and that clearly addresses the issues of older adults. With shrinking research dollars and increased competition for resources for research activity, the relevance of topics under investigation and the impact that results will have on clinical practice and patient outcomes for older adults must be clear. Nurse researchers prepared at the doctoral and postdoctoral levels and who are experienced in the care of older adults are crucial to the future of gerontological nursing.

Recent Changes

A marked change in geriatric nursing research began when the Hartford Foundation funded the American Academy of Nursing for the Building Academic Geriatric Nursing Capacity program to enhance nursing's future capabilities to address projected health care

needs of the older population by increasing the number of geriatric nursing faculty, researchers, and leaders. Each year, the program BAGNC awards highly competitive predoctoral scholarships and postdoctoral fellowships, convenes an annual leadership conference, and facilitates communication and collaboration among the nine Centers of Geriatric Nursing Excellence and other geriatric programs. As of 2008, the program had awarded 106 predoctoral scholarships, 4 Master's of Business Administration scholarships, and 70 fellowships. Graduates of this program are building geriatric academic nursing capacity nationwide and generating huge amounts of externally funded programs of research and publications and presentations to address this issue.

One important development that resulted from enhanced scholarly productivity in geriatric nursing was the 2008 launch of *Research in Gerontological Nursing*. The time was ripe for a journal of this nature, because, as a field, gerontological nursing research had matured to the point where there is an abundance of high-quality findings to disseminate. Since the launch of the journal, the situation has changed so dramatically and the scholarly base and intellectual leadership have expanded so greatly that the field is ready for a journal to disseminate findings from gerontological nursing research more broadly.

Other factors that contribute to the current state of the science that enable a journal like *Research in Gerontological Nursing* to flourish include—but are not limited to—the strategic plan of the National Institute of Nursing Research, which that addressed goals and objectives related to the research needs of older adults, and the Institute's support for institutional training programs (T32 predoctoral and postdoctoral training) in gerontology at the University of Iowa and Oregon Health Sciences University. In addition, the burgeoning evidence-based practice movement in nursing that incorporates research findings into best clinical practices and curricula has helped to move geriatric nursing research from the book to the bedside. Taken together, these initiatives have led to better clinical and research training, more research opportunities, the increased synthesis of information, and a greater dissemination of research and best practices.

It is too soon to determine whether the growing numbers of Doctor of Nursing Practice programs, which provide expertise in translational rather than basic or clinical research, will encourage more nurses to

pursue clinical doctoral educations and possibly result in a decrease in those interested in pursuing a Doctor of Philosophy degree. This growing trend bears watching for its impact on the field and gerontological nursing research in particular.

ISSUE: BLENDED OR SEPARATE ROLES FOR GERONTOLOGICAL CLINICAL NURSE SPECIALISTS AND GERIATRIC NURSE PRACTITIONERS

Although the literature during the 1990s supported a merging of the roles of nurse practitioner and clinical nurse specialist and the emergence of a single advanced practice gerontological nurse (Fulmer & Mezey, 1994; Schuren, 1996), that has not come to fruition. At issue is whether one individual can be prepared who can integrate the competencies of both of these roles (Lyons, 1996), which have traditionally been setting specific and functionally distinct.

In 1996, the American Nurses Credentialing Center instituted a policy that allowed only individuals prepared in a gerontological nurse practitioner program to sit for the gerontological nurse practitioner examination; the crossover from family and adult nursing to gerontological nursing is no longer allowed. Given the complexity of gerontological clients and of the knowledge base that is required for successfully managing the role functions of the gerontological nurse practitioner, formal gerontological education should be the foundation for gerontological certification and clinical practice.

Recent Changes

In 2008, a seminal document was drafted through the efforts of the Advanced Practice Registered Nurse (APRN) Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee. Entitled "Consensus Model for APRN Regulation, Licensure, Accreditation, Certification and Education," the document defines APRN practice (affirming separate roles for nurse anesthetists, nurse-midwives, clinical nurse specialists, and nurse practitioners), describes the APRN regulatory model, identifies titles to be used, defines specialties, describes the emergence of new roles and population foci, and addresses strategies for implementation. The proposed APRN regulatory model merges adult care and gerontology as a population focus that ranges from young adults to older adults and frail elders (p. 7). APRNs will be educated and certified with regard to both the adult and gerontological populations, and they will receive the

titles "adult-gerontology clinical nurse practitioner" or "clinical nurse specialist." In addition, all APRNs who provide care to the older adult population must be prepared with enhanced skills and knowledge to meet growing needs. The implementation of the proposed regulatory model is set to occur incrementally, with 2015 as the target date for full implementation.

SUMMARY

This chapter has identified nine issues relevant to gerontological nursing, from those that are broad based (e.g., the fragmentation of the current health care system) to those that are more specific to the field. Recent changes designed to address these issues are set forth, including the multifaceted programs and initiatives funded by the John A. Hartford Foundation in partnership with various other foundations, organizations, and academic centers. The Hartford Geriatric Nursing Initiative was launched in 1996 in an effort to confront the issues associated with an aging society by shaping nursing practice to meet the health care needs of older adults, enhancing education to ensure that all nurses are prepared to treat older patients, promoting research to guide care and promote health, developing leadership in academic and professional settings, and enacting public policy to improve geriatric health care. The Hartford Foundation has invested more than \$70 million in this initiative, and the results have remarkably and perhaps even single-handedly affected gerontological nursing through work that has and that is changing the face of gerontological nursing nationwide.

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Hospice and Palliative Care: One Solution for Improving U.S. Health Care?

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Over the past 30 years, palliative care has emerged as a specialty area of practice for nursing and medicine. There has been an increasing availability of hospice care and an explosion of palliative care in a variety of forms. Palliative care can affect both quality of care and health care resource use across almost all health care settings and throughout the course of many illnesses. This has been confirmed by several recent research studies, which have indicated that hospice and palliative care provide alternatives to some of the aggressive traditional care associated with poor patient quality of life, worse bereavement adjustment, and high costs. This is especially true when this care is provided earlier during the course of serious illness and not just at the very end of life (Conner et al., 2007; Meier & Beresford, 2008; Wright et al., 2008).

In the United States, palliative care originated with the development of hospice programs during the 1970s. Through the 1980s, this was often referred to as the *hospice movement*, which had underpinnings of the hospice philosophy that aimed at improving the care of the terminally ill. This philosophy is defined by the National Hospice and Palliative Care Organization as follows:

Hospice provides support and care for persons in the last phases of an incurable disease so that they may live as fully and as comfortably as possible. Hospice recognizes that the dying process is a part of the normal process of living and focuses on enhancing the quality of remaining life. Hospice affirms life and neither hastens nor postpones death. Hospice exists in the hope and belief that through appropriate care, and the promotion of a caring community sensitive to their needs that individuals and their families may be free to attain a degree of satisfaction

in preparation for death. Hospice recognizes that human growth and development can be a lifelong process. Hospice seeks to preserve and promote the inherent potential for growth within individuals and families during the last phase of life. Hospice offers palliative care for all individuals and their families without regard to age, gender, nationality, race, creed, sexual orientation, disability, diagnosis, availability of a primary caregiver, or ability to pay (2007, ¶6).

Hospice care became reimbursable under the Medicare Hospice Benefit established by the 1982 Tax Equity and Fiscal Responsibility Act. It was designed as a managed-care type of program for Medicare beneficiaries who must be determined by two physicians to be terminally ill and who must consent to care that is focused on comfort rather than the cure or treatment of disease. Beginning in the 1990s, a revolution in palliative care outside of hospice programs evolved that was spurred in large part by the interests of major funding organizations such as the Soros Open Society Institute's Project on Death in America and the Robert Wood Johnson Foundation. These organizations poured resources into research and other end-of-life and palliative care initiatives. Nursing has been at the forefront of developing and defining both hospice and palliative care principles and practices, moving the knowledge base of palliative care forward, and expanding and integrating its availability into every care settings. Both hospice and nonhospice palliative care programs have grown tremendously during recent years. The positive outcomes long claimed by hospice and palliative care practitioners have recently been substantiated by research (Conner et al., 2007; Meier & Beresford, 2008; Wright et al., 2008).

MODERN EVOLUTION OF THE CARE OF THE DYING

During the 1960s, two major forces occurring across an ocean from each other ultimately provided the basis for hospice and palliative care practice. Elisabeth Kübler-Ross, a psychologist at the University of Chicago, published *On Death and Dying*, her landmark book that describes the death-denying culture of the United States. Kübler-Ross brought the issue of dying to the attention of the American public, thus creating a framework for describing the dying experience of that time (Kübler-Ross, 1969). Around the same time that Kübler-Ross was studying the experience of dying, Dame Cicely Saunders, a British physician, provided leadership to establish St. Christopher's Hospice; this was the first modern hospice in the world created to care exclusively for the dying. Many of the standards of care developed at St. Christopher's Hospice remain the hallmarks of palliative care today.

Dame Saunders began her interest in the dying as a volunteer; she then became a nurse, received a degree in social work, and went on to become a physician (Martinez & Wagner, 2000). This unusual background uniquely situated Dame Saunders to understand the essential need for an interdisciplinary team to provide optimal palliative care.

The current application of the term *palliative care* to describe the concept of holistic care and symptom management for the terminally ill is attributed to Dr. Balfour Mount, who established the first palliative care service and dedicated inpatient ward at Montreal's Royal Victoria Hospital during the 1970s. After reading Dr. Kübler-Ross' book, Dr. Mount launched a study of care of the dying at the Royal Victoria, where he was shocked at what he discovered. He subsequently visited St. Christopher's Hospice in England to learn about their care of the dying (Ottawa Citizen, 2005).

Nursing leadership in hospice care began with Dr. Florence Wald, Dean of the School of Nursing at Yale University, with her desire to bring the principles of Dame Saunders' hospice care to America. Dr. Wald could not interest Yale in establishing a hospice program, so she left her position as dean and became a founding member of Connecticut Hospice, Inc, the first American hospice. Opened in 1973, Connecticut Hospice, Inc, was one of the few inpatient facilities designed and built for the care of the dying (Martinez & Wagner, 2000).

During the 1990s, the Robert Wood Johnson Foundation chose improvement of end-of-life care as a major area of focus. The Foundation funded many large initiatives, including the following:

- ◆ The Center to Advance Palliative Care (CAPC): CAPC is a program to promote palliative care in hospitals that was started at Mount Sinai Hospital in New York, New York.
- ◆ The Education on Palliative and End-of-life Care project (EPEC; originally called the Education for Physicians on End-of-life Care project): EPEC is a national "train-the-trainer" initiative established under the auspices of the American Medical Association to provide educational training for physicians and other health care providers in practice. This program is now located at Chicago's Feinberg School of Medicine at Northwestern University.
- ◆ The End-of-Life Nursing Education Consortium (ELNEC): ELNEC is a national train-the-trainer initiative for nursing educators and nurses in practice. Originally based in Washington, DC, ELNEC is now administered by the Hospice and Palliative Nurses Association national office in Pittsburgh, Pennsylvania.

Other smaller initiatives in end-of-life care have been funded by the Robert Wood Johnson Foundation, including an award to the National Quality Forum to identify quality measures in palliative care (Robert Wood Johnson Foundation, 2009).

The Soros Open Society Institutes Project on Death in America (PDIA) distributed \$45 million over 9 years to transform the culture and experience of dying and bereavement. Awards were granted for professional and public education, the arts, research, clinical care, and public policy projects related to the dying experience (Aulino & Foley, 2001).

The Hospice Nurses Association, which was the first professional organization dedicated to promoting excellence in hospice nursing, was formed in 1987. From that group, the National Board for Certification of Hospice Nurses developed in 1992, and it offered the first specialty certification examination in hospice nursing in 1994. In 1997, the Hospice Nurses Association changed its name to the Hospice and Palliative Nurses Association, thereby recognizing the commonalities between (nonhospice) palliative care and hospice nursing practice. In 1999, the National Board for Certification of Hospice Nurses likewise became the National Board for Certification of Hospice and Palliative Nurses (Anderson, Raudonis, & Kirschling, 1999).

NOT JUST END-OF-LIFE CARE: FURTHER EVOLUTION OF PALLIATIVE CARE

There are several major definitions of palliative care. The World Health Organization (WHO) defines palliative care as follows:

...an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering and of early identification and impeccable assessment and treatment of pain and other problems, psychosocial and spiritual. Palliative care:

- ◆ provides relief from pain and other distressing symptoms;
- ◆ affirms life and regards dying as a normal process;
- ◆ intends neither to hasten or postpone death;
- ◆ integrates the psychological and spiritual aspects of patient care;
- ◆ offers a support system to help patients live as actively as possible until death;
- ◆ offers a support system to help the family cope during the patient's illness and in their bereavement;
- ◆ uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated;
- ◆ will enhance quality of life, and may also positively influence the course of illness;
- ◆ is applicable early in the course of illness, in conjunction with other therapies that are to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications (WHO, 2009).

The current WHO definition offers a distinct change from 1990, when the WHO defined palliative care as follows: "The active total care of patients whose disease is not responsive to curative treatment." The revised definition has evolved along with palliative care practice; palliative care has become a model of care for any serious illness and at all stages of the illness's trajectory, not only at end of life. Support for this expanded concept of palliative care is confirmed by an even broader definition of palliative care developed by the National Consensus Project, which is a coalition of five major organizations that represent hospice and palliative care interests: the Hospice and Palliative Nurses Association, the National Hospice and Palliative Care Organization, the American Academy of Hospice and Palliative Medicine, the Center to Advance Palliative Care, and the Last Acts Partnership. The National Consensus Project's *Clinical Practice Guidelines for Quality Palliative Care*

was published in May 2004, and it defined palliative care in this way:

The goal of palliative care is to prevent and relieve suffering and to support the best possible quality of life for patients and their families, regardless of the stage of the disease or the need for other therapies. Palliative care is both a philosophy of care and an organized, highly structured system for delivering care. Palliative care expands traditional disease-model medical treatments to include the goals of enhancing quality of life for patient and family, optimizing function, helping with decision-making and providing opportunities for personal growth. As such, it can be delivered concurrently with life-prolonging care or as the main focus of care (2004, p. 5).

The National Consensus Project guidelines identify core elements that have been organized into eight domains of care (Box 21-1); these domains largely reflect the standards that were originally developed by hospice programs. The guidelines are intended to be applied to any patient care setting and are thus not limited to those with end-stage disease (National Consensus Project for Quality Palliative Care, 2009). The National Quality Forum is using these guidelines as a basis for their quality measures of palliative care (National Quality Forum, 2008). In 2007, The Joint Commission also established a set of standards to certify hospital palliative care programs (Joint Commission, 2008).

BOX 21-1 The National Consensus Project's Eight Domains of Quality Palliative and Hospice Care

1. Structures and processes of care
2. Physical aspects of care
3. Psychological and psychiatric aspects of care
4. Social aspects of care
5. Spiritual, religious, and existential aspects of care
6. Cultural aspects of care
7. Care of the imminently dying patient
8. Ethical and legal aspects of care

Source: National Consensus Project for Quality Palliative Care. (2009). Clinical practice guidelines for quality palliative care (2nd ed.). Retrieved March 31, 2009, from http://www.nationalconsensusproject.org/Guidelines_Download.asp

HOSPICE VERSUS PALLIATIVE CARE

Hospice always provides palliative care, but palliative care can be provided outside of hospice programs (Figure 21-1). Palliative care elements such as pain management, spiritual care, holistic care, and advance care planning can and should be integrated into any health care setting. However, in many settings, there is an additional need for expert palliative care services to be provided by specialist practitioners. In the United States, certification in palliative medicine has been available for many years. In 2008, palliative medicine was recognized as a board-certified subspecialty by the American Board of Medical Specialties (2008). Specialty nursing certification in hospice and palliative nursing is available for all levels of the nursing care team: the registered nurse, the advance practice nurse, the licensed practical or vocational nurse, and the nursing assistant (National Board for Certification of Hospice and Palliative Nurses, 2008). The registered nurse and advance practice nurse certification examination are accredited by the American Board of Nursing Specialties (2000).

Although hospice and palliative care programs share underlying principles with regard to their approach to patient care, their differences in the United States are largely the result of the regulatory mandates that govern hospice care and, conversely, the lack of distinct reimbursement for and regulation of palliative care practice. Each program has its advantages and limitations with

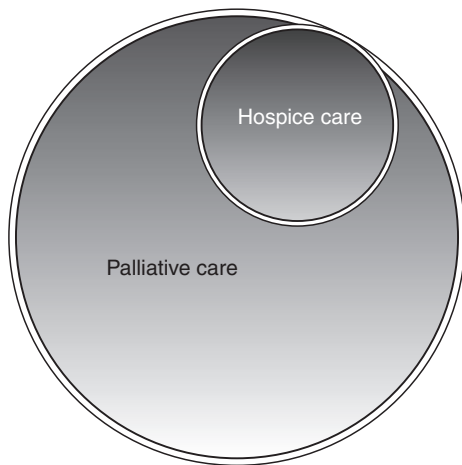


FIGURE 21-1 Hospice versus palliative care. (Note that the figure is not intended to indicate the proportion of patients who receive hospice and palliative care; these statistics are known for hospice only.)

regard to the provision of patient care; both are constrained in different ways. Hospice care is limited by the requirement that hospice can only be offered to those with a life-limiting illness who are expected to live less than 6 months if the disease runs its expected course. The Medicare Hospice Benefit allows hospice care to continue beyond 6 months for those patients who live longer than expected if they continue to meet criteria for end-stage illness. However, this requirement to acknowledge a 6-month prognosis often causes reluctance on the part of physicians, patients, and families to access hospice “too soon.” The result has been a shortened length of stay in hospice to a median of 20.6 days in 2006 (National Hospice and Palliative Care Organization, 2006). Advantages of the Medicare Hospice Benefit include regulations that standardize services and reimbursement among hospice programs; mandating holistic care, spiritual care, and family bereavement services; and providing for both inpatient care and home care. Hospice is also the only Medicare benefit that provides 100% coverage to the recipient for all of its services.

Alternatively, palliative care services have no distinct reimbursement, but they are usually reimbursed by the same health care provider billing mechanisms used for all medical care: inpatient consultation charges for inpatient hospital care, office visit fees in an ambulatory care setting, and home-visit charges for home services provided by physicians and advance practice nurses. In some states, social workers and counselors can bill for their services as well. As a result of the fragmentation of reimbursement, palliative care services may not be as comprehensive as hospice care, particularly for meeting the spiritual and psychosocial needs of end-stage illness, death, and grieving. Palliative care services are still largely self-defined, and they often focus on addressing physical pain and other symptoms, sometimes to the detriment of a more holistic approach to patient care. Therefore, emotional support and grief care provided to families may not be included in a specific palliative care program’s services, whereas this type of care of the family is mandated by hospice program regulations. More palliative care programs are being offered in the home, but they may not provide continuity across all health care settings.

COMMON (NONHOSPICE) PALLIATIVE CARE MODELS

The most common palliative care service models are hospital based in the form of inpatient hospital units, palliative consultation services, and ambulatory clinics.

These models provide mechanisms for specialist palliative practitioners to provide primary care or consultation to patients who are specifically referred or who seek out palliative care. In addition, palliative care may be more broadly integrated into existing health care in the following ways:

- ◆ Palliative care protocols or standing orders
- ◆ Family information about grieving and grief counseling, usually at the time of a family member's death
- ◆ Bereavement services provided directly by the hospital after a family member's death
- ◆ Facilities designed to enhance patient and family comfort and quality of life

CURRENT TRENDS

The CAPC continues to lead the way in providing resources and research to encourage the continued development of a variety of palliative care models and initiatives. The following are current CAPC projects (CAPC, 2009):

- ◆ Hospice-hospital partnerships
- ◆ Palliative care in the intensive care unit
- ◆ Pediatric palliative care
- ◆ Long-term care palliative care
- ◆ Community-based palliative care

In 2009, the Centers for Medicare and Medicaid (CMS) revised the Medicare Hospice Benefit conditions of participation for the first time since the program's inception in 1982 (CMS, 2009). One emphasis of the revised conditions of participation is the mandating of comprehensive quality assurance and performance improvement for all hospice programs. The CMS did not impose specific public patient outcomes as some had anticipated (and as currently required by Medicare home care services).

Recent studies have begun to demonstrate some of the positive impact of hospice and palliative care. Perhaps most startling data have shown that patients who receive hospice care live longer than those who are not enrolled in hospice. In a large study that compared Medicare beneficiaries who had a variety of end-stage diagnoses, the mean survival for those who received hospice care was 29 days longer than those who were not hospice patients. Although this was not true across every diagnosis studied, hospice enrollment was not associated with shorter survival for any diagnosis. Statistically, the largest positive impact on survival for hospice patients was for those with congestive heart failure (Conner et al., 2007). In addition, a multisite

longitudinal study that compared aggressive medical care (e.g., ventilator, resuscitation) with hospice care during the final week of life indicated that longer hospice stays were associated with better quality of life and better bereavement adjustment for survivors (Wright et al., 2008). Finally, the Dartmouth Atlas of Health Care, which has tracked Medicare health care trends since 1996, concluded that higher health care use during the last months of life is often associated with both harm to patients and billions of dollars in unnecessary health care spending. The most recent Dartmouth Atlas data also showed that hospice care can provide a better alternative; "a weak inverse association with inpatient days in hospital and inpatient spending" (Meier & Beresford, 2008, p. 1) was found among those making use of hospice care. No such association was shown with expanding access to skilled nursing facilities or home health agencies.

SUMMARY

For the past decade, hospice and nonhospice palliative care programs have expanded with regard to both the volume of patients cared for and the scope of services provided. The integration of palliative care into almost all other health care arenas has also begun to demonstrate improved patient and service outcomes. Hospice and palliative care models must continue to be refined to provide appropriate care wherever and whenever needed and to increase the potential that they have for achieving an even greater impact on scarce health care dollars. Recent research has shown that hospice and palliative care can have a positive impact during the course of many illnesses and not just at end of life, with improved quality of life, decreased costs, and better use of health care services. Dartmouth Atlas researchers estimated that Medicare could have saved \$50 billion from 2001 to 2005 for care during the last 2 years of life if all hospitals across the United States were on par with the least costly hospital (Wennberg, Fisher, Goodman, & Skinner, 2008). Therefore, it appears that better and earlier access to hospice and palliative care may be one solution for improving U.S. health care outcomes while reducing costs and providing optimal care to the dying.

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Pediatric Nursing: Recent Changes and Current Issues

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The goal of pediatric nursing is to improve the quality of health and well-being for all children. More than 73 million children who are less than 18 years old live in the United States, and they represent 25% of the population (United States Census Bureau, 2006). Although most American children are healthy, disparities by race, ethnicity, socioeconomic status, and geography do exist. Pediatric nurses face many challenges related to their ability to provide comprehensive pediatric health care. Numerous obstacles, including single-parent families, poverty, and increasing cultural diversity in this country, have the potential to affect future children's health outcomes.

SINGLE-PARENT FAMILIES

Although divorce rates have stabilized, the number of single-parent households continues to rise. In 2005, 32% of children less than 18 years old lived in single-parent families, and the majority of single parents are women (United States Census Bureau, 2003; Annie E. Casey Foundation, 2007). It is estimated that at least half of the children born during the 1990s will spend part of their lives in a family headed by a divorced, separated, widowed, or never-married mother. Although some women are single parents by choice, most of these women never planned on being single parents, and many feel pressure to marry or remarry.

Managing shortages of money, time, and energy are major concerns for single parents. In 2004, only one third of mother-headed households received any child support or alimony (Annie E. Casey Foundation, 2007). In fact, the stigma of poverty may be more keenly felt than the discrimination associated with being a single parent. Examples of the resources needed for single-parent families include flexible health services that are open in the evenings and on the weekends, safe and reliable child care, community programs that enhance

parenting skills, and recreational centers that are available for the entire family.

POVERTY

Almost 13 million children (17%) in the United States live in families with incomes that are below the poverty line (National Center for Children in Poverty, 2008). Children who live in poverty experience little if any preventive health care, inadequate health maintenance, and limited access to medical treatment. For example, although infant mortality rates have decreased overall, the disparity in infant death rates between white and black babies has widened (Wertheimer, 2005).

Families are the fastest-growing subgroup of the homeless population (American Academy of Pediatrics, 2005a). Homeless children experience all of the health problems associated with poverty in addition to other types of disorders. A majority of these children experience poor health. They do not have a regular source of health care, and the focus of their care is not preventive. Their care is fragmented and crisis oriented, and it is often sought in emergency departments. Children who are homeless experience a higher incidence of trauma-related injuries, developmental delays, sinusitis, anemia, asthma, bowel dysfunction, eczema, and visual and neurologic deficits (American Academy of Pediatrics, 2005a).

DIVERSITY

The United States has more racial, ethnic, and religious minority groups than any other country in the world. One third of Americans less than 18 years old are classified as racial or ethnic minorities (Lichter, 2005). Because American culture is becoming more diverse (Murdock, 2005), pediatric nurses must be knowledgeable about the minority groups within their communities, and they

must be able to apply an understanding of the various cultures to daily clinical practice. For example, nurses must understand the influence of culture, race, and ethnicity on the development of social and emotional relationships, child-rearing practices, and attitudes and beliefs toward health and illness. Nurses must evaluate cultural beliefs related to the causes of illness and treatment practices when caring for diverse families.

EMERGING PEDIATRIC PROBLEMS

The health of U.S. children continues to improve in many areas (e.g., lower pregnancy rates among adolescents). With regard to the effect of modern society on the family, the explosion of technology and information systems is influencing the emergence of significant medical problems that tend to affect the future health of the nation's children. Emerging pediatric problems include obesity and obesity-related disorders, injuries, violence, substance abuse, emotional and mental health problems, and media exposure concerns.

Obesity and Obesity-Related Disorders

Advancements in entertainment and technology, such as cable television, computers, and digital video games, may be associated with the growing childhood obesity problem in the United States. A recent survey showed a high association among adolescents who reported increased television viewing time and computer usage with the prevalence of overweight and obesity (Kautiainen et al., 2005). Daily media use tends to encourage sedentary activity and the intake of large portions of ready-to-eat foods that are usually high in calories and fat, both of which contribute to overweight and obesity (Gable, Chang, & Krull, 2007). Preventive nursing interventions for childhood obesity include promoting healthy dietary habits, encouraging daily physical activity, and regulating media use.

Childhood obesity and obesity-related disorders such as type 2 diabetes, hypertension, and heart disease are increasing in epidemic proportions among American children (Cowell, 2008; Ludwig, 2007). The Institute of Medicine (2006) defined obesity in 2- to 18-year-old children as a body mass index of more than 30 kg/m² or greater than the 95th percentile for youth of the same age and gender. Overweight youth—especially in ethnic minorities such as Latino, African American, Native American, or Asian Indian—have an increased risk for developing type 2 diabetes, insulin resistance, hypertension, heart disease, and other

obesity-related disorders (Cowell, 2008; Harding, Teyhan, Maynard & Cruickshank, 2008). Obese children are at high risk for becoming obese adults, which may shorten their life expectancies (Ludwig, 2007). A primary goal of *Healthy People 2010* focuses on reducing overweight children between the ages of 6 and 19 years from the current 20% to less than 6% (National Center for Health Statistics, 2004). However, public policy measures such as mandatory nutritional labeling and school lunch guidelines have not been effective against the obesity epidemic (Isganaitis & Levitsky, 2008). Therefore, nurses, parents, teachers, government agencies, and industries have been challenged to coordinate efforts to prevent childhood obesity.

Childhood Injuries

Injuries are the most common cause of death and disability to children in the United States (Rivara, 2005). Although unintentional injuries and violent death rates among children 19 years old and younger had declined, they have now plateaued (Rivara, 2005). As children grow older, the most common types of unintentional injuries include motor vehicle accidents, drowning, burns, accidents involving firearms, and head injuries. Many childhood injury fatalities can be avoided. For example, most bicycling deaths among children occur from head injuries; bicycle-related mortality decreased significantly after mandatory helmet use by cyclists was legislated (Wesson et al., 2008). Motor-vehicle-related accidents continue as the most common cause of death among children 1 year old and older. Unintentional motor vehicle injuries are commonly associated with adolescent drivers who are inexperienced, who display risky driving behaviors (e.g., speeding, racing), and who experience distractions (e.g., talking on cell phones, text messaging, interacting with teen passengers; Ginsburg et al., 2008).

Pediatric nurses can be instrumental in reducing childhood injuries and fatalities by encouraging the use of preventive measures such as wearing seat belts, using child/infant car seats, and using helmets and other protective equipment during sports participation. Education should be provided to adolescents regarding safe driving practices. Other injury preventive measures include adequate pool fencing, the safe placement of household toxins and medications, and the use of smoke detectors. Medical providers should discuss drug- and alcohol-related injuries and consequences with youth to discourage alcohol and drug use (Spoth, Greenberg, & Turrissi, 2008).

Violence

Each day, 10 children in the United States are murdered by gunfire; this aligns with the homicide rate as the second leading cause of death among youth (Centers for Disease Control & Prevention, 2006). Strikingly, higher homicide rates are found among the minority populations, especially African-American children. Violence permeates American households through television, video games, and the Internet, and this may desensitize children toward violence. The newly emerged cyberspace violence consists of inappropriate and harmful online behavior, including cyber crimes, cyber sexploitation, cyber stalking, and cyber bullying (Chisholm, 2006). Cyberspace violence has invaded e-mail, chat rooms, and social networks (e.g., MySpace), where youth tend to place their personal contact information. Violence also infiltrates schools with the availability of guns and illicit drugs and the presence of gangs, as exemplified by the deadly school shooting that occurred at Columbine High School in 1999. The assessment of high-risk behaviors in youth must continue to be a major focus of health providers. Family counseling, limiting a child's media use to less than 2 hours daily, and the safe storage of firearms have proven to be successful violence-prevention behaviors (Barkin et al., 2008). In addition to these preventive measures, the nurse must also educate youth to not share identifying information online or to agree to meet an online stranger, and they must stress to the parents the importance of supervising the child's online activity.

Substance Abuse

The use of illegal drugs among high school students declined during the late 1990s, but it has stabilized since that time (Hollman & Alderman, 2007). Alcohol is the drug of choice among adolescents; parents see alcohol as "better" than illicit drugs, so youth receive limited education about its adverse effects. About 10.9 million youths (primarily males and youths between the ages of 12 and 20 years) report drinking alcohol, with nearly 19% reported as binge drinkers and 6% as heavy drinkers (Substance Abuse and Mental Health Services Administration, 2004). Sixty-six percent of youths who drank alcohol heavily and 52% of youths who smoked cigarettes daily were also users of illicit drugs (Substance Abuse and Mental Health Services Administration, 2004). Marijuana remains the most commonly used illicit drug among twelfth graders, with 45% reporting marijuana use (Hollman & Alderman, 2007). Inhalants, such as glue, paint thinner, gasoline,

spray paints, and hairsprays, were the third most widely used agent among twelfth graders and the second most widely used among eighth and tenth graders (Crocetti, 2008). Although a newly arising disorder known as Internet and videogame addiction is not yet considered a viable diagnosis, many psychologists argue that the Internet elicits the same euphoric and withdrawal symptoms as substance abuse (Reddy, 2008).

Mental Health and Emotional Problems

Mental health problems affect one out of five school-aged children in the United States. One of the most common mental health or neurobehavioral problems is attention-deficit/hyperactivity disorder (Raishevich & Jensen, 2007). This disorder is characterized by inattentiveness, impulsivity, and hyperactivity that affect every aspect of the child's life but that is most obvious in the classroom. Family education, counseling, medication, proper classroom placement, environmental manipulation, and behavior therapy are important management strategies for children with this condition. Children and adolescents with mental health problems tend to have a correlation with depression, anxiety, conduct disorders, and obsessive tendencies, and they are most likely to participate in excessive use of the Internet and videogames (Ha et al., 2007; Raishevich & Jensen, 2007).

Suicide is defined as a self-chosen death. It is the third leading cause of death among adolescents in the United States, with the vast majority of these children having some sort of mental illness (Boris & Dalton, 2007). Suicidal behavior in females is associated with depression, whereas these behaviors in males are associated with conduct disorders or chronic anxiety (Boris & Dalton, 2007). Suicide is a preventable occurrence, but it places a heavy burden on the nurse to identify the at-risk adolescent who may display mental health and emotional problems. Nurses who care for children and adolescents with mental health and emotional problems must work closely with parents or guardians, teachers, social workers, counselors, psychologists, and psychiatrists to formulate a collaborative individualized treatment plan to promote the child's mental health.

Media Exposure

Media devices for children and adolescents are ever expanding and include movies on cell phones, television in cars, digital cameras, e-mail devices, portable video games, portable music devices, and computers, which all help to create the media generation known as

the “M generation” (Rideout, Roberts, & Foehr, 2005). The proportion of children with home computers escalated from 73% to 86% (Rideout et al., 2005). The M generation tends to spend a quarter of each day performing sedentary activities such as watching television, surfing the Internet, playing video games, and listening to music. To decrease sedentary activity among youth and to promote daily exercise, the Nintendo Wii sport computer game was created to encourage greater movement during video game play. Although this game system requires more energy than sedentary computer games, it does not expend enough energy to contribute to the recommended daily amount of exercise for children and adolescents (Graves, Stratton, Ridgers, & Cable, 2008). With the increased use of media technology, the diagnosis of new disorders such as acute Witiitis and texting tendonitis has emerged among youth as a result of prolonged, repetitive, forceful or awkward movements during media play (Menz, 2005; Ramos, James, & Bear-Lehman, 2005). To decrease the risk of media-related health care problems, nurses, teachers, and parents should limit media exposure time and educate youth about media-related injuries.

PEDIATRIC HEALTH CARE PROMOTION

The National Children’s Study is the largest long-term study of children’s health and development conducted in the United States. The study will follow 100,000 children and their families from birth to age 21 to understand the link between children’s environments and their physical health, emotional health, and development (National Children’s Study, 2008). The goal of the study is to provide new knowledge regarding associations among children’s environmental exposures and health factors that will lead to effective preventative health care, education, and interventions (Landrigan et al., 2006). This study supports one of the *Healthy People 2010* primary goals of increasing the quality and years of healthful life and eliminating health disparities related to race, ethnicity, and socioeconomic status (Keppel, Percy, & Klein, 2004). Numerous opportunities for pediatric nurses to participate as advocates for pediatric preventive health care will be available as a result of this study.

Nutritional Maintenance and Dental Prevention

Nutrition is an essential component of healthy growth and development, and its promotion begins at birth. Human milk is the preferred form of nutrition for all infants. Breast-feeding provides the infant with

micronutrients, immunological properties, and several enzymes that enhance the digestion and absorption of nutrients (Wilson, 2005). The success and longevity of breast-feeding has been found to be dependent on a positive initial relationship with a skilled health care provider, supportive family and social networks, and adequate breast-feeding knowledge (McInnes & Chambers, 2008). Nurses can have a great impact on these factors. Young children tend to establish eating habits during the first 2 to 3 years of life, and the nurse is instrumental in guiding parents with regard to the selection of nutritious foods. During childhood, eating preferences and attitudes related to food habits are established by family influences and culture. During adolescence, parental influence diminishes, and the adolescent makes food choices related to peer acceptability and sociability that may be detrimental to the chronically ill child with diabetes, hypertension, or renal disease.

Unhealthful diets permeate the lower social class, often because of the lack of availability and the cost of nutritious fresh fruits, vegetables, milk, and protein. The lifestyles of homeless and migrant children place this population at risk for inadequate food intake that can cause nutrient deficiencies, developmental and growth delays, depression, and behavior problems. Nurses should work closely with families to ensure the appropriate use of resources to assist with the obtaining of nutritious food. In addition, nurses need to incorporate the customs, health beliefs, traditions, and values of various ethnic groups to obtain acceptance and compliance regarding the benefits of ingesting affordable nutritious foods rather than high-caloric foods, which are perceived to be cheaper. *Healthy People 2010* reports that nearly 1 in 5 children between the ages of 2 and 4 years has visible cavities. People with lower educational levels, members of lower socioeconomic classes, and non-Hispanic black and Mexican-American individuals are more affected by caries (Glick, 2006). Because caries is a preventable disease, the nurse plays an essential role in promoting early tooth care by instructing children and parents about performing dental hygiene (beginning with the first tooth eruption), drinking fluoridated water, and instituting early dental preventive care.

Immunizations

Vaccines have significantly decreased the prevalence of many communicable diseases. However, some vaccine-preventable diseases (e.g., measles, pertussis) have recently reemerged, likely as a result of a decline in immunization

rates. In 2005, only 76% of children in the United States between the ages of 19 and 35 months had received all of their recommended immunizations (Kimmel, Burns, Wolfe, & Zimmerman, 2007). Immunization barriers include vaccine supply and distribution factors, cost, fragmented records, and knowledge deficits among parents and health care providers regarding immunization schedules, contraindications, and side effects (Kimmel et al., 2007). Nurses need to be cognizant of this vulnerable population and to provide education about recommended vaccines. Nurses should routinely review the child's immunization record during each clinic visit and instruct the parent to keep immunizations current. Computer-based immunization registries are being developed to maintain vaccination records. It is hoped that this database will assist with the attainment of the goal of 90% of 2-year-olds being vaccinated, as mandated by *Healthy People 2010* (Centers for Disease Control and Prevention, 2008).

ADVANCES IN HEALTH CARE: CREATING CHALLENGES FOR PEDIATRIC NURSES

Although medical progress continues to occur, it does not guarantee the equity of healthy outcomes (Wise, 2005). Social inequities that lead to poverty are directly linked to increased childhood illness and suffering. These social inequities create important priorities for pediatric nursing. Despite the challenges, nurses' roles in pediatric nursing must continue to focus on health promotion and disease prevention for all children. Caring for the increasing number of uninsured children and children with chronic illnesses and implementing innovative nursing care in the face of emerging technology are major priorities for the future of pediatric nursing. The increased survival of very-low-birth-weight infants and the changing role of genetics in disease identification and management are examples of medical advances that are creating unique challenges for pediatric nurses. Increases in home-based nursing care are an ongoing priority for the pediatric specialty. Despite advances in medical technology, children still die in the United States. A continued challenge for pediatric nurses is to provide the best palliative care possible for children who will not survive.

Uninsured Children

Approximately 13% of children in the United States have a chronic physical or mental illness that account for 70% of the expenses for pediatric health care services

(American Academy of Pediatrics, 2005b). Children are completely dependent on their adult caregivers for their health care services. As a result of a high unemployment rate, an inability to pay high health insurance premiums, and a lack of availability of employer-based health insurance among many adults, the insurance status of many children is changing from private insurance providers to insurance provided by Medicaid or the State Children's Health Insurance Program (Ku, 2003). Despite increased public assistance, in 2003, approximately 9% of all children less than 18 years old and 19% of people 18 to 64 years old were uninsured (Ku, 2003). Uninsured individuals are more likely to go without needed health care, to receive fewer preventive services, and to have to pay higher prices for services and drugs. Pediatric nurses play a major role as patient advocates by negotiating ways for children to continue to obtain needed health care.

Chronic Illness

Because of advances in medical technology, more children with chronic illnesses and disabilities are living longer. Each year in the United States, nearly 1 million adolescents with chronic illnesses become adults (Levey & Murphy, 2005). Adolescents with special health care needs strive to become independent members of society by seeking an education, a job, social interaction, and health. One of the priority areas for *Healthy People 2010* includes transitioning youth with special health care needs to adult life (Levey & Murphy, 2005). The ability to achieve successful adult outcomes involves developing strategies to assist with education, training, employment, and adequate access to health care (Scal & Ireland, 2005). Many young adults with chronic illnesses are reluctant to transfer to an adult health care facility, and this transition can be a stressful event because of differences in practice styles. A successful transition requires early planning, a multidisciplinary approach to health care, and skilled health care providers. Adult providers need to develop their expertise for treating chronic pediatric conditions, whereas pediatric providers need to develop skills to smoothly transfer their young adults (Levey & Murphy, 2005). A well-timed transition allows young adults to optimize their ability to assume adult roles and functioning (Scal & Ireland, 2005). Pediatric nurses often assume responsibility for implementing transitional care within their specific patient population. Nurses also serve as legislative advocates for the lifelong needs of the chronically ill child and young adult.

Low-Birth-Weight Infants

Each year, 60,000 very-low-birth-weight (VLBW) infants (i.e., infants who weigh less than 1500 g) are born (Msall & Park, 2008). The survival of VLBW infants has significantly increased during the past several decades; however, the incidence of subsequent health-related issues has not improved. VLBW infants are at an increased risk for general health problems (e.g., recurrent infections) and chronic illnesses (e.g., chronic lung disease, cerebral palsy; Reijneveld et al., 2006). Almost one fifth of VLBW infants develop major cognitive disabilities and learning disabilities by the age of 8 years, and more than 50% require special assistance in the classroom (Ment et al., 2003). In addition, as these infants grow, they are at increased risk for behavioral disorders, including anxiety, social withdrawal, attention-deficit disorder, and disruptive or oppositional behavioral disorders (Msall & Park, 2008). Parents, teachers, nurses, and other health care professionals must learn to recognize potential deficits among VLBW children and to encourage assistance when needed. Research has found that, despite cognitive, behavioral, and health problems, VLBW children had similar ratings of quality of life as compared with normal-birth-weight children (Zwicker & Harris, 2008). Further research is needed to evaluate the multitude of long-term complications and outcomes of VLBW infants as they grow into adulthood.

Genetics

The Human Genome Project has generated a great deal of new genetic information, and it has changed the way that health care providers evaluate and treat many diseases. Because genetic specialists are limited in number but have a high demand for service, the pediatrician is often the person who provides genetic information to patients and families. Effectively communicating genetic information to patients and families is often challenging because of the cultural, language, and educational barriers of the patient and the family; the situation may also be complicated by the inadequate training of and lack of time from the physician (Rosas-Blum, Shirsat, & Leiner, 2007). In addition, genetic information may be difficult for patients and families to comprehend, especially when the patient appears to be healthy and the genetic diagnosis involves a statistical risk (Rosas-Blum et al., 2007). Pediatric nurses play important roles within the field of genetics. When genetic information is discussed, the pediatric nurse can serve as an additional resource to clarify information

with the patient and the family. The pediatric nurse can also serve as a support and advocate to a patient and family with concerns about privacy or discrimination issues related to the genetic diagnosis (Rosas-Blum et al., 2007). In addition, nurses provide comprehensive assessments for the evaluation of physical anomalies or morphological features throughout an affected child's life span.

Pediatric nurses who specialize in genetics assist with developing ethical research policies, contributing to health policies, and integrating new knowledge discovered from genetic research findings into clinical practice (Olsen et al., 2003). Future nursing research regarding genetics is needed to evaluate the impact of a genetic condition on end-of-life decisions; to identify disparities among groups making use of genetic services; and to determine how the identification of genetic risk states affects health care use and lifestyle choices (Feetham, Thomson, & Hinshaw, 2005).

Home Health Care

As more children with chronic illnesses and severe disabilities are living longer, they need to be cared for in a setting that promotes normal growth and development. Hospitalization can interfere with a child's ability to develop interpersonal relationships that are important components of normal growth and development. Caring for a chronically ill child at home can promote quality of life for the child and family while allowing for cost-effective health care to be provided. Careful planning, coordination, and preparation are essential for successful care at home. Chronically ill and disabled children should meet the following criteria to be considered for home care services:

- ◆ The child's medical condition must be stable.
- ◆ The parent or guardian must want the child at home and have the motivation and ability to learn the child's care.
- ◆ The community must have the necessary supportive services available.
- ◆ Financial support must be available for the services.

For the pediatric patient, family-centered nursing is essential in the home care setting. Home health nurses collaborate with parents and children to set mutual health goals for the child or adolescent. Home health nursing increases the child's and parent's self-management skills and the knowledge of the child's illness (Navaie-Walieser, Misener, Mersman, & Lincoln, 2004). Ongoing assessments evaluate the success of the home care program

and help to focus ongoing modifications of the child's care. Careful analysis, shared experiences, and future research studies are needed to support the appropriateness and cost-effectiveness of home health care pediatric programs.

END-OF-LIFE CARE

Pediatric nurses have always been instrumental in caring for the patient and family throughout all aspects of an illness. The focus of care without cure becomes important when decisions must be made regarding a child's end-of-life care. Many obstacles arise with regard to providing quality palliative care to dying children. Parents' fear and denial of death are common, especially when faced with an acute event that has left a child critically ill.

Palliative care for children involves numerous controversies that must be addressed: decisions regarding where the child should die; clarification of do-not-resuscitate orders; the use of medical interventions, including nutrition, hydration, and antibiotics; and the discontinuation of potentially life-sustaining treatments, such as ventilation and dialysis (Lang & Quill, 2004). One may find obstacles to providing good palliative care created by the health care staff. For example, some nurses may be distracted by the ability of advanced technology to sustain life, and they may become more focused on the tasks involved in maintaining life than on providing optimal end-of-life care. Nurses play major supportive roles for parents who are making important decisions about end-of-life care, measures that can or should be withheld or withdrawn, and the type of care that a critically ill child should receive. Recent focus on palliative care as "aggressive comfort treatment" reinforces the nurses' role in the prevention of suffering (Calabrese, 2007). Pediatric nurses must work with other health care providers to overcome barriers of communication regarding child and family preferences and treatment goals (Davies et al., 2008). Nurses who provide clear communication, who demonstrate good listening skills, and who have an awareness of the parent's values—including cultural, ethnic, and religious beliefs—contribute significantly to quality care for the dying child and the family.

CHANGING ROLES IN PEDIATRIC NURSING

As medical technology advances, opportunities for nurses who specialize in the care of children abound. Continued traditional roles for primary care nursing in urban and rural settings are critical to eliminating

health disparities that are most obvious for racial and ethnic minorities in this country. Primary care pediatric nurses are instrumental in the evaluation of the barriers that prevent health care access in minority communities. Awareness of the environments in which the children that nurses care for live allows nurses to expertly identify factors that support or prevent health care access in their communities.

Advanced pediatric nursing practice has seen many changes during the past decade. In 2004, the American Association of Colleges of Nursing voted to move advanced practice nursing to the doctoral level by 2015 (Fain, Asselin, & McCurry, 2008). The Doctorate of Nursing Practice (DNP) curriculum contains content that addresses leadership, management, and the specific educational focus needed to address issues in the health care system that traditionally have not been included in most Master's of Science in Nursing curricula; it also contains additional essential content and nurse practitioner competencies. Although primary care continues to be essential for promoting child health outcomes, changes in health care delivery, patient condition severity, and reimbursement are shifting the traditional roles of advanced practice pediatric nursing. The acute care nurse practitioner has emerged as an established subspecialty nurse; these nurses have moved into roles within pediatric intensive care units in increasing numbers (Brown, Besunder, & Bachmann, 2008).

Certification within this specialty provides validation of the education and qualifications to meet the intensity of the demands of this subspecialty. The acute care nurse practitioner who specializes in pediatrics provides cost-effective, quality care to critically ill children admitted to acute and intensive care units. The role meets an essential need for health care experts who are knowledgeable about the care of critically ill infants and children. As tertiary settings continue to increase the number of critical care units, the acute care nurse practitioner's role provides a model that allows for an increased workload in critical care facilities.

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Perinatal Nursing: Recent Changes and Current Issues

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Every day in the United States, approximately 11,200 babies are born to women in the nearly 3000 hospitals that provide perinatal services (Martin et al., 2009). These mothers and babies are cared for during pregnancy, labor, birth, and the postpartum period by perinatal nurses dedicated to providing a safe and therapeutic environment to promote the best possible outcomes for their patients. Few professional experiences are more rewarding than attendance at the birth of a healthy newborn and sharing the joy with the new mother and her family. Perinatal nursing offers the best of all specialty areas of professional nursing practice and includes the prenatal course; obstetrical triage; and labor, birth, perioperative, post-anesthesia, postpartum, and newborn care. Perinatal nurses who care for women with high-risk pregnancies and preterm infants use medical-surgical and critical care nursing knowledge and skills. No other specialty in nursing offers a wider range of activities and opportunities to make a difference in the lives of women, newborns, and their families. The focus of perinatal nursing is on making families and creating our future. Although approximately 4% of registered nurses in the United States are men, perinatal nursing remains predominantly a specialty of nurses who are women. This woman-to-woman connection is powerful for both perinatal nurses and their patients.

As a specialty, perinatal nursing faces many challenges; some are specific to perinatal care, whereas others are shared with nursing in general. These challenges are related in part to recent changes in health care delivery systems that seem to favor the financial bottom line and convenience for providers over practices that promote patient safety and the socialization of women to childbearing. Current issues of importance that require assertive actions by perinatal nurses if significant changes are to occur are the continued medicalization

of labor and birth; the increased use of technology for healthy women; the ongoing conflict between “the way we’ve always done it” and evidence-based care; errors by health care providers that contribute to maternal-fetal injuries; increasing nurse-to-patient ratios; the proliferation of convenience as the foundation for care during labor and birth; the lack of education about the impact of this convenience philosophy among childbearing women; and the forces that challenge nurse-midwives as the primary care providers for healthy women. Each of these issues is discussed in the context of why perinatal nurses are in this situation and what they can do to make significant changes.

THE MEDICALIZATION OF LABOR AND BIRTH

Unlike other nursing specialties, perinatal nurses care for women during a healthy, natural life event. Labor and birth are natural physiological processes, and most women do well with support and selected, minimal interventions. However, many women in the United States give birth in a high-technology, low-touch environment with electronic devices monitoring every physiological parameter possible (Simpson, 2008). Even when an unmedicated, low-technology childbirth is planned and prepared for extensively, many women who are vulnerable during labor and birth find themselves agreeing to interventions that clearly are unnecessary and that have the potential to cause iatrogenic injuries (Clark, Simpson, Knox, & Garite, 2009; Simpson, 2008). When birth occurs in a hospital, there is a tendency to view the process as a medical event. In this setting, birth is controlled and managed, and arbitrary time frames rule what is a natural process. Despite a substantial body of evidence that suggests that this is not the best approach, if labor is not proceeding according to the “labor curve,”

then interventions are routinely used to hasten the process. For example, amniotic membranes frequently are ruptured artificially to speed labor, which causes a significant increase in umbilical cord compression as evidenced by variable fetal heart rate decelerations (Garite et al., 1993; Goffinet et al., 1997). Convenience for the provider that comes with shortening labor is not worth these risks to the fetus. Amniotomy results in a decrease in the length of labor of at most up to 1 hour and is not clinically significant (Smyth, Alldred, & Markham, 2007).

The use of drugs to stimulate labor contractions artificially has increased more than 125% since 1989, which is the first year that these data were collected (Martin et al., 2009). Compelling evidence indicates that elective labor induction increases the risk of cesarean birth for nulliparous women (Simpson, 2008). Most women in the United States labor in bed, thus eliminating the normal physiological advantages of an upright maternal position. Ample data indicate that coached, closed-glottis pushing that begins immediately at 10-cm cervical dilation when the woman does not yet feel the urge to push increases the risk of nonreassuring fetal heart rate patterns, low umbilical cord pH, fetal acidemia, perineal trauma, and urinary dysfunction (Association of Women's Health, Obstetric and Neonatal Nurses, 2008; Fraser et al., 2000; Handa, Harris, & Ostergard, 1996; Roberts, 2002; Sampselle & Hines, 1999; Schaffer et al., 2005; Simpson & James, 2005). However, this practice continues because providers believe that coached pushing will shorten the second stage of labor, contrary to the results of multiple randomized trials (Fraser et al., 2000; Hansen, Clark, & Foster, 2002; Mayberry et al., 1999; Roberts, 2002).

If the second stage of labor does not proceed within an outdated time frame, vacuum extractors that use between 400 and 600 mm Hg of pressure are often applied to the fetal head to hasten birth. The U.S. Food and Drug Administration (1998) has issued warnings to health care providers about the risk of fetal injuries with this device; however, the use of the procedure is at an all-time high (Martin et al., 2009). Although an extensive body of research suggests otherwise, many women in the United States have an episiotomy immediately before birth. This unnecessary procedure is painful, it delays recovery, and it increases the risk of urinary and fecal incontinence for women later in life (American College of Obstetricians and Gynecologists [ACOG], 2006; Hartmann et al., 2005). Many hospitals in the United States have strict visitor policies that are based on crowd-control principles and that disregard

the desires of women to have whomever they wish attend the birth.

This medicalization of childbirth continues for many reasons. Hospitals have invested millions in high technology related to the birthing process, which, once in place, becomes part of the routine care of women during labor and birth. There was hope that this technology would reduce the incidence of cerebral palsy; however, despite routine continuous electronic fetal monitoring during labor in U.S. hospitals since the late 1970s, the incidence of cerebral palsy remains the same as it was before the introduction of this device (ACOG, 2005). There was hope that electronic fetal monitoring would reduce the professional liability of health care providers and institutions; however, "bad baby" cases instead have increased over the years. Conflict in the interpretation of the data from electronic fetal monitoring has now become a major part of lawsuits that allege perinatal malpractice. Problems with inter- and intra-rater reliability related to electronic fetal monitoring are reality in everyday clinical practice. Thus, it is no surprise that experts disagree when asked to offer testimony for the defense and plaintiffs.

Another significant reason for the continued medicalization of childbirth is that perinatal care is provided primarily by physicians, who are educated and trained to monitor and intervene, rather than by nurse-midwives, who believe that less is more when it comes to interventions for childbearing women. Nurse-midwives believe in and support the inherent power of women to give birth naturally and with selected interventions as needed. Unfortunately, less than 10% of births in the United States are attended by nurse-midwives (Martin et al., 2009). Financial and philosophical reasons prohibit or inhibit certified nurse-midwives (CNMs) from obtaining privileges to attend births in many hospitals. Some areas of the country have more obstetrician-gynecologists than are needed to support the target population; thus, there is an effort to prevent CNMs from effectively entering the market. Healthy women at low risk for complications during pregnancy can be managed by CNMs and have been shown to have similar clinical outcomes and lower costs of care. Increased access to CNMs by this healthy patient population would help to reverse the current trend of making birth a medical event.

INCREASED USE OF TECHNOLOGY

Some argue that the lack of one-to-one nursing care in the United States for women in labor has led to electronic monitors providing much of the maternal-fetal

assessment data during labor and birth. Just as likely is that the increased use of technology has contributed to the perception by health care administrators that one-to-one nursing care during labor is no longer needed. The latest monitors allow for the electronic assessment of multiple physiological variables that are displayed on a central screen at nurses' stations. In this type of setting, nurses have less need to interact personally with the woman in labor.

Consider the following scenario: A healthy woman at term agrees to the induction of labor; this leads to epidural anesthesia, a slow progress of labor, and the attachment of the following nine intervention and monitoring devices:

1. A main intravenous line;
2. An additional line with oxytocin;
3. An internal fetal scalp electrode;
4. An intrauterine pressure catheter;
5. An epidural catheter;
6. An automatic blood pressure device;
7. A cardiac monitor;
8. A pulse oximeter; and
9. A Foley catheter.

An interesting note is that none of these devices or interventions is recommended by the professional associations that promulgate guidelines and standards of care for women in labor—such as the Association of Women's Health, Obstetric and Neonatal Nurses, the American College of Nurse-Midwives, the American College of Obstetricians and Gynecologists, or the American Society of Anesthesiologists—yet they are the routine in many labor and birth units in the United States.

THE "WAY WE'VE ALWAYS DONE IT" VERSUS EVIDENCE-BASED PERINATAL CARE

The lack of integration of evidence-based care for healthy pregnant women contributes to high-technology labor and birth becoming the norm. Perinatal nurses can only be advocates for healthy childbearing women when they have knowledge of current standards and guidelines from their professional associations. Many nurses are unaware of their specialty nursing organizations, and of those who are aware, few are members. Although there are 2.9 million registered nurses in the United States (Health Resources and Service Administration, 2006), the Association of Women's Health, Obstetric and Neonatal Nurses only has approximately 17,000 members; there are undoubtedly many more perinatal nurses in

the United States. In addition to the awareness of and adherence to professional guidelines and standards of care, perinatal nurses must have knowledge about all areas of their specialty practice. The ability to search computer databases for pertinent literature and to critically evaluate the combined weight of what is known about each intervention is requisite for perinatal nurses in the advocacy role who want to provide safe and effective care. Perinatal nurses must be aware of the body of evidence that suggests that routine interventions during labor and birth lead to iatrogenic injuries. They must be willing to work collaboratively with physician colleagues to make evidence-based perinatal care a reality.

Commitment to practice based on evidence and standards is an ongoing process, and it may require substantial changes and more professional energy than the usual methods of implementing and evaluating changes in patient care. However, it is well worth the additional effort. Discussions about clinical practice that are based on evidence and standards of care rather than hierarchical relationships, personal preferences, and old routines can be helpful for setting the stage for real collaboration. Nurse leaders must promote the "different but equal" contribution that nurses make to clinical outcomes. For perinatal nurses to have an equal voice in these discussions about clinical practices, they must make efforts to keep abreast of current evidence and evolving trends that have the potential to enhance maternal-fetal outcomes. However, to be able to critically evaluate the evidence that is available and to present credible recommendations, nurses require knowledge of the research process and skills for critiquing research studies. Unfortunately, a baccalaureate degree is not required for registered nurses, and, according to the latest data, less than half of registered nurses (47.2%) hold a 4-year college degree in nursing (Health Resources and Service Administration, 2006). Without the education about the research process that is provided during baccalaureate education, it is difficult for nurses to bring a similar level of understanding and evaluation of the evidence under consideration to a clinical discussion with physician colleagues.

The wide disparity in education between nurses and physicians is one of the contributing factors to the lack of equal partnership in developing and implementing evidence-based clinical interventions. An equal voice in clinical discussions must be the voice of one who has been educated in an institution of higher learning in a manner similar to other members of the health care team (Simpson & Knox, 2001). The lack of college education

among the majority of practicing nurses is one of the most significant barriers to enhancing the professional status of nurses, and it contributes to the present hierarchical relationships between nurses and physicians. Nurses have been debating this issue for too long: the time is now to set a date for requiring the baccalaureate degree as the criterion for entry into professional nursing practice (American Association of Colleges of Nursing, 2000). The profession can grandfather in current nurses and move forward united in providing consumers with the care that they deserve delivered by professionals who have been educated adequately to provide that care (Gennaro & Lewis, 2000). Only with additional education will nurses be able to fully participate in processes that promote evidence-based care for mothers and babies.

ERRORS BY HEALTH CARE PROVIDERS THAT RESULT IN MATERNAL-FETAL INJURIES

Although the use of multiple interventions and sophisticated technologies to monitor maternal-fetal status has become the norm, these techniques and machines have not decreased the risk of maternal-fetal injuries. This is a serious issue that faces perinatal nurses today. Along with emergency departments and perioperative services, perinatal units account for most of the claims of patient injuries and death (Simpson & Knox, 2003). The 1999 release of the report from the Institute of Medicine entitled *To Err Is Human: Building a Safer Health System* highlighted what risk managers and perinatal care providers already knew: errors by health care providers are an unfortunate common occurrence during inpatient stays (Kohn, Corrigan, & Donaldson, 1999). A preventable adverse outcome for a mother or baby can be tragic, with long-term and even fatal consequences in some cases. Fetal and neonatal injuries are more common than maternal injuries. Six common and recurring clinical problems account for most fetal and neonatal injuries (Knox, Simpson, & Townsend, 2003):

1. The inability to recognize or appropriately respond to antepartum and intrapartum fetal compromise;
2. The inability to perform a timely cesarean birth (30 minutes from decision to incision) when indicated by fetal or maternal condition;
3. The inability to resuscitate a depressed baby appropriately;
4. The inappropriate use of oxytocin or misoprostol, leading to uterine hyperstimulation, uterine rupture, and fetal compromise or death;

5. The inappropriate use of forceps, vacuum, or fundal pressure, leading to maternal-fetal trauma or preventable shoulder dystocia; and
6. The mismanagement of the second stage of labor, resulting in maternal-fetal injuries.

Many of the clinical problems are interrelated, and they can be attributed to communication failures and the trend toward provider convenience taking precedence over established professional standards and the latest evidence. In obstetrics, complications that lead to death are rare because mothers and infants are generally healthy (Simpson, 2005). Even care that would be judged by expert peers to be substandard rarely results in injury or death; the odds are always in favor of a good outcome because of the healthy population. These clinical conditions allow some practitioners to disregard practice based on professional standards and rigorous evidence, often without consequences. However, even one preventable injury or death of a mother or infant is one too many. Perinatal providers must make safety the number one priority to promote the best possible maternal-fetal outcomes. Patient safety—particularly for the most vulnerable populations (in this case, mothers and babies)—is a matter of integrity. Everyone in the health care system, including administrators, members of the leadership team, and individual providers, has a moral obligation to do everything possible to keep patients safe (Ryan, 2004). Perinatal unit operations and health care provider relationships must be reexamined in the context of implementing a system that is designed for maternal-fetal safety.

NURSE-TO-PATIENT RATIOS

The increasing trend toward fewer nurses caring for more patients during labor and birth is a major barrier to quality perinatal care. When the nurse has more patients than can be cared for adequately, the constant priority setting and elimination process contribute to shortcuts and the provision of only the most basic care (Knox, Kelley, Simpson, Carrier, & Berry, 1999). Unfortunately, for some nurses, the basics may be high-technology interventions and documentation; supportive care in labor may be considered a luxury. Ample data suggest that more favorable nurse-to-patient ratios improve outcomes and decrease the risks of morbidity and mortality (Aiken et al., 2002; Friese et al., 2008; Kane et al., 2007a, 2007b; Needleman et al., 2002; Tourangeau et al., 2007). However, as costs of care have accelerated, perinatal units have suffered staffing cuts.

The increased use of technology to monitor maternal-fetal status during labor, the high rate of epidural anesthesia, and the fact that most women and fetuses are healthy have contributed to the ability of institutions providing perinatal care to get away with using fewer nurses in perinatal services (Knox et al., 2003). Nurses are adept at on-the-spot problem solving and work-arounds when they are faced with situations and systems that put patients at risk. However, their ability to keep patients safe under these conditions often allows the hospital and the health care team to avoid investing time and effort to redesign unsafe systems (Needleman & Buerhaus, 2003).

PROLIFERATION OF CONVENIENCE AS THE FOUNDATION FOR LABOR AND BIRTH

The artificial induction of labor is at the highest level in the United States since these data began being collected from birth certificates in 1989 (Martin et al., 2009). The incidence of labor induction is most likely much higher than reported because of inaccuracy issues with data retrieved from birth certificates. Multiple factors influence the decision to induce labor (Simpson, 2008). Clearly, not all indications are clinical or are in the best interests of mothers and babies. Convenience has increasingly become a significant factor in the artificial induction of labor. This is a complex issue that involves all participating parties: the pregnant woman, her family, the obstetrician or CNM, the institution, and the perinatal nurse (Clark, Simpson, Knox, & Garite, 2009; Simpson & Thorman, 2005). In 1995, ACOG included psychosocial indications as an accepted reason for induction; previously, the position of the college had been that the induction of labor solely for convenience was not recommended (ACOG, 1991). The most likely reason for this change was that routine practices were not consistent with published standards, thus exposing physicians to liability risks if adverse outcomes resulted from artificial labor induction. The controversy centers on the issue of who benefits more from this convenience approach to labor induction. Women agree to or choose the induction of labor for many reasons. For some women, advance planning and prior arrangements can provide reassurance and a sense of control over an otherwise unpredictable process. Additional factors—such as child care for other children, the availability of the labor support person or the father of the baby, the choice of attending physician, the avoidance of holidays, maternity leave constraints, and even a

federal income tax deduction in the preferred year—can enter into the pregnant woman's decision to agree to or request an elective induction of labor (Simpson & Thorman, 2005).

Although the American Academy of Pediatrics and ACOG (2007) have long held that elective births before 39 completed weeks of gestation are not appropriate and can lead to iatrogenic prematurity, elective births of babies before this time are common in the United States (Clark et al., 2009; Tita et al., 2009). Babies born even 1 to 2 weeks before 39 completed weeks of gestation are also at significant risk for neonatal morbidity (Clark et al., 2009). Rates of adverse respiratory outcomes, mechanical ventilation, newborn sepsis, hypoglycemia, admission to the neonatal intensive care unit, and hospitalization for 5 days or more are increased 1.8 to 4.2 times for births at 37 weeks' gestation and 1.3 to 2.1 times for births at 38 weeks' gestation (Tita et al., 2009).

If a pregnant woman is fully informed about the indications for induction, the risks and benefits of the proposed method, and possible alternative approaches as recommended by ACOG (1999), then the woman's choice should be honored if the appropriate resources are available to induce labor safely and she has reached 39 completed weeks of gestation. However, many discussions between women and their physician before induction fall short of meeting these criteria. An all-too-common occurrence during the admission of a pregnant woman for induction is the realization by the nurse that the woman did not request an induction of labor and is unaware of the indications, potential risks, and alternative approaches (Simpson & Thorman, 2005). Although not well documented in the literature or discussed openly in professional forums, a scheduled induction of labor offers some real convenience advantages to the physician and the CNM (Clark, Simpson, Knox, & Garite, 2009). Scheduling several women for an induction of labor on the same day starting early in the morning allows patient management to be done concurrently and increases the likelihood that most women will give birth by the end of the day. When physicians and CNMs schedule inductions routinely, the risk to the women of going into spontaneous labor and giving birth at a time that is inconvenient is avoided. As the number of patients who have scheduled inductions increases, the number of physician and CNM telephone calls and trips to the hospital in the middle of the night and on weekends is likely to decrease (Clark, Simpson, Knox, & Garite, 2009).

Another example of provider convenience is shortening the second stage of an otherwise normal labor by applying forceps or a vacuum extractor and cutting an episiotomy (Simpson & Thorman, 2005). Perinatal nurses can help to avoid the temptation by physicians to shorten the second stage when there are no maternal-fetal indications by calling physicians at appropriate times when birth is imminent so that they are not delayed in the hospital when they have an office full of pregnant women waiting to be seen. However, this requires knowledge of the labor process and keen assessment skills. All interventions for convenience involve some risk of an adverse outcome. Unfortunately, the current culture in many perinatal units supports routine practices for convenience rather than patience and allowing the normal process and progress of birth to occur. In this situation, routine practices for convenience continue until the inevitable adverse outcome occurs.

One way to understand how practices that involve risk can come to be favored over patience and patient safety is provided by Vaughn (1996) in her analysis of the *Challenger* disaster. She found that professional standards of any work group will degrade slowly and incrementally over time. Vaughn called this progressive degradation in safe practice the *normalization of deviance*. Operational systems and clinical practices that are known to be risky continue because the risk is continually redefined in the context of injuries that do not occur. This phenomenon of human behavior is especially prevalent when the chances of the risk occurring are small. Most mothers and babies are healthy, so care involving increased risk does not usually result in patient injury (Simpson, 2005). As time goes on, practice becomes increasingly less safe because the health care system that is in place can "get away with it." Perinatal practices that involve convenience for health care providers should be evaluated in terms of risks and benefits for mothers and babies. Before proceeding, it should be clear who the beneficiary of the convenience is. Women should be informed fully that the practices or interventions being considered are for convenience, and these women should then be allowed to make a decision about whether to go forward (Simpson & Thorman, 2005). Avoiding the risk of the normalization of deviance in any perinatal setting is a significant challenge for perinatal nurses, but it is one that can be met if the goal of the best possible outcomes for mothers and babies is ranked higher in priority than convenience. This goal will require physicians and nurses to come to a consensus that patient safety is the number

one priority and that some may be inconvenienced while waiting for nature to take its course.

LACK OF KNOWLEDGE AMONG CHILDBEARING WOMEN ABOUT THE IMPACT OF THE PHILOSOPHY OF CONVENIENCE

Information about pregnancy and birth has never been more available for childbearing women than it is today. A visit to the local bookstore reveals aisles of books about all sorts of related topics, and more than 80,000 Internet sites are devoted to pregnancy and childbirth. However, many pregnant women seem to be uninformed about the implications of the artificial induction of labor, epidural anesthesia, assisted instrumental vaginal birth, and elective cesarean birth on the eventual outcomes of pregnancy. Rarely is a woman admitted for an elective induction of labor who is able to accurately articulate the risks involved. Most women are not actively involved in the decision to use forceps or a vacuum to shorten the second stage of labor or informed about the risks of the procedure versus waiting for the fetus to descend spontaneously. Few women question the need for an episiotomy when the procedure is imminent. Women put their trust in their health care providers. Trust is a good thing, but blind trust is not. A fully informed woman is a partner in the decision-making process. However, even women who are fully informed agree to things that they had planned to avoid when they are vulnerable during the process of labor and birth. Perinatal nurses, as advocates for pregnant women, need to make sure that women have the necessary information to make important decisions during labor and birth (Simpson & Thorman, 2005). Unfortunately, this advocacy can be seen by some as interfering with the physician-patient relationship. One way to increase the likelihood that women who are informed and who have made choices actually realize care based on those choices is the implementation of a birth plan that lists available options. A woman can complete a birth plan during the prenatal period and make that plan part of her medical record. The perinatal nurse can then review the requests and their appropriateness based on the individual clinical situation when the woman is admitted for childbirth. The content of prepared childbirth classes should include an objective review of the risks and benefits of commonly used interventions during labor and birth, and this information should be reinforced by nurses who care for women during the intrapartum period.

SUMMARY

Many issues in perinatal care could benefit from the collective efforts of all perinatal nurses to improve the way that they routinely care for childbearing women. Much of what nurses do in perinatal care is based on myths, rituals, and "the way we've always done it" (Simpson & Thorman, 2005). Those who are invested in the old ways will resist attempts to make significant changes. The best hope for change is a firm commitment to providing care that is based on the combined weight of available evidence. This commitment involves perinatal nurses making an effort to become educated about how to critique these data and applying the evidence to everyday clinical practice. Remember, knowledge is power. This power is within all perinatal nurses who arm themselves with the skills required to have clinical discussions with physician colleagues that are based on evidence; it is in this way that perinatal nurses will become true partners in determining the best practices for routine perinatal care.

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Perioperative Nursing: Recent Changes and Current Issues

NANCY J. GIRARD

The specialty practice area of perioperative nursing is facing many of the same issues that nurses in general are facing. The general health care delivery system in the United States today remains broken, and no one person, leader, or profession can fix it. Changes will occur eventually, and they may be painful to all involved before the final outcome. Team efforts and innovative methods to provide health care for the people of the United States involve an ongoing discussion with no solution to date, but things may be moving toward the more socialized health care seen in Canada and England. Daily, more and more Americans lose their insurance as a result of job loss, or they have inadequate or no insurance. Surgery costs climb, with some surgeries costing hundreds of thousands of dollars and bankrupting many who may even have insurance. Care is fragmented and often unattainable even for the insured; third-party payers control the extent of treatment, and faith in the system continues to decline. In light of these national problems, current major issues that affect perioperative nurses can be categorized into four areas: practice/role issues, skill issues, fiscal issues, and professional issues. These categories of issues are interconnected and should be considered factors that affect each other. Some of the variables that affect these factors are as follows:

- ◆ Nearly 90 million people—about one third of the population less than 65 years old—spent a portion of either 2006 or 2007 without health coverage (National Coalition on Health Care, 2009).
- ◆ Health care expenditures in 2005 were \$2 trillion; this was up 5.8% from 2004 (National Center for Health Statistics, 2008).
- ◆ The numbers of elective surgeries are dwindling.
- ◆ Third-party reimbursements to hospitals are more tightly controlled, with less money being received from Medicare. Those with private insurance have greatly decreased with the present recession and

loss of jobs, and insurance is more likely to be declined or withdrawn with any major illness or supposedly preexisting condition.

- ◆ The number of ambulatory surgery centers, office surgeries, and minimally invasive procedures being performed in alternative settings have affected hospitals.
- ◆ Consumers of health care are more knowledgeable about and more aware of their options because of the Internet. Information can be obtained from sources such as the Agency for Healthcare Research and Quality and consumer and patient advice columns about health care and treatment options (Clancy, 2008).
- ◆ Changes in regulatory and legislative mandates require health care institutions and providers to continually evaluate and improve the safety and quality of health care (Joint Commission, 2005).
- ◆ Needless complications will no longer be reimbursed (Box 24-1). Many of these conditions are directly related to actual operating department and surgical episodes (Centers for Medicare & Medicaid Services, 2008).
- ◆ Enhanced imaging devices have improved and will continue to improve the diagnosis and treatment (including surgery) of numerous health conditions.
- ◆ Innovations such as minimally invasive surgery, computerized technology, and robotic surgery will allow surgery to be done with greater precision, less tissue injury, and improved patient outcomes.

PRACTICE/ROLE ISSUES

The major goals of perioperative nursing practice are to maintain a safe environment, to prevent nonsurgical injury, to support the emotional and psychological

BOX 24-1 Potential Surgical Complications that Will No Longer Be Eligible for Additional Payment if Not Present on Admission

- Retained foreign body from surgery
- Air embolism after invasive procedures
- Urinary catheter infection
- Administration of incompatible blood
- Surgical site infections: spine, neck, shoulder, elbow, or obesity surgery
- Burns from cautery or chemicals
- Electric shock
- Infections from vascular catheters
- Deep vein thrombosis and pulmonary embolism following total knee or hip replacement

Source: Centers for Medicare & Medicaid Services. (2008). *Hospital-acquired conditions (HAC) in acute inpatient prospective payment system (IPPS) hospitals*. Retrieved September 21, 2008, from Available at: <http://www.cms.hhs.gov/HospitalAcqCond/Downloads/HACFactsheet.pdf>.

needs of the patient and the family, and to provide timely and accurate information to all. The nurse assesses, plans, implements, and evaluates care during the surgical episode, just as nurses do in every setting. The majority of people have either recently had surgery or know someone close to them who has. The impact of a registered nurse (RN)—whether or not the patient is aware that the nurse is by his or her side—may have made the difference between client satisfaction and dissatisfaction, and it may also have minimized mishaps and maintained safety during the procedure.

Perioperative nurses feel strongly that they must remain in the role of patient advocates and caretakers at surgical sites. The Association of PeriOperative Registered Nurses (AORN, 2009b) position statement is that every surgical patient deserves an RN. However, the traditional perioperative nursing roles are under attack. The questions being debated today by many within and outside of nursing are as follows: “Are professional RNs needed in the operating department and in areas in which surgical interventions are being performed? If so, what will they do?” Historically, perioperative nurses had two roles: circulating nurse and scrub nurse. Within the last decade, surgical technicians have taken over the role of scrub person, and nursing has maintained a nebulous hold on the professional circulating role. New legislative measures in many states allow semiskilled technicians to take over the roles of the circulating person and the scrub person. Hospital administrators quickly accepted the surgical technologist in this role

because of the decreased availability of qualified surgical nurses and the lower costs associated with unlicensed personnel in this role. The development of surgical technology programs in hospitals and in technical colleges has produced an increased number of ancillary personnel who are assuming the scrub role and who are beginning to assume a circulating role.

The roles of the perioperative nurse are expanding beyond circulating and scrubbing. Additional roles include those of managers, educators, case coordinators, researchers, consultants, informatics specialists, industrial supply company representatives, and advanced practice nurses. Many nurses are obtaining additional education beyond their basic nursing education to further develop their perioperative practice roles. The most common formal graduate educational degrees for those aspiring to be leaders are a Master’s in Nursing Administration and a Master’s in Business Administration. Most states identify three advanced practice categories that perioperative nurses are joining by obtaining graduate education (i.e., a Master’s of Science in Nursing): clinical nurse specialists, nurse practitioners, and certified registered nurse anesthetists. Clinical nurse specialists and nurse practitioners are providing care during the whole continuum of the surgical experience, from home to home. They are practicing in surgical units, clinics, offices, freestanding surgery centers, and homes. As health care delivery continues to change, one must ask whether the major future role of perioperative nursing is beyond the operating department.

Expanded perioperative nursing roles include certified RN first assistants (CRNFAs), who work as hospital employees or in private physician practices. Some nurses maintain their own businesses and hire themselves out to surgeons who need CRNFAs. A CRNFA may or may not have an advanced degree, but he or she has additional education in first assisting (AORN, 2005). Meanwhile, the role of the perioperative nurse in hospitals and ambulatory surgery settings has become highly diversified. What was once a homogenous population of caregivers is now a group that often has little in common except the incidence of a surgical episode. For example, perioperative nurses in ambulatory settings assume responsibility for the care of the patient throughout the entire perioperative period, from pre-admission to discharge. Some ambulatory-based perioperative nurses make discharge follow-up calls or visits to the home. Perioperative nurses are now focusing in areas such as gastrointestinal, radiology, endoscopy, orthopedic, cardiovascular, and other surgical subspecialties, along with physicians.

These subspecialties take the perioperative nurse out of the traditional operating department; this has led to a fragmentation of perioperative nursing, and it also draws members away from AORN as they move to start their own specialty organizations. This movement lends importance to the issue of practice, because the perioperative group no longer speaks with one voice and thus is in jeopardy of losing what little political influence it has had. To counteract this, AORN recently joined forces with the American Nurses Association, which made the huge leap to work with specialty organizations and to include AORN members as affiliate members. This gives a louder voice to common nursing issues and enables a stronger role in legislative processes for both organizations.

SKILL ISSUES

The change in skill requirements for perioperative nurses is a big issue today, because technological advances are changing the practice of surgery. Innovations in minimally invasive surgery, virtual reality, robotic technology, computerized technology, gene therapy, and nanotechnology are transforming surgical techniques. Computerized and enhanced imaging devices have and will continue to improve the diagnosis and surgical treatment of numerous health conditions. With the growth in the amount of technical and computerized equipment, perioperative nurses are facing continuous updates and training needs. Indeed, many nurses think that they should have taken engineering courses rather than nursing courses to cope with all of the new equipment. The newest innovations may require certification and specialization to prepare nurses to implement and monitor the patient with the use of the technology that is present in surgical settings. Because of the constant upgrading of existing and new technology, it is impossible for nursing schools to prepare competent new graduates adequately in every skill; this responsibility must be absorbed by surgical institutions as staff development or on-the-job training.

With the increasingly complex technological aspects of intraoperative care must come training for the use of each piece of technology. Some technology is so detailed that the skills required are provided by the company that manufactures the product rather than the employer. Hands-on training is essential, and many skills require competency testing and even certification. By one estimate, there could be up to 450 different pieces of equipment in an operating department for just one surgery, so cross-training for everything is

impossible. In the past, a perioperative nurses—like any other nurse—could be cross-trained to work in all areas of surgery. Today, that just could not be done. A nurse who is excellent in heart surgery may have no knowledge of brain surgery. Thus, perioperative nurses have become as specialized in surgery as physicians and thus can no longer be available for assignment in any room for any type of surgery.

The general perioperative nurse of the past is gone, and management now must hire for specific skill sets. The lack of administration and management understanding of the knowledge and skill needs of these nurses is a big issue, and many administrators continue to look for an all-around practitioner. This is unreasonable, and it sets up unsafe situations for the patient and risks for the institution. Physicians gain more respect and ability as they focus on one aspect of care, whether it is orthopedics or eye surgery; nurses should have that same respect and opportunity.

The increased skill levels needed by perioperative nurses require the presence of a unit educator to teach and train the nurses in any new technology. Because of the ongoing nurse shortage, more new graduates are being recruited into perioperative nursing, so basic skill training is also still needed. Nurses assuming educator roles are responsible for the design, implementation, and evaluation of perioperative education programs for staff, patients, and families as well as for in-service education and orientation programs for all members of the surgical team. Advanced practice nurses can assist unit educators as clinical resource persons for these teaching endeavors, although that is not their main role. Unfortunately, one of the first cutbacks in the hospital to decrease costs is the deletion of the educator. As described previously, training is essential in the operating department. These graduates must be oriented and their competencies must be determined to ensure safe care. In addition to training new nurses, educators are frequently needed for training hospitals to provide orientation for others who are not skilled in manipulating sterile supplies and moving about in a controlled system. These individuals can be medically trained individuals, technicians, assistants, or other students. Without a perioperative educator, these tasks can be accomplished only with a longer, more costly, and more inefficient method.

Finally, mobile computer and communication technology skills are essential for perioperative nurses. The use of personal handheld devices and wireless computers is increasing in surgical areas to provide more efficient workflow and to allow for documentation and

care planning that have the potential to reduce errors. Perioperative nurses today must be computer literate, and they must have the skills to use all methods of communication technology. A problem that often occurs is that the operating department uses its own computers and software that does not interact with that of the rest of the hospital; this negates the concept of one unified electronic record. One has to wonder what can be done to facilitate a more consistent and efficient approach for the whole hospital or if this is an unreal expectation.

FISCAL ISSUES

The cost of health care in the United States today is driving all aspects of care, including perioperative nursing. Great concern exists regarding the extent of the benefits provided through Medicare and Medicaid programs. Today's economy is in a recession, and the impact of this is being felt by everyone, including hospitals. Although layoffs nationally are rampant, hospitals today remain a critical component of the national economy. In 2007, 45% of new private-sector jobs were created in the health care sector, and hospitals employ more than 5 million people (American Hospital Association, 2008).

A hospital survey found that elective procedures are down 31% and that inpatient surgery is down 1.4% nationally. The increase in unemployment results in a loss of health care benefits (American Hospital Association, 2008). It is most likely this situation will not improve during the next year but that it will take even longer. Hospitals will likely rethink the workforce that they need to employ, which may affect nurses' positions. Although surgical centers are cutting administrative costs and reducing staffing and services, they remain one of the few revenue-producing units within hospitals. Not-for-profit community hospitals that are also trauma 1 centers cover the low-income populations of mothers with children, the elderly, and the disabled. Individuals who require emergency surgery often seek care in community hospitals, but they may not be able to pay the high copayments, if they even have insurance. Medicare compensation requests are going up even as reimbursements are being cut. As of October 2008, only six states did not have a budget gap. The costs of caring for the elderly are greatly affecting acute care hospitals as the population ages. Surgery is now being performed on persons up into their late 80s and even into their 90s, which will drive fiscal issues and cost containment further afield.

Just when advanced practice nurses and CRNFAs are becoming eligible to bill for third-party reimbursement, costs are being cut, particularly those of Medicaid. Community- and state-run health care institutions (e.g., acute care hospitals) will be affected by any cuts. The salary costs of any business are the major budgetary consideration, so managers will be looking at more cost-effective methods to stay in business. These changes can affect perioperative nurses, because, to date, no empirical evidence justifies having a professional RN in the role of the circulating individual. Indeed, nonperioperative nurses often question the need for RNs in the operating department. No other specialty is so judged by other nurses as is perioperative nursing. This opinion is unacceptable, because the practice of nursing exists no matter what the practice site. Still, an argument to retain advanced practitioners and CRNFAs in the operating department is that they now can bill for third-party reimbursement in many states. This billing recovery could be considered salary replacement or additional income to those employing these practitioners, which may help these nurses to retain their positions.

Today, more surgeries and minimally invasive procedures are performed outside of traditional hospital operating departments. In addition to the growth in ambulatory care procedures, office-based surgery is the latest trend in surgery. As more procedures are performed in office settings, the number of surgeries performed in hospital and ambulatory care settings is anticipated to further decrease. These changes in clinical settings will continue to drive significant financial changes in hospitals, which will affect the traditional role of the perioperative nurse further. Ambulatory surgical centers were established in an effort to decrease costs and to create an efficient process for patient and staff members. Changes in reimbursement, the shift to minimally invasive surgical techniques, cost-containment efforts, and high levels of patient and staff satisfaction further contributed to the expansion of ambulatory surgical settings.

Although many surgeries can be performed outside of the operating department, is that really where they should it be done? The general public seems to support the idea, but this trend was started for financial reasons. Surgery is cheaper outside of a hospital. Some major surgeries (e.g., abdominal aortic aneurysm repair) may now be performed in radiology departments without the assistance of a perioperative nurse (or any nurse). What one often encounters in doctors' offices are the least-educated staff, many without even a medical assistant education. Thus, the assistive individuals

present for office surgery do not have knowledge of emergency resuscitation or of the safety needed during procedures to adequately provide minimal care. In many settings, the knowledge that perioperative nurses bring to the practice is valued and adopted. However, in other settings, there are assistants with little knowledge of basics such as sterile technique, which thereby increases the incidence of postprocedure infection.

PROFESSIONAL ISSUES

Professionalism is an issue for nursing in general, and it is a major problem with the identification of perioperative nurses as professionals because of the lack of visibility. Perioperative nurses still, for the most part, remain behind closed doors. In addition, students exposed to the operating department often do not see professional nursing being performed when only observing, or they may have bad experiences and not further consider this as a career choice. Perioperative nurses are accountable for this situation. Unfortunately, in many schools, nursing faculty frequently tell students not to go into the operating department after graduation and discourage interest in the specialty; this has led to a continual decline in RNs in the operating department. Today, new nurses are not entering the perioperative arena in sufficient numbers to replace retiring nurses. In addition, older perioperative nurses may have trouble keeping up with the physical activity required to perform in the operating department, so the impact of retirement is being felt around the country. One measure that is being used to counteract this loss is to replace RNs with semiskilled and unskilled personnel.

Another threat to the professional RN continuing in the operating department comes from the Association of Surgical Technologists (2005), which is developing national legislative and regulatory initiatives that include functions that were previously only performed by the circulating nurse. They define the role of the circulating individual as that of an RN, a licensed vocational nurse, or a certified surgical technologist (CST) (Association of Surgical Technologists, 2008). This clearly defines their goals and should alert professional nurses to the possibility of legal support to change the present requirements that an RN circulate (and thus control) the operating department. AORN's position statement remains that there must be one circulating RN dedicated to every patient who is undergoing a surgical or other invasive procedure (AORN, 2009c). The nursing profession vigorously opposes any bill that puts the CST in the circulating role, because this would result in broad grandfathering

practices and waivers for education, which may not retain the quality of surgical patient care that is desired. Although the good intentions of the bill are to provide educated and qualified surgical technicians who perform a valuable and needed service as part of the operating department team, in reality, the bill provides less-skilled entry to compete with the professional nurse in the operating department, it does not involve the meeting of any current criteria for certification, and it allows for minimal education. Bills have been presented to define the educational levels of the CST that may further affect the professional role of the RN. Indeed, if the ancillary technician eventually require a bachelor's degree as the basic level of admission to practice, nursing is not only in jeopardy, but nurses may eventually be the less educated of the two. If this occurs in the operating department, it will certainly happen in other practice areas and with other specialties.

Entry into practice is an ongoing issue with perioperative nurses as with all other nurses. Although AORN leadership approved the idea that entry into nursing practice should require a baccalaureate degree (AORN, 2009a), many perioperative nurses still have an associate's degree or a diploma certificate and oppose the position. Thus, the entry level remains fragmented and continues to weaken nursing's position in health care. Some hospitals still call non-master's-prepared nurses "clinical specialists," but these nurses do not have the education or proper certification to practice in this role. Advanced practice nurses must adhere to their state criteria for practice, including obtaining a master's degree. This is becoming more important, because state boards of nursing now are looking closely at scopes of practice to ensure that nurses are not practicing outside of their academic preparation and certification. This scrutiny can affect many acute care institutions that are presently hiring family nurse practitioners for surgical areas and even to assist with surgery (rather than hiring acute care nurse practitioners and CRNFAs).

Another professional issue is the continuing discussion about the roles of the certified registered nurse anesthetist and the CRNFA, particularly if these nurses are hired by independent surgeons and are not staff at a hospital. Practice privileges, financial reimbursement, job descriptions, and actual roles are in ongoing development and depend on the state and the institution. Often the ability of these practitioners to perform adequately in their roles depends on their ability to charge for third-party reimbursement, which also varies from state to state.

The majority of health care organizations have been concerned with the safety of the patient for years. AORN

has, since the beginning of the specialty profession, mandated safety as the ultimate goal for practice in this arena. Therefore, a major reason to retain the professional nurse in the operating department is to maintain and improve quality care that is safe and effective. Perioperative nurses have always focused on safety in all aspects of surgical patient care, because this is one area in which the patient has no ability to cope with threatening situations alone. AORN is working in close collaboration with the Council on Surgical & Perioperative safety and The Joint Commission to recognize National Time Out Day, which has occurred every year since its inception in 1963. AORN is sponsoring a poster for 2009 with the following motto: "Every Patient. Every Time. Take a Time Out for Patient Safety" (AORN, 2008). This motto is meant to mandate that, before every surgery or invasive procedure (immediately before cut time), the entire surgical team takes a time out to ensure that the right patient, the right procedure, the right surgical site, and the right anesthesia have been identified. Physical, emotional, and psychological aspects must be considered to provide quality care. Professional nurses have the education and depth of knowledge to provide this care. This degree of nursing care can be provided only by a professional, and, if semi-skilled or unskilled workers replace the RN in the operating department, then patients may be the ones who suffer as a result of inadequate or insufficient care.

SUMMARY

Practice/role, skill, fiscal, and professional issues currently affect perioperative nurses. Debate about all of these issues is ongoing within the health care arena. These issues are influenced by socioeconomic factors and by the changing demographic characteristics and cultures today. Perioperative nurses need to continue to demonstrate their contributions to quality care in surgical settings by using evidenced-based outcomes to validate their practice. Although few empirical findings are available to support the role, practice, and professional concerns, clinical evidence is available. The presence of RNs in the operating department is vital to quality patient care, and the perioperative specialty must be supported by nurses and management. The loss of this professional role would be a great detriment to future surgical patients and their loved ones.

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Psychiatric Mental Health Nursing: Recent Changes and Current Issues

GAIL W. STUART

This is an exciting time to be a psychiatric mental health nurse; this subspecialty is one of the most important for the profession, both now and in the years to come. Mental health issues have emerged as a major source of disability and morbidity for children, adults, and the elderly, and psychiatric nurses are seen as providing essential aspects of care to ensure the health and well-being of individuals, families, and communities.

THE IMPORTANCE OF MENTAL HEALTH CARE

The World Health Organization has identified mental illnesses as the leading cause of disability worldwide (World Health Organization, 2001). Specifically, of all health-related disability, the highest proportion (24%) is related to psychiatric and mental health disorders; this is followed by alcohol and drug use disorders (12%) and Alzheimer's disease and dementia (7%) (Figure 25-1). Thus, fully 43% of health-related disability is the result of mental health issues. Four out of the 10 leading causes of disability for people over the age of 5 years are mental illnesses. Major depression is the leading cause of disability among developed nations, and manic-depressive illness, schizophrenia, and obsessive-compulsive disorder also rank at the top.

Mental illness is a tragic contributor to mortality, with suicide representing one of the leading preventable causes of death in the United States. In fact, worldwide, suicide accounts for more deaths than homicide and war combined. Furthermore, the return of U.S. soldiers from combat overseas has brought public attention to the impact of brain injury and posttraumatic stress disorder on quality-of-life issues. In many ways, mental health has come out from under the cloak of darkness

to be recognized as one of the most compelling health care problems of this decade.

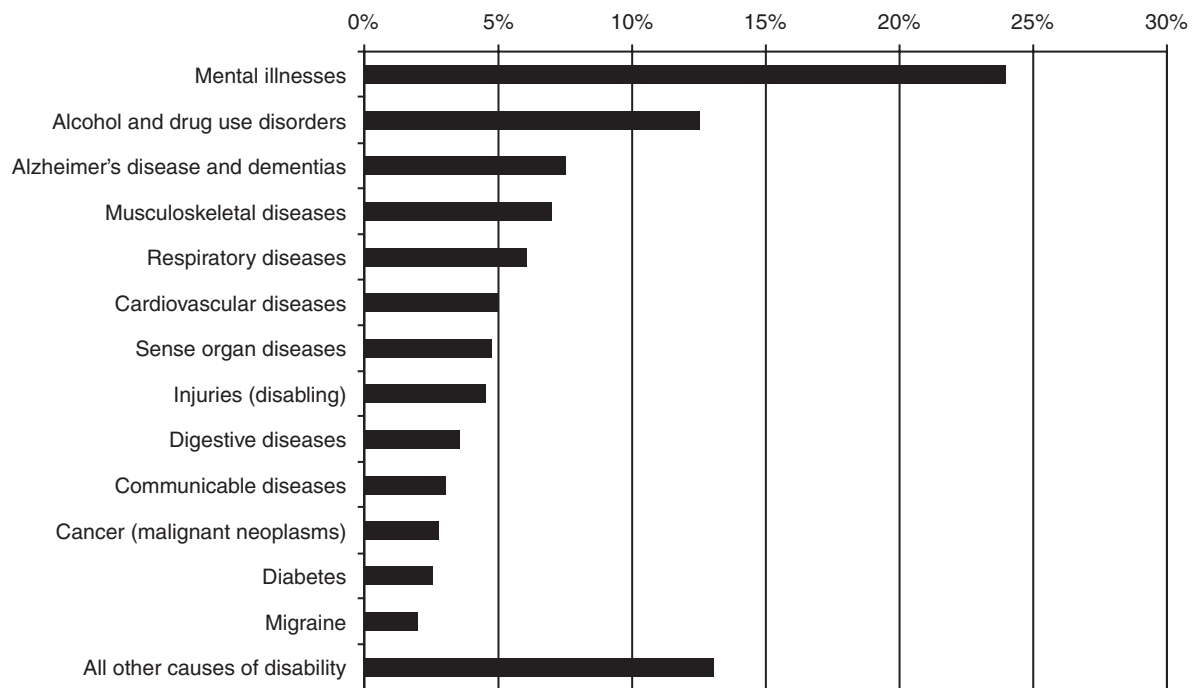
However, this recognition has come slowly, with four important reports contributing to the current state of the field. The most recent one is "Improving the Quality of Health Care for Mental and Substance Use Conditions" (Institute of Medicine, 2006). This report describes a multifaceted and comprehensive strategy for ensuring access, improving quality, and expanding mental health and substance abuse treatment services.

The second was the report from the New Freedom Commission on Mental Health, *Achieving the Promise: Transforming Mental Health Care in America*, which was issued in 2003. The Commission was formed to address the problems of the mental health service delivery system that allow Americans to fall through the system's cracks. This was found to be a result of fragmentation, gaps in care, and the uneven quality of mental health services. The Commission recommended a focus on promoting recovery and building resilience (i.e., the ability to withstand stresses and life challenges).

The third report, which was issued in 1999, was the first ever issued by a U.S. Surgeon General on the topic of mental health and mental illness. It was entitled *Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services, 1999), and it concluded the following:

- ◆ Mental health is fundamental to health.
- ◆ Mental disorders are real health conditions that have an immense impact on individuals and families.
- ◆ The efficacy of mental health treatments is well documented.
- ◆ A range of treatments exists for most mental disorders.

On the basis of the strength of the findings in the report, the one explicit recommendation is that



Causes of disability for all ages combined. Measures of disability are based on the number of years of "healthy" life lost with less than full health (i.e., YLD: years lost due to disability) for each incidence of disease, illness, or condition. All data shown add up to 100%.

FIGURE 25-1 Causes of disability in the United States, Canada, and Western Europe.

people should seek help if they have a mental health problem or think that they have symptoms of a mental disorder.

The fourth notable report is *Healthy People 2010*, which identified a list of leading health indicators that reflect the major public health concerns in the United States (U.S. Department of Health and Human Services, 2000). These concerns include the following: physical activity, overweight and obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunization, and access to health care.

These studies and reports underscore the critical importance of mental health care, and they help to advocate for a more effective and efficient mental health delivery system. They also underscore the need for more psychiatric health professionals, including nurses. More than 54 million Americans have a mental illness during any given year, although fewer than 8 million seek treatment. Therefore, 1 in 5 Americans

is living with a mental illness, and, if these individuals seek treatment, it is usually in a way that is dependent on the skills of primary care providers. It is further estimated that half of all visits to primary care providers are the result of conditions that are caused or exacerbated by mental or emotional problems. At present, parity for mental health care is being enacted at the national level and by many states across the country. Advances in genetics and neurobiology abound, and the field is moving quickly toward a paradigm of evidence-based practice. Clearly, mental health is the trump card within the health care system; it has been linked to both the development of and recovery from a wide variety of medical illnesses.

It is clear that there is a growing need for psychiatric-mental health nurses. Today, there are more than 80,000 registered nurses who work in mental health organizations in the United States: half are employed in private psychiatric hospitals and general hospital psychiatric

units, and the other half are community based (Manderscheid & Berry, 2007). There are more than 20,000 advanced practice psychiatric mental health nurses with graduate degrees (American Nurses Credentialing Center, 2003). However, these numbers are too few to meet the growing need for mental health care, and evidence suggests that psychiatric nurses will age out of the workforce faster than nonpsychiatric nurses (Delaney, Hanrahan, & Merwin, 2007; Hanrahan et al., 2003; Hanrahan & Gerolamo, 2004).

These problems create unique opportunities for the specialty. Psychiatric nurses are quickly moving into the continuum of care, where they clearly articulate their skills, functions, and abilities. They are demonstrating their cost-effectiveness and differentiated levels of practice that are based on education, experience, and credentials. These strategies will position psychiatric nurses as visible, interdependent, central, and collaborating professionals who have much to offer a reformed health care system.

PSYCHIATRIC MENTAL HEALTH NURSING PRACTICE

Psychiatric mental health nursing is an interpersonal process that promotes and maintains patient behavior that contributes to integrated functioning. The patient may be an individual, a family, a group, an organization, or a community. The American Nurses Association's *Psychiatric–Mental Health Nursing: Scope and Standards of Practice* defines psychiatric–mental health nursing as “a specialized area of nursing practice committed to promoting mental health through the assessment, diagnosis, and treatment of human responses to mental health problems and psychiatric disorders. . . . (It) employs a purposeful use of self as its art and a wide range of nursing, psychosocial, and neurobiological theories and research evidence as its science” (2007, p. 14). The Center for Mental Health Services officially recognizes psychiatric nursing as one of the five core mental health disciplines. The other four disciplines are marriage and family therapy, psychiatry, psychology, and social work.

Recent changes and current issues are occurring in five discrete areas of psychiatric nursing practice:

1. Role;
2. Activities;
3. Models of care;
4. Treatment settings; and
5. Evidence-based practice.

Each of these will be explored on the basis of historical perspectives, recent developments, and future challenges in the field.

PSYCHIATRIC MENTAL HEALTH NURSING ROLE

The decades of the 1950s and 1960s are fondly remembered by psychiatric nurses because they mark the emergence of the identity of the specialty. It was an exciting and stimulating time, and the early psychiatric nursing leaders who contributed to this identity formation—Peplau (1952, 1962, 1978), Gregg (1954), Tudor (1952), and Mellow (1968)—will forever remain larger than life for their early contributions to the emerging specialty area. The challenges that they faced were to identify and describe the roles and functions of psychiatric nursing specialty practice and to disseminate them widely within the broader community of nurses.

The challenges for psychiatric nurses in the 1970s and 1980s were somewhat different. During those years, nurses worked to define the nature and focus of nursing as a practice discipline, and they examined aspects of both the art and science of nursing. Psychiatric nurses worked parallel to the overall nursing profession and moved psychiatric nursing into the mainstream of nursing practice by helping to elaborate psychosocial concepts, thus further defining the caring and holistic dimensions of professional nursing practice.

Psychiatric nurses in the 1990s faced a new challenge: integrating the rapidly expanding bases of psychobiology, the neurosciences, psychopharmacology, and psychotherapy into the holistic biopsychosocial practice of psychiatric nursing. Advances in understanding the interrelationships among biology, the brain, behavior, emotion, and cognition offered new opportunities for psychiatric nurses. In addition, the taxonomy used to categorize and diagnose mental illnesses was becoming increasingly precise and more interdisciplinary. A final issue to emerge was the importance of sociocultural factors in psychiatric care. Psychiatric nurses saw the need to become realigned with care and caring, which represent the art of psychiatric nursing and give balance to the science and high technology of current mental health care practices.

The task for psychiatric nurses today and in the years ahead is to evolve beyond the formative work in the field and to enact psychiatric nursing roles and functions on the basis of the current social and environmental context of care. For example, the nurse–patient relationship as first described by Peplau (1952) has grown

in complexity from its original historical elements. It has now been reconceptualized in a health care environment in which there is greater consumer responsibility and a broader context of clinician accountability. Thus, the concept of the nurse–patient relationship has evolved into that of the nurse–patient partnership, which incorporates new dimensions of the professional psychiatric nursing role (Figure 25-2).

Enacting the nurse–patient partnership requires expanding the traditional roles of the nurse to include the elements of clinical competence, patient–family advocacy, fiscal responsibility, interdisciplinary collaboration, social accountability, and legal and ethical obligations (Stuart, 2009a). No longer can psychiatric nurses focus exclusively on bedside care and the immediacy of patient needs. Rather, they must broaden the context of their care and the responsibility and understanding that they bring to the caregiving situation.

The current practice of psychiatric nursing requires greater sensitivity to the social environment and active advocacy for the diverse needs of patients and of the families of the mentally ill. It also mandates the thoughtful consideration of complex legal and ethical dilemmas that arise from a health care system that is embracing the efficiencies of managed care, which often disadvantages and discriminates against those with psychiatric illnesses. Finally, new models of delivering mental health care require greater skill with regard to interdisciplinary collaboration; this is built on the psychiatric nurse's clinical competence and professional self-assertion and balanced by a clear understanding and respect for the cost indices and financial aspects of psychiatric care in general and psychiatric nursing care in particular. Each of these elements

permeates the education, research, and clinical aspects of the current state of psychiatric nursing.

ACTIVITIES OF PSYCHIATRIC NURSES

There are three domains of contemporary psychiatric nursing practice: direct care, communication, and management activities. Within these overlapping domains, the teaching, coordinating, delegating, and collaborating functions of the psychiatric nursing role are expressed. Often the communication and management domains of practice are overlooked, minimized, or discounted when discussing psychiatric nursing. However, these integrating activities are critically important and time-consuming aspects of the psychiatric nurse's role. They are also valuable in a reformed health care system that places great emphasis on efficient patient assessment, triage, and management. Thus, they are critical aspects of contemporary psychiatric nursing practice.

It is important for psychiatric nurses to be able to further delineate the various activities that they engage in within each of these domains. The range of specific activities that can be enacted by a psychiatric nurse in each area are listed in Box 25-1 (Stuart, 2009a). Although not all psychiatric nurses participate in all of these activities, they do reflect the current nature and scope of competent caring by psychiatric nurses. In addition, psychiatric nurses do the following:

- ◆ They make biopsychosocial health assessments that are culturally sensitive.
- ◆ They design and implement treatment plans for patients and families with complex health problems and comorbid conditions.
- ◆ They engage in case-management activities, such as organizing, accessing, negotiating, coordinating, and integrating services and benefits for individuals and families.
- ◆ They provide a health care map for individuals, families, and groups to guide them to community resources for mental health, including the most appropriate providers, agencies, technologies, and social systems.
- ◆ They promote and maintain mental health and manage the effects of mental illness through teaching and counseling.
- ◆ They provide care for the physically ill with psychological problems and the psychiatrically ill with physical problems.
- ◆ They manage and coordinate systems of care that integrate the needs of patients, families, staff, and regulators.

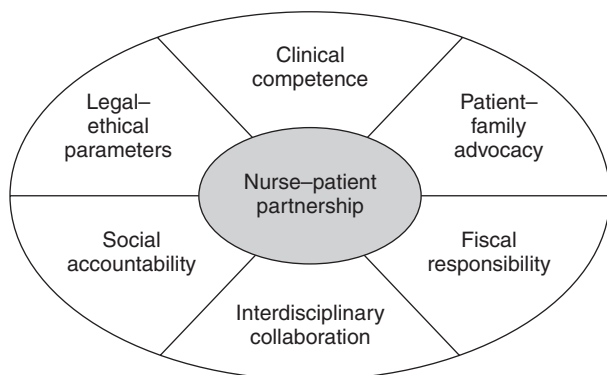


FIGURE 25-2 The nurse–patient partnership.

BOX 25-1 Psychiatric Nursing Activities**DIRECT CARE ACTIVITIES**

Activity therapy
 Advocacy
 Aftercare follow-up
 Behavioral treatments
 Case consultation
 Case management
 Cognitive treatments
 Community assessment
 Community-based care
 Community education
 Complementary interventions
 Compliance counseling
 Counseling
 Crisis intervention
 Discharge planning
 Environmental change
 Environmental safety
 Family interventions
 Group work
 Health maintenance
 Health promotion
 Health teaching
 High-risk assessment
 Holistic interventions
 Home health care
 Individual counseling
 Informed consent acquisition
 Intake screening and evaluation
 Interpreting diagnostic and laboratory tests
 Medication administration
 Medication management
 Mental health promotion
 Mental illness prevention
 Milieu therapy
 Nutritional counseling
 Ordering diagnostic and laboratory tests
 Parent education
 Patient triage
 Physical assessment
 Physiological treatments
 Play therapy
 Prescription of medications
 Promotion of self-care activities
 Provision of environmental safety
 Psychiatric rehabilitation
 Psychobiological interventions
 Psychoeducation
 Psychosocial assessment
 Psychotherapy
 Rehabilitation counseling
 Relapse prevention
 Research implementation
 Social action

Social skills training
 Somatic treatments
 Stress management
 Support of social systems
 Telehealth

COMMUNICATION ACTIVITIES

Clinical case conferences
 Development of treatment plans
 Documentation of care
 Forensic testimony
 Interagency liaison
 Peer review
 Professional nurse networking
 Report preparation
 Staff meetings
 Transcription of orders
 Treatment team meetings
 Verbal reports of care

MANAGEMENT ACTIVITIES

Budgeting and resource allocation
 Clinical supervision
 Collaboration
 Committee participation
 Community action
 Consultation/liaison
 Contract negotiation
 Coordination of services
 Delegation of assignments
 Grant writing
 Marketing and public relations
 Mediation and conflict resolution
 Mentorship
 Needs assessment and forecasting
 Organizational governance
 Outcomes management
 Performance evaluations
 Policy and procedure development
 Practice guidelines formulation
 Professional presentations
 Program evaluation
 Program planning
 Publications
 Quality improvement activities
 Recruitment and retention activities
 Regulatory agency activities
 Risk management
 Software development
 Staff scheduling
 Staff and student education
 Strategic planning
 Unit governance
 Utilization review

Finally, psychiatric nurses must be able to explain both the general and the specific aspects of their practice to patients, families, other professionals, administrators, and legislators. When such skills and competencies are identified, psychiatric nurses will be able to ensure their appropriate role use, adequate compensation for the nursing care provided, and the most efficient use of scarce human resources for the delivery of quality mental health care. Health care reform, patient and family needs, scientific developments, economic realities, and societal expectations are the forces that will shape the future roles and activities of psychiatric nurses.

MODEL OF PSYCHIATRIC NURSING CARE

As a result of rising health care costs, changing reimbursement trends, and problems with the accessibility of care, there has been a reformulation of the model of care for psychiatric illness in this country. Twenty years ago, most psychiatric care was provided in hospital units, where the average length of stay for acute inpatient treatment was about 25 days (as compared with 10 days in 1995 and 7 days in 2005). Not surprisingly, most psychiatric nurses were employed by inpatient facilities. Now, however, most inpatient psychiatric settings have an average length of stay of 5 days, and inpatient crisis stabilization programs often involve only a 2- or 3-day length of stay. These changes stimulated reciprocal changes in the goals, assessments, interventions, and expected outcomes of psychiatric care. Mental health care providers, including psychiatric nurses, need to reevaluate the models of care that they use on the basis of the patient's treatment stage, setting, and resources.

One current psychiatric nursing model of care identifies four treatment stages (Stuart, 2009b):

- 1. Crisis;
- 2. Acute;
- 3. Maintenance; and
- 4. Health promotion.

These stages reflect the range of the adaptive-maladaptive continuum of coping responses and suggest a distinct set of psychiatric nursing activities. For each stage, the psychiatric nurse identifies the treatment goal, the focus of the nursing assessment, the nature of the nursing intervention, and the expected outcome of nursing care (Figure 25-3).

During the crisis stage of treatment, the nursing goal is the stabilization of the patient; the nursing assessment focuses on risk factors that threaten the patient's health and well-being; the nursing intervention is directed toward managing the environment to provide

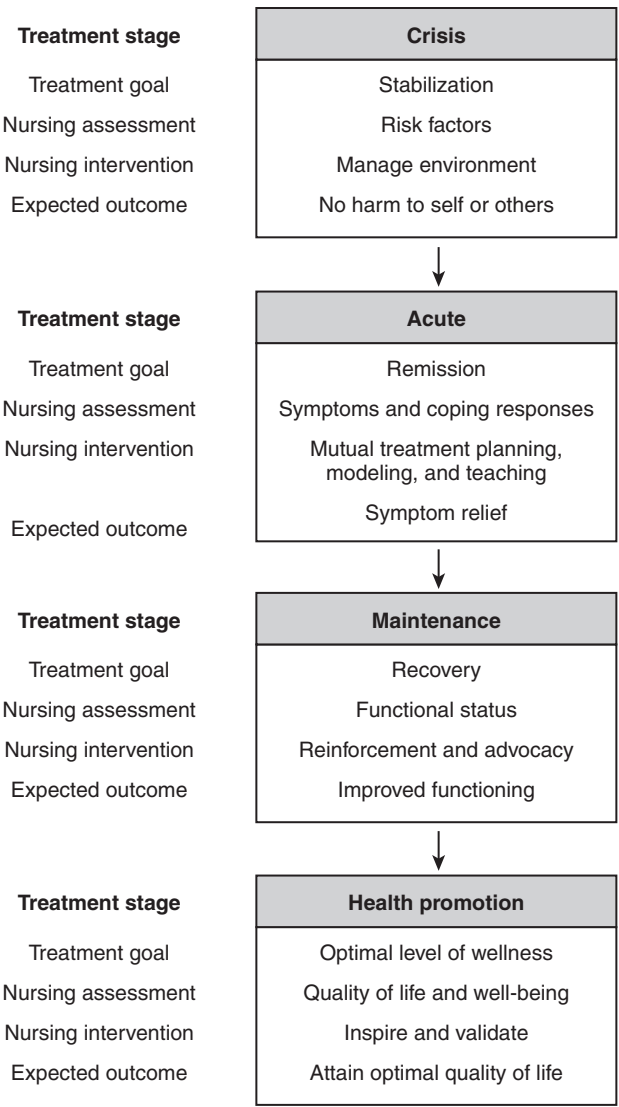


FIGURE 25-3 The stages of psychiatric treatment.

safety; and the expected outcome of nursing care is that no harm will come to the patient or others.

During the acute stage of treatment, the nursing goal is for the patient's illness to be placed in remission; the nursing assessment is focused on the patient's symptoms and maladaptive coping responses; the nursing intervention is directed toward treatment planning with the patient and the modeling and teaching of adaptive responses; and the expected outcome of nursing care is symptom relief.

During the maintenance stage of treatment, the nursing goal is the complete recovery of the patient; the

nursing assessment is focused on the patient's functional status; the nursing intervention is directed toward reinforcing the patient's adaptive coping responses and patient advocacy; and the expected outcome of nursing care is improved patient functioning.

During the health promotion stage of treatment, the nursing goal is for the patient to achieve the optimal level of wellness; the nursing assessment is focused on the patient's quality of life and well-being; the nursing intervention is directed toward inspiring and validating the patient; and the expected outcome of nursing care is that the patient will attain the optimal quality of life.

Psychiatric nurses have often overlooked the maintenance and health promotion treatment stages, because the activities associated with these stages of treatment have not traditionally been valued, and there has been limited reimbursement for providing care in these areas. With health care reform and the emergence of managed mental health care, however, activities related to these stages are becoming more important aspects of the contemporary psychiatric nursing role.

This model of care also helps to determine how the psychiatric nurse functions in each setting. For example, during previous years, most psychiatrically ill patients entered the psychiatric hospital in the acute treatment stage and were able to stay in the hospital until the goal of symptom remission was attained. This created the need for comprehensive treatment plans with long-term interventions for recovery. Today, however, most patients are admitted to inpatient units during the crisis treatment stage and have stabilization as their treatment goal, thus mandating very different nursing interventions and expected outcomes. The psychiatric care goals of symptom remission and recovery are now most often pursued in community-based settings, thereby requiring new skills and competencies from psychiatric nurses.

One may question whether psychiatric nurses have actually changed their expectations and treatment plans on the basis of the changing nature of inpatient care. It has been suggested that psychiatric nurses have not fully owned inpatient care (Delaney, 2006; Delaney & Johnson, 2006, 2007), and difficulty recruiting and retaining psychiatric nurses in inpatient settings may be directly attributable to a mismatch between traditional nursing expectations and current caregiving and fiscal realities.

TREATMENT SETTINGS

Traditional practice settings for psychiatric nurses have included psychiatric hospitals, community mental health centers, psychiatric units in the general hospital,

residential treatment facilities, and private practice. Many psychiatric hospitals have become integrated into clinical systems that provide inpatient care, partial hospitalization or day treatment, residential care, home care, and outpatient or ambulatory care.

Psychiatric nurses who work in inpatient settings have seen the goals, processes, and structures of care change drastically in ways that are reflective of the new models of psychiatric nursing care (Maree, 2009). Nurses who staff inpatient units no longer have their responsibilities limited to activities delivered exclusively in the hospital setting. Rather, they are likely to be flexibly assigned on a daily basis to other settings in the continuum of mental health care on the basis of fluctuating patient censuses and organizational need.

However, the future of psychiatric care clearly resides in the community. Community-based treatment settings have expanded to include foster care, group homes, hospices, visiting nurse associations, emergency departments, nursing homes, shelters, primary care clinics, schools, prisons, industrial settings, homes, managed care facilities, and health maintenance organizations. Psychiatric nurses have moved into the domain of primary care, and they are working with other nurses and physicians to diagnose and treat psychiatric illnesses in patients with somatic complaints. Cardiovascular, oncology, gynecological, respiratory, gastrointestinal, and family practice settings are appropriate for assessing patients for anxiety, depression, and substance abuse disorders. As health care initiatives continue to move into schools and other community settings, psychiatric nurses are assuming leadership roles to provide expertise through consultation and evaluation.

Psychiatric nurses are well suited to provide comprehensive health care to patients in both psychiatric settings and primary care environments. In particular, advanced practice psychiatric nurses acting as consultants to nonpsychiatric providers in hospital-based or outpatient clinics are in a unique position to assess and triage these patients on the basis of the immediacy of their needs. Early assessment and triage can minimize the length of time between psychiatric referral and intervention. By identifying patients who are in crisis and intervening in a timely fashion, these practitioners may reduce the number of failed appointments and enhance the efficacy of treatment. In fact, primary care settings appears to be the new frontier of psychiatric nurse practice.

Psychiatric nurses also provide medical and medication management for selected groups of patients in collaborative practices. For example, patients who are

having difficulty being stabilized on their medications or who have comorbid medical illnesses are seen in a psychiatric nursing clinic in which nurses and physicians collaborate to provide high-quality patient care. Psychiatric nurses who obtain prescriptive authority further expand the services that they provide and deliver cost-effective psychiatric care to communities that do not have access to a psychiatrist.

This widened range of settings maximizes the psychiatric nurse's potential contribution to the delivery of mental health care. The specific role that the nurse assumes in any one of these psychiatric treatment settings, however, depends on a number of factors, including the following:

- ◆ The legal parameters of practice as defined by one's state's Nurse Practice Act;
- ◆ The clinical competence of the nurse as a consequence of education, experience, and certification in psychiatric nursing;
- ◆ The philosophy, mission, values, goals, and organizational structure of the treatment setting;
- ◆ The needs of the consumers of mental health services;
- ◆ The number of available staff and the services that they are able to provide;
- ◆ The consensus reached by the mental health care providers who work together regarding their respective roles, responsibilities, and accountabilities;
- ◆ The resources and revenues available to offset the cost of care that is needed and provided; and
- ◆ The presence of strong nursing leadership and mentorship.

The new opportunities for psychiatric nursing practice that are emerging throughout the continuum of mental health care are exciting for the specialty. They allow psychiatric nurses to demonstrate their flexibility, accountability, and self-direction as they move forward into these expanding areas of practice. They also require that psychiatric nurses be proactive in articulating their skills and activities and that they demonstrate their expertise by designing interventions, planning programs, implementing treatment strategies, managing staff, and collaborating with other health care providers in a variety of traditional and nontraditional treatment settings. It is perhaps most important to note that the expansion of mental health treatment settings is providing psychiatric nurses with the opportunity to implement primary, secondary, and tertiary prevention functions from a holistic and biopsychosocial perspective, thus expanding their base of practice to better meet the mental

health needs of individuals, families, groups, and communities.

EVIDENCE-BASED PRACTICE

A final aspect of current psychiatric mental health nursing is the emphasis being placed on evidence-based practice. This includes the identification, description, measurement, and use of data that pertain to the efficacy and effectiveness of the care provided by psychiatric nurses (Rice, 2008a, 2008b). This is a great area of challenge and opportunity for the specialty.

Evidence-based care and clinical effectiveness emphasize the importance of clinical practice that, when delivered to patients, is effective for achieving expected health outcomes. For example, although more than 110 of the interventions described in the Nursing Intervention Classification codes relate to psychosocial care, very few of them are supported by a strong research base (Dochterman & Bulechek, 2004).

Psychiatric nurses must be sensitive to the issues of cost and quality, and they must support their practice with data from outcome studies that reflect clinical, functional, satisfaction, and financial indicators; this is the essence of evidence-based psychiatric nursing practice. The use of measurement or rating scales must be viewed as an essential part of psychiatric nursing practice (Rush, First, & Blacker, 2008). Nurses would benefit greatly from mastering the technology that supports this process. Nurses need to research the impact of their activities and control the data set related to nursing outcomes. Finally, nurses need to know how to access, interpret, and use findings from efficacy and effectiveness outcome research (Stuart, 2009c).

Outcome data for psychiatric nurses can include health status, functional status, quality of life, the presence or absence of illness, types of coping responses, and satisfaction with treatment. Outcome evaluation can focus on a psychiatric clinical condition, a nursing intervention, or the caregiving process (Azocar et al., 2007). The outcomes that need continued examination by psychiatric nurses fall into four categories:

1. Clinical outcomes: The patient's treatment response
2. Functional outcomes: The maintenance or improvement of the patient's biopsychosocial functioning
3. Perceptual outcomes: The patient's and family's satisfaction with the response to treatment, the caregiving process, and the health care providers

4. Financial outcomes: Costs and resources used to achieve the treatment response

Specific indicators related to each of these categories are presented in Box 25-2 (Stuart, 2009c).

Outcome data that document the quality, cost, and effectiveness of psychiatric nursing practice are perhaps the most important issues on the psychiatric nursing agenda. More work is needed in this area, and studies must be able to stand up to the scientific review of the broader community of mental health professionals, regulators, and payers by being methodologically sound, empirically grounded, and replicated across the continuum of psychiatric treatment settings. The results of this

work can then be used to provide a shared knowledge base, to formulate practice guidelines, to provide data about clinical courses, and to better manage mental health care and the way in which it is delivered in this country.

SUMMARY

The need to implement evidence-based practice and to critically evaluate the outcomes of psychiatric nursing care is a task for each psychiatric nurse, regardless of role, activity, model of care, or treatment setting. Psychiatric nurse clinicians, educators, administrators, and researchers all must assume responsibility for answering the question that is likely to determine the future of psychiatric nursing: What difference does psychiatric nurse caring make? Only a clear and credible answer to this question will position psychiatric nurses as central, visible, competent, interdependent, and collaborating professionals who have much to offer a reformed health care system.

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BOX 25-2 Categories of Outcome Indicators

CLINICAL OUTCOME INDICATORS

High-risk behaviors
Symptomatology
Coping responses
Relapse
Recurrence
Readmission
Number of treatment episodes
Medical complications
Incidence reports
Mortality

FUNCTIONAL OUTCOME INDICATORS

Functional status
Social interaction
Activities of daily living
Occupational abilities
Quality of life
Family relationships
Housing arrangement

SATISFACTION OUTCOME INDICATORS

Patient and family satisfaction with the following:

- Outcomes
- Providers
- Delivery system
- Caregiving process
- Organization

FINANCIAL OUTCOME INDICATORS

Cost per treatment episode
Revenue per treatment episode
Length of inpatient stay
Use of health care resources
Costs related to disability

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Forensic Nursing: Recent Changes and Current Issues

VIRGINIA A. LYNCH

Global health care has recognized the need for greater awareness of the science of forensic nursing than ever before. Nursing practice is provided through many diverse public and private mechanisms. However, the primary responsibilities of public health are carried out through laws, policies, and programs that are promulgated, implemented, and enforced by or for the state. In many cases, the Department of Health and Human Services or the Ministry of Health oversees national health care policy. Central to all programs of health care delivery and promotion (i.e., physical, psychological, and social well-being) is the concept of prevention, which involves three levels of care: primary prevention, secondary prevention, and tertiary care (World Health Organization, 1978). In a similar framework, the forensic nursing model addresses the interfaces of body, mind, spirit, and, now, the law.

FORENSIC NURSING SCIENCE

One of the most compelling dilemmas facing the health and justice systems during the twenty-first century concerns the ability to keep pace with the rapid advances in medicine, scientific technology, and legislative issues that pertain to patient care. In a milieu of continuously changing health care requirements, these advances affect traditional standards of care, explicitly where health care interfaces with the law. The process of change affects the practice of nurses, specifically those who specialize in caring for victims of violence as well as the suspects or perpetrators of criminal acts (Campbell & Lynch, 2006).

Crime and violence bring together the two most powerful systems that affect the lives of people throughout the world: health and justice. The need for policies to address critical issues related to violence

and its associated trauma is a multidisciplinary issue that concerns physicians; nurses; attorneys; judges; sociologists; psychologists; social workers; forensic and political scientists, advocates, and activists; and criminal justice practitioners. The effective management of forensic cases is an area that was previously lacking in sufficient policy and legislation to ensure the protection of the patient's legal, civil, and human rights.

This chapter reviews the global evolution of forensic nursing, its relationship with the various specialties in the forensic sciences, and the current and future application of the science of forensic nursing. The chapter also provides an opportunity to explore innovative pathways that will influence the manner in which victims and perpetrators of criminal violence are processed through the health and justice systems in the new millennium. As an emerging discipline, forensic nursing assumes a mutual responsibility with the forensic medical sciences and the criminal justice system with regard to the concern for the loss of life and function caused by human violence and liability-related issues. The nurse investigator represents one member of an alliance of health care providers, law enforcement officials, and forensic scientists in a holistic approach to the study and treatment of victims and perpetrators of physical, psychological, and sexual violence. Forensic nurses do not compete with, replace, or supplant other practitioners; rather, they fill voids by accomplishing selected forensic services concurrently with other health and justice professionals. This role provides a uniquely qualified clinician who blends biomedical knowledge with the basic principles of law and human behavior. The forensic nurse examiner (FNE) provides the traditional nursing associate that has been historically absent in forensic medicine.

EMERGING DISCIPLINE

The genesis of a new specialty in nursing is emerging in response to criminal violence as we have moved into the twenty-first century. As a specialty practice, forensic nursing unites health care systems and the law in a joint concern for social justice. As early as 1991, the American Academy of Forensic Sciences was the first to formally recognize the scientific role of the forensic nurse as an essential partner to other forensic specialists in the clinical investigation of trauma involving both survivors and the deceased. This organization continues to extend membership to forensic nurses, and it serves as a resource for advancing scientific knowledge. In 1992, the International Association of Forensic Nurses was founded, thus providing a forum for nurses who practice their specialties within the arena of the law. The American Nurses Association Congress of Nursing Practice accorded forensic nursing a formal specialty status in 1995. The Standards and Scope of Forensic Nursing Practice were approved and published in 1997 and updated in 2008. Concurrently, the American Nurses Association recognized forensic nursing as one of the four dominant areas for nursing development in the twenty-first century (Marullo, 1997). This new perspective provides a vital link in policy with the criminal justice system through a shared responsibility for the legal and social dimensions of crime.

Forensic nursing is multidimensional by definition in that it addresses issues related to both health care and the law. In the clinical environment, this role is defined as the “application of clinical and scientific knowledge to questions of law related to the civil and criminal investigation of trauma in the survivors of traumatic injury and patient treatment involving court-related issues” (Lynch, 1995a). Forensic nursing is further defined as “the application of the nursing process to public or legal proceedings; the application of the forensic aspects of health care combined with the biopsychosocial-education of the registered nurse in the scientific investigation of trauma and/or death related issues involving abuse, violence, criminal activity, liability concerns and traumatic accidents” (Lynch, 1991).

The forensic nurse provides direct services to individual clients; consultation services to nursing, medical, and law-related agencies; and expert court testimony in areas such as trauma, questioned death investigative processes, adequacy of services delivery, and specialized diagnoses of specific conditions as related to nursing (Lynch, 1991).

As an emerging discipline, forensic nursing assumes a distinctive role in cases that require essential forensic knowledge and skills. Where inadequate numbers of forensically skilled physicians present a threat to public health and safety, the FNE represents a new approach to forensic health care. Forensic nurses also work with government leaders who formulate national health policy and apply their expertise to help provide a greater measure of effectiveness in forensic health services. Vision, commitment, and endurance are strengths that have achieved new and challenging roles for forensic nurses and that sustain their capacity for performance in this field. Collaboration and innovation are two significant qualifications of the forensic nurse to implement positive change in antiquated health and justice systems worldwide. Prevention is a major goal of the forensic nurse that parallels the major purpose of traditional medicine and nursing. These qualities help to prevent needless human tragedy and to advance progress in this field of specialization.

MILITARY FORENSIC NURSING

The most recent advances in forensic nursing have come from those who practice their legal and scientific skills in the military and who offer a wealth of professional and developmental knowledge and experience to the U.S. Armed Forces at home and abroad. Contemporary forensic nursing has broadened its scope of practice to include the investigation of trauma in clinical and community-based institutions and legal agencies. Forensic nurses are embracing new employment opportunities in public and private facilities; establishing independent practice roles; and serving in national, state, and local government agencies in which the concept of a clinical investigator provides a new perspective for the investigation of crimes against persons. The nurse's clinical education and experiential background are major strengths for forensic investigation that have provided important analytical and observational skills, thereby allowing nurses to venture beyond the traditional role of the nurse. With emphasis on innovative change and current issues in nursing and forensic nursing services, the armed forces are now presenting a military application.

The vision of military nurses working to implement this position is much broader than that of a sexual assault nurse examiner (SANE). The intent is to provide a more comprehensive forensic nursing practice with greater scientific expertise to the position. This new military concept will provide for collaboration with

both civilian and military investigative team members to provide timely, quality, comprehensive forensic intervention for the patients entrusted to their care. Military FNEs will provide clinical excellence; cutting-edge technology; and unparalleled education for the nurse corps, medical staff, and military law enforcement agents, thus providing global access to forensic health care for beneficiaries in the armed forces.

Lieutenant Commander Cynthia Ferguson, who is a moving force for promoting forensic practice within the military nurse corps, reports the following: "While . . . SANEs were specifically recommended in the [U.S. Department of Defense (DoD)] Care for Victims Task Force report as important in providing care to sexual assault victims within the Armed Forces, the military community recognized its own requirement for increased versatility within its ranks regarding various levels of providers to provide sexual assault care" (DoD, 2006).

This was particularly true for remote areas in which medical clinics had limited personnel and resources. A recent complicating factor in providing care for patients has been the increased state nursing board requirements for advanced practice certification in the area of sexual assault and forensic nursing. For example, the state of Maryland requires that all nurses who perform sexual assault examinations be licensed as FNEs, and it further divides the forensic nursing specialization into adult and pediatric patient populations (Ferguson, 2008).

The unique setting of military health care and equally distinctive stressors placed on members of the military calls for greater commitment by the DoD to meet those needs with trained professionals who can offer holistic and appropriate care, both at home and abroad (Ortiz, 2008). Military nurses from all branches of service who hold forensic degrees and certificates make forensic contributions and referrals daily. Although they are not employed in a forensic nursing billet or capacity, they are used on an as-needed basis.

Military nurses who are being deployed to an austere or isolated setting are often sent to a 40-hour SANE didactic course (minus the clinical component) with the expectation that they are now responsible for all sensitive and complicated sexual assault examinations that need to be performed in the field. The sensitive and complicated sexual assault examination requires the examiner to be well prepared and well educated both in forensic nursing theory and practice. These nurses are ideally clinically precepted by an expert SANE to collect evidence and to document the

case properly (Clements, Mugavin, & Capitano, 2005). Military families have historically confronted challenges that result in significant levels of stress, such as financial burdens among junior enlisted personnel, long family separations, frequent moves, and isolation from traditional support systems (Chamberlain, 2003; Rentz et al., 2006).

According to Lieutenant, Non-Commissioned, United States Navy Michelle Ortiz (Retired), the continued impact of war has renewed interest in the issues surrounding Post Traumatic Stress Disorder (PTSD), and the effects of traumatic brain injury (TBI) involving the military veteran, propose new applications of practice and research in forensic nursing science. Long term stress is cited as extremely difficult for the family members left at home as it is for the member leaving home. Unique to military families' failure to report abuse are issues that are often stress related such as domestic violence, child abuse, shaken baby syndrome, rape, or violence in any form. Investigating military cases involving violence is complex and often crosses jurisdictional lines (Ortiz, 2008).

Victims of domestic violence also become "silent victims" when they are hesitant to report abuse in fear of the impact it could have on their spouse's career (Ortiz, 2008). The global war on terror has been identified as increasing stress levels and poor coping responses in some military members, which could exponentially increase the forensic cases that involve the military. The interest of the DoD in issues of interpersonal violence is apparent, and the infusion of FNEs into a prevention initiative could be the catalyst to propel the DoD recommendations toward success (Ortiz, 2008). The hope is that, in time, the DoD will work to progressively recognize the overall benefits of this unique and essential nursing specialty. Military forensic nurses may prove to provide an invaluable service to the DoD and to the United States.

FORENSIC VERSUS FORENSICS

The word *forensic* comes from the Latin adjective *forensis*, which means "of or before the forum." During the time of the Romans, a criminal charge meant that the case was presented before a group of public individuals in the forum (court) to achieve social justice. A public debate provided for discourse between the prosecution and the defense of the accused, and it is representative of the forensic process that is still used today. Any subject of suspicious circumstances reported to a legal agency that requires an investigation of the actual facts

and that may be resolved in a court of law is considered a forensic case.

Although the term *forensics* has previously referred specifically to the profession or study of public debates or courses in public speaking in the academic setting, this term is now so closely associated with the scientific field that many dictionaries indicate that the word *forensics* can be equated with the term *forensic science*. This new definition evolves from the application of two modern usages of the word *forensic*: as a form of legal evidence and as a category of public presentation. In modern use, the term *forensics* in place of *forensic science* can now be considered correct as an effective synonym for *legal* or *related to the courts*. Thus, the term *forensics* represents an often shortened term that refers to the application of a broad spectrum of sciences to answer questions of interest to the courts in relation to a crime or a civil action.

HISTORICAL PERSPECTIVE

Although nursing had not yet evolved as a discipline, midwives filled the caregiver role until the days of Florence Nightingale. Thus, certain aspects of forensic nursing are noted before the French Revolution of the fourteenth century, where court testimony concerning sexual assault and proof of pregnancy was limited to the midwife practitioner (Camp, 1976). However, the inclusion of nurses in contemporary clinical forensic practice has been met with some resistance. From the beginning of medical specializations, physicians have had skilled nursing associates in every medical specialty, with the exception one: forensic medicine. Currently, the FNE is providing that missing component of professionalism and efficacy for the forensic medical practitioner that has been afforded to medical clinicians.

For unidentified reasons, the preferred assistant to the forensic physician in clinical practice and forensic pathology has been an individual with a law enforcement background. The employment of individuals with nursing or other health care skills, education, and expertise is now recognized to ensure effective clinical investigation, thus separating medical investigation from criminal investigation. The separation of these components of investigation also individualizes the objectives and responsibilities of each respective discipline to the investigator with an appropriate knowledge base. Because trauma is the central issue in the prosecution of crimes against persons, one should consider that issues of trauma are not component skills of law

enforcement training or education for judicial law. However, issues of trauma are core cognates of nursing education.

Forensic nursing has been recognized as a globally significant resource for forensic psychiatric practice and for the management of incarcerated patients throughout the past century. However, these nurses were not forensically educated or recognized as specialty practitioners; they were simply considered to be providing nursing care to the mentally disordered offender (often referred to as “criminally insane”) or to be working with large prison populations and in jails.

The forensic nurse death investigator was first recognized in 1975 as a nursing role within the forensic sciences as one who worked for forensic pathologists assessing the investigation of questioned death at the scene of a crime. Since that time, forensic nursing has undergone a significant paradigm shift to include clinical forensic practice. The clinical investigation of trauma was brought to the attention of professional nursing in 1986 with the implementation of a master's degree preparing the FNE as a designated specialist. This model was based on the role of the police surgeon of the United Kingdom, which was generally lacking throughout North America (Lynch, 1995b). Nurses practicing in this forensic role became the first to be referred to informally as “forensic nurses” because of the services they provided to a forensic patient population within a forensic facility. These nurses were taught the unique and necessary skills required to assess and manage patients in custody and the offenders of social crimes. No formal training existed at that time, and no formal specialty identified these nurses as FNEs. For the last 30 years, numerous institutions of higher education have developed specific curricula for forensic psychiatric nurses and correctional or custody nurses who practice within the judicial and correctional systems.

The forensic psychiatric nurse works with the accused before adjudication and provides court-ordered mental health evaluations, among other services. This role is differentiated from that of a correctional/custody nurse after the patient is found guilty of a crime and is incarcerated in a jail or prison system. Both roles are subspecialties of the nursing specialty of forensic nursing. These roles require nurses to have specialized forensic education and training to be identified as a forensic specialist in nursing. The establishment of the International Association of Forensic Nurses has provided identified and approved specific titles based

on specialized education and clinical skills that entitle one to be called an FNE.

The respected opinion of well-known forensic pathologists in the United States has indicated that it is preferable to teach investigative techniques to nurses rather than to teach medical concepts to police officers. To require a law enforcement officer's responsibility to include medical objectives when the officer has been "computerized" and objectified by training to function as a criminal investigator is considered difficult at best. Thus, each discipline should remain separate with regard to responsibility: the medical investigator provides the medical cause and manner of death, and the criminal investigator determines whether a crime was committed and, if so, by whom. Too often, a conflict of interest may result when education and training are not specific to the objectives of the discipline. Because the clinical forensic nurse role has evolved from the role of the clinical forensic medical practitioner, one should expect that this new forensic expert would be embraced as an extension of professional growth and development.

Traditionally, the clinical forensic physician has been referred to as the police surgeon, the district surgeon, the district medical officer, or, most contemporarily, the forensic medical examiner who has assumed the legal responsibilities required by the judicial system to provide the clinical investigation of trauma (i.e., of the survivor rather than the decedent). This role differs from that of the forensic pathologist, whose primary focus is the medical investigation of death. However, a shortage of forensically skilled physicians has long been recognized worldwide, and this often presents a serious problem with regard to the accurate evaluation of abuse, neglect, crime-related injury, and human rights violations.

Clinical forensic physicians are generally not on staff in the emergency department, so they must be notified to respond to the hospital to assess the patient. Alternatively, the patient may often be transferred to a forensic facility. If those who are the first to admit the patient for trauma assessment are lacking in forensic skills, the subtle indications of abuse may go unrecognized and unreported. Under these circumstances, the forensic physician may not be notified to assess the injury. Studies indicate that the average victim of interpersonal violence is admitted and released seven to nine times before anyone in the clinical setting recognizes that the person is a victim of a crime. Too often, the patient is treated and released without adequate forensic evaluation. It is also common for a

patient to be released back into the care of the perpetrator of interpersonal violence, who may have brought the patient to the hospital.

With a heightened awareness of victimology in clinical and community health care, crime-related trauma and the collection of evidence have become major concerns in clinical nursing. The nurse is most frequently among the first to see the patient and to recognize injury and the nonverbal indicators of abuse. Thus, clinical forensic nursing is recognized as an essential component of current health care delivery in numerous countries today. One can reasonably expect that clinical forensic nursing will become a requirement for emergency department and trauma nurses within the next 5 to 10 years. Because no clinical forensic physician routinely exists within the United States health care system and because of the continual influx of medicolegal patients who require forensic case management, the assistance of the FNE helps to relieve an unnecessary workload on the medical staff, to provide a more timely patient response, and to ensure the careful documentation of injury and the collection and security of evidence that is often lost or destroyed by nonforensic personnel.

In many countries, the absence of a forensic physician who is a resident in the emergency department has long been noted to delay forensic patient services and thus emergency medical treatment. Patients are often transferred to other clinical facilities for forensic intervention, thus delaying treatment and increasing the risk of losing highly fragile and perishable biological evidence. Delay and transfer increase hazards to evidence recovery and can be psychologically harmful to the emotionally traumatized patient.

An article entitled "Death by Red Tape" that was published in *Dawn*, a leading Pakistani news source, cited cases of patients in Pakistan who were refused forensic services upon admission to the casualty department and who were transferred to other locations, where access to a medicolegal officer was available. The article further admonished the forensic system because of the loss of lives during long waits and the transfer of patients. In most hospital facilities in many countries, when the medicolegal officer does respond, the officer does not provide emergency treatment but rather documents the forensic injury and evidence and leaves lifesaving intervention or trauma care to staff physicians and surgeons. With an FNE on staff, the unnecessary loss of dignity, emotional trauma, and death related to this practice could be

avoided. As these needs are identified and filled by nurses, the formal recognition of the FNE is recognized as a direct response to violence by the health care profession.

VIOLENCE AND PUBLIC HEALTH

Social violence presents a constant threat to public health and safety. Violence is defined as stimuli that evoke a nonaccidental act that involves intrapersonal or interpersonal actions that result in physical or psychological injury to one or more individuals (Stanhope & Lancaster, 1996). A pernicious epidemic of human violence indicates that crime-related trauma is the major health care issue that is most frequently associated with violence and the law. Trauma ranks higher than heart disease or cancer as a reason for hospital admission. The need for standardized protocols and clinical specialists specifically responsible for the care and treatment of crime-related injury and death is now essential. Internationally, a coordinated effort to ensure that these cases receive comprehensive medical attention, evidentiary examinations, emotional support, and referral information has been addressed through the evolution of a forensic specialist in nursing.

NURSING AND LAW ENFORCEMENT

The role development of the forensic specialist in nursing practice represents a multidisciplinary team of health care providers, law enforcement agencies, and forensic science operatives uniting in a common concern for the plight of victims of human violence and those accused of criminal acts. Forensic nursing represents a partnership between nurses and the legal agencies in the community. This involves nurses working together with police officers, the correctional and judicial systems, and forensic psychiatric patients, who often are considered a component of evil in society. Unfortunately, this relationship has often been one of friction and distrust for both parties. Nurses historically have displayed fear, guilt, and a lack of confidence in cooperating with police officers during the investigation of criminal violence. Nurses have cited several reasons for their reactions when police request medical records or ask specific questions about a patient:

- ◆ A lack of clear understanding of the law about how it affects the nurse-patient relationship with regard to the police
- ◆ A fear of incriminating the patient
- ◆ A fear of self-incrimination

- ◆ A fear of intimidation during cross-examination in court
- ◆ A lack of confidence with regard to medicolegal documentation
- ◆ A concern for staff involvement in potential legal issues
- ◆ A lack of confidence when nurses must seek physician approval
- ◆ A perception by the patient of participating in suspected police abuses
- ◆ A lack of understanding of the rules of reasonable search and seizure
- ◆ A fear of disciplinary actions that involve the hospital in legal issues

These reasons are generally not without justification. The nursing literature cites numerous instances in which a lack of interagency coordination and cooperation has led to serious conflict with the police. Reports by nursing staff also cite instances in which they were told to not get involved with police cases because doing so would involve the hospital or physicians in addressing legal issues or making court appearances. This can be frustrating for the police during the investigation of a crime; a lack of cooperation also may result in a miscarriage of justice.

In other circumstances, the failure to cooperate with police may occur in countries in which the police are seen as the arm of the government or a political body that practices summary executions and government-sanctioned torture. The nurse may feel that any information given to the police regarding the patient will be misused and that an innocent individual may be arrested without just cause. Through the implementation of forensic nursing specialists as an institutional liaison to law enforcement agencies, this problem is being resolved. Police investigators indicate that they find the availability of a forensic nurse to bridge the gap between clinical staff, patients, patients' families, and the medical records department to improve the flow of critical information and the security of evidence and that it has eliminated unnecessary confrontations. Where the multidisciplinary team approach is applied, motivated and skilled FNEs can be an invaluable resource for the criminal justice system, the hospital, and the patient. However, after the police agencies and the courts become familiar with the benefits of clinical forensic nurses that specialize in sexual assault evaluations and death investigation, forensic nurses become accepted members of the alliance of clinical and criminal investigators.

Police officers who work with forensic nurse investigators consider them to be invaluable to the forensic system. The following statement represents one example of a police officer's perspective on FNEs:

Before entering a law enforcement profession, I worked 10 years in the medical profession. I spent a lot of time in the emergency trauma area and watched the interaction between law enforcement and the emergency department. I have worked 24 years in law enforcement and have many stories to tell about the law enforcement/emergency department relationship. Within any group of people, you have different views on civil liberties, crimes, and people in uniform. Compounding the issue is that hospitals get their advice from private attorneys who often have an anti-police attitude and discourage the hospitals from interaction with police. "If they want the evidence, they can get a search warrant." "You are not obligated to answer any questions." These are common responses that I have heard over the years. The unfortunate side is that the patient has to go back into the community after he or she has received treatment and needs to go back into a safe environment. The advent of the FNE has opened the door to a new era in criminal justice. We now have someone at the hospital who knows the laws and understands their role in the health and justice systems. It begins with having a designated person to serve as a liaison for the patrol officer: someone to talk with about a patient or their injuries; someone who can document injuries or collect critical sexual assault evidence. Just knowing how long semen may be detectable in the vaginal vault already exceeds the knowledge of a patrol officer. Special examination rooms with [FNEs] help to decrease an unnecessary wait for the patient and the patrol officer or sex crimes detective in a victim-friendly environment, away from the emergency department or police department. From here a decision can be made about how to collect important evidence that may lead to the apprehension of a dangerous criminal or the exoneration of an innocent person. The value of the forensic nurse extends outside the medical facility. Attorneys need someone who can read medical reports and tell them what is there. The strength or weakness of the medical evidence is also important. From here the diversity of expertise expands in many directions. Elder abuse, child abuse, mental health, questioned deaths—all need assistance from the forensic nurse. When a senior citizen has suspicious bedsores, a nurse from outside the patient's resident healthcare facility is the best qualified to determine whether this constitutes abuse and to work with local law enforcement to get the problem resolved. In such cases, the FNE may work as an independent forensic consultant and investigator where medical evidence is required. In our community, a forensic nurse is active in death determinations, crime scene response, domestic violence cases, and training to law

enforcement. Nursing is about service to others through healthcare. Law enforcement is about service to others through protection. Forensic nursing is about service through building bridges between healthcare and law enforcement for the long-term benefit of others within their community.

Officer Jim Pex
Coos County Police Department
Coos County, Oregon, USA
August 20, 2004

RESPONSIBILITIES OF THE CLINICIAN

Medicolegal and psychosocial interaction with forensic patients is a new and important role for nurses that requires a combination of knowledge where human behavior interfaces with the law. Because the current policies of advocacy programs mandate the inclusion of criminal justice and health care providers, it is especially timely to propose that the FNE be placed in the trauma treatment environs to serve as a valuable link in inter-agency cooperation and to ensure that human needs and medicolegal interests are served. Most emergency personnel and prehospital care providers ordinarily have only secondary interest in forensic matters. The responsibility of the trauma team is to provide lifesaving intervention that requires concentration on details unrelated to forensic evidence. However, enlightened legal systems call for the recognition and reporting of crime-related trauma and the collection and security of evidence. Because the nurse is among the first to evaluate the patient, to document injury, or to recognize nonverbal indicators of abuse that require investigation, forensic nursing is essential to contemporary health care.

INVESTIGATION OF TRAUMA

The FNE plays a vital role in the investigation of crime-related trauma. Because of the increasing caseload of patients who present to the emergency department with medicolegal-related injuries, the need for a resident forensic clinician has been recognized. Fatal or near-fatal injuries that result from intentional or unintentional acts that involve criminal or civil actions constitute forensic cases. Although a forensic case can involve any patient admitted to the hospital with liability-related injuries, specific categories include sexual assault, domestic violence, abuse, neglect, motor vehicle and pedestrian trauma, attempted suicide, job-related injuries, malpractice, drug

abuse or tampering, and environmental hazards (Lynch, 1995c, p. 490). According to Pasqualone's research with emergency department, cases with medicolegal implications constitute 27 categories of forensic patients. These cases necessitate attention to forensically significant evidence. In addition, there are growing concerns about sensitivity to the victims and their families.

ROLE AND RELEVANCE OF THE FORENSIC NURSE

Role specificity includes the following:

Clinical forensic nurse: The clinical forensic nurse provides care for the survivors of crime-related injury and deaths that occur within the health care institution. This specialist has a duty to defend the patient's legal rights through the proper collection and documentation of evidence that represents access to social justice.

Forensic nurse death investigator: The forensic nurse death investigator is employed in a medical examiner or coroner's jurisdiction and represents the decedent's right to social justice through a scientific investigation of the scene and circumstances of death.

FNE: The FNE provides an incisive examination and evaluation of trauma related to forensic cases. This may involve any type of interpersonal violence, such as child abuse, domestic violence, or elder abuse; sexual assault; or injury or death as a result of lethal weapons, torture, or police brutality. The FNE is cross-trained in a variety of forensic services in addition to sexual assault examinations. The FNE represents the expanded role of the forensic nurse, which was previously known as a SANE; SANE remains the acronym for the certification credentialing of nurses who specialize in the sexual assault examination of both adult and pediatric forensic patients.

Forensic psychiatric nurse: The forensic psychiatric nurse specializes in the care and treatment of criminal defendants (i.e., offenders with mental disorders) and patients in legal custody who have been accused of a crime or who have been ordered by the court to receive a psychiatric evaluation.

Legal nurse consultant: The legal nurse consultant provides consultation and education to judicial, criminal justice, and health care professionals in areas such as personal injury, product liability, and malpractice among other legal issues related to patient health. Each of these primary roles and

other subspecializations of the forensic nurse is investigative in nature and requires specific knowledge of the law and the skill of expert witness testimony.

NATURE AND IMPORTANCE OF THE PROBLEM

The emergency department nurse is often the first person who is in a position to note the types of injury present when a patient arrives for treatment. Even if police officers are involved in the incident, uniformed officers are not trained in the legal aspects of trauma nor are they usually in a position to observe wound characteristics accurately because of various obstacles (e.g., contamination of the injury, clothing, poor lighting). Although prompt and effective patient care is paramount in the treatment of victims of trauma, recognition of the forensic implications of injury is of the utmost importance. The recovery of forensic evidence is always second to lifesaving intervention.

The Joint Commission has emphasized guidelines for written policies and procedures that require appropriate staff to be trained with regard to the identification of crime victims and the procedures required to work with abuse survivors. These standards include criteria to identify possible victims of physical assault, rape, or sexual molestation of spouses, partners, and children. Specific guidelines regarding procedures for patient evaluation include patient consent, examination, and treatment. A mandate that unequivocally provides for the role of the forensic clinician is set forth in the hospital policy regarding the responsibility for the collection, retention, and safeguarding of specimens, photography, and other trace and physical evidence. Medical record documentation to include examinations, treatment referrals to other care providers and community-based family violence agencies, and the required notification of authorities are among the responsibilities of the care provider. However, the need to establish specific guidelines for the facilitation of adult and child victims of suspected abuse or neglect has brought about little change in the majority of hospitals nationwide. It is also essential to recognize the medical records of forensic patients as critical legal evidence that should not be stored in the general medical record department. Such records should be kept separately and locked up with one key that requires the signature of the FNE in charge as it changes hands (i.e., in the same manner that is essential for the security of narcotics). This method of custody should be used for all forensic evidence.

Reasons cited for the failure to meet Joint Commission standards for dealing with this category of crime victims were time constraints, lack of training, and reluctance on the part of the health care worker and the victim to talk about domestic violence. This landmark survey of 397 emergency departments revealed that as few as 1 in 5 emergency departments are meeting the national hospital accreditation requirements for this issue. Only 59 of those emergency departments reporting had specific forensic policies, and only 8 were addressing identification, treatment, and intervention adequately. Although the response rate indicated that health care professionals were enthusiastic about helping these victims, few had programs developed to do so. California was not alone in facing violence and its associated trauma. Where time constraints interfere with the ideal clinical intervention in such cases, having forensic specialists in nursing can ease the workload of physicians and better meet the needs of victims of domestic violence, the criminal justice system, and other medicolegal agencies.

IDENTIFICATION OF WOUND CHARACTERISTICS

The investigation of trauma often begins with the evaluation of wound pattern characteristics. Detailed documentation of the appearance of the wound may be the identifying factor in determining the type of weapon used to inflict the injury. Wound characteristics constitute evidence that may be obscured by emergency trauma care. Therefore, where the emergency department nurse may be the first to have the opportunity to observe traumatic injury closely, the nurse also may be the only person to observe such trauma in its original state. Nurses who become involved in the investigation of traumatic injuries have a responsibility beyond the immediate treatment environment that includes issues related to the patient's right to know, the public's right to know, and the administration of justice.

The nurse's documentation should include the location of the injury and approximate measurements of sharp, blunt, and fast-force injuries as well as uniquely patterned injuries (e.g., bite marks). Diagrams, body maps, and photography are helpful for reconstructing injury patterns as part of subsequent investigations or autopsies; both photographs and diagrams should be used in such cases. For patients who survive or whose wound is excised or extended surgically, later reconstruction of the injury is not possible. The specific importance of reconstruction is magnified when the

patient lives for an indefinite period of time and later dies as a result of the injury. Treatment procedures and the natural healing process commonly alter the condition of the wound, thus eliminating the possibility of determining, for example, whether the wound was inflicted with a single- or double-edged knife or whether the gunshot wound was an entrance or exit wound.

Nurses should have an accurate knowledge of the types of injuries that generally result in medicolegal cases, and they should be familiar with the appropriate terminology required to describe these injuries. Failure to recognize and describe injuries has confounded the testimony of both victims and perpetrators as a defense strategy in the courtroom. The nurse will not only be made to appear unprofessional, but a serious crime may go unpunished and could result in the release of a dangerous offender. A nurse without forensic training should follow the simple rule of stating only what is seen and not offering a technical or scientific explanation of what the injury may be, thus allowing the forensic specialist to later diagnose with certainty. Photographs and diagrams also provide a guide for the specialist who did not observe the injury firsthand.

INVESTIGATION TECHNIQUE

Nurses are recognized as invaluable resources to prosecutors who often have little or no knowledge of trauma. However, the majority of cases that are prosecuted are crimes against persons that involve traumatic injury. Valuable notations—such as the names and addresses of witnesses, the monitoring of the procedures or events before treatment, and the safeguarding of clothing and other personal effects—should be documented in the charting. Personal property may constitute forensic evidence and should never be released to the family without permission from the police, the medical examiner, or the coroner. By implementing forensic protocol that emphasizes cooperation with the criminal justice sector, nurses are initiating a critical link in trauma systems that will provide for increased coordination and services.

The implementation of the role of clinical forensic nurse would provide a uniquely skilled and qualified forensic clinician whose responsibilities would include the following:

1. Developing the appropriate forensic protocols in compliance with accreditation standards;
2. Triaging patients who are at risk for forensic injuries;
3. Reporting to proper legal agencies;

4. Documenting, collecting, and preserving evidence;
5. Securing evidence and maintaining the chain of custody;
6. Serving as a liaison between the health care institution, law enforcement agencies, and the medical examiner/coroner; and
7. Making referrals when medical treatment or crisis intervention is required.

The forensic nurse liaison can initiate significant constructive changes as one essential component of a network of medicine, nursing, law, and social services. The implementation of regular in-service programs regarding the forensic aspects of health care is a primary responsibility of the forensic nurse specialist. This would serve to advise the medical and nursing staff and other first responders about the legal requirements of trauma care. Forensic standards also serve as a means of transmitting developing knowledge regarding technical and social interventions. Those who are among the first to come in contact with victims of suspected abuse must understand the application of forensic policies to emergency medical services.

THE INVESTIGATION OF DEATH

Societal needs to understand the disease mechanisms and biomechanical factors associated with death are essential to systems of public health and the administration of justice. The processes that help to determine precise precipitating factors and causes of death not only benefit medical science but also serve the general welfare by ensuring that accidental and crime-related fatalities are investigated systematically for cause, manner, and mechanism of death. Regardless of the circumstances of death, there are typically acute emotional reactions of significant others and inherent legal consequences. For example, the precise way that individuals die and the events that surround the dying process can determine the execution of last wills and testaments, life insurance distributions, and rights of survivorship. Death cannot be viewed apart from the consideration of civil and criminal laws and social justice principles that govern human existence from social, moral, and religious perspectives (Campbell & Lynch, 2006).

NURSE CORONERS AND DEATH INVESTIGATORS

Sudden and unexpected deaths associated with crime-related trauma demand a legal investigation that remains a complicating factor. When the shock of death

is compounded by violence, the reaction of survivors is often a complex multidimensional scenario of shock, anguish, and despair. The interface with the next of kin is a delicate situation that requires a balance of empathy and objectivity.

Although forensic nursing is a new concept in clinical practice, it has been a respected practice in death investigation for the past 30 years. Forensic nursing as a scientific discipline originally defined its role as a medical examiner's investigator in the field of death investigation. To clarify the scope of forensic nursing practice, a direct application to clinical nursing and an interrelationship with the living and the deceased have been established (Lynch, 1993).

John C. Butt (1993), chief medical examiner of Alberta, Canada, was the first to recognize that the registered nurse represented a valuable resource to the scientific investigation of death. As early as 1975, Butt established a program that used registered nurses as death scene investigators, citing nurses' biomedical education and interpersonal communication skills as their most important qualifications. Butt further emphasized nurses' knowledge of medical terminology, pharmacology, and familiarity with natural disease processes as invaluable resources to the medical examiner. He also cited nurses' experience in public relations as a major priority: representing the medical examiner at the scene, handling confidential material, and being comfortable relaying sensitive information to bereaved family members.

Because as much as 65% to 72% of the U.S. medical examiner's caseload is natural deaths that require no high investigative profile that involves law enforcement, the use of nurse investigators in these cases allows police officers to devote more time to criminal investigation (Lynch, 2006). Butt stressed the importance of teamwork between criminal and biomedical investigative personnel. He expressed concern that medically untrained officers often disregarded medical evidence, maintained poor sensitivity, and were noncommunicative with grieving families. Conversely, by nature of their education in forensic health science, nurses recognize the importance of the integrity of criminal evidence, the suspect interview, and the investigation of leads. A nurse's skill in clinical documentation, strict guidelines regarding confidentiality, and sterile technique to prevent the cross-contamination of specimens provides the foundation for a unique clinician in death investigation.

However, human consolation is not the primary objective of criminal investigation, and families often

feel that police officers treat them in less than an empathic and compassionate manner during the immediate postdeath period. Whether the death occurs at the crime scene or in the emergency department, police often rely on the nurse to facilitate the notification of death with the next of kin.

Although every unexpected death has actual or potential medicolegal aspects, most unattended deaths are the result of a terminal illness or another natural cause. Where deaths often occur in isolation without the attendance of a physician or those skilled in emergency services, families may resent the dramatic intrusion of the police during the investigation process. Where forensic nurse investigators are part of the medical examiner and law enforcement team, the nurse provides a holistic approach to the scientific investigation of death. As trends in crime and violence change, new antiviolence legislation is being implemented; consequently, new personnel resources are required to ensure that these legislative mandates are meeting the needs of society effectively.

As the health and justice systems worldwide prepare for the challenges of this century, the trend of using forensic nurse investigators has moved across Canadian provinces and into the United States. Most recently, departments of legal medicine in South Africa and Singapore have appointed forensic nurses as death investigators. Forensic pathologists who employ nurse investigators stress the importance of the relationship between criminal and biomedical investigative personnel. They express concern that medically untrained officers often disregard medical evidence, maintain poor sensitivity, and are noncommunicative with grieving families. Because the unexpected death is often responsible for arousing suspicion in the clinical and community environment in which there is a shortage of forensic pathologists or clinical forensic physicians, the forensically trained nurse provides a previously untapped resource for medicolegal agencies.

The forensic nurse death investigator has an advantage for providing investigative skills as a result of familiarity with natural disease processes and the subtle indications of trauma associated with abuse and neglect. These nurses' abilities to correctly document patterned injuries, medications, and surgical interventions and to interpret medical records is of great benefit to forensic pathologists and police officers.

Although individuals hired as death investigators traditionally have had extensive backgrounds in law enforcement, recent advances in forensic science indicate that investigators require stronger backgrounds

in pharmacology, anatomy and physiology, medical and nursing terminology, and legal issues. Medical examiners and coroners who endorse the employment of forensic nurse investigators find that the nurse who is cross-trained in criminalistics and legal issues provides a collaborative practice approach that is beneficial to forensic professionals. A forensic specialist in nursing represents a revolutionary concept for using traditional nursing abilities in an area of human services not previously explored by nurses but which is making significant contributions to the area of death investigation and service to law enforcement and to the community.

The nurses' expertise in death investigation is recognized in enlightened communities, where lay officiators of death have been outdated in today's concerned society. Nurses are being elected as coroners in communities that recognize the need to provide a more professional approach to the scientific investigation of death. In the United States, where the law does not require the coroner to be a physician, no longer is the unskilled, untrained, nonmedically oriented (often politically driven) lay officiator of death preferred when the other option is a qualified, licensed, credentialed, or certified forensic nurse educated in the biomedical sciences and experienced in the principles and philosophies of forensic medicine. Such a professional contributes to the overall quality of community life.

FORENSIC RESPONSIBILITIES

Forensic nurse death investigators provide community services to the bereaved families of those taken by sudden, catastrophic death through crisis intervention and grief counseling, often reviewing the autopsy report in the family's home to assist them in a caring and empathic setting. Experience with death and dying brings a unique understanding of the wide range of behavioral responses by victims in crisis. When one considers the impact of unresolved grief on stress-related diseases, the care provided during the immediate post-death period is crucial.

A prototype position description of one role of the forensic clinical nurse specialist has been defined. A number of individual roles—such as an elder abuse specialist, a child abuse specialist, a death investigator, or another separately identified role—would evolve from this basic list of role functions. As the health and justice systems prepare to move into the next century, forensic nursing provides a missing link between the forensic physician and the nursing assistant.

EXPECTATIONS

The preparation of forensic clinical nurse specialists provides the knowledge base and clinical skills appropriate for the role of a coroner or a medical examiner's investigator involved in the scientific investigation of questioned deaths. The forensic clinical nurse specialist is prepared to do the following:

1. Use principles and skills in communication, interviewing, and physical assessment for making appropriate nursing interventions with the decedent's family and with relevant persons in the community.
2. Synthesize and apply skills of physical assessment and knowledge of biomedical investigation to assess, plan, provide, and evaluate nursing interventions with and on behalf of the deceased, the family, and the community.
3. Participate effectively on the multidisciplinary medical examiner's team to plan and provide direct and supportive nursing care; to assess needs for and make referrals to other health care services; and to counsel individuals and families throughout periods of stress.
4. Participate in investigations under the direction of the medical examiner to determine the circumstances that surround a sudden death. This includes the following:
 - ◆ Visiting the scene of death and working with the police;
 - ◆ Independently identifying and developing health details and collecting medical evidence related to the cause of death in criminal and noncriminal cases;
 - ◆ Interpreting the client's health history and circumstances before the death;
 - ◆ Researching health records and preparing case history summaries to facilitate death investigations;
 - ◆ Interviewing physicians and other health care providers to help establish the cause and manner of death;
 - ◆ Providing direction for handling the body and personal effects of the deceased;
 - ◆ Arranging transportation of the body, if necessary; and
 - ◆ Conducting interviews with persons who have reported deaths and with other persons, as appropriate.
5. Plan and implement forensic educational programs for nurses, other health care providers, and the community (e.g., child abuse and child safety;

grief counseling; health maintenance, promotion, and prevention programs for persons at risk for major health problems).

6. Assume accountability as a forensic nurse specialist by accepting responsibility as a nurse clinician; recognizing one's own abilities and limitations; and consistently seeking guidance, counseling, direction, and learning experiences that promote professional and personal development.
7. Demonstrate a leadership role in forensic nursing—including innovation, consultation, advocacy, accountability, and responsibility—to improve services to the family, the community, and, as appropriate, the criminal justice system in cases of sudden death.

ADVANCES IN FORENSIC AND NURSING SCIENCE

When combating increasingly sophisticated crime, new and improved identification procedures can help to revolutionize the ability to bring to justice those who commit criminal violence, particularly serial sexual offenders and murderers. Clinical professional support for law enforcement is imperative in this quest to transmit developing knowledge through improved treatment and services, including forensic intervention.

BIOTECHNICAL ADVANCEMENT

With the advent of the twenty-first century, forensic science is on the threshold of an explosion of biotechnical advancement. This knowledge requires responsibilities of health care professionals that were previously unrecognized as forensic nursing and forensic health science. The forensically educated nurse will be a critical component of the recognition and proper collection of forensic evidence in complex criminal cases. With the emerging application of DNA profiling, virtually any genetic evidence (e.g., semen, blood, tissue) may provide the crucial answer to the identification and apprehension—or elimination—of a perpetrator.

SEXUAL ASSAULT NURSE EXAMINER

Because of the lack of qualified forensic physicians skilled in the clinical evaluation of sexual assault patients in most areas of the world, the need for increased numbers of specialists to conduct the forensic examination within the strict guidelines of current standardized care has been identified. Many physicians also lack the ability to provide expert witness testimony

and have insufficient interpersonal skills. Psychological interventions are critical to recovery, and they contribute to the continuity of care from the crime scene to clinical facilities and courts of law.

The forensic nurse who specializes in the care and treatment of the sexual assault patients is known as a SANE. This specialist is a registered nurse who has received advanced education in the area of sexual assault evaluation. The SANE, as an FNE, provides an independent forensic examination that includes the identification of trauma, the collection of evidence, and testimony as an expert witness. Each team of SANEs works under the director of clinical forensic medicine and maintains a collaborative relationship with the medical staff. As of January 2007, 952 forensic specialists had taken and passed the SANE adult certification examination and were credentialed by the International Association of Forensic Nurses (Ortiz, 2007).

VICTIMOLOGY

Nursing involvement in public service activities covers a wide range of activities related to community education, program development, and defining of policies and protocol that affect and involve victims of violence and abuse. Nurses have often been the first to recognize the need for a rape crisis program in a rural areas where resources for victims were nonexistent. The education of law enforcement officials regarding the dynamics of sexual offenders and their victims, essential victim rights, and victim needs is also currently being better achieved. Sexual violence requires the support of an advocate who can provide emotional stabilization and serve as a liaison with police, judges, juries, and the victim's immediate family in a knowledgeable and professional manner.

The FNE generally works within the framework of a sexual assault response team that provides a multidisciplinary approach to the investigation and treatment of sexual assault cases. The team is comprised of members of law enforcement agencies, advocates, and SANEs. With the use of this approach, members are able to initiate a forensic interview, expedite the forensic examination, and provide much-needed information regarding community referrals, advocacy, and criminal justice services for the victims of sexual assault.

EDUCATION AND TRAINING

Advanced preparation is required for nurses who provide sexual assault evaluations. The International Association of Forensic Nurses Council of Sexual Assault

Nurse Examiners has defined the standards of care and educational guidelines for nurses who provide these services for law enforcement agencies. Certification examination for the SANE had previously been sponsored by individual state agencies; however, in 2002, the first national certification credentialing examination was implemented through the International Association of Forensic Nurses for nurses in North America.

GENERAL GUIDELINES FOR THE FORENSIC NURSE

The forensic nurse should understand what constitutes human abuse and should be prepared to accurately describe specific acts in proper terms. Intimate partner abuse can be characterized by physical, sexual, and emotional abuse. Rarely do physical injuries occur without precedents of emotional abuse, neglect, and exploitation. Note that these definitions are broad and that they may be applied to children, women, older adults, and other vulnerable subjects.

- ◆ Human abuse is the willful infliction of injury, unreasonable confinement, or cruel punishment on another individual. Acts that cause mental or emotional injuries or that negatively affect growth, development, or psychological functioning are also acts of human abuse.
- ◆ Neglect is the failure on the part of the caregiver to provide the goods or services that are necessary to avoid physical harm, mental anguish, or mental illness for someone under his or her care or to leave that person in a situation where he or she could be exposed to serious harm.
- ◆ Exploitation is the illegal or improper act or process of using the resources of an adult, child, older adult, dependent, or disabled person for monetary or personal benefit.

For nurses to become emotionally involved with patients who have been abused and to want to assume a protective role on the behalf of these individuals is not uncommon. However, the nurse must guard against trying to rescue the victim while reassuring the person that there is help. As a concerned ally, the nurse should not judge or preach to the victim. Admonishment or patronizing behaviors are counterproductive. Remaining objective, providing appropriate nursing and safety interventions, and displaying a professional, caring demeanor help to build trust between the nurse and the victim.

Primarily, the nurse must be aware of the signs and symptoms of abuse. The nurse should take action and say something like, "I see that you have a lot of bruises.

You can talk to me about how they happened.” The nurse must listen carefully and express concern for the abused victim’s safety and welfare. The nurse should explore whether there are children in the household, because they also may be victims. The nurse should provide telephone numbers of local resources (e.g., hot-lines, shelters), even though the individual may be reluctant to take them. A discreet card that can be hidden in a wallet or a shoe is appropriate.

Nurses often feel that intimate violence between adults is their own concern. The principles and philosophies of forensic nursing compel nurses to take an active role in domestic violence by careful interviews and assessments and by generating the required report forms. The philosophies of a caring nursing practice will guide the interaction and the relationship that is being established. No emergency or casualty department exists in any hospital in any country that does not come into contact with domestic violence victims. Many women who are seeking to escape from interpersonal violence turn to health care professionals for help. In the United States, victims of intimate partner violence visit their doctors eight times more often than women who are not abused; however, only about 10% of these women are identified as being abused (Stalking Victims Sanctuary, 2003). This statistic can be attributed to the health care professional’s lack of information and education and the reluctance to ask the right questions. Health care workers often hesitate to get involved in intimate partner violence.

The Emergency Nurses Association and The Joint Commission have set forth recommendations for instituting protocols in facilities to manage victims of domestic violence. In the United States, the *Healthy People 2010* objectives include goals such as reducing the rate of physical assault by former or current intimate partners, reducing the annual rape or attempted rape rates, and reducing physical assaults. Forensic nursing can have a direct effect on achieving these goals. Detailed screenings, interviews, referrals, and treatment of injuries may be tedious and time consuming, especially considering the intense workload in the emergency or casualty department. Some survivors of intimate violence have reported that they felt twice victimized: once by the abuser and again by health care workers, who tend to treat the injuries and ignore the cause. Screening for intimate partner violence and providing help for victims through referral processes are ways to interrupt the cycle of violence, thus reducing further injury or even death for thousands of victims. Important concepts for the FNE to remember when

dealing with victims of intimate partner violence are confidentiality, safety, objectivity, caring, the documentation of injury, and the collection of evidence.

COURTROOM RESPONSIBILITIES

A nurse expert witness is defined as a nurse who is qualified by education, experience, occupation, present position, degrees held, publications, and professional organization memberships that establish credibility as an expert to give opinions about whether nursing care administered met acceptable standards of care. Such validity of IAFN was validated on January 11, 2002, in the case of *Eduardo V. Velazquez v. the Commonwealth of Virginia*. It is on this date that the Supreme Court of the State of Virginia issued an opinion that solidified the legitimacy of forensic nurses testifying as expert witnesses and offering opinion testimony. This landmark case pushed forensic nursing to the next plateau of acceptance and gave the specialty further autonomy in the medicolegal arena (Gilson, 2002). As nurse expert witnesses are increasingly used in courts (specifically in sexual assault and domestic violence cases as medical examiner’s investigators or nurse coroners), the expanded role of the nurse provides unique and vital services that involve a distinct body of knowledge that is not found in the practice of any other profession. Establishing the appropriate standard for nurses who practice in advanced nursing roles that encompass court testimony is critical to protect the legal rights of victims and professional nurses. Educational requirements and courtroom standards are currently held admissible under the foregoing definition. Many nurses are practicing forensic nursing and do not realize it. Professional judgment, intuition, actions, interventions, and documentation will be placed under legal review (Childers, 2006). Nurses must be cautioned to realize that, anytime a patient injury becomes the basis for a criminal action or lawsuit, the nurse’s forensic skills are scrutinized. Scrupulous documentation provides protection for the nurse, evidence for the client, and testimony for the court (Stevens, 2004).

Individual state or provincial penal codes ultimately define the criteria for the court to qualify a witness as one who may state only facts or opinions based on reasonable certainty. Briefly put, forensic nursing links the nursing profession to the criminal justice system by providing forensic expertise where the victim or perpetrators most often have the first point of contact after a crime: a hospital. The forensic specialist in nursing is taught to maintain a high index of suspicion and is

skilled in the identification of injuries that are consistent with weapons, the interviewing of victims, the collection and preservation of evidence, and service as a liaison with the police and the medical examiner. Later in the process, forensic nurses are recognized as effective expert witnesses. As trends in crime and violence change, new antiviolence legislation is being implemented; consequently, new personnel resources are required to ensure that these legislative mandates are meeting the needs of society effectively.

HUMAN RIGHTS

The application of nursing science to the process of human rights investigation now is recognized as one aspect of the legal and ethical responsibilities of the nurse (Glittenberg, Lynch, & Sievers, 2007). The forensic nursing specialist has a vital role in the identification of victims of human rights abuse and the investigation of violations of humanitarian law. Forensic nursing as a clinical subspecialty provides an important resource to clinical forensic medicine and the human rights community. As an emerging discipline, forensic nursing assumes a mutual responsibility with forensic scientists and the criminal justice system with regard to the loss of human life and function as a result of the intimidation, domination, and control of political, religious, cultural, and interpersonal oppressors. The unique skills of nurses educated in forensic techniques enhances investigative capabilities and forensic functions.

In addition to traditional professional nursing care, nurses specializing in the care and treatment of victims of pernicious human behavior offer the complex skills of the assessment of covert and latent patterned injuries, the recognition and collection of human bite mark evidence, photographic documentation, the recovery and preservation of genetic evidence, and the provision of crucial intervention for the emotional trauma associated with human rights violations. A forensic specialist in nursing is ideally qualified to assist with initiatives designed to address forensic guidelines that provide accurate assessment and documentation and to address the educational needs of staff to ensure compliance with forensic details. These distinct responsibilities include the roles of assessor, educator, and therapist, which are often required when caring for individuals, families, and community survivors of cruel and inhumane treatment. The forensic nurse also assists institutional staff members with critical incident stress debriefing.

Sexual assault is a violent act that results in serious physical and emotional sequelae that are inflicted

continually on victims of social and political torture. The forensic nurse as a sexual assault examiner provides the advanced physical assessment and stabilization of the victim's emotional state, the collection of forensic evidence, and courtroom testimony for cases in which no medical treatment is required. Many forensic nurses who specialize in the scientific investigation of death assist forensic pathologists with questioned death cases. Participation in this area includes investigation at the crime scene, postmortem examinations in the autopsy laboratory, exhumations, and disaster site recovery. Other nurses practice their forensic skills in forensic mental health nursing, as hostage negotiators, and as nurse attorneys or legal nurse consultants.

The academic and professional development of the forensic clinical nurse specialist provides an incisive exploration of the principles and philosophies of the forensic sciences, including the following: the structure and function of institutions of legal medicine; forensic psychopathology; signs and legal aspects of death; certification of death; bioethics; victimology; traumatology; sexual and domestic violence; forensic pathology; organ and tissue recovery; medicolegal documentation; and rules of evidence. Forensic education prepares nurse clinicians with excellent observation, assessment, clinical, and communication skills and for the prevention and rehabilitation issues that are essential to caring for individuals who have been violated by government institutions and domestic terrorists.

Current nursing theories and practices support the development of forensic intervention in response to the complex, sensitive needs of survivors of human torture and human rights violations. Nurses can bring empathy, compassion, and respect for human rights victims. Forensic specializations in the biomedical and social sciences incorporate emergency and advocacy interventions while providing scientific knowledge to combat destructive social and political conditions. Because of its holistic orientation, forensic nursing helps provide a humanistic approach to the application and protection of internationally recognized human rights standards. This new health and justice specialist is a uniquely qualified clinical professional who blends biomedical knowledge with the basic principles of law and human behavior when caring for survivors of torture.

UNIVERSAL NEED

The need to promote the image of the police as defenders of the innocent and as being proactive with regard to the apprehension of those who have violated the law

is universal. In many countries, law enforcement agencies are viewed with suspicion because the government may be using or may have previously used the police to carry out torture or punitive measures. For example, in South Africa, the aftermath of apartheid has left a bitter taste in the mouth of the health care professional who recalls the fear of being charged with terrorism for treating any patient with any injury from a lethal weapon. Under the new South African constitution, this is no longer a concern for health care professionals, but only time and experience will allow health care personnel to establish a close working relationship with the South African police force.

With the current approach to the restructuring of forensic services, South Africa has entered into an era in which the culture of human rights is being nurtured. In the shadows of a time in which claims of evidence tampering, fabrication, and other professional improprieties threatened the legal, civil, and human rights of the accused, improved forensic services and victim management will extend the humanitarian rule of law. In response to the overwhelming need to create positive change for more competent, accessible forensic services and to provide a system of support to forensic physicians in South Africa, the Northern Cape Province took a bold and direct approach. Through their vision for new and improved medicolegal services, the forensic physicians established the first forensic nursing practice in Kimberley, Republic of South Africa, in 1997. This innovative approach emanated from the concerted efforts of Dr. Tromp Els, chief forensic medical officer; the National Restructuring Committee for Forensic Services; Office of the Attorney General—Northern Cape Province; Henrietta Stockdale College of Nursing, University of the Orange Free State; and the Department of Health, Welfare, and Environmental Affairs.

In the aftermath of apartheid, interpersonal violence is recognized as a major cause of injury and death, and it poses a serious threat to public health and safety in this area of the world. As forensic professionals in South Africa search for solutions to an identified problem, forensic nursing has been acknowledged as one mechanism to assist with combating the impact of crime. The struggle of South Africa during its transition to a democratic society requires assistance and specialized training within the health and justice systems to deliver effective services. In response to this important opportunity to aid the republic with providing intervention to victims of human violence and with the development of antiviolence strategies came a select

group of professionals; this team of forensic specialists was willing to share its unique knowledge, resources, and skills to prevent serious abuses of individual human rights.

In a collaborative endeavor, several members of the American Academy of Forensic Science and the International Association of Forensic Nurses came together to promote and establish the practice of forensic nursing in the Republic of South Africa. These individuals represented the mission of their professional organizations and the tenets of their respective disciplines. The International Liaison Committee on Forensic Health Science in Nursing, which was established by the president of the American Academy of Forensic Sciences in 1996, represented a united endeavor to improve the quality of forensic services, the treatment of victims, the prosecution of sexual assault and domestic violence cases, and the advancement of human rights.

A MODEL PROGRAM

The project in the Republic of South Africa, which was initiated on May 18, 1997, provided 240 contact hours of didactic instruction in the principles and philosophies of clinical forensic evaluation and the scientific investigation of death. Clinical supervision of sexual assault examinations; the use of colposcopic magnification and postmortem procedures; and field experience in crime scene search, evidence collection, courtroom testimony, and forensic photography completed the curriculum. A 6-month internship is required under the direction of the chief forensic medical officer of the province and regional district surgeons in specific areas in which the FNEs are located. Candidates for the initial course were 13 nurses and 2 police officers who successfully completed the requirements of the course. This cadre of forensic nurses offers a new resource for the clinical management of cases of child abuse, sexual assault, and other crime-related injuries as well as for the investigation of questioned deaths. In the interest of justice, forensic nurses will afford a new perspective in scientific knowledge, professionalism, and evidentiary principles that will assist existing medicolegal specialists with informing, educating, and safeguarding public health and safety. The legal and regulatory process will be better equipped to prevent the atrocities of the past from being repeated and to provide fundamental rights and freedoms to the next generation of children.

THE FUTURE OF FORENSIC NURSING

Nonphysician health care providers have become the leading providers of the forensic investigation of crimes against persons in health care environments, and they have both clinical and community patients. As in other sectors of health care, the nonphysician health care provider is often a nurse who has unique skills and who is assuming increasing roles in the evaluation and treatment of patients who require forensic services. The primary person to fulfill this role is an FNE. Although this role has often been controversial in the past, it is now considered the ideal clinician for cases that involve the maltreatment of adults or children and most importantly where sexual violence has occurred.

Forensic science is an important but often neglected area of emergency practice. Violence has a profound influence on the public health system, and it affects all areas of the health care institution. The identification of the subtlest signs of abuse and subsequent intervention are important responsibilities for nurses. Traditionally, these responsibilities were relegated specifically to law enforcement agencies. However, the support of criminal justice has provided an impetus that has served as a driving force to involve nurses in forensic role behavior. The forensic nursing specialist has a vital role in the emergency department or trauma center because of the increasing caseload of patients who have medicolegal-related problems. Sekula states that, "within the health-care setting, the forensic nurse enhances patient care management, resulting in improved clinical services, legal order, and well-documented forensic protocols" (2005, p. 9).

Fatal or near-fatal injury that results from intentional or unintentional acts that involve criminality or civil action brings health care professionals into the arena of the law that constitutes forensic cases. These cases necessitate attention to forensically significant evidence. In addition, there are growing concerns about sensitivity being shown to victims of violence and to their families or significant others.

Medicolegal and psychosocial interaction is a new and important role for nurses that requires knowledge about how human behavior interfaces with the law. Because the current policies of advocacy programs mandate the inclusion of criminal justice and health care providers, it is especially timely to propose that the forensic nursing specialist be placed in the trauma treatment environment to serve as a valuable link for interagency cooperation and to ensure that human

needs and medicolegal interests are served. Because most emergency personnel and prehospital care providers ordinarily have only a secondary interest in forensic matters, the motivated and skilled forensic nurse can be an invaluable resource for the criminal justice system, the hospital, and the patient.

THE EVOLUTION OF A GLOBAL NETWORK OF FORENSIC NURSING

Along with the new millennium came extraordinary challenges and opportunities available to the nursing profession worldwide with regard to defining the way that nurses care for patients, conduct research, teach students, address antiquated laws and policies, and participate in the global enterprise of health care. These challenges will not cease; they will require continuous quality improvement, innovative educational programs, and the realization that the framework for forensic nursing science must remain an ever-evolving work. The dynamics of culture, tradition, and religious practices will continue to pose a threat to the most vulnerable subjects in each society and thus to affect the way nurses practice nursing. Nurses must prepare graduates and reeducate practicing nurses to face the changing health care delivery system of the future.

Nursing students in the United States who are participating in forensic nursing programs often appear to be surprised that there is a need to study human rights and international law, the broader focus of transcultural nursing, and the recognition of indicators of torture. However, the United States receives a greater number of immigrants and refugees than any other country in the world, which results in the presence of survivors of war and torture and victims of cultural practices that have maimed and crippled many. Where centers of justice, immigration laws, and deportation pertaining to the legal residence of these populations are established, one also will find large communities of immigrants and refugees seeking to combine their resources, support, and strategies for survival. These peoples also are seeking comfort, understanding, and protection in a new, strange environment that threatens their understanding of the laws, causes fear of accusation of wrongdoing, and inhibits their desire to be accepted. The fear of being judged for their traditions, cultural practices, and worship of religious practices remains a covert concern, often driving their beliefs into secrecy and their customs underground.

Nurses must learn to understand the impression that may be left with these individuals who have recently arrived from countries of origin where doctors, nurses, and police may have participated in their imprisonment, mutilation, and evaluation of the extent of punishment or torture that they may receive without causing death. An awareness of cultural and traditional practices (e.g., female genital mutilation, honor killings, bride burning, dowry deaths, child prostitution, incarceration of rape victims rather than rape perpetrator), poverty, and the lack of education for women must become a part of nursing education in today's multicultural, dissimilar population, which is subject to the often ethnocentric and confined perspective of American health care services.

Nurses must strive to include in their strategic plan for nursing the issues that have been identified as having the highest priority by the World Health Organization and not limit their concerns to their state and national agendas. Nursing research, curricula, and practice must address the following:

- ◆ The prevention of human immunodeficiency virus and acquired immunodeficiency syndrome and the direct connection to sexual assault;
- ◆ The prevention of disease and death related to the lack of early detection and management of chronic conditions of the immigrant and refugee populations transferred from their countries of origin;
- ◆ The reduction of abuse against women and children in a culturally competent and sensitive manner;
- ◆ The reduction of infant mortality among immigrant groups; and
- ◆ The risk factors from a contaminated environment that may not have been experienced before.

ACHIEVING AN INTERNATIONAL FOCUS

Canada was the first to join with the International Association of Forensic Nurses at the initial founding meeting to establish the bond between the United States and forensic nursing that today has directed the expansion of this mission into other areas of the world. Those who have reached out to developed and developing countries in need of a new resource to address violence and its associated trauma have discovered that the similarities of interpersonal crime (i.e., crimes against women, children, and older adults) are basically the same everywhere. The major commonality that links each of these countries with regard to health beliefs, cultural differences, societal values, and nursing care is

the impact of domestic violence, child abuse, crimes against older adults, and, most specifically, sexual assault. Other commonalties include homicide, alcohol abuse, and suicide. As in any country, culture, or society, children are those who are most violated by mistreatment, neglect, brutality, sexual abuse, and war.

For forensic nurses to better understand the necessary approach to assist with the forensic assessment and management of medicolegal cases requires the incorporation of transcultural nursing perspectives, the ethical and moral dimensions of human care, health care practices of diverse cultures, and a review of the law (local, national, and international, as well as an in-depth knowledge of the United Nations Declaration of Human Rights). A strong working knowledge of the law promotes interaction with local law enforcement agencies and helps to develop an accurate approach to forensic nursing interventions, and it may also protect nurses who are practicing outside of their own national boundaries. An increased awareness of the law also enables the nurse to present informed, appropriate lectures and to understand how the current standards of nursing practice differ.

The establishment of the International Association of Forensic Nurses in 1992 has promoted the education and implementation of forensic nursing roles worldwide. The vision of this founding group was to develop an organization that would encompass a wide and diverse body of those who practice nursing within the arena of the law. Nurses who apply concepts and strategies of forensic science in their specialty practice include death investigators, SANEs, forensic psychiatric nurses, correctional or custody nurse specialists, legal nurse consultants, forensic geriatric and pediatric specialists, nurse attorneys, forensic clinical nurse specialists, and other forensic nursing roles as they evolve. With the establishment of graduate and undergraduate education programs, role development in forensic nursing in the United States and abroad is recognized as one important component of antiviolence strategies.

To meet the health care needs of an increasingly diverse population of patients with forensic assessment needs in the United States, the International Association of Forensic Nurses is determined to maintain and encourage a worldwide focus in membership, to develop a scope and standards of practice, and to commit to establishing practices internationally. The International Association of Forensic Nurses recognizes a membership of more than 3500 individuals in 19 countries and territories. Institutions of higher learning are offering formal and informal curricula in Australia,

Canada, England, Scotland, Singapore, Brunei, Central America, India, Italy, South Africa, Turkey, Kosovo, Portugal, Sweden, Switzerland, Mexico, Zimbabwe, Singapore, Japan, and the United Kingdom. The United Kingdom Association of Forensic Nurses was founded in 2007, and it became the first forensic organization for nurses outside of the United States. This organization will serve as a model for other countries to establish individual groups to provide greater access to local nurses, to provide forensic education, and to support the development of practice for nurses who are seeking to become forensic specialists. The influence and availability of nurses worldwide has continued to reach across the globe to provide clinical assignments and forensic services where they have not previously existed (Lynch, 2007).

South Africa became the first country in which the minister of health designated forensic nursing as a national priority program. Through advanced technology, forensic nursing has entered the World Wide Web via digital distance delivery. Internet education and information connect this new frontier in forensic health care with the global community.

SUMMARY

The development of a new field of practice is a challenging experience that brings together professionals who recognize a mutual benefit through collaborative practice, an exchange of knowledge, and shared successes to reach common goals. Nurses must remain concerned with improving the health care of at-risk populations and with advancing the information technologies that are revolutionizing forensic nursing research, clinical care, and forensic education. Nurses must find a clinical partnership with nurses from other countries with similar interest to address specific concerns and threats to health and justice. In the near future, developed and developing countries will be served by nurses who have been prepared with the basic principles and philosophies of forensic nursing science. With the support of national and international bodies of nursing, forensic specialists in medicine and science, and the advent of this emerging nursing specialty, new roles and educational programs are being defined that until now have not existed. The International Association of Forensic Nurses and the inclusion of forensic nursing as an accepted discipline for membership in the American Academy of Forensic Sciences provide vital resources for education and experience that were unavailable in traditional health care practice. The academic

application of forensic science to nursing practice has revealed a wider role for the clinical investigation of crime and the legal process.

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Occupational Health Nursing: Recent Changes and Current Issues

KENNITH R. CULP ♦ SANDRA L. RAMEY

For the last 20 years, the American workforce has been drifting away from production, manufacturing, and agricultural jobs toward more service-oriented, professional, and skilled jobs. These changes have shaped occupational health nursing, which has historically focused on the practice of nursing in industrial and business settings as well as in community-based occupational health clinics. In addition, hospitals have now developed specialty resources in occupational health, and many companies contract for services from these acute-care-oriented institutions. Those industries with on-site clinics have scaled back the size of their on-site employee health operations, redirected injury reporting and work absence monitoring to human resource personnel, or reconceptualized the occupational health service (OHS) to include a team of professionals with nursing, occupational medicine, industrial hygiene, ergonomics, and safety staff (Rogers, 2003). In fact, the most frequent model of delivery for nursing services in many industrial settings with an on-site OHS is the one-nurse unit.

Clinical services offered in the OHS are variable. Some employers cover only work-related health and safety problems, but others offer a wider scope of services that includes treatment for non-work-related injuries and illnesses, employee assistance programs, and health promotion services. Regulation has also impacted the OHS. Today, employers must comply with Occupational Safety and Health Administration (OSHA) standards, the Americans with Disabilities Act (ADA), the Family Medical Leave Act (FMLA), sexual harassment policies, workers' compensation (WC) procedures, and state laws for drug-free workplace programs (Levy, Wegman, Baron, & Sokas, 2006).

Indeed, the specialty of occupational health nursing has become increasingly complex, and there are

new workplace hazards that differ from the physical hazards that characterized the industrial revolution. For example, technology has now introduced nanoparticles into some manufacturing processes (McCauley & McCauley, 2005). These particles range in size from 1 to 100 nm, and they easily penetrate the respiratory system and skin; the long-term health effects of nanotechnologies are largely unknown. Police officers, firefighters, and teachers are also exposed to noxious psychological environments that challenge everyday functioning.

OCCUPATIONAL HEALTH AS A NURSING SPECIALTY

Before the twentieth century, few nurses were employed in industrial settings, and there was no professional society to represent them (Kalisch & Kalisch, 2004; Rogers, 2003). In 1942, occupational health nurses from 16 states started the American Association of Industrial Nurses; this name remained the same until 1976, when it was changed to the American Association of Occupational Health Nurses (AAOHN). For many years, there was significant interdisciplinary interaction between AAOHN members and their medical colleagues in the American College of Occupational and Environmental Medicine; the two organizations convened at an annual conference. However, the partnership posed some problems, and the AAOHN board had concerns about revenue sharing; thus, the alliance between the American College of Occupational and Environmental Medicine and AAOHN eventually failed. The membership of AAOHN (www.aaohn.org) is currently 8000, which is down from a peak of 13,000 in 1995, according to the executive director of the organization (A. Cox, personal communication, January 7, 2009).

Education

In a survey of 1389 occupational health nurses in the United States, 29.15% held master's degrees as their highest academic credentials, and 50.87% held baccalaureate degrees (Strasser, Maher, Knuth, & Fabrey, 2006). There are two preferred educational pathways to practice as a clinical specialist in occupational health nursing: the Master's of Science in Nursing (MSN) or the Master's of Public Health (MPH). However, some nurses in the field also obtain a Master's of Business Administration. Most of the MSN and MPH programs in the occupational health nursing field are funded by the National Institute for Occupational Safety and Health (NIOSH) and are externally reviewed by a special-emphasis panel (McGovern et al., 2000).

The curriculum for many of these MSN and MPH programs addresses the foundational sciences of occupational health, epidemiology, toxicology, industrial hygiene, ergonomics, and injury prevention (Salazar, 2001). With the shortage of nurses in the workforce and the pressing demands to supply the acute care workforce (Christmas & Hart, 2007), it has been difficult to recruit nurses into the MSN programs; community health clinical specialists programs are chronically underenrolled (Ervin, 2007). There is also a shortage of PhD-prepared nursing faculty doing research in occupational risk reduction and other elements of the work environment (Allen, 2008). Furthermore, faculty capacity is expected to diminish precipitously during the next 5 to 10 years (Garbee & Killackey, 2008).

Certification

Certification in occupational health nursing is obtained through the American Board of Occupational Health Nurses (www.abohn.org). Although there is no certification as a nurse practitioner (NP) in occupational health, certification is available in case management, as a clinical specialist, and in safety management (Lukes, 2002; Buddle, 2009). NPs generally follow a family or adult NP track and obtain an MSN degree. Changes are occurring in many NP specialties, and a Doctorate of Nursing Practice may be required for certification by 2015 (Chase & Pruitt, 2006; Nelson, 2005). A potential problem in the next few years is that currently NIOSH is not funding the Doctorate of Nursing Practice curriculum, so it is unclear if there is enough incentive by the specialty boards to create an occupational health NP certification examination.

TRANSITIONS, ROLE, AND SCOPE

Autonomy, independent decision making, and responsibility to leverage information related to the workplace have all been traditional hallmarks of the occupational health nursing role (Amann, 2003; Salazar, Kemerer, Amann, & Fabrey, 2002), but expectations from employers and employees are changing. Although occupational health nurses protect and promote the health of employees, nurses are also expected to justify health expenditures in corporations by writing business plans for wellness programs (Tobias, Burnes-Line, & Pellarin, 2008); doing cost justifications for workplace interventions (Hart, Olson, Fredrickson, & McGovern, 2006); and articulating productivity concerns in employee return-to-work policies (Kalina & Haag, 2005).

Much of the practice and role of occupational health nursing is interdisciplinary, with knowledge based not only on nursing but also on medicine, public health, toxicology, the social and behavioral sciences, and administration principles (AAOHN, 2007). However, nursing practice is changing dramatically. For example, there are new rules that employers have to comply with regarding genetic screening in the Genetic Information Nondiscrimination Act in 2008 (Table 27-1). In essence, the Act prevents employers from requesting or using genetic information for the purposes of hiring, promoting, making assignments, firing, or determining regulations related to communicating about workplace risks to employees (Bouchard, 2007).

Ethics

One of the more difficult areas for nursing has been the fine line between being the "company nurse" and being an advocate for clients or workers. Although nurses develop a professional rapport with employees and employers and promote and facilitate continuity of care, many times, worker-nurse relationships are suspect. A code of ethics established by AAOHN details an ethical framework for the registered professional nurse to maintain integrity in such matters; the code highlights the ultimate obligation to act in the best interest of the worker/client and to safeguard clients from unethical and illegal actions (AAOHN, 2007).

CHANGING WORKER DEMOGRAPHICS

Demographers have presented a markedly different picture of the twenty-first century workforce as compared with that of the last century; major changes in the labor assets of corporations initiated during the 1980s and

TABLE 27-1 Key Federal and State Programs Impacting Occupational Health

Program	Description	Current Occupational Health Issues
Workers' Compensation	This is a state-mandated, "no-fault" insurance system that pays benefits to workers who are injured on the job to cover medical care, part of lost wages, and permanent disability. In return, employers receive immunity from civil lawsuits by employees over such workplace injuries.	<ol style="list-style-type: none"> 1. State regulated and variable with regard to employee choice of physician provider; may complicate care and delay return to work 2. Mental stress and psychiatric morbidity from the work environment 3. Commissioner intervenes in disputes
Family Medical Leave Act and the National Defense Authorization Act (2008)	These are federal laws designed to balance the demands of the workplace with the needs of families and to provide eligible employees with up to 12 weeks per year of unpaid, job-protected leave for qualified family and medical reasons.	<ol style="list-style-type: none"> 1. Medical certificate or birth/adoption documentation required to be eligible 2. Grandparents, same-sex partners, in-laws, and siblings may not be eligible 3. Disputes over use of paid versus unpaid leave 4. Additional time for military mobilization (12 weeks) or service member injury (26 weeks)
Genetic Information Nondiscrimination Act	This law prevents employers, employment agencies, and labor organizations from discriminating on the basis of an individual's genetic information and specifically from using genetic information to lower insurance and sick leave costs.	<ol style="list-style-type: none"> 1. Genetic information protected is comprehensive (e.g., family history) 2. Employees may have suspicions about employers obtaining genetic data from routine examinations and blood studies
Americans with Disabilities Act and Amendment	These laws protect individuals who have disabilities, who have records of disabilities, who are perceived as having disabilities (whether they do or not).	<ol style="list-style-type: none"> 1. Place restrictions on pre-employment physical examinations; employers cannot elicit information about whether a job applicant has a disability or the nature or severity of such disability 2. No universal definition of a reasonable accommodation in the workplace 3. Essential functions job need to be clearly identified by employer 4. List of major life activities and bodily functions affected by disability has been expanded

the 1990s will become more pronounced during the next decade. Clearly, the world economy has shifted, and this has created a shortage of highly skilled workers in many industrialized countries; thus, many older professional and educated workers have continued to participate in the workforce (Froneberg, 2007). Likewise, there has been a tremendous emphasis on outsourcing essential services and production tasks that was intended to lower costs; U.S. businesses have flocked to cities in India and Eastern Europe for offshore production and service functions (Bruett, 2006; Farrell, 2006). These global changes could affect employer-sponsored

health care plans in the United States and abroad (Holahan & Cook, 2008).

Aging Workers

Older workers have had a major impact on occupational health nursing. The workforce is older, and there is greater demand for managing non-work-related injury and chronic illness (Schofield et al., 2008); promoting health and wellness to decrease the cost of employer-provided health insurance (Naumanen, 2006); and managing worker disability more carefully when recovery is more complicated (Rupp, Davies, & Strand,

2008). The employment of older workers also means that the occupational health nurse must apply adult learning principles to employee safety training (Wallen & Mulloy, 2006) and help the employer stay in compliance with ADA requirements for accommodations on the job (McKenna et al., 2007). In addition, occupational health nursing is needed to develop workplace policies that recognize the needs of the older adults and the “sandwiched generation,” which is responsible for frail, elderly parents as well as adult children (Head, Baker, Bagwell, & Moon, 2006).

Because the number of workers who are 55 years old and older is projected to increase significantly over the next 20 years, these changes will more directly affect the OHS. The largest increase in the worker demographic has been among women who are more than 55 years old (United States Department of Labor, 2009). According to the survey results from the federally funded Health and Retirement Study, which was based on a random sample of community-dwelling U.S. adults 50 years old and older, working older adults were more likely to be non-white, less educated, unmarried, and with lower levels of net worth than the working non-poor in this same age group (Lee, Teng, Lim, & Gallo, 2005). In essence, the field of occupational health has working elders that fall into two groups: those who want to work and have the education and skills to do so and those who do not have enough retirement income and cannot live on social security alone. This latter group comprises the “working poor” who are at risk for depression and feelings of hopelessness (Simmons & Swanberg, 2008).

More Women in the Workforce

The number of women who participate in the workforce has been growing since World War II, but the impact of this fact on legislation was largely limited to sexual discrimination. The landscape has now changed. Most certainly, parenting issues were the driving force for the passage of the FMLA in 1993, and working women were largely responsible for this (Pyle & Pelletier, 2003). This single piece of legislation profoundly changed how U.S. employers allocate leave for working adults who must care for a new child as a result of a birth or adoption; one's own health; or an ill child, spouse, or parent. Although some Western European countries have broader policies than the FMLA and U.S. corporations complain about lost productivity (Sayeed, 2002), the U.S. mandate provides benefits for all workers in the workplace (Morris, 2008).

A comprehensive review of the role of women in the workplace is beyond the scope of this chapter.

However, the change in gender balance within corporate America has prompted attention to the problem of balance between work and family life (Frick & Jones, 2008). Research conducted by the Families and Work Institute—specifically the National Study of the Changing Workforce, which was based on a U.S. survey (N = 3400) of working adults (Bond, Thompson, Galinsky, & Prottas, 2002)—has had a major influence on what is known about balance in the workplace. According to this study, the vast majority of married or domestic partner respondents indicated that they had two incomes (in three fourths of this aggregate, both partners worked full time); that they were struggling with the provision of child-care; and that they were in need of more supportive workplace policies. Women who indicated that they were burned out by their jobs verbalized that they had insufficient time and energy for themselves and their families. Although the survey results supported that the quality of jobs has improved somewhat for women over the past 20 years, these jobs have become less secure, especially for women who have become self-employed (Prottas & Thompson, 2006). Overall, the survey results indicated that employed married women still spend more time (as compared with their male counterparts) doing household chores.

Ethnic Diversity in the Workplace

It is beyond the scope of this chapter to go into the details of the changes in the demographics of the U.S. workplace, so emphasis will be placed on immigration and work opportunities. Although little is known about the numbers of nondocumented workers in the United States, it is apparent that many migrant and seasonal farm workers do not have the full protection of the federal government when it comes to work hazards (Culp & Umbarger, 2004). Little objective evidence is known about the number of injuries among Hispanic and Latino workers, although it has been suggested that injury reporting is lower in this aggregate, possibly because of the fear of job loss or the notion that, in these cultures, injuries are a sign of weakness (Culp, Brooks, Rupe, & Zwerling, 2008).

There are many hypotheses regarding why there is an influx of immigrants into the United States, and an exhaustive list will not be proposed here. However, possible explanations include the ideas that Americans simply do not want to perform the work at the market labor rate, that the working conditions are undesirable (Forst et al., 2006), and that this labor force is largely accepted in the marketplace (Parks, 2005).

African Americans, Latinos, and American Indians are severely underrepresented in the health professions, and much work needs to be done to recruit minority occupational health nurses to serve this population (Grumbach & Mendoza, 2008; Kosoko-Lasaki, Cook, & O'Brien, 2009). Employees need to develop tolerance and acceptance of people different from themselves to curb workplace violence (Milam, Spitzmueller, & Penney, 2009).

Contingent Workers

The traditional employee-employer relationship is changing in the U.S. workforce; contingent workers (e.g., temporary contract workers, freelance workers, consultants) represent a substantial and growing percentage of the U.S. workforce (Gleason, 2006). Another variation is a result of the temporary staffing firm. The incentive to use this labor pool is to decrease long-term salary and benefit commitments for the employer, but these nontraditional workers can create a host of legal and practical problems. Permanent employees can be resentful of these workers, who may have higher hourly rates or threaten job security.

RECENT LEGISLATION THAT AFFECTS THE WORKPLACE

When the ADA was originally passed in 1990, it enabled employee requests for workplace accommodations as a result of a disability, and it also changed how employers conducted pre-employment screening (McMahon & Hurley, 2008). The ADA defined a disability as an impairment of a major life activity, and this resulted in numerous court-derived decisions over the next 28 years regarding what constituted a disability. In 2009, the ADA Amendments Act (ADAAA) was passed, and it rejected several U.S. Supreme Court cases that interpreted the ADA. This included the court-fashioned requirement that an individual must have an impairment that prevented or severely restricted the individual from doing activities that are of central importance to daily life to be considered substantially limited (Leiker, 2008). In the ADAAA, the term *major life activity* term is more broadly defined by expanding examples of major life activities, and it also extends the phrase to include major bodily functions. In addition, the ADAAA limits employers from rejecting disability claims by stating that they cannot consider the ameliorative effects of mitigating measures when determining whether an employee has a disability (except for eyeglasses and contact lenses). In essence, the ADAAA will

severely complicate currently pending disability claims, and it will create confusion for both employers and employees in the near future.

The FMLA, which was passed in 1993, was the first U.S. policy to regulate employee leaves from work for family-care purposes. In 2008, the National Defense Authorization Act (NDAA) amended the FMLA, and it affects employees who are military family members (Magill & McGeehon, 2008). The National Defense Authorization Act created two new categories of FMLA leave: qualifying exigency and military caregiver leave. A covered military member is the employee's spouse, son, daughter, or parent who is on active duty or called to active duty status. The qualifying exigency leave most commonly covers short-notice deployment and the need for the employee to assist with childcare and related activities that have arisen after a call to active duty for the affected family member. An employee may take up to 12 weeks of FMLA leave for qualifying exigencies (Schwartz, 2009). A second provision of the amendment is military caregiver leave, which may be taken by an eligible employee to care for a covered service member with a serious injury or illness. The employee is entitled to take up to 26 weeks of leave for this purpose.

MANAGING LOST WORK TIME

Nursing in the occupational health specialty is heavily geared toward case management after an injury or illness has occurred. Case management is a collaborative process of assessment, planning, facilitating, and advocating for options and services required to meet a worker's rehabilitation needs so that a cost-effective outcome is obtained (Ramos, 2006). In occupational health, this is primarily a return to some level of pre-morbid productivity (Kalina & Haag, 2005). There is a significant societal expectation that employers accommodate workers with permanent disabilities as well as a legal mandate from the ADA. However, for short-term disabilities, many frontline supervisors on production floors in industrial plants do not always want employees to work at partial capacity while they are in recovery (Shaw et al., 2006).

Indeed, disability management in the workplace is probably one of the more controversial aspects of care in any OHS, but it is especially challenging to the nurse case manager in occupational health. It is sometimes difficult for both employers and employees to recognize that there are lost work time benchmarks for any given injury or illness. An example of this is the American Productivity Audit, which captured a large,

representative national sample of the U.S. workforce and assessed lost productive time as a result of common health conditions (Stewart et al., 2003). The cost of absence from the workplace is plagued with hidden items, including direct health care costs, salary support in the form of sick leave or disability for work not performed, the hiring of temporary workers, and unscheduled overtime.

For the past few years, WC has been primarily influenced by state legislation, and there is wide variation in how it is implemented in the United States. However, one of the changes is allowing workers or employees to select their own medical providers. This opening up of access to rehabilitation services for extended periods of time and allowing for the choice of providers are problematic for several reasons, but the most prominent rationale against these initiatives is that the typical primary care provider has little training in occupational health. For example, in one study, 70% of family physicians stated that, when treating job-related soft tissue injuries, they were influenced by workers' misunderstandings of their employer's expectations and by workers' fears about furthering their injuries if they returned to work too early (Guzman, Yassi, Cooper, & Khokhar, 2002).

Alternatively, some argue that the specialty of occupational health is in danger because of its dependence on financing by industry (LaDou, 2005). Indeed, one of the most difficult tasks for a provider is to determine whether an injury or illness is work-related or work-aggravated, because both of these determinations make the employer liable. As a result, states have recently changed their WC laws in using evidenced-based studies for both temporary and permanent disability (Guidotti, 2006). From a purely business point of view, some of these changes have increased the cost for WC claims by 10% to 30% per year during the last decade (Emmett, 2004).

LABOR UNIONS AND HEALTH

During the last decade, occupational health nursing has worked together with organized labor on a number of issues, including implementing workplace interventions, managing family medical leave, and developing return-to-work programs; establishing relationships with union stewards has been a seminal priority in this effort (Baker, Szudy, & Guerriero, 2000; Kalina, Haag, & Brown, 2007). Some nurses employed in industry verbalize frustration with regard to working with

organized labor, but there have also been major breakthroughs when successful partnerships are formed (Hammer, Bayazit, & Wazeter, 2009). By contrast, some nurses are union-based and work for labor unions to negotiate health benefits.

Impact on Workplace Safety

Organized labor has been largely responsible for the safety protections that many American workers may take for granted. In 1970, it was largely the result of efforts by labor unions that OSHA and NIOSH were created. Labor essentially improved and maintained health and safety in the workplace for all later generations with this legislation (Fell-Carlson, 2004). However, the director of OSHA is an Assistant Secretary of Labor position, so politics play a huge part in setting a national agenda for workplace safety. Recently, under a Republican administration, OSHA developed a policy of voluntary and cooperative compliance on the part of industry in the area of workplace hazards; this move has left organized labor somewhat suspicious (Gottschalk, 2007).

Employer-Based Health Coverage

Health care reform has been a major issue within organized labor that has affected not only occupational health nursing but nursing in general. During the early 1990s, as health care reform moved to the top of the national agenda, organized labor was unable to forge an effective strategy (Rosner & Markowitz, 2003). At risk for many Americans today is the employment-based health insurance premium benefit (Ginsburg, 2008). Many labor leaders advocate for universal health care, but this masks important differences among these leaders with regard to the specifics of these universal plans. For example, there are stark differences among the opinions and perspectives of labor leaders on topics such as the more expensive elements of employee choice for a provider, the creation of tax incentives for employer-sponsored plans, and the on-site delivery of primary care services for non-work-related injuries and illnesses in the employee health clinic. Some labor leaders argue that on-site employee health clinics are exclusively a cost-savings measure and that they limit employees' choice of health care providers (Ginsburg, 2008).

One labor group, the Service Employees International Union, has spent most of the last decade negotiating employer-sponsored health coverage and the outsourcing of work outside of the United States

(Perry, 1997). Specifically, the rate of employed adults without health insurance coverage has grown 2.1 percentage points over a 6-year period, from 13.7% in 2000 to 15.8% in 2006 (Gould, 2007). Although the Service Employees International Union has been an advocate for workers and very strategic in bringing attention to the issue of employer-sponsored health insurance as a benefit, there has been little evidence of progress in bringing about increases in salaries and in reducing work hazards.

Declining Influence

Labor unions have largely failed to reverse an apparent trend of decreasing membership in unions. In 1945, more than one third of employees in the United States belonged to unions; by 1998, union membership had fallen to 13.8%. Today, the percentage of workers in unions has dropped to 12.1% (United States Department of Labor, 2008). Among demographic groups, the union membership rate was highest among African-American men and salaried workers between 55 and 64 years old, and it was lowest among Hispanic women and workers between 16 and 24 years old. Labor has exerted some political pressure to increase membership; in some states, there are laws about requiring employees to pay union dues in organized workplaces (Ray, Sharpe, & Strassfeld, 2005). In right-to-work states (e.g., Iowa, Arizona, Nevada) and most southern states, an employee cannot be terminated if they decide not to pay union dues. However, employees who work in the railway industry, the airline industry, and some federal jobs are not protected by right-to-work laws.

Economic Recession

The Bureau of Labor Statistics reported that the American economy shed 2.6 million jobs in 2008 and that the unemployment rate was 7.2%, which was a 16-year high (United States Bureau of Labor Statistics, 2008). The construction, manufacturing, and retail employment sectors were among the hardest hit. Employment expanded in the areas of education and health services sectors and in some federal government offices, but recently state treasuries have experienced a loss of tax revenue, and some local and county offices are laying off workers. Some of these job losses have been in vital areas (e.g., social services, police and fire departments), thus posing new challenges for local government officials with regard to preserving essential services.

Within the labor movement, the last decade has been one of disagreement. Several major worker groups that

represent more than 6 million workers seceded in 2005 from the American Federation of Labor and Congress of Industrial Organizations to form their own labor federation called Change to Win. Recently, there have been talks about restoring these groups (Maher, 2009), but the central strength of labor is unity. In the case of the United Auto Workers, which was one of the first labor groups to organize African Americans (Thottam, 2007), there has been a refusal by union leaders to accept salary concessions in the federal bailout of the "Big 3" automakers. Any decision of this group to strike in difficult economic times may ultimately contribute to organized labor's decline (Richards, 2008).

Labor will likely continue to struggle during the years ahead, and occupational health nurses will need to partner with labor and include labor in health and safety training initiatives. However, occupational nurses must also deal with a changing employer-employee relationship as the potential erosion of employer-based health insurance becomes more apparent. A lengthy discussion of health care reform is beyond the scope of this chapter, but labor has been largely responsible for the maintenance of this benefit.

SUMMARY

Future challenges for occupational health nurses will likely include working with an aging workforce with greater diversity, particularly with regard to ethnicity and gender, than previously experienced. Volatile economic times will likely perpetuate dynamic changes in employer-based health care coverage and prompt the redefining of priorities by labor unions. Given these dynamics, greater scrutiny of budgets and resources that affect health and safety in the workplace is likely imminent. However, even in the midst of a serious global shortage of nurses, America now more than ever desperately needs the services of competent occupational health nurses who are committed to maintaining and ensuring safe and healthy work environments for employees and employers.

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Genetics, Genomics, and Current Issues for Professional Nursing

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From the launch of the Human Genome Project in 1990 (<http://www.genome.gov>) to the completion of a consensus human genome sequence in 2003 (Celera Genomics Sequencing Team, 2001; International Human Genome Mapping Consortium, 2001) to the promise of low-cost sequencing of individual human genomes in the near future (Mardis, 2006; Morozova & Marra, 2008), the pace of innovation and discovery in human genetics and genomics research continues to be stunning. Key innovations emerging from the Human Genome Project include the International HapMap Project (<http://www.hapmap.org>) and the 1000 Genomes Project (<http://www.1000genomes.org/page.php>; Kuehn, 2008), each of which contributes to an increasingly comprehensive catalog of human DNA sequence variation that is being rapidly exploited in the search for the genetic factors involved in causes of common complex diseases. Since the sequencing of the human genome, a prioritized plan for sequencing the entire genomes of other species has been underway (National Human Genome Research Institute, 2009); this will provide for systematic comparisons of DNA sequences across species (i.e., comparative genomics) as a tool for understanding the structure and function of genes and genomes, for discovering human disease genes, and for examining evolutionary processes. Subsequent technologic advances in DNA sequencing have also spurred the field of metagenomics, which is defined as the “application of modern genomics techniques to the study of communities of microbial organisms directly in their natural environments” (Chen & Pachter, 2005). Although initially metagenomics revolved around sequencing the DNA found in environmental samples, such as soil and water (Handelsman et al., 1998), the field is rapidly expanding to identify the full range of microbial diversity on and within humans, including the skin (Grice et al., 2008) and the

gut (Zoetendal, Rajilic-Stojanovic, & deVos, 2008). These advances allow for the study of the human organism as an ecosystem of genomes that include human, virus, bacteria, and fungi and the impact of these human–environment interactions on health.

The common thread among these genomics innovations is the ability to generate large quantities of genetic data more quickly and less expensively. These new technologies and expanding databases provide an exciting resource for determining the contribution of genes to both wellness and disease as illustrated by the growing number of genome-wide association studies completed since 2006 (Johnson & O'Donnell, 2009; <http://www.ncbi.nlm.nih.gov/gap>). Although historically the focus of genetic research has concentrated on the discovery of genes that cause rare single-gene disorders, resources today allow for the examination of the contribution of many genes to the onset and development of more common complex diseases (e.g., cancer, diabetes, heart disease, Alzheimer's disease). Thus, genomics is the study of all genes in the human genome together, including their interactions with each other and with environmental influences (i.e., physical, psychosocial, and cultural) (Guttmacher & Collins, 2002). The ultimate goals of genomics research are the better understanding of biologic pathways and of the alterations in these pathways that cause disease; the identifying of new targets for pharmaceutical and nonpharmacologic therapies; the improvement of the ability to predict risk; and the improvement of the ability to tailor or direct interventions on the basis of individual characteristics, including the characteristics of one's genome.

The scope and depth of the new knowledge gleaned from genetics and genomics research has the potential to dramatically alter or shift the provision of health care across the health science disciplines. As scientists, educators, practitioners, and advocates, nurses are charged

with carefully considering the current and future genomics research landscape to build nursing science, strengthen nursing practice, and craft a prepared workforce. The purpose of this chapter is to posit the current issues for professional nursing research, practice, and education that have arisen from the ongoing genomics discovery and technology boon.

GENOMICS AND NURSING RESEARCH

New advances in genomics information and technology necessitate and facilitate essential avenues for nursing research (Figure 28-1). First, advances in genetics research have yielded expanded opportunities for genetic testing, primarily (but not exclusively) to screen for, diagnose, or predict single-gene disorders. The increased availability of genetic testing has motivated important research to examine the social and psychological impact of genetic information on individuals and families. However, unanswered questions remain with regard to risk perception, decision-making processes, communication, coping, and psychological well-being in the context of genetic information across the lifespan and across cultural boundaries. Nurse researchers have contributed to these efforts (Hamilton, Williams, Bowers, & Calzone, 2008; Kinney, Coxworth, Simonson, & Fanning, 2009; MacDonald et al., 2008;

Sparbel et al., 2008; Williams et al., 2000), and their continued efforts are needed to translate this research into evidence-based practice standards for genetic counseling and testing services.

Another critical and expanding area of nursing research includes efforts to use genetics and genomics technology to examine the molecular basis of health problems for which nurses have the primary responsibility to prevent or treat. Health problems such as pain, distress, anxiety, nausea, vomiting, fatigue, pruritus, incontinence, altered skin integrity, and the behavioral and functional sequela of impaired cognition are core nursing problems with underlying biologic mechanisms. How do genetic and environmental factors work independently or interactively to influence these problems? Nurse scientists are currently addressing many of these questions (Cashion et al., 2006; Frazier et al., 2004; Gallek et al., 2009; Kleiber et al., 2007; Schutte, Maas, & Buckwalter, 2003). However, harnessing the vast array of genomics tools to answer these questions remains a critical need for the nursing profession (Conley & Tinkle, 2007).

After a genetic predictor, an environmental predictor, or a combination of predictors of a health problem is established, this knowledge can be used to better identify those individuals at particular risk for a health outcome. When risk can be more accurately predicted, hypotheses can be developed, and the ability to intervene in light of these risk factors can be tested, whether the intervention is providing improved anticipatory guidance, intervening earlier to promote a positive outcome, or intervening in a more targeted or tailored way to prevent or ameliorate a negative outcome. The identification of genetic and environmental predictors of health problems and outcomes is really but a first step on a path toward intervention effectiveness and translational research with the goal of improved health outcomes.

Additional multidisciplinary and multisite research led by nurse scientists is essential to address knowledge gaps related to the biologic basis of health phenomena. Notably, the cadre of nurse scientists who contribute across the many domains of nursing genomics-related research is steadily growing (Loescher & Merkle, 2005). The Summer Genetics Institute, sponsored by the National Institute of Nursing Research, has supported the continued preparation of nurse scholars who are prepared to conduct genomics-related research. Continued funding support for research training grants and individual programs of research that integrate biologic and behavioral basic and applied research for nurse

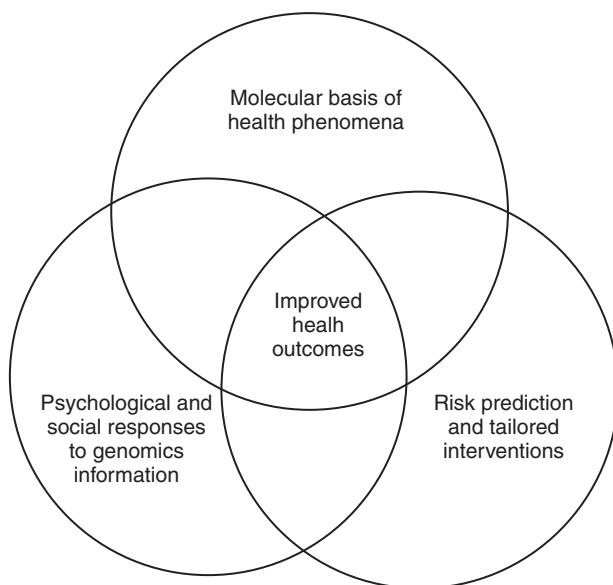


FIGURE 28-1 Genomics and essential avenues of nursing research.

researchers is also key. In addition, the International Society of Nurses in Genetics (ISONG; www.isong.org), which is a professional nursing specialty organization, continues to provide an international forum for networking and for the dissemination of multifaceted research initiatives. Continued innovation with regard to strategies to support knowledge discovery from within and outside of the profession in the area of genomics and its impact on health and disease is essential to provide the evidence on which nurses build their practice and its supporting educational systems.

GENOMICS AND NURSING PRACTICE

Although there remain many uncertainties regarding the impact of genes on health and health care practice, what is certain is that professional nurses will be faced with genetics, regardless of their level of educational preparation, their practice setting, or their primary population of interest. The current role for nurses in genetics and genomics was first explicated in the *Statement on the Scope and Standards of Genetics Clinical Nursing Practice* (ISONG, 1998) and the recently revised standards (ISONG, 2008). Both documents lay out the expectations for genetics nursing as a growing area of clinical specialization (Lea et al., 2006). Equally important is that both documents emphasize the role of all nurses in the delivery of genetics and genomics health care. Specifically, nurses are charged with the following:

1. Identifying individuals who are at high risk for experiencing a genetic disorder;
2. Referring high-risk individuals to specialty genetics services; and
3. Providing supplemental support, education, and advocacy to individuals who may be considering the impact of genetic information on their health care decisions.

Additional voices across the profession and the globe have called for an increased awareness of the growing role of genetics and genomics in health care across settings and populations (Barnoy et al., 2006; Bottorff et al., 2005; Ceber, Soyer, Ciceklioglu, & Cimat, 2006; Challen, Harris, Benjamin, & Harris, 2006; Floria-Santos, & Nascimento, 2006; McDaniel, Schutte, & Keller, 2008; Schutte, 2004; Skirton, Arimori, & Aoki, 2006).

In addition to identifying at-risk individuals and referring them to specialty services, professional nurses will be called on to provide an increasingly direct role in genetic testing. Genetic testing as a health care intervention will continue to evolve. For example,

consumers are already faced with direct marketing for genetic testing kits or risk-prediction services (Hogarth, Javitt, & Melzer, 2008; Hudson et al., 2007). Consequently, nurses will increasingly be faced with questions from consumers about the nature and value of these tests and potentially about the interpretation of the results of these tests. In addition to the challenges associated with genetic tests marketed directly to consumers, genetic tests are diffusing into general health care practice settings as well. For example, DNA variants in the *CYP2C9* isoform and vitamin K epoxide reductase complex subunit 1 (*VKORC1*) genes influence the metabolism of warfarin. Studies are underway to determine the effectiveness and clinical usefulness of genotype-guided warfarin dosing (Anderson et al., 2007; Shurin & Nabel, 2008). In fact, the U.S. Food and Drug Administration recently updated the warfarin drug labeling to include information about genetics (U.S. Food and Drug Administration, 2007). Similar efforts are underway in the areas of antidepressant pharmacotherapy (Lin, Perlis, & Wan, 2008) and tailored chemotherapies for individuals with breast cancer (Roukos, 2009), all of which are geared toward the goal of using genetic testing results to guide the delivery of pharmacologic interventions. Thus, professional nurses will require a strong working knowledge of the different types of genetic tests (e.g., pharmacogenomic, prenatal, predictive, carrier, newborn screening), the risks and benefits of these different testing strategies, the interpretation of test results, and the relevance of the test results to treatment options.

The broad discussion of personalized medicine has expanded to include genomics information (Sadee & Dai, 2005). However, the potential scope of customized, tailored, and personalized interventions is necessarily much broader than pharmaceuticals (pharmacogenomics) or medical intervention (personalized medicine). What are the implications of genomics for the treatments provided by the nursing profession? How will nurses discuss, debate, and determine the desired meaning of personalized nursing care in the context of genomics? How will nurses diffuse the desired composition of personalized nursing care into professional practice? Nurses will continue to play essential roles in identifying at-risk individuals, referring clients to specialty genetics resources, supporting clients through the making of decisions about genetic testing, educating clients about the meanings and implications of genetic test results, and assisting with the delivery of tailored medical and pharmaceutical interventions.

However, the ultimate integration of genomics into nursing practice will be the translation of genomics or other biological evidence into the delivery of evidence-based nursing interventions to provide tailored or individualized interventions. Perhaps the ultimate challenge for nurses will be lending their voices as advocates to ensure that the integration of genomics into health care is accomplished in a way that does not perpetuate disparities with regard to access to health care services and resultant health outcomes.

To fulfill this vital advocacy role, professional nurses will need to be aware of and conversant in the ethical considerations that accompany the evolution of genetics information and technologies. Notably, the founders of the Human Genome Project established a division of ethical, legal, and social issues (ELSI) to do the following (Meslin, Thomson, & Boyer, 1997):

1. To proactively consider the potential benefits and risks to individuals, families, and communities associated with the sequencing of the entire human genome; and
2. To fund research to examine these issues.

The ELSI division remains a vital part of the National Human Genome Research Institute, and nurse leaders provide an essential voice in ELSI deliberations and knowledge discovery. Although these deliberations continue as the scope of the Human Genome Project evolves, there is consensus that new genetics and genomics innovation raise questions about issues of privacy and confidentiality and that there is a risk for discrimination in particular (Lea, 2008; Ulrich, Wallen, & Grady, 2008). For example, the nature of an individual's genetic information is that the information is not only relevant to the individual but to that individual's family as well. However, not all members of a family may be willing to share health information with other family members, and not all family members may want to know about potential genetic risks. These scenarios require health care providers to conduct careful and sensitive assessments of family dynamics and communication patterns to safeguard confidentiality related to their client's health information and to respect the privacy of other family members. Employment and insurance discrimination have also been deliberated as potential harmful consequences of knowing one's risk for health outcomes on the basis of genetic information. The recent passage of the Genetic Information Nondiscrimination Act of 2008 provides federal protection against employment or health insurance discrimination on the basis of genetic information, thus alleviating many of these concerns. However, continued

vigilance with regard to the development, implementation, and evaluation of public policy is an ongoing responsibility for professional nurses, both individually and collectively.

GENOMICS AND NURSING EDUCATION

Traditionally, the extent of genetics content in nursing curricula has varied, but it has often been sparse (Burke & Kirk, 2006; Prows et al., 2005). The drive to incorporate additional content is fueled and aided more recently by a growing set of recommendations for professional nursing practice. In addition to the scope and standards of practice document described earlier, these recommendations include the National Coalition for Health Professional Education in Genetics' *Core Competencies in Genetics for Health Professionals* (2001) and the American Association of Colleges of Nursing's *Essentials of Baccalaureate Education for Professional Nursing Practice* (2008). An important recent contribution to these recommendations is the article entitled "Essential Nursing Competencies and Curricula Guidelines for Genetics and Genomics" (Jenkins & Calzone, 2007). Although the processes for deriving these recommendations and the details of these recommendations may differ, their overall message is the same in that today's nurse faculty and workforce need to be fluent in the language of genetics and genomics, the biological mechanisms of heredity, and the clinical implications—both biological and social—of gene discovery.

The key challenges for nursing faculty will be planning and implementing innovative strategies for the following:

1. The integration of relevant basic and clinical genetics content into an already intense undergraduate curriculum;
2. The insertion of relevant basic and clinical genetics content across all levels of the graduate curriculum; and
3. The integration of content into both didactic and practicum courses.

Although it is essential to include didactic content about genetics assessments and interventions, the integration and practice of these skills either with standardized patients (Seibert, Guthrie, & Adamo, 2004) or in practicum assignments is key. Possible strategies for integrating content into practicum courses include the following:

1. Incorporating genetic health assessment, pedigree construction, and pedigree interpretation content into each clinical assignment;

2. Assigning one or two clients with a known genetic component, when possible, within each practicum experience;
3. Incorporating opportunities to observe or follow clients into specialty genetics clinics; and
4. Approaching genetics referral and support as a basic nursing intervention.

These efforts ultimately depend on the availability of nursing faculty with content expertise in clinical genetics. Consequently, educational institutions will need to provide administrative support to fuel faculty development in this area by tapping in-house expertise, compiling accessible online education and curricular resources, importing expertise from consultants, or supporting faculty participation in continuing education opportunities. The goal of these educational efforts is the preparation of practicing nurses who not only survive but thrive in an era in which genomics information is integral to the delivery of health care services.

SUMMARY

The extraordinarily fast-moving and expanding genomics research infrastructure is daunting. However, the opportunities that these resources afford nurses on every professional front is breathtaking. Professional nurses are at the interface of science and consumers, and, at this interface, they will play a critical role in ensuring that genomics research—whether driven from within the nursing discipline or across disciplines—is translated into maximally beneficial outcomes for consumers across the globe. To this end, nurse practitioners, nurse scientists, and nurse educators will need to partner closely to prioritize research efforts and to translate new evidence into both practice and education models. Nurse scientists will need to take the lead in conducting genomics-related research to expand the evidence base of nursing practice. Finally, professional nurses across the globe will need to partner with communities and consumers to ensure their participation in the translation of genomics-driven health care so that it is both meaningful and accessible to all.

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SECTION 4

Information Technology Challenges

The Impact of Technology on Health Care

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

This section overviews the use of technology and its increasing role in health care and nursing. In the 7th edition of *Current Issues in Nursing*, this section was not retained because at that time, changes related to technology were not creating issues in nursing as much as other trends. This situation has totally changed over the last 5 years. Today issues of technology are important to the federal mandates and requirements to move to an electronic health record and other initiatives into the health care arena. Organizations are being pushed by technology requirements, and the costs associated with these new technologies are significant. The chapters in this section illustrate the broad span of issues associated with the integration and adoption of technology in health care in the United States and globally. These changes impact patients, providers, and the organizations in which they work. The world of health care is being driven by the key principles of informatics—data, information, and knowledge leading to wisdom.

In Chapter 29 Marisa Wilson describes the impact of technology on the nursing profession in the debate chapter that leads this section. The author traces the historical use of technology by nurses caring for patients for almost 50 years. Nurses have used many types of machine technology to gather data, monitor patients, generate information, and provide care. The use of technology has contributed to the professions expanding nursing knowledge base. The chapter provides a summary of the leadership role of the Institute of Medicine (IOM) in promoting the next generation of information technology development as a way to improve patient safety and to ensure quality care for patients. Included in the chapter is a discussion of the nursing informatics role and competencies. The final section of this chapter provides a discussion of the use of technology in current nursing practice and provides specific examples for both practicing nurses and nursing administration. This is an important chapter for

nurses wanting to learn more about technology and its implications for building science and supporting nursing practice at the bedside.

In Chapter 30 the link between knowledge development and technology is explored in the first viewpoint chapter. Suzanne Bakken and Leanne Currie provide a thorough overview of the challenges related to transforming nursing data into knowledge. They highlight that the building blocks for the development of nursing knowledge include standardized terminologies for patient problems (e.g., nursing diagnoses, medical diagnoses, symptoms), nursing interventions, and nursing-sensitive patient outcomes. In addition integrated information systems to support the acquisition, storage, transformation, and presentation of data relevant to nursing are essential. The authors begin by addressing the question of why traditional automated nursing systems have not fostered the development of nursing knowledge. They review the development of standardized nursing terminologies and the evolution of standards for data exchange in information systems. Systems integration remains a major challenge in most health care organizations, thus limiting the ability of information systems with electronic nursing data to influence the quality of nursing practice. This also is a barrier to nursing knowledge development by the profession. Some features of technology support for health care have shown significant growth. For example, the use of the Internet and extensive resources are now available on the World Wide Web. The role of informatics in fostering knowledge development in nursing is reviewed through the system design framework of the National Commission on Nursing Implementation Project. The framework's four types of information system processes (data acquisition, storage, transformation, and presentation) are reviewed. Several examples are given that illustrate the interaction among information and information processes. These include data mining and knowledge discovery techniques for analysis of data

repositories. The authors conclude that technological building blocks such as standardized terminologies and integrated systems are necessary but not sufficient for the development of nursing knowledge. Computer competencies related to the acquisition, organization, and analysis of large repositories of clinical data are required. The chapter ends with the formulation of four questions that demonstrate the evolution of nursing knowledge through the documentation of nursing care. Overall, the chapter illustrates the central role of the computer technologies in building nursing science.

In Chapter 31 Karen Monsen and Karen Martin focus on nursing informatics partnerships focused on practice and research using the Omaha System. The authors share six exemplars of current research and practice partnerships. These partnerships reflect diverse partners, a variety of settings, various populations of interest, different technology applications, and varied outcomes. The exemplars address questions of real world significance that are important to nurses providing care to patients. Examples are partnerships to improve child health, investigate cost effectiveness of transitional care, improve perinatal health among Latinas, advance public health informatics in Minnesota, evaluate public health nursing program effectiveness and improve outcomes, and study intervention effectiveness.

In Chapter 32 Sandra Bellinger and Cathy Konrad summarize the work of a focus group that has actively developed outcomes since 1993 in cooperation with the Nursing Outcomes Classification development team at the University of Iowa, College of Nursing. The chapter highlights the importance of standardized nursing languages and overviews the classification focused on outcomes. The authors identify three main factors that have motivated the work of the focus group: (1) the belief in and commitment to the importance of standardized languages for nursing shared by the group, (2) the opportunity for personal intellectual growth through involvement in this type of research, and (3) the opportunity for professional collegiality with other nurses from a variety of organizations. The use of focus groups has been used in the development of standardized nursing languages as a means of gathering expert opinion on concepts of interest to nursing. The authors provide a useful definition of a focus group and the use of concept analysis in the development of new outcomes. The focus group has provided educational sessions to help nurses better understand the importance of nursing standardized languages. The chapter highlights challenges faced by the group as they

develop new outcomes and discusses mechanisms to keep the group actively involved in the important work of defining outcomes for nurses to capture the positive contributions of nursing care.

As the electronic health record becomes a reality many involved in the use of technology are mandating that information technology standards are needed to enhance the systems that are developed. In Chapter 33 Audrey Dickerson describes health information technology standards as an essential component in health information systems (HIS). These standards include modeling of clinical process measurements; architecture, operational systems, enterprise, and electronic health records; messaging clinical data; security, privacy, confidentiality, and security of clinical and business data; and terminology, ontologies, vocabularies, code sets, and lexicons. The chapter highlights nursing workflow and data flow as important concepts for nurses to understand. The chapter provides a generic use case to demonstrate the importance of these concepts and the standards for electronic health records. The author provides an excellent overview for nurses wanting to learn about the importance of standards for designing an electronic health record for the future.

In Chapter 34 Mikyoung Lee highlights the use of personal health records to consolidate individual patient health information while providing the ability to track, update, and share information with care providers. The idea of a personal health record (PHR) is not new as it has been used in paper records for decades. Electronic PHRs provide the capability of the Internet to connect people and information and can provide timely access to a patient's complete health history. This feature addresses physical challenges to exchange personal health information across health care institutions. The chapter includes a comparison of PHRs and electronic health records and describes the types of PHRs currently in use. The author discusses in detail the benefits of using these records in health care. The future for this technology is important because it provides a tool to help focus on individual's health needs and priorities, increase interconnectivity across health care entities, and guide and empower individuals to participate in their personal health care. The PHR will provide another technology to improve quality; increase safety, accuracy, and efficiency; and enhance continuity of care across organizations. This is an excellent overview for nurses not familiar with the potential benefits of using PHRs in health care.

In Chapter 35, Anne Casey provides a global view of the impact of information technology on health care. The chapter provides a brief introduction focused on electronic health records. Casey highlights current global challenges of using electronic records by nursing using four propositions. To date research suggests that nursing information systems have failed to have an impact on practice or outcomes. The author discusses both electronic health records and personal health records and suggests that nurses need to think in new ways to support effective use of electronic records by health care consumers. She also challenges that nurses need to better describe their work to influence system design of electronic record systems. The author suggests that today electronic records can pose a significant risk to patient safety and have not yet been subject to rigorous evaluation or risk management by developers or organizations using this technology. The final section of the chapter overviews the importance of nursing content in electronic health records being standardized

and based on evidence-based practice. The strength of this chapter is that it highlights the common themes across the globe for using technology to enhance the provision of health care.

This section of the book reinforces the importance of technology in nursing and focuses the reader on the variety of applications currently available and under development for use in health care. The chapters identify the link between technology and the potential to enhance the science of nursing based on data to build evidence-based practice. Informatics as a specialty in nursing is focused on data, information, knowledge and wisdom as central concepts. Many of the chapters in this section build on this important model. Decisions about health care reform that are on the horizon will build on the technology currently available and will stimulate the development of improved technology for use in health care. Standards will be an important part of these changes. Nursing has an important role to play in the development of technological supports for our practice.

Nursing: A Profession Evolving with the Use of Informatics and Technology

MARISA L. WILSON

PAST HISTORY

Nurses using technology in caring for their patients is not new. For nearly 50 years, nurses have used various forms of machine technology to gather data, monitor patients, generate information, and provide care. Ubiquitous and pervasive in various settings, scopes, monitors, pumps, and ventilators are all used to assist the nurse in the care of patients and in the generation and storage of data. Sandelowski (1997) noted that during the 1960s at the dawn of the use of complex machine technologies, some nurses optimistically viewed the technologies as readily assimilated into or as an extension of their practices, allowing for an expansion of human observation and a deeper understanding and management of the human condition. Additionally, many in nursing attributed an expanding nursing knowledge base to the use of technology. George (1965) argued that the use of monitors (a machine technology) not only taught nurses to better understand and appreciate human physiology and function but also forced nurses to become more knowledgeable about biophysical, physiological, and engineering sciences that are required in professional practice.

As another type of machine technology, computer use for patient care in the clinical setting is also not new. In addition to the burgeoning use of monitors, pumps, and scopes, the 1960s also ushered in the first efforts to implement computerized patient documentation and decision support systems based on evidence. It is important to briefly touch on this history because many nurses today perceive the “invasion” of technology into a high-touch field as a relatively new phenomenon. In fact, the use of technology has been embedded into some levels and locations of practice over 50 years, all the while shaping and evolving the role of technology in patient care.

In 1965, El Camino Hospital in Mountain View, California, undertook one of the earliest attempts at the

development and implementation of an electronic health record (EHR). In collaboration with Lockheed Missiles and Space Company and Technicon Medical Information Systems, a computerized information system was developed that processed and communicated physician orders, allowed laboratory result retrieval, and automated nursing documentation (Staggers, Thompson, & Snyder-Halpern, 2001). Developed in 1968 at the Massachusetts General Hospital, the Computer Stored Ambulatory Record was the first electronic documentation system to contain embedded guidelines used to remind clinicians of needed screenings and other preventive interventions in the ambulatory setting (Barnett et al., 1978). The Intermountain Health Corporation's Latter Day Saints Hospital staff and administrators spent 25 years developing a computerized documentation system that also contained embedded automated decision support rules. By the early 1980s, the Intermountain Health Corporation's Health Evaluation through Logical Processing system contained more than 100,000 rules and statistical processes that were developed to guide the clinician to correct diagnoses and treatment for a broad spectrum of health problems (Pryor et al., 1983).

Nurses helped develop these products and ultimately used the systems at the point of care. They sought out the benefits of this technology to advance professional practice and shared their findings. For example, Donovan and colleagues (1983) studied the use of COSTAR to assist nurses in managing a hypertension screening and education program for known and suspected persons with hypertension and presented their findings at the American Medical Informatics Association Symposium.

These and other early attempts at electronic documentation and decision support have contributed in profound ways to understanding the complex and intertwined ways in which nurses gather data, process

information, and formulate knowledge of patients as they go about the business of care. Why then were these early attempts not replicated in other hospitals? Why did more nurses not become users of such systems and why were more attempts to integrate nursing decision support via information systems not made?

The answers to these questions are found in the literature. Reasons include the slow, cumbersome, sometimes unreliable state of technology; the cost of development and implementation; the culture of health care; the desire for physician autonomy; the nonintegrated nature of the decision support functionality; and lack of external pressure. These all served to postpone technological advancement in clinical information technology for physicians as well as nurses (Berner, Detmer, & Simborg, 2005). This slow adoption was responsible for numerous negative results: (1) it left most nurses forced to continue to document their significant contributions to the outcomes of patient care in the form of handwritten, paper-based patient records while using machine-based technologies as tools for assessment and intervention only; (2) it rendered the integration of data from multiple sources, particularly paper, a very cumbersome and nearly impossible task; and (3) slow adoption made the derivation of nurse-sensitive outcomes difficult to determine and limited the nurse's ability to measure and validate the patient outcomes that resulted from the interventions provided.

RECENT HISTORY

The lull in the development and infiltration of information technology and electronic documentation was arrested, however, in the late 1990s when the Institute of Medicine (IOM) took a leadership role in promoting the next generation of information technology development. The IOM, through interdisciplinary teams of health care practitioners, scientists, and administrators, bolstered by the lessons learned and outcomes gained by the health care informatics pioneers of the 1980s, played a key role in propelling informatics and information technology to the forefront as a means to improve patient safety and to ensure quality care. Although much development of systems at this time was focused on order entry products, these mandates were not lost on nursing. The publication of *The Computer-Based Patient Record* in 1997, *To Err is Human* in 2000, *Crossing the Quality Chasm* in 2001, and *Improving the Quality of Long-Term Care* in 2001 highlighted the importance of using

information technology to provide safer and more efficient systems of care through connected clinical, administrative, consumer, public health, and educational data and information sources. These publications made it clear that the utilization of informatics was to be a core competency of all health care professionals (Greiner & Knebel, 2003).

Nurses responded to these developments by becoming more involved in the design and implementation of the systems, including order entry, which ultimately affects nursing workflow in a profound way. In 2004, the IOM focused special attention on the nurse's role in patient safety by stressing that nurses are knowledge workers that need to be supported by information technology (Page, 2004). Nurse leaders immediately recognized the usefulness of the technology and informatics techniques in collecting, documenting, and quantifying their domain of care and the significance of information technology in assisting with determining outcomes affected by nursing care. However, nurses needed a certain skill set and academic preparation in this area to be full partners in this important emerging field.

NURSING INFORMATICS—A NEEDED ROLE

To meet the need, a new nursing specialty was developed—nursing informatics. Graves and Corcoran (1989) defined this new specialty of nursing informatics as a combination of computer science, information science, and nursing science designed to assist in the management and processing of nursing data, information and knowledge to support the practice of nursing and the delivery of nursing care. A new role, the informatics nursing specialist, was crafted to help lead this evolution in nursing practice. The role and training requirements of the informatics nursing specialist were developed in the early 1990s and are outlined in *Nursing Informatics: the Scope and Standards of Practice* (American Nursing Association, 2008). The initial informatics competencies developed by the International Medical Informatics Association's Work Group on Nursing Informatics became the basis for development of the specialty master's and doctoral programs at the University of Maryland, School of Nursing, in the late 1980s (Gassert, Mills, & Heller, 1992). In 1990, the University of Utah developed the second program with this emphasis. Today, multiple graduate level programs are available to educate nurses in the roles of systems analyst, project manager, information officer, and informatics researcher.

RECOGNIZING THE NEED FOR INFORMATICS COMPETENCIES FOR ALL NURSES

Given the evidence for using information technology, more health care facilities took tentative steps towards infusing it into patient care. In addition to some fundamental clinical systems, health care facilities made other types of information technology already in wide use in the community available to their staff. Once instituted for nursing use, the Internet, facility-wide email, and electronically stored educational materials slowly infused new ways of doing the business of nursing. This infusion resulted in a small, but growing, cadre of nurses who attempted to become users of order entry systems, electronically stored health information, and basic nursing documentation and administrative systems. However, the nurses were not always the most proficient users of this technology or of the information that was now at their fingertips. Moreover, the systems were not always compatible with the work done in the patient care setting.

Several large efforts have focused on and continue to refine and strengthen informatics competencies for the student and practicing nurse as knowledge worker. The American Association of Colleges of Nursing initiated the clinical nurse leader and the doctor of nursing practice as new programs with informatics as a core competency. The National League for Nursing established the Task Group on Informatics Competencies, which developed and implemented a survey to determine the extent to which current nursing curricula prepare students with necessary informatics competencies. The Task Group has found that while most schools of nursing focused on computer and information literacy, involvement in the attainment of informatics knowledge and skills was limited (National League for Nursing, 2007). The Technology Informatics Guiding Education Reform (TIGER) (2009) initiative was developed by a group of representatives from 120 diverse organizations. The project is dedicated to enabling practicing nurses and nursing students to fully engage in the unfolding digital era of health care and has developed curricular recommendations to assist nurses in seamlessly providing safer, higher quality patient care. This project is commonly called the TIGER Project.

CURRENT STATE

In 2004, the effort to expand the use of technology in health care was intensified when President George Bush ordered the action report entitled, *The Decade of Health*

Information Technology. As outlined in Thompson and Brailer (2004), the goals of this decade were as follows:

- ◆ Inform clinical practice by bringing EHR systems to physicians' offices and hospitals
- ◆ Interconnect clinicians by building an interoperable health information infrastructure so that consumers could seamlessly move from one provider to the next
- ◆ Personalize care by using health information technology to help consumers become more involved in health decisions
- ◆ Improve population health by expanding capacity for public health monitoring, quality-of-care measurement, and the acceleration of research advances into medical practice

In addition, on February 17, 2009, President Barack H. Obama signed into law the American Recovery and Reinvestment Act of 2009 (ARRA), which contains provisions for stimulus expenditures and other stimulus measures relating to health information technology (HIT), including incentives for adoption of EHR systems. ARRA provides substantial stimulus expenditures in the health care industry—over \$20 billion—for the development and adoption of HIT. The largest allocation of funding, approximately \$17 billion, is for incentive payments through the Medicare and Medicaid reimbursement systems to encourage providers and hospitals to implement EHR technology systems. ARRA establishes additional government and agency involvement in setting policy, standards, specifications, and criteria for HIT and EHR systems. The Office of the National Coordinator for Health Information Technology is established within the U.S. Department of Health and Human Services (HHS) and will be the primary agency monitoring this effort.

What does this mean for nurses? The stimulus should provide the financial incentive needed for health care facilities to expand more broadly the use of HIT so that even more nurses will be using technology at the bedside to document care. Through the activities of The Office of the National Coordinator for Health Information Technology and other national organizations, more HIT systems within one hospital (or hospital system) will be able to connect data so that nurses will be able to see the patient story across the transitions of care.

With the ARRA stimulus, the growing ubiquity of the Internet, and the increasing sophistication of information technology, nurses interacting with patients via technology both inside and outside of the traditional walls of the health care facility will multiply, reshaping the role of nurses. Nurses who take advantage of these newer technologies and the information generated may

become more active in patient care in nontraditional ways and settings. Strengthened by the potential of access to data to obtain information and subsequent knowledge and bolstered by the ability to access evidence-based nursing guidelines at the point of care, nurses may further solidify their roles in improving patient outcomes. This provides nursing an opportunity to shape these advancements in such a way that professional nursing practice can be both supported and enhanced. Done correctly and thoughtfully, these systems should become the tools with which nurses can efficiently document patient data in real time, manipulate data to form information that guides patient care, and use that information to generate the knowledge needed to ever refine care that is knowledge based. The potential to improve nursing care for specific populations will be enhanced as data from multiple patients are collected over time, helping establish best practices and refining evidence-based care.

APPLICATIONS IN USE BY NURSES

Currently nurses may use a variety of information systems that can provide data to inform patient care. A quick review of what is being used is necessary. These systems fall under three categories—clinical, administrative, and consumer health.

Clinical Systems

Nurses use a variety of clinical systems, including the EHR, as they care for their patients. The most commonly used today are as follows:

- ◆ *Computerized Provider Order Entry (CPOE)* allows the direct entry of orders by prescribing clinicians, including verbal orders entered by nurses. The typical orders entered address medications, laboratory, radiology, nursing, and dietary needs, as well as orders for various consults. Nurses may receive work lists generated from these orders that are ultimately interventions based on patient condition. The orders may originate from order sets that are evidence-based lists of potential orders that are required and/or recommended for patients with specific admitting diagnoses. These order sets include nursing actions or orders, and nurses must constantly review these for appropriateness based on evidence and for the specific intervention tasks each general order may include. For example, an order set may generate a nursing order of “Assess for Falls Risk” or “Monitor for Falls Risk.” Nurses must decide exactly what interventions this order entails.

- ◆ *Nursing Documentation* allows the entry of nursing assessments, diagnoses, and interventions (which may originate from the CPOE). Documentation systems should permit the capture of the outcomes obtained by nursing actions when nurses reassess patients. Currently, many nursing documentation systems in use just allow the storage of assessment data. There is no connection to diagnoses or appropriate interventions. Thus, nurses resort to typing in notes to describe their professional decision making and the outcomes of interventions taken. This use of free text to convey professional nursing practice makes it difficult to extract data to further refine nursing evidence.
- ◆ *Electronic Medication Administration Records (eMAR)* are generally a by-product of the medication ordering function of CPOE. The eMAR should allow for the online documentation of medications administered along with any required parameters such as blood pressure, heart rate, pain level, or psychological state.
- ◆ *Bar Code Medication Administration* is also a by-product of the medication ordering function of CPOE and permits the automation of the Five Rights, particularly the match between the patient, the medication, and the dose. This in combination with the eMAR allows accurate documentation of physiological parameters and administration times. Nurses are able to see relationships between medication administered and physiological response, thereby strengthening decision making at the time of administration.

Administrative Systems

At present, nurses commonly use several administrative systems. Why are these of significance? With the need to be able to correlate nurse staffing ratios, nursing educational backgrounds, licensure types, and certifications with patient outcomes from within a hospital or unit, it is imperative that nurse managers and nurse researchers have the ability to compile data not only from clinical systems but also administrative systems. Here are but a few with which nurses may currently interact.

- ◆ *Staff Scheduling Systems* allow nurses to enter their preferred days and times to work within allowable defined parameters. Scheduling systems permit managers to determine staffing levels and skill mix necessary to care for the patient population at hand in near real time. These systems may be accessed from within a facility or from home via the Internet. Scheduling systems may be configured to allow nurses to indicate days and times that they cannot work.

- ◆ *Time and Attendance Systems* may be used to document arrival and departure times. These systems can be interfaced with payroll to generate payroll checks and to document the staffing patterns that actually occurred as the data indicate exactly who did work at a particular time.
- ◆ *Human Resource Systems* (which may either include scheduling and time and attendance features or stand alone) maintain demographic data, but they also may contain data on education level, licensure types, and certifications earned. This data along with patient discharge diagnoses and length-of-stay data may be used to look at the impact of various nurse staffing patterns with patient outcomes.
- ◆ *Radio Frequency Identification* allows the active or passive tagging of staff, equipment, patients, and supplies. Nurses use these systems to manage and locate needed resources. They also may be used to document patient throughput issues when a tag is placed on a patient-specific item. Nurses often use tracker boards that present a graphical representation of the real-time location of resources.
- ◆ *Modular Online Educational Software* is often used to conduct annual competency training. Online education also can be used to provide staff with various learning opportunities, including information technology and informatics competencies. Online education is a convenient way for nurses to update skills.

Consumer Health Systems

Nurses will inevitably come into contact with consumer health systems. Generally Web based, these applications can be used to manage, monitor, educate, and involve patients in their own care. Many aspects of consumer health systems resonate well with the domain of nursing and afford a means to expand nursing's reach.

- ◆ *Patient Portals* are Web-based applications through which patients maintain contact with the health care facility. Using a patient portal, one may make, cancel, or change appointments; request refills; receive laboratory results; e-mail health care providers; locate patient health or medication information; and even participate in a health care visit. Nurses are often charged with managing certain functions of the patient portal and may want to take an active role in determining the health information needs of specific patient populations that can be managed via the portal.
- ◆ *Personal Health Records (PHRs)* are the patient-centric form of the EHR. With PHRs, patients have all of the functionality of a portal with the added benefit of

recording their own health information. For example, diabetic patients may keep food and exercise diaries along with records of glucometer readings and insulin injections and oral medications. Nurses working with chronically ill populations may find PHRs encourage patient involvement in their own care. PHRs also offer an opportunity to expand the role of the nurse in pursuit of satisfying consumer health needs for guidance, monitoring, and holistic assessment (Lee, Delaney, & Moorhead, 2007).

- ◆ *Telehealth* is used in many locations to support patients in their homes, particularly the chronically ill rural area dwellers, and the underserved. For example, patients with congestive heart failure may have a computer terminal in their home that is connected to a remote central monitoring station. Integrated into the computer application may be scales for weighing the patient, a blood pressure cuff, and other necessary physiological monitoring devices. Using the Internet-based videoconferencing technology available to serve these patients, nurses are ever expanding the concept of point of care (Courtney, Demiris, & Alexander, 2005). In general, nurses both set up and manage the patient on these devices. Moreover, a nurse is usually the coordinating entity receiving the data from the devices and generating an action plan based on the information obtained.
- ◆ Social networking tools are becoming popular ways to manage health care conditions and to gain information. Blogs, Facebook, LinkedIn, Twitter, and Second Life are all social networking tools consumers currently use to assist them in learning about or managing their health care needs. These are managed communities where members form subcommunities to exchange information, provide support, and mingle (Hawn, 2009). Nurses can have a significant role in ensuring that these tools are used wisely.

EVOLVING— NURSES AND INFORMATION TECHNOLOGY AND INFORMATICS

The next decade will offer opportunities for nursing to evolve with the assistance of informatics and information technology. From presidential edicts and building from the lessons learned over nearly 50 years and the dramatic growth in information technology available to nurses both in and out of the hospital, there will be no going back to the days of paper charts. As hardware and software increase in sophistication and permeation, as more functions of nursing workflow become automated, as integration and interoperability begin to allow disparate

systems to exchange data, and as nursing-centric data become part of an enterprise warehouse, we may finally see information technology truly become a tool for nurses as knowledge workers. In addition, as a greater number of nurses at the bedside become ever more proficient at information management and information technology to support evidence, we also may see actionable knowledge delivered to the point of care. As Norma M. Lang, PhD, RN, FRCN, FAAN proposed at the 2008 Annual Sigma Theta Tau Conference, referential knowledge, or synthesized nursing knowledge, can be distilled into actionable knowledge representing practice recommendations and then placed into machine readable format to become executable knowledge within the information systems used at the point of care. This will require nurses to be competent and evolved users of information technology, to be aware and comfortable with informatics competencies, and to truly understand their roles as knowledge workers.

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Standardized Terminologies and Integrated Information Systems: Building Blocks for Transforming Data into Nursing Knowledge

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The premises of this chapter are twofold. First, nursing theory, nursing research, and nursing practice must be related integrally in order to foster the development of nursing knowledge. Second, building blocks for the development of nursing knowledge include standardized terminologies for patient problems (e.g., nursing diagnoses, medical diagnoses, symptoms), nursing interventions, and nursing-sensitive patient outcomes, as well as integrated information systems to support the acquisition, storage, transformation, and presentation of data relevant to nursing. The discussion supporting these premises is organized around three questions:

- ♦ Why have traditional nursing information systems not fostered the development of nursing knowledge?
- ♦ How can standardized terminologies and integrated information systems foster the development of nursing knowledge?
- ♦ What informatics competencies are required to complement the technological building blocks of standardized terminologies and integrated information systems?

WHY HAVE TRADITIONAL NURSING INFORMATION SYSTEMS NOT FOSTERED THE DEVELOPMENT OF NURSING KNOWLEDGE?

Although various types of nursing information systems have been in place for several decades, these systems for the most part have failed to foster the development of nursing knowledge. Several reasons can be posited for this void, including the traditional role of the nursing record as a transaction log rather than as an evolving repository of practice-based nursing knowledge; limited incorporation of standardized terminologies in

information systems in a manner that facilitates data reuse; and application-specific rather than integrated information systems.

The Nursing Record as a Transaction Log

In his discussion of a framework for the transition from nursing records to a nursing information system, Turley (1992) notes that storage of the transaction log (what the nurse does when) is not likely to add to the understanding of the patient's condition and problems. Turley states,

Alone, transaction logs do not reflect the evolution of patient status, condition resolution, or expected long-term outcomes. All those lost data represent the forfeiture of documented nursing knowledge and will critically affect the development of decision support components of any nursing information system (p. 178).

This thought is consistent with the recent IOM (Committee on Data Standards for Patient Safety [CDSPS], 2004) report on data standards for patient safety and the recommendations by the seminal Institute of Medicine (IOM) (Dick & Steen, 1991; Dick, Steen, & Detmer, 1997) reports on the computer-based patient record (CPR), which identified the documentation of the logical bases for all diagnoses or conclusions and the clinical rationale for decisions about the management of the patient's care as essential attributes of CPR systems. In addition, these attributes are critical to knowledge development in health care.

Standardized Health Care Terminologies

Standardized health care terminologies, that is, the set of terms representing a system of concepts, are necessary to reliably and validly describe, support, and analyze health care processes and outcomes (CDSPS, 2004).

During the last several decades, development of standardized health care and nursing terminologies has been extensive (Association of periOperative Registered Nurses, 2008; Bulechek, Butcher, & Dochterman, 2008; International Council of Nurses, 2008; International Health Terminology Standards Development Organization, n.d.; Martin, 2004; Moorhead et al., 2008; NANDA International, 2009; Saba, 2007; International Health Terminology Standards Development Organization, 2008). Table 30-1 summarizes the content of selected terminologies related to aspects of the nursing process.

Given the availability of multiple terminologies and the obvious need for the information they provide, one might ask, "Why are standardized terminologies not universally implemented in computer-based systems?" A number of organizations and terminology experts have proposed criteria or standards related to suitability of terminologies for incorporation into computer-based systems (American Nurses Association [ANA], 2006; Cimino, 2006; International Standards Organization, 2002). Evaluation studies of standardized terminologies against these criteria provide some answers to this question.

The evaluation criteria can be broadly conceptualized into two categories. The first category is composed

of criteria that focus on the content of a terminology in relationship to the needs of a particular domain. These include breadth of coverage and depth of clinical detail (e.g., nursing diagnoses vs. individual tasks). In contrast, the second set of criteria (e.g., concept permanence, formal definitions) focuses on the extent to which a terminology is represented in an information system in a manner that supports computer processing for data manipulation and reuse.

Historically, the primary focus of nursing terminology development has appropriately been on the collection and categorization of nursing concepts. Consequently, evaluations of content coverage in the 1990s suggested broad coverage for nursing diagnoses, nursing interventions, and nursing-sensitive outcomes (Henry et al., 1998). In addition, they demonstrated the utility of non-nursing terminologies for representing nursing concepts (Griffith & Robinson, 1992, 1993; Henry et al., 1994). More recently, efforts have focused on integration of nursing terminologies into larger health care terminologies (Matney, Bakken, & Huff, 2003; Park et al., 2007) and enhancing the International Classification of Nursing Practice (Hardiker et al., 2006; Hardiker & Coenen, 2007; Matney et al., 2008). Nursing

TABLE 30-1 Standardized Terminologies for Representing Concepts Relevant to the Nursing Domain

Terminology	Assess	Diagnose	Intervene
NURSING			
Clinical Care Classification (formerly Home Health Care Classification)*,† (Saba, 2007)	•	•	•
International Classification of Nursing Practice (International Council of Nurses, 2008)	•	•	•
NANDA Taxonomy II* (NANDA International, 2009)		•	
Nursing Interventions Classification* (Bulechek, Butcher, & Dochterman, 2008)			•
Nursing Outcomes Classification* (Moorhead et al., 2008)	•		
Omaha System*,† (Martin, 2004)	•	•	•
Perioperative Data Set* (Association of periOperative Registered Nurses, 2008)	•	•	•
HEALTH CARE			
International Statistical Classification of Diseases and Related Health Problems: 10 th Revision (World Health Organization, 2003)		•	
Logical Observation Identifiers, Names, and Codes (LOINC) (Matney et al., 2003)	•		
Current Procedural Terminology (Beebe et al., 2007)			•
SNOMED Clinical Terms (International Health Terminology Standards Development Organization, 2008)	•	•	•

* Included in SNOMED Clinical Terms.

† Included in LOINC (2008).

diagnoses, interventions, and outcomes from a number of terminologies (see Table 30-1) have been integrated into the Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT) (International Health Standards Development Organization, 2008), which is freely available for use in the United States through a federal license and is internationally available through the International Health Standards Development Organization (n.d.). The Logical Observation Identifiers, Names, and Codes (LOINC, 2008) database includes nursing assessments and goal status statements and is also available for use without fees (Matney et al., 2003).

Regarding representing nursing concepts in a manner that maximizes the capacity for data sharing, manipulation, and reuse, under the auspices of the International Standards Organization, an international standard was developed for nursing diagnoses and nursing actions (Bakken, Coenen, & Saba, 2004). Other groups are working on harmonizing the nursing terminology efforts with those of the Health Level 7 standards organization (Danko et al., 2003; Ozbolt & Saba, 2008).

Although a number of challenges remain, significant progress has been made during the last decade to facilitate incorporation of nursing concepts into clinical information systems (Cho & Park, 2003; Currie et al., 2004; Hardiker & Bakken, 2004; Keenan, Tschannen, & Wesley, 2008; Lang, 2008). In addition, some schools of nursing are integrating standardized nursing terminologies into information systems used by their undergraduate and/or advanced practice nurse students. For example, nurse practitioner students at the Columbia University School of Nursing document their clinical encounters in a personal digital assistant (PDA) student clinical log that incorporates nursing diagnoses and interventions from the Clinical Classification System as well as medical diagnoses from the International Classification of Diseases—Clinical Modification and diagnostic tests and procedures from the Current Procedural Terminology (Bakken et al., 2004). Standardized terminologies also play a critical role in the decision support for guideline-based care that is implemented within the PDA student clinical log (Bakken et al., 2008).

Challenge of Information Systems Integration

Systems integration is still a major challenge in most health care organizations, thereby limiting the potential of information systems to influence the quality of nursing practice and also providing a barrier to nursing knowledge development. Historically, stand-alone, application-specific information systems

have constrained the relationships that can be examined among various types of data as well as the transformation processes applied to the data (Keenan et al., 2008; Lang, 2008).

Great strides made during the last decade have the potential to decrease the technological barriers to using information systems as facilitators of knowledge development. Most significant among these are the growth of the Internet and resources available on the World Wide Web and the evolution of standards for data exchange among systems. Recently, there has been heightened activity toward the development of a National Health Information Network and coordination of health information technology activities at the federal level (Kolodner, Cohn, & Friedman, 2008). In addition, the move toward tailored (e.g., user-specific) views to a shared data repository rather than to separate information systems has broadened the types of data available. The primary barriers to integrating data from information systems from different organizations are not technical (Committee on Data Standards for Patient Safety, 2004). In order to maximize knowledge development and use within the context of integrated systems, future efforts must include enhancing the understanding of human-computer interactions at the individual user and organizational levels.

HOW CAN STANDARDIZED TERMINOLOGIES AND INTEGRATED INFORMATION SYSTEMS FOSTER THE DEVELOPMENT OF NURSING KNOWLEDGE?

Framework for Design Characteristics for Nursing Information Systems

Nursing informatics integrates nursing science, computer science, and information science to manage and communicate data, information, and knowledge in nursing practice. Informatics also facilitates the integration of data, information, and knowledge to support patients, nurses, and other providers in their decision-making in all roles and settings. This support is enabled by information structures, information processes, and information technology (ANA, 2001).

The role of nursing informatics in fostering knowledge development in nursing is discussed using the classic framework for design characteristics of a nursing information system provided by the National Commission on Nursing Implementation Project (NCNIP) Task Force on Nursing Information Systems (Zielstorff et al., 1993). The framework includes three categories of information required to support professional nursing

practice. Patient-specific data are data about a particular person and may be acquired from a variety of data sources (e.g., provider observations and interventions, self-reports of functional status). Domain information and knowledge are specific to the discipline of nursing or to health care in general (e.g., bibliographic literature, clinical practice guidelines, comparative databases).

The NCNIP framework also delineates four types of information system processes that relate to the three categories of information. (1) Data acquisition is the set of methods by which data become available to the information system (e.g., monitoring devices, entry of symptom data by the patient via the World Wide Web, keyboard or voice entry of data by the health care provider). (2) Data storage includes the methods, programs, and structures used to organize data for subsequent use and reuse (e.g., data structures, databases). (3) Data transformation or processing comprises the methods (e.g., calculation, abstraction, production rules, data mining algorithms) by which data or information is “acted upon” according to the needs of the end user. (4) Presentation encompasses the forms in which information is delivered to the end user after processing. These include simple textual, as well as graphic and multimedia presentations. For example, vital signs or functional status might be best displayed as a line chart in order to examine trends over time, whereas the defining characteristics of altered oral mucous membrane, which include leukoplakia, hyperemia, and hemorrhagic gingivitis, could be presented most effectively using video images. The evolution of Web 2.0 principles and technologies in recent years enables visualization of data from a variety of sources into a single user-configurable interface and is applicable to the data required by nurses in the context of clinical care (Bakken, Stone, & Larson, 2008).

Transforming Data through Standardized Terminologies and Information System Processes

The following examples illustrate the dynamic interaction among types of information and system processes.

Fall and Injury Risk Assessment and Management.

Inpatient falls are an ongoing patient safety problem and have been identified as 1 of 10 nursing-sensitive quality indicators monitored by the National Database of Nursing Quality Indicators (ANA, 2006). As with other nursing-sensitive indicators such as pressure ulcers and pain management, adequate nursing assessment

and management for fall and injury prevention are critical to a patient’s safety during hospitalization.

Standardized fall-risk instruments, which represent evidence-based nursing knowledge, have been developed over the past three decades (Myers, 2003). Such instruments have typically been integrated into clinical information systems; unfortunately, the integration has often failed to take advantage of the benefits of the computer technologies. Rather, the computer-based instrument replicates the paper documentation process in which data are not supported by standardized terminologies, are not represented in a data dictionary, and thus cannot be reused or linked to corollary nursing diagnoses or associated interventions.

New York Presbyterian Hospital has developed a Fall-Injury Risk Assessment instrument that has been integrated into three clinical information systems (Bakken et al., 2008). The instrument was developed via evidence-based methods and includes five elements for fall risk and two elements for injury risk (Currie et al., 2004). When fall risk and injury risk are combined, a patient’s “fall-injury risk” can be determined. The instrument is part of a fall and injury prevention and management policy used to guide the characteristics of the computer-based instrument, including stratified nursing interventions per risk level and fall-injury risk assessment by additional members of the care team.

Figure 30-1 illustrates the dynamic interaction among information related to fall and injury risk assessment in an integrated information system. Standardized terminologies provide a foundation by which domain-specific information and patient data are iteratively transformed for local use, aggregate use, and domain knowledge generation. In this figure, the ovals represent data, information, or knowledge; the numbered, rounded rectangles represent actions; and the lines represent pathways of patient and nonpatient data, information, and knowledge transmission.

First, the nurse obtains information from the patient. This information also might be derived from the patient’s existing information in the system (e.g., medications, gender). Second, the nurse uses the patient information to perform a standardized assessment for fall-injury risk. Since the fall-injury risk assessment instrument is integrated into the system, all data are stored in the clinical data repository in a standardized format. Each term has a unique identifier in the concept-oriented data dictionary, thus facilitating data reuse (e.g., the ability to view results from previous patient assessments). Third, once the

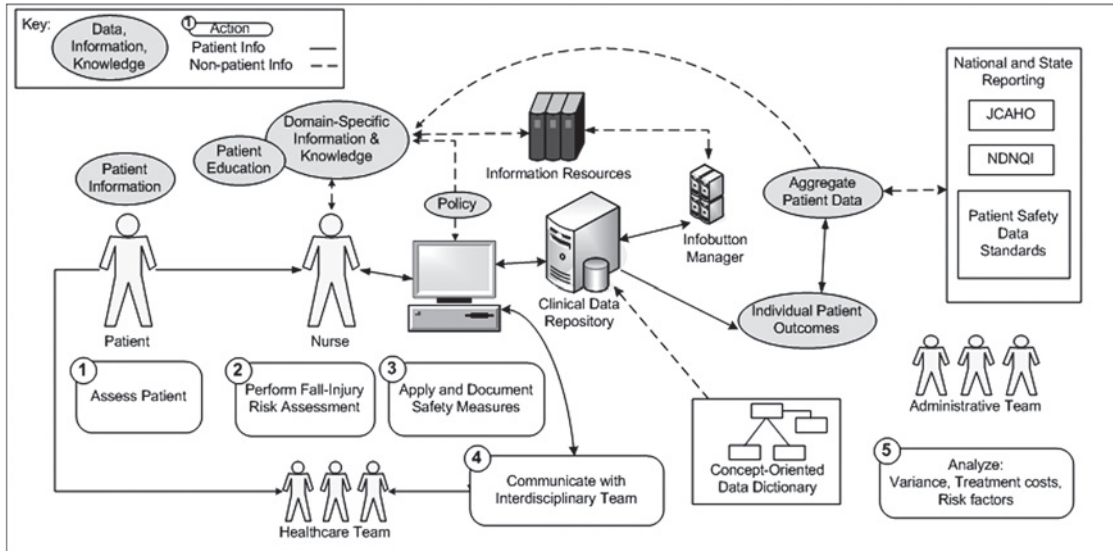


FIGURE 30-1 Illustration of using standardized terminologies and integrated information systems to support fall and injury risk assessment and management. Individual-level patient data is not only used for patient care, but also is aggregated and analyzed locally to assess variance, treatment costs, and risk factors. Aggregate data are also externally reported to groups such as The Joint Commission (TJC) and National Database of Nursing Quality Indicators (NDNQI). The development of the fall and injury risk assessment was partially funded by a grant from the National Institute of Nursing Research and its further expansion into behavioral health is funded by a grant from the National Institute of Mental Health.

assessment is complete, the nurse exercises his or her clinical judgment to apply the appropriate safety measures and then documents the safety measures in the information system. These data also can be reused. For example, the nurse may want to view the previous nursing interventions applied by nursing colleagues, or administrators may wish to examine which interventions are more effective for a certain group of patients.

At the second or third point in this description, the nurse may want to access additional information through an application that provides links to context specific information resources. Types of information that may be accessed by the nurse include the policy, patient education materials, or information related to any aspect of the assessment or treatment process. Real-time access to such information can streamline and support the decision-making process.

Fourth, interdisciplinary communication can be facilitated because the fall-injury risk assessment is

located in a centrally accessible location in the information system in which all relevant members of the care team can document and view results. The underlying policy places the patient at the center of the information exchange, thus ensuring that the patient risk data are accessible to other members of the care team.

Fifth, the administrative team can reuse individual or aggregate patient data to examine any of several aspects of the patient's care (e.g., a snapshot of risk levels for all patients on a given unit at a certain time point). The data also can be reused to report to national benchmarking databases such as the National Database of Nursing Quality Indicators (ANA, 2006), to document compliance with patient safety goals as required by The Joint Commission, or to document and report patient safety data to other agencies.

Integration of a standardized risk assessment instrument into a clinical information system provides a

method by which data can be collected, manipulated, and stored for efficient reuse. In addition, standardized risk assessments such as the fall-injury risk assessment instrument can be stored in a section of the computer-based record where the data can be viewed and contributed to by all members of the care team, making the patient the center of the care record. As national patient safety quality indicators are being increasingly standardized, the structure by which to build systems in which data can be reused is increasingly available. In addition, use of standardized terminologies facilitates regional and national benchmarking.

Validation of Nursing Diagnoses. Probabilistic data transformation approaches have been applied to medical diagnostic reasoning for several decades, resulting in the development of medical diagnostic decision support systems such as DXplain (Hoffer et al., 2005) and Isabel (Ramnarayan et al., 2007). Nursing research and theory have generated defining characteristics and labels for nursing diagnoses (NANDA International, 2009). Databases containing nursing diagnoses, predicted defining characteristics, and patient-specific data have the potential to serve as the infrastructure for large-scale validation studies (Maas & Delaney, 2004). Wide-scale implementation of information systems containing nursing diagnoses and patient attributes will facilitate not only the validation of nursing diagnoses, but also the deployment of decision support systems that are based on empirical data rather than exclusively on predicted relationships (Lang, 2008).

Linking Diagnoses, Interventions, and Outcomes. Publications have proposed linkages among diagnoses, interventions, and outcomes (Johnson et al., 2006). In addition, a number of efforts are focused on implementing standardized terminologies for nursing diagnoses, interventions, and nursing-sensitive outcomes in information systems at the enterprise, national, and international level (see Westra et al., 2008, for a summary). Keenan, Tschannen, and Wesley (2008) demonstrated the value of a technology-supported method of using NANDA International, the Nursing Interventions Classification, and the Nursing Outcomes Classification for plans of care. At the international level, the International Classification of Nursing Practice (ICNP) project (International Council of Nurses, 2008) is making tremendous progress toward an information infrastructure to examine health care phenomena, nursing activities, and outcomes globally. Hardiker and colleagues (Hardiker & Bakken, 2004; Hardiker & Coenen, 2007; Matney et al., 2008) have used the context of the ICNP to focus on formalization of nursing terminologies, on the mediation among

conceptual structures required for information systems, and on the functional requirements of tools to assist with structured, electronic data entry in a manner consistent with the clinical nursing process.

Knowledge Discovery in Databases. As large repositories of health care data are developed, it becomes possible to apply data mining and knowledge discovery in databases techniques in order to answer questions that were not hypothesized at the time of data collection. Similarly to the machine learning techniques applied in the artificial intelligence research of the 1980s, knowledge discovery in databases uses pattern recognition and matching, classification or clustering schemas, and other algorithms to examine relationships in data to “discover” answers to the questions posed by that investigator (Fayyad et al., 1996). Researchers have demonstrated the utility of knowledge discovery techniques to detect elderly patients with impaired mobility (Lu, Street, & Delaney, 2006), predict the likelihood of falls (Volrathongchia, Brennan, & Ferris 2005), and classify patients according to nursing care needs (Seomun et al., 2006). In addition, Hyun and colleagues (2009) demonstrated the utility of natural language processing to extract data related to quality and patient safety from nursing narratives. As data of relevance to nursing become more ubiquitous, such techniques have tremendous potential for knowledge development through empirical research and theory testing (Goodwin et al., 2003).

Retrieval and Application of Heterogeneous Sources of Knowledge. In the domain of health care in general, the Unified Medical Language System, a linked collection of source terminologies developed by the National Library of Medicine, has been used to retrieve heterogeneous sources of knowledge for application in patient care settings (Humphreys et al., 1998). Infobuttons provide context-specific access to relevant information on demand at the point of care through an infobutton manager (Cimino et al., 2004; Del Fiol et al., 2008) (e.g., cholesterol treatment guidelines when reporting laboratory results or resources for management of an intra-aortic balloon pump) (Figure 30-2) (Collins et al., 2007). Another approach to retrieval and presentation of tailored information is the Heart Care project (Brennan et al., 2007), in which a nursing assessment after coronary artery bypass graft surgery is used to create individualized Web access to a set of information resources. Web 2.0 technologies support the integration of data at the user interface level from a variety of resources through strategies such as really simple syndication feeds; however, implementation for health care

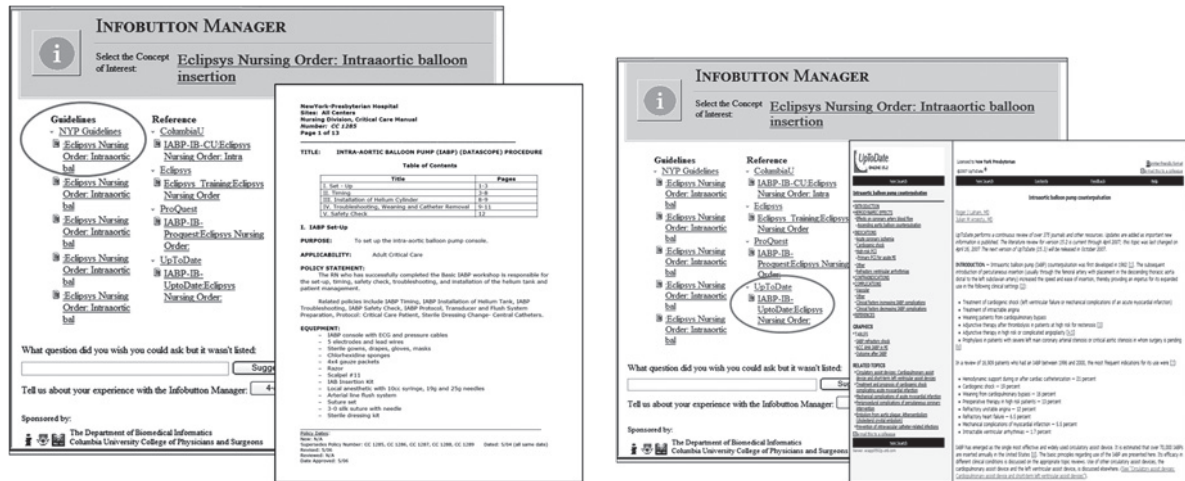


FIGURE 30-2 Illustration of context-specific information retrieval using an infobutton. When the user clicks the infobutton link related to the resource for the concept of interest, the relevant information appears from the selected resource. The development and evaluation of infobuttons was funded by grants from the National Library of Medicine.

purposes is still in its infancy (Senathirajah & Bakken, in review).

Translation of Research Protocols into Standardized Terminologies. A number of investigations have demonstrated the utility of standardized terminologies to abstract narrative records from nursing research studies (Bowles, 2000; Naylor, Bowles, & Brooten, 2000). The translation of research protocols a priori into standardized terminologies that are also used in practice settings has the potential to expedite not only the collection of research data at the point of care but also the retrieval and application of the research findings into practice. For example, Bakken and colleagues (2005) incorporated terms from the Home Health Care Classification (Saba, 1992) for structured data entry and documentation of the Client Adherence Profiling and Intervention Tailoring intervention, a nurse case manager-delivered medication adherence intervention for home care patients receiving highly active antiretroviral therapy. Their results demonstrated the ability of using a standardized terminology to document the dose and the individualization (i.e., tailoring) of the client profiling intervention. Nurse researchers in general, however, have yet to embrace the incorporation of standardized terminologies into research protocols. Lang (2008) contends that clinical information systems built upon standardized data and actionable, executable evidence will transform both practice and research.

WHAT INFORMATICS COMPETENCIES ARE REQUIRED TO COMPLEMENT THE TECHNOLOGICAL BUILDING BLOCKS OF STANDARDIZED TERMINOLOGIES AND INTEGRATED INFORMATION SYSTEMS?

Technological building blocks such as standardized terminologies and integrated information systems are necessary but not sufficient to realize the promise of utilizing information systems to facilitate the development of nursing knowledge and to link theory, research, and practice. These building blocks must be complemented by informatics competencies. The informatics competencies necessary for knowledge-intensive professions, such as nursing, go beyond computer literacy.

Staggers, Gassert, and Curran (2001, 2002) published a set of informatics competencies for nurses at four levels of practice: beginning nurse, experienced nurse, informatics specialist, and informatics innovator. Building upon this work and others, the ANA (2001) published the Scope and Standards of Nursing Informatics Practice, which describes informatics competencies for beginning and experienced nurses as well as for specialists. Other researchers (Tanner, Pierce, & Pravikoff, 2004) have focused on information literacy, a component of informatics competency based upon a set of knowledge and skills related to information retrieval that was proposed by the library community in 1989 (American Library Association, 1989), was updated in 1998 (National Forum on Information Literacy, 1998),

and is closely tied to evidence-based practice. These include active learning to include the processes of

- ◆ knowing when they have a need for information,
- ◆ identifying information needed to address a given problem or issue,
- ◆ finding needed information and evaluating the information,
- ◆ organizing the information, and
- ◆ using the information effectively to address the problem or issue at hand (American Library Association, 1989).

It is essential that such competencies be incorporated into all levels of nursing education programs and into nursing practice to foster both the development and use of nursing knowledge. However, research suggests that, with a few exceptions, these competencies are not widely incorporated into nursing education or practice (McNeil, Elfrink, & Pierce, 2004; Tanner et al., 2004).

SUMMARY

This chapter has described the vital role of standardized terminologies and integrated information systems as building blocks for the development of nursing knowledge. Examples have illustrated the manner in which these building blocks can facilitate the interrelationships among nursing theory, nursing research, and nursing practice. As the building blocks are broadly implemented, new questions will evolve. For example:

- ◆ How will definitions of nursing expertise evolve as sources of domain information and knowledge become more accessible at the point of care?
- ◆ What are the ways in which interventions built upon standardized terminologies and integrated information systems can and should serve as an extension of the nurse?
- ◆ Will standardized terminologies and integrated information systems assist in the delineation of a distinct body of nursing knowledge or will the boundaries of discipline-specific knowledge blur?
- ◆ How will standardized terminologies and integrated information systems impact patient safety?

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Nursing Informatics: Partnerships at the Crossroads of Practice and Research

KAREN A. MONSEN ◆ KAREN S. MARTIN

Diverse perspectives in nursing are rapidly converging towards a common goal: using nursing's information to inform nursing's work. The modern vision of nursing administrators to evaluate nursing outcomes began in the 1970s and has intensified with the increasing pressure to demonstrate outcomes of care (Martin & Scheet, 1992). Information technology has advanced this agenda. In the mid-1980s, the American Nurses Association (ANA) and National League for Nursing established associations to address computer applications in nursing (Ozbolt & Saba, 2008). Scope and standards documents for informatics were first published in 1994 and 1995 (ANA, 2008). Nursing researchers responded to technology trends by creating a National Institute of Nursing Research–funded nursing informatics research agenda (NINR Priority Expert Panel on Nursing Informatics, 1993). As computerized documentation systems were adopted in practice settings, practitioners were challenged to integrate technology into their workflow and to see the potential uses of their data. Some early adopters proactively implemented data quality infrastructures to support their clinical documentation (Monsen & Martin, 2002a, 2002b). Nursing educators began to introduce informatics content into their curricula to prepare the emerging workforce for the new technology in practice environments. In 2004, health informatics gained prominence and a sense of urgency with President Bush's mandate to universally implement electronic health records by 2014.

Automation demands standardization. It is clear that standardized terminologies are essential for representing nursing's work in the electronic health record (EHR). A complex web of public-private initiatives has emerged to define national standards required to meet the 2014 EHR mandate. Although the number of nurses currently participating in the standards initiatives is small, nurses are recognizing the critical need to be

involved (Martin & Sensmeier, 2009). The vision of nursing scholars for standardized terminology to describe practice began in the 1970s, with the North American Nursing Diagnosis Association's first meeting in 1973, and the Omaha System's first grant in 1975 (Ozbolt & Saba, 2008; Westra et al., 2008).

The ANA currently recognizes 12 standardized terminologies with diverse purposes and applications. The recognized terminologies include data sets, interface or point-of-care terminologies, and reference terminologies (ANA, 2006). Multiple terminologies are needed to address nursing's wide scope of practice, and to allow specialized groups to articulate professional standards. Nurses use these terminologies to describe and standardize nursing practice and to generate clinical data. The data they generate can in turn be analyzed, and the results can inform practice quality issues, evaluate programs, and discover new knowledge about nursing intervention effectiveness. It is essential that the 12 terminologies are integrated into clinical information systems to achieve this country's goals of interoperability and universal adoption of EHRs (Lundberg et al., 2008; Martin, 2005; Martin & Sensmeier, 2009).

The Omaha System has been recognized by the ANA as a standardized terminology since 1992. It exists in the public domain, passed the Healthcare Information Technology Standards Panel (HITSP) selection criteria in 2007, and is registered (recognized) by Health Level Seven (HL7). It is integrated into the National Library of Medicine's Metathesaurus; Logical Observation Identifiers, Names, and Codes (LOINC); and SNOMED CT (Omaha System, 2009). It was originally developed as an interface terminology in the United States and adopted in community practice settings such as home care, public health, and school health, and by some educators. Current use has expanded nationally and internationally to include many diverse settings, including

faith-based nursing, hospital-based and managed-care case managers, acute care and rehabilitation hospitals, and long-term care. In addition, many Omaha System partnerships have been developed to promote and support practice quality, documentation quality, information management, program evaluation, and knowledge discovery (Martin, 2005; Omaha System, 2009).

The Omaha System vision originated at the Visiting Nurse Association of Omaha (Nebraska). The vision was to develop a research-based, integrated, comprehensive, valid and reliable clinical information system organized around individuals, families, and communities who received services. This vision embraced all practitioners who provided services and supported the notion of multidisciplinary partnerships to promote optimal client outcomes. Since its inception, it emphasized the necessity of automation and the power of using clinical data for various purposes including program evaluation and research (Martin, 2005; Martin & Scheet, 1992; Omaha System, 2009; Ozbolt & Saba, 2008).

Three examples of Omaha System partnerships illustrate early collaboration when health care systems and groups were considering how to prepare for automation. First, the police chief and police department, community agency personnel, and health department in Beloit, Wisconsin, used the Omaha System as part of an action plan when providing services to the same high-risk individuals, families, and neighborhoods. They wanted to document services using a standardized terminology that would improve their collaboration and communication. However, they did not exchange their organization's legal records or develop a plan for automation. Second, nurse practitioners, physicians, and nutritionists at Boston's Massachusetts General Hospital used the Omaha System in a research demonstration project. Their goals were to provide posthospital discharge services that improved coordination of care for high-risk elders; reduce unnecessary use of hospitals, nursing homes, and emergency rooms; and measure the outcomes of their care. For this project, they used COSTAR, a very early automated documentation system. Third, the interdisciplinary hospice team at the Visiting Nurses Association of Omaha consisted of nurses, social workers, a pastoral counselor, and a physician. Team members provided end-of-life care to clients of differing ages. They used the Omaha System to enhance their collaborative practice, document accurate outcome ratings, and establish data trends. They used a limited version of a clinical information system. These exemplars show the importance and value of partnerships as a foundation for Omaha System development. This tradition continues

as practitioners, researchers, educators, and systems engineers increasingly collaborate in Omaha System-related initiatives.

PARTNERSHIP EXEMPLARS

This chapter provides six exemplars of current research and practice partnerships that illustrate diverse partners, settings, populations of interest, technology applications, and outcomes. These exemplars show high levels of complexity and sophistication and substantive results. They are essentially living laboratories in which questions of real-world significance can be posed to a team equipped to address them from both scientific and practical perspectives.

See Table 31-1.

Partnership to Improve Child Health

Barton and colleagues (2003, 2004; Moritz & Barton, 2001) formed a partnership of nursing educators, nursing students, and Head Start. Their project, the Public Health Nursing Outreach for New Americans, was a community-based faculty practice partnership for refugee and immigrant populations in the Denver, Colorado, metropolitan area. Program partners included the faculty and students of the University of Colorado, School of Nursing who provided services and conducted research and the Rocky Mountain Service, Employment, and Redevelopment Head Start program. The latter organization was formed by the two oldest Hispanic organizations in Colorado. The faculty-student practice provided health education and home visits for children with the Head Start program and their families. Baccalaureate nursing students participated in the program during their Public Health nursing practicum. They used the Omaha System to document services. Data analysis indicated that the target population had serious health needs and demonstrated statistically significant improvement during the period of service. These data were shared in the research grant report within the Denver community, in presentations, and in publications. The partnership identified that Head Start students and their families had serious health needs and then provided care, case management, and referral. They raised community and public awareness about health care needs.

Partnership to Investigate Cost Effectiveness of Transitional Care

Bowles and colleagues (2000; Naylor et al., 2004; Martin & Bowles, 2008) described a partnership of nurse researchers, nursing educators and students, nurse

TABLE 31-1 Exemplars of Current Research and Practice

Exemplar	Researchers	Educators, Students	Providers	Populations	Systems	Outcomes
Barton et al., 2003; Barton, Clarke, & Baramée, 2004; Moritz & Barton, 2001	Nursing	Nursing	Faculty-student practice, Rocky Mountain Service, Employment, and Redevelopment Agency	Children attending Head Start		Provided care to students; raised community awareness of health needs by sharing findings
Bowles, 2000; Naylor et al., 2004; Martin & Bowles, 2008	Nursing	Nursing	Nurse practitioners	Frail older adults with chronic conditions	University systems developers	Documented cost effectiveness of standardized interventions
McEwen & Slack, 2005; McEwen, Baird, & Gallegos, 2007; Martin & Bowles, 2008	Nursing, Pharmacy	Nursing, Pharmacy, Public health, Medicine, Social work	Faculty-student practice, <i>Promotoras</i>	Young pregnant women and adults with diabetes		Provided culturally appropriate care to an underserved population and evaluated the effectiveness of services
Monsen et al., 2006, 2009	Nursing	Nursing	Public Health Nurses, Community Health Specialists, Social workers, Nutritionists	County residents and populations of interest (MCH, elderly)	Proprietary systems developers	Tools to support data and practice quality; publications; Web site; data comparison
Lytton, & Monsen, 2009	Nursing, Epidemiology	Nursing	Public Health Planners, Administrators, Nurses	Family health	Proprietary systems	Data quality to support improved population health; new knowledge about service effectiveness and the Omaha System
Monsen et al., 2009	Nursing, Medicine, Computer science	Nursing, Computer science	Home care and public health nursing clinical experts	Home care, Family health	Proprietary systems	New knowledge about intervention effectiveness and Omaha System

MCH, Maternal child health.

practitioners, systems engineers, and third-party payers. The Transitional Care Model program of research at the University of Pennsylvania in Philadelphia consists of eight studies and spans two decades. Frail, older adults; chronic illness; and the rising costs of health care were themes of these studies. During the early studies, the nurse researchers extracted Omaha System data from narrative documentation. They noted considerable difficulty extracting accurate and consistent data as a serious limitation of the studies. Based on their need for consistent data, they developed an automated clinical information system based on the Omaha System. They also formed a partnership with a major insurance company and a large health plan to address concerns about cost effectiveness of care. Study results revealed the health plan's member characteristics, their chronic care needs, and the interventions provided and demonstrated economic advantages of nurse practitioner care. The partnership documented nurse practitioner interventions, analyzed resulting data, and demonstrated improved client outcomes to the third-party payers.

Partnership to Improve Perinatal Health Among Latinas

McEwen and colleagues (2005, 2007; Martin & Bowles, 2008) described a partnership of nursing researchers, educators, and students; faculty colleagues and students from public health, social work, and medicine; and community health workers (*promotoras*). Since 1996, faculty members from the Colleges of Nursing and Pharmacy at the University of Arizona have conducted multiple studies on the border of Arizona and Sonora, Mexico, using an interdisciplinary case management model. The *promotoras* developed culturally appropriate interventions for the underserved target population. Subjects of the studies were young pregnant women and adults with diabetes or who were at risk for developing diabetes. These subjects were primarily of Mexican origin. The Omaha System was the common terminology used by all of the multidisciplinary team members to document client assessments, services that were provided, and to evaluate outcomes. Use of the Omaha System facilitated the research and practice partnership as well as communication among the subjects, researchers, and providers. Study findings demonstrated a large number of problems per subject and the positive impact of services. The partnership provided culturally appropriate care to an underserved population and evaluated the effectiveness of services.

Partnership to Advance Public Health Informatics in Minnesota

Monsen and colleagues (2006, 2009) described a partnership of public health nurses, social workers, nutritionists, and community health specialists; state public health consultants and epidemiologists; home care nurses; educators; software vendors; and nursing researchers. In 2001, practitioners in Minnesota became aware that public health agencies throughout the state were using computerized documentation software based on the Omaha System. They decided to convene a Minnesota Omaha System Users Group. The goal of the group was to advance capacity to implement the Omaha System and maximize the benefits of their software investments. The group has defined practice standards, articulated practice (standardized care plans), and reported outcomes for diverse public health nursing programs. They have developed tools to ensure data reliability, formats for data sharing, and publications to disseminate their efforts (Monsen et al., 2006; Monsen et al., 2009). The Minnesota Omaha System Users Group Web site is a resource to Omaha System users nationally and internationally (www.omahasystemmn.org). They contributed to the Omaha System revision in 2005 and worked with software vendors to improve workflow and accurate representation of the Omaha System within software and to improve outcome reporting. Partners in this Omaha System community of practice have developed and shared data and practice quality tools and increased all partners' capacity to use standardized terminology and analyze data for program evaluation, outcomes reporting, and benchmarking.

Partnership to Evaluate Public Health Nursing Program Effectiveness and Improve Outcomes

Lytton and Monsen (2009) sought to collaborate with a research-intensive university to create a mutually beneficial practice-research partnership. The goals of the public health agency and university researchers were to use information to support rigorous program evaluation and evidence-based practice. In the process of meeting these goals, the research team committed to disseminating their findings to support informatics efforts in local public health settings and to advance the state of the science in public health practice. The research team employs existing de-identified Omaha System data sets from the county's public health nursing information system. The research projects address relevant questions posed by public health agency evaluators and staff. For example, the public health agency is

committed to ensuring high data quality for program evaluation. Therefore, one of the team's first projects was to assess the reproducibility and validity of selected Omaha System scales. The benefits of this partnership are many. First, the local public health department benefits from this partnership by adding no-cost capacity in data management and analysis. Second, the university researchers and students benefit from access to rich clinical data and clinical expertise in data interpretation. Finally, county residents benefit from the public health agency's commitment to excellence in providing evidence-based services. This partnership of public health planners and nursing researchers is ensuring quality data in the local public health department while advancing understanding of the Omaha System psychometric properties.

Partnership to Study Intervention Effectiveness

University of Minnesota nursing, computer science, and medical researchers and graduate students, collaborating with public health and home care administrators have developed ongoing research teams to study critical health care issues. A home care intervention study generated intervention clusters that were novel, overlapping, and consisted of diverse actions for multiple problems that appeared to represent the complexity of home care practice. The research team will test the predictive validity of these clusters in a future study of intervention patterns related to home care client rehospitalization (Monsen et al., 2009). A recently completed family home visiting intervention study generated 14 intervention clusters and 3 client signs/symptoms clusters. Hierarchical multiple regression analysis showed differential improvement in client knowledge and behavior by intervention type and by client group. A text mining study in progress is analyzing supplemental text used by public health and home care practitioners in their routine Omaha System documentation. Results will inform optimal use of the Omaha System within software and provide detailed information about the Omaha System taxonomic structure as it is applied in public health and home care documentation. These data mining partnerships are advancing discovery of effective intervention models for family home visiting and home care practice and improving understanding of the Omaha System taxonomic structure.

PARTNERSHIP IMPLICATIONS

The exemplars summarized in this chapter illustrate the complexity, diversity, and scope of multidisciplinary partnerships employing the Omaha System.

Far reaching implications are related to collaboration, nursing's role, standardization, and information technology.

Collaboration

The primary goals of all health care partnerships should be to improve client services and health outcomes. The goals of these six exemplars were to improve outcomes for mothers and children at high risk for health issues, Latinas at risk for diabetes, frail elders, and home care clients. However, partners as well as clients benefit from collaborating in such research-practice partnerships. Researchers benefit from access to large data sets and clinical expertise that can advise in interpreting results. Practitioners benefit from evaluation design and methods expertise. Their mutual need in research and practice for high quality data drives a shared commitment to support rigorous documentation quality at the point of care. Faculty and students benefit from involvement in rich practicum environments that connect the dots between care, data, and outcomes. Systems engineers benefit from active involvement of stakeholders in workflow, system design, and reporting capabilities. Finally, these partnerships are ideal for translational research because the relationships between practice and research facilitate disseminating new evidence directly to service providers, thus using clinical data to improve health.

Nursing's Role

Nurses were leaders in all six exemplars and had diverse roles such as administrators, researchers, educators, managers, and data analysts. The number of informatics nurses is expanding dramatically, and the nursing profession is uniquely poised to lead research-practice partnerships that involve standardized health informatics data. This leadership capacity is related to several factors, including nurses' increasing educational preparation and experience as informaticians, expertise in standardized terminology development, adoption of electronic documentation systems in diverse practice settings, and the ability to build and foster positive working relationships. For optimal mutual benefits and project outcomes, nursing leaders must recognize and support the unique contributions of all partners.

Standardization

The exemplars used a standardized terminology, the Omaha System, in diverse ways to support their practice and research. Nursing's focus on development of

standardized terminologies has provided a foundation for advancing use of point of care terminologies in EHRs across disciplines. Standardized terminologies are nursing's voice within computerized clinical systems. Until recently, nursing's work has been invisible because much of the EHR development focused on finances, medications, and laboratory tests. Data must be represented within these systems so that nursing information, knowledge, and wisdom is visible to administrators, and outcomes can be measured. In the future, scholars envision storing standardized nursing data in warehouses as repositories for investigating important clinical questions such as intervention effectiveness for particular health concerns or special populations (Lang, 2008).

Information Technology

Advances in EHRs/computerized documentation have dramatically altered the research-practice partnerships described in this chapter. Computerized clinical information systems now offer opportunities to collect, store, analyze, retrieve, and share data. This trend will continue to increase in magnitude, complexity, and sophistication. For example, nurses are beginning to use mobile technology at the point of care to review previous assessment, intervention, and outcome data. However, too often the computerized clinical record is a barrier to excellence in nursing care because of interruptions in workflow and cumbersome systems. Clearly, information technology is not an end in and of itself, and it should not drive practice or research. Instead, it is a servant which should be designed for seamless and efficient workflow and accurate data capture and reporting. Technology should enhance and support practice by providing timely decision support and by translating standards of care and best practices. These changes cannot occur in a vacuum. Instead, all stakeholders need to be involved. When researchers, practitioners, systems engineers, and others work as partners, they create optimal environments to maximize such evolution.

SUMMARY

Increasingly, standardized nursing data sets will be used by partnerships to address important clinical questions and generate new nursing knowledge. Partnerships provide an optimal environment in which to enhance practice, evaluate programs, measure outcomes, and improve population health.

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Sustaining a Focus Group Devoted to Standardized Language Development

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Since 1993, a group of nurses working together as the Physiologic Focus Group has endeavored to help the Nursing Outcomes Classification Research Team at the University of Iowa College of Nursing develop, review, and revise selected nursing outcome labels for the Nursing Outcomes Classification (NOC). The NOC is a standardized nursing language that is focused on patient outcomes of care. This chapter describes the work completed by the Physiologic Focus Group and identifies factors that have enabled the group to endure and sustain the challenges involved in this important professional endeavor.

Why would a group of nurses voluntarily continue to sustain the activity of assisting the NOC Research Team at the University of Iowa with the development of a standardized language? Three main factors have motivated the work of the focus group: (1) a belief in the importance of standardized language for nursing; (2) the intellectual growth afforded by this type of research work; and (3) professional collegiality with other nurses. Box 32-1 identifies the current and past members of the focus group.

Focus groups have been used for the development of standardized nursing language as a means of gathering expert opinions about concepts of interest to nursing. Krueger and Casey defined a focus group study as “a carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment” (2009, p. 2). Focus groups have been used in research as a means of gathering qualitative data (Morgan, 1993). When a focus group is used for the development of outcomes, this method allows nurses from a variety of settings and specialties to develop content based on the combined expertise of the group.

THE IMPORTANCE OF STANDARDIZED LANGUAGE

Standardized language is vital to the nursing profession for many reasons. For the practicing nurse, standardized language facilitates professional nursing practice. As Pesut stated, “Clinical thinking and reasoning presupposes the use of a standardized nursing language and . . . nursing knowledge classification systems provide the vocabulary for clinical thinking” (2002, p. 3). With JoAnne Herman, Pesut has developed a model for clinical reasoning called the *OPT model*, which shifts thinking from a problem orientation to an outcome orientation (Pesut & Herman, 1999). This model assists the nurse with enhancing clinical reasoning skills and establishing keystone issues to address as part of the care provided to patients. Standardized language is also important because it provides the nurse with a consistent way to communicate nursing knowledge, thereby minimizing the bias imposed by individual mental models (Clancy et al., 2006). Furthermore, when it is used in computer charting, standardized language has the potential to help nurses meet standard documentation requirements in an efficient manner (Clancy et al., 2006).

At a national level, the use of standardized language must be built into nursing information systems to facilitate data reuse so that the nursing record can be more than just a practice log and so it can become a source of practice-based nursing knowledge (Bakken & Currie, 2006). The resulting knowledge can be used to identify appropriate nursing care outcomes, assess quality, and determine costs (Delaney et al., 1992), and it provides the foundation for effectiveness research. It is critical that nursing terminology form the foundation of an electronic health record so that nurses are accountable for the care provided to patients.

BOX 32-1 Current and Past Focus Group Members

Sandra Bellinger*
 Maureen Carty
 Teresa Cochran
 Kayla Minnick Dahms
 Mary Ann Fahrenkrug*
 Rose Gephart
 Rose Robinson Gooding
 Linda Hamma Guebert
 Barb Gunderson
 Cheryl Hardison
 Renae Harroun
 Jane Hartsock
 Pam Becker Harvey
 Marni Jacobi
 Cathy Konrad*
 Regina Holly Lange*
 Kathy Lenaghan*
 Jan Levsen
 Anne Lewis
 Rebecca Maxson
 Kathryn McKnight*
 Heidi Nobiling
 Lisa Payden
 Shelley-Rae Pehler*
 Rose G. Robinson
 Sharron Schneider
 Jo Ellen Sharer
 Cheryl Wagner*
 Marilyn Willits
 Karen Wilson

*Current members.

The Nursing Outcomes Classification

The NOC complements the classification developed by NANDA International (NANDA-I) and the Nursing Interventions Classification (NIC). The NANDA-I classification, the NIC, and the NOC (NNN) are among 13 classifications recognized by the American Nurse's Association as appropriate terminology and data element sets (American Nurses Association [ANA], 2006). The NOC completes the nursing process elements needed for the Nursing Minimum Data Set (NMDS) (Moorhead, Johnson, & Maas, 2004). The Center for Nursing Classification and Clinical Effectiveness at the University of Iowa facilitates the continued development, maintenance, and use of the NIC and the NOC.

Moorhead and colleagues define a nursing outcome as "an individual, family, or community state, behavior

or perception that is measured along a continuum and is responsive to nursing interventions" (2008, p. 30). The NOC provides a comprehensive, standardized classification of patient outcomes. These outcomes and related measures at the individual, family, and community levels can be used to evaluate nursing care across the patient care continuum. This approach goes beyond identifying the goals of the nursing care plan and includes measurement scales to assess the patient's state, behaviors, and perception at the time of admission and after intervention. Change scores are used to quantify the effects of nursing interventions; they may be positive, negative, or demonstrate no change (Moorhead et al., 2008).

The development of the NOC began in 1991 at the University of Iowa. It was initiated under the leadership of two researchers and scholars: Marion Johnson and Meridean Maas. Johnson and Maas continue with this leadership, and they have been joined by two additional researchers and scholars: Sue Moorhead and Elizabeth Swanson. There were three planned phases of the initial NOC research. Phase I consisted of establishing concepts and methodologies used in the study of nursing-sensitive patient outcomes and compiling an initial list of outcome labels and indicators. Phase II involved the concept analyses of specific outcomes. Phase III tested the psychometric integrity and practicality of the outcome measures (Moorhead et al., 2008). Phases II and III are ongoing as further outcomes are identified and developed.

INTELLECTUAL GROWTH

One of the opportunities for intellectual growth for focus group members was assisting with the research methodology for outcomes classification. Both qualitative and quantitative methods were used in the development of the classification of outcomes (Maas, Johnson, & Moorhead, 1996); this mixed methodology offers different and richer insights into outcomes research (Tashakkori & Teddlie, 1998). Focus group members meet once a month to review the outcomes developed by members of the group. The group uses a concept analysis framework for its work.

Concept Analysis

Concept analysis helps to validate that the outcomes and associated indicators are responsive to nursing interventions. The concept analysis of an outcome label is primarily qualitative and inductive (Maas et al., 1996, p. 298). Early on in the research work of the NOC

Research Team, the Delphi technique was used, with the assistance of focus groups, to organize indicators and associate them with outcome names. An indicator is “a concrete individual, family, or community state, behavior, or perception that serves as a cue for measuring an outcome” (Moorhead et al., 2008, p. 38). Indicators were placed on separate pieces of paper, randomly shuffled, and then given to members to sort into clusters of similar categories. The clusters were then given outcome names or labels. Over time, the research team completed 20 exercises that focused on grouping indicators and labeling outcomes, ultimately producing a list of 82 nursing-sensitive outcome labels with approximately 4500 outcome indicators. These outcome labels were grouped into eight broad categories for the next phase of the study.

Each of the broad categories was then assigned to one of eight focus groups. Each of these work groups was composed of two to four members and a doctoral-prepared chairperson. The focus groups originally had the following titles: (1) Physiological Status; (2) Psychological and Cognitive Status; (3) Social and Role Status; (4) Physical Functional Status; (5) Safety Status; (6) Family Caregiver Status; (7) Health Attitudes, Knowledge, and Behavior; and (8) Perceived Well-Being (Iowa Outcomes Project, 1997). Of the eight original groups, only the Physiological Status group remains active in outcome development efforts.

Physiologic Health is the current name of the group that looks at the outcomes that were originally assigned to the Physiologic Outcomes focus group. Physiologic Health includes “outcomes that describe organic functioning” (Moorhead et al., 2008, p. 132). The group reviewed the outcome labels in the physiologic category, combined similar labels as appropriate, added new labels as needed, and standardized the language of the outcome labels according to guidelines provided by the research team (Table 32-1).

For each physiologic outcome label, focus group members then reviewed nursing, allied health, and other pertinent literature to analyze the outcome concept. This involved defining the outcome label, selecting indicators of that outcome, identifying pertinent measurement scales, and developing a reference list. The completed outcome label work was presented first to the Physiologic Health focus group for discussion. When consensus was reached with regard to the label, it was sent to the NOC Research Team for approval and for adoption for surveys and field testing (Table 32-2). Although the entire NOC Research Team initially reviewed each label, a small group of researchers that

TABLE 32-1 Rules for the Standardization of Nursing-Sensitive Outcomes

1. Outcome labels should be concise (i.e., stated in five words or less).
2. Outcome labels should be stated in nonevaluative terms rather than as a decreased, increased, or improved state.
3. Outcome labels should use common nursing terms as much as possible.
4. Outcome labels should not describe a nurse’s behavior or an intervention.
5. Outcome labels should not be stated as nursing diagnoses.
6. Outcome labels should describe a state, behavior, or perception that is inherently variable and that can be measured and quantified.
7. Outcome labels should be conceptualized and stated at a middle level of abstraction.
8. The definition of an outcome should be consistent with the relevant measurement scale.
9. The wording of an indicator should be standardized as much as possible for outcomes that make use of the same measurement scale.
10. Colons should be used to make broader concept labels more specific. The broader label should be stated first, with the colon and the more specific label following (e.g., Nutritional Status: Nutrient Intake, Self-Care: Bathing).

Source: Moorhead, S., Johnson, M., Maas, M., & Swanson, E. (Eds.). (2008). *Nursing Outcomes Classification (NOC)* (4th ed.). St. Louis: Mosby/Elsevier.

consisted of the primary investigators and PhD students eventually took over the work of final approval. As content experts, members of the Physiologic Health focus group were invited and welcomed at these approval meetings at the University of Iowa to discuss each label and its indicators. Focus group members were called upon to explain and defend their work. These discussions resulted in an exchange of knowledge between nurses from a variety of educational and practice backgrounds. As a result, the discussions were challenging, stimulating and rewarding.

The focus group has also participated in critical thinking exercises designed to determine conditions or factors other than nursing interventions that could alter selected physiologic outcomes. The factors that have been identified include individual characteristics and other disease entities. The follow-up reports of these exercises were sent to the NOC Research Team at the University of Iowa.

TABLE 32-2 Example of a Physiologic Outcome

Cardiopulmonary Status—0414

Domain-Physiologic Health (II)

Class-Cardiopulmonary (E)

Scale(s)-Severe deviation from normal range to No deviation from normal range (b) and Severe to None (n)

DEFINITION: Adequacy of blood volume ejected from the ventricles and exchange of carbon dioxide and oxygen at the alveolar level

OUTCOME TARGET RATING:

Maintain at_____

Increase to_____

		Severe deviation from normal range	Substantial deviation from normal range	Moderate deviation from normal range	Mild deviation from normal range	No deviation from normal range	
Cardiopulmonary Status Overall Rating		1	2	3	4	5	
Indicators:							
041401	Systolic blood pressure	1	2	3	4	5	NA
041402	Diastolic blood pressure	1	2	3	4	5	NA
041403	Peripheral pulses	1	2	3	4	5	NA
041404	Apical heart rate	1	2	3	4	5	NA
041405	Cardiac rhythm	1	2	3	4	5	NA
041406	Respiratory rate	1	2	3	4	5	NA
041407	Respiratory rhythm	1	2	3	4	5	NA
041408	Depth of inspiration	1	2	3	4	5	NA
041409	Expulsion of air	1	2	3	4	5	NA
041410	Urinary output	1	2	3	4	5	NA
041411	Cardiac index	1	2	3	4	5	NA
041412	Oxygen saturation	1	2	3	4	5	NA
041413	Movement of sputum out of airway	1	2	3	4	5	NA
		Severe	Substantial	Moderate	Mild	None	
041414	Activity intolerance	1	2	3	4	5	NA
041415	Impaired cognition	1	2	3	4	5	NA
041416	Pallor	1	2	3	4	5	NA
041417	Cyanosis	1	2	3	4	5	NA
041418	Flushed	1	2	3	4	5	NA
041419	Neck vein distention	1	2	3	4	5	NA
041420	Chest retraction	1	2	3	4	5	NA
041421	Pursed-lip breathing	1	2	3	4	5	NA
041422	Peripheral edema	1	2	3	4	5	NA
041423	Pulmonary edema	1	2	3	4	5	NA
041424	Dyspnea at rest	1	2	3	4	5	NA
041425	Dyspnea with mild exertion	1	2	3	4	5	NA
041426	Fatigue	1	2	3	4	5	NA
041427	Restlessness	1	2	3	4	5	NA
041428	Somnolence	1	2	3	4	5	NA
041429	Weight gain	1	2	3	4	5	NA
041430	Weight loss	1	2	3	4	5	NA
041431	Diaphoresis	1	2	3	4	5	NA

Outcome content references:

Berry, B. E., & Pinard, A. E. (2002). Assessing tissue oxygenation. *Critical Care Nurse*, 22(3), 22-36.Dougherty, C. M. (2001). Decreased cardiac output. In M. Maas, K. Buckwalter, M. Hardy, T. Tripp-Reimer, M. Titler, & J. Specht (Eds.), *Nursing care of older adults: Diagnoses, outcomes & interventions* (pp. 285-297). St. Louis, MO: Mosby.Smeltzer, S. C., & Bare, B. G. (2004). *Brunner & Suddarth's textbook of medical surgical nursing* (Vol. 1 & 2) (10th ed.). Philadelphia: Lippincott Williams & Wilkins.Wakefield, B. (2001). Ineffective breathing pattern. In M. Maas, K. Buckwalter, M. Hardy, T. Tripp-Reimer, M. Titler, & J. Specht (Eds.), *Nursing care of older adults: Diagnoses, outcomes & interventions* (pp. 313-323). St. Louis, MO: Mosby.Source: Moorhead, S., Johnson, M., Maas, M., & Swanson, E. (Eds.). (2008). *Nursing Outcomes Classification (NOC)* (4th ed.). St. Louis: Mosby/Elsevier.

Validation: Fehring's Technique

One quantitative NOC research method was to take a survey of clinical nursing experts, who were asked to rate the indicators that were most important to each outcome and most sensitive to nursing intervention with the use of a modified Fehring's technique (Maas et al., 1996). Sensitivity and importance were rated by the nurses on a 5-point Likert scale that ranged from 1 (no contribution or no importance) to 5 (most or highly important). Next, a mean validity coefficient for each indicator was determined with the use of statistical analysis. Results of the sensitivity and importance ratings were interpreted as 0.80 or higher being a major indicator and 0.60 to 0.79 being a supporting indicator. Overall, few indicators of outcomes were dropped as a result of content validity coefficients of less than the criterion of 0.60. Thus, the results of these surveys supported the outcomes that were developed by content analysis (Maas et al., 2002, p. 114).

The focus group did not participate in the actual research mailings or data analyses. These were completed by researchers at the Center for Nursing Classification and Clinical Effectiveness at the University of Iowa College of Nursing. However, the results were shared with the focus group members, who were then able to discuss the ratings and give feedback to the NOC Research Team. The NOC research primary investigators ultimately decided whether certain indicators should be retained.

Field Testing

To establish inter-rater reliability, two registered nurses who each cared for a patient independently rated each of the outcomes within a prespecified period of time (Maas et al., 2002). One site for field testing was a medical center where two focus group members were employed. These members communicated to the focus group about the challenges involved with the actual hands-on use of the NOC in clinical practice, and they confirmed the importance of standardized language for the practicing nurse with regard to the evaluation of nursing care. In addition, nursing educators who used the NOC to teach the care-planning process discussed how the classification was used with their clinical students.

PROFESSIONAL COLLEGIALITY

One of the main advantages of focus group work is the opportunity to network with other professional nurses who share a passion for standardized language and

nursing outcomes work. At one time or another during the 15-year period that the focus group has been active, members of the Physiologic Health focus group have represented the majority of educational institutions and each medical center in the bistate metropolitan area where members reside. Focus group activities allowed members to set aside institutional competitiveness and work together on important professional work. A local restaurant provided a convenient location and an ideal meeting site for the monthly meetings (except when discussing elimination outcomes!).

Collegiality was enhanced when focus group members interacted with the principal and co-principal investigators of the research team. Research team members and graduate students from the University of Iowa have attended focus group meetings to share their expertise and perspectives. The constancy of Sandra Bellinger serving as chairperson for 10 of the focus group's 15 years was definitely a major factor in sustaining group activity. Bellinger had been a nursing faculty member at the University of Iowa for 3.5 years, she was a co-investigator on the 2001 NOC Research Team, and she maintains professional contacts at and loyalty to the institution.

Focus group members recognize the importance of sharing knowledge with other professionals. The outcomes are published in Moorhead, Johnson, Maas, and Swanson's *Nursing Outcomes Classification (NOC)*, now in its fourth edition (2008). Focus group members are listed in the classification and recognized for their expertise in reviewing and developing its outcomes. In addition, Sandra Bellinger is recognized as one of the original authors of the first edition, which was published in 1997.

The focus group accepted the challenge of working together to help the nursing community learn more about the NOC. Membership in the group also helped members to improve their ability to write for publication and to prepare for professional presentations. The focus group facilitated two community presentations by NOC primary investigator Marion Johnson: "Development of Nursing Outcomes Criteria" and "Updating Nursing Sensitive Outcomes Classification—Development and Utilization."

Examples of focus group educational information sessions include posters at NNN: The Second Biennial NANDA, NIC & NOC International Convention in Chicago, Illinois, and at the Midwest Nursing Research Society 28th Annual Research Conference. A presentation was also developed for the 12th Annual Research Conference, "Changing Roles, Changing Outcomes,"

sponsored by the Marquette University College of Nursing and Sigma Theta Tau, Delta Gamma Chapter.

The Center for Nursing Classification and Clinical Effectiveness at the University of Iowa established a fellows program in December 1995. The designation of *Fellow* is an appointment for individuals who contribute significantly to the ongoing upkeep and implementation of the NIC and NOC classifications. The appointment is for a period of up to 3 years, depending on the need. Four members of the Physiologic Health focus group are past or current fellows.

FUTURE CHALLENGES

Members of the Physiologic Health focus group recognize the importance of nursing outcome labels as an essential component of standardized language; however, one issue is the challenge of the growing list of NOC labels. The list grows when nurses in a wide variety of practice areas request outcome labels specific to their patient populations. Since the first edition of the *Nursing Outcomes Classification (NOC)* in 1997, 195 new outcomes have been developed and placed in the taxonomy. The fourth edition of the *Nursing Outcomes classification (NOC)* contains 385 outcomes (Moorhead et al., 2008).

One outcome area that has the potential for continued growth is Health Knowledge. Health Knowledge outcomes describe “an individual’s understanding in applying information to promote, maintain, and restore health” (Moorhead et al., 2008, p. 137). Although Health Knowledge is not in the Physiologic Health domain, the focus group has branched out to develop other labels as members’ interests and expertise allow. Some of the Health Knowledge outcome labels are quite general (e.g., Knowledge: Diet), whereas some are specifically related to a common disease condition (e.g., Knowledge: Congestive Heart Failure Management). The focus group has discussed issues such as how specific the outcome label should be and how many disease states should be addressed in a certain knowledge outcome. The challenge becomes developing an outcome list that includes all useful labels required by practicing nurses and nursing students that is not overwhelmingly long. Clancy, Delaney, Morrison, and Gunn reported a method of using the current list of 330 NOC outcomes in a power law distribution called Pareto’s law, which is also known as the 80/20 rule (2006). In the specialized nursing unit described by Clancy and colleagues, 80% of cases fell into 20% of patients’ medical diagnoses, thereby

reducing the number of nursing diagnoses, interventions, and nursing outcomes that need to be routinely processed (2006).

Another issue concerns the need to identify outcomes that may be used by more than one discipline across patient populations and settings. The NOC Research Team will continue to develop standardized language that not only evaluates the effectiveness of nursing care but that is applicable to other disciplines as well.

SUMMARY

This chapter has described the reasons that the Physiologic Health focus group has endured as a work group that assists with the development of the NOC, especially with regard to concept development for outcomes that describe organic functioning. The focus group work has benefited group members by teaching them about the research involved in nursing outcomes development, helping them to develop collegial relationships, and allowing them to share information about nursing outcomes with other nurses. The outstanding leadership of the principal and co-principal investigators at the University of Iowa support the focus group’s endurance. The Physiologic Health focus group plans to continue to participate in the development of standardized outcome language.

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Why Health Information Technology Standards and Harmonization Are Important?

AUDREY E. DICKERSON

Justin Parker is a 26-year-old male coping with the long-term effects of a brain tumor removed during childhood. As Justin ages, access to information from previous health care encounters has become increasingly difficult. He has no way of effectively maintaining a continuity of care record that is accessible or provides a history of his lifestyle, illness, and reactions to medications that are vital to his treatment plan and continued finance needs to his insurance company. Because there is no coordination of effective communication, Justin is also concerned that one day, he may have a medical emergency that might result in a medical error.

Justin considers his medical history to be a private matter to be shared on a need-to-know basis and that means a health care system where his information is instantly available to the caregivers who need it. Plus, Justin wants assurances only those with his permission have access to components of his health care records.

There are thousands of “Justins” and “Janes” who need their clinical data to securely move through the health care system on an as-needed basis. Identified needs to be addressed are multiple health information technology (HIT) systems with alternative designs and interfaces, nonstandardized clinical workflows and work patterns with unique internal workflow operations, security requirements to ensure consumer participation and patient protections, patient identity, and effectively linking clinical information to clinical decision support to significantly enhance effectiveness of the quality of healthcare. (Healthcare Information Technology Standards Panel [HITSP], 2009).

Nurses are the integral connection between all of the pieces of Justin’s story in the health care system. Their role, in part, has historically been as a collector, user, and disseminator of clinical information. Nurses manage

information in a systematized, organized manner to increase the quality of patient care. This chapter identifies, defines, and discusses the relationship of HIT standards to the current health care environment. Several tables are included to assist the reader with the specialized vocabulary and abbreviations used in this specialty. Table 33-1 provides an extensive glossary of the common terms used in informatics. Table 33-2 highlights a glossary of standards development organizations.

HIT standards are an essential component in health information systems (HIS). These standards are part of a diverse collection, including (1) modeling of clinical process measurements (e.g., blood pressure readings, other nursing care and care delivery services); (2) architecture, operational systems, enterprise and electronic health records (EHRs); (3) messaging clinical data (e.g., radiology, laboratory, and clinical content text and business for reimbursement and other financial transactions); (4) security, privacy, confidentiality, and security of clinical and business data; (5) terminology, ontologies, vocabularies, code sets, and lexicons (semantic content). In an information technology (IT) management environment, data are converted to information, knowledge, and wisdom (Graves & Corcoran, 1989) though a process of transformation. Data are stored, protected, processed, and securely sent (perhaps encrypted), and information or data are retrieved in a variety of formats. Data are managed by using the basic information sharing concepts documented in HIT standards such as modeling, architecture, messaging, terminology/vocabulary, security, and other concepts in addition to processes too technical for this discussion.

An important part of this discussion revolves around two distinct areas, *nursing workflow* and *data flow* for the nursing activities. *Nursing workflow* has been identified as being the logical process to assess, diagnose, plan, intervene, and evaluate the human response to health

TABLE 33-1 Terms and Acronyms Glossary

Term/Acronym	Definition
Actors	Actor refers to a system or application responsible for certain information or tasks (e.g., the order placer actor).
Architecture	Architecture is a term applied to both the process and the outcome of specifying the overall structure, logical components, and the logical interrelationships of a computer, its operating system, a network, or other conception. It may also refer to a framework from which applications, databases, and workstations can be developed in a coherent manner and in which every part fits together without containing a mass of design details. The term normally is used to describe how a piece of hardware or software is constructed and which protocols and interfaces are required for communications. Network architecture specifies the function and data transmission needed to convey information across a network.
Atomic concept	Atomic concept is defined as a primitive concept or a concept in a formal system whose definition is not a compositional definition.
Blog	A blog is a Web site, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video.
CCD	A continuity of care document is an XML-based markup standard (developed between Health Level Seven [HL7] and American Standards Testing and Materials [ASTM]) intended to specify the encoding, structure, and semantics of a patient summary clinical document for exchange.
CCR	A standard specification being developed jointly by ASTM International, the Massachusetts Medical Society (MMS), the Health Information Management and Systems Society (HIMSS), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics, a continuity of care record (CCR) is intended to foster and improve continuity of patient care, reduce medical errors, and ensure at least a minimum standard of health information transportability when a patient is referred or transferred to, or is otherwise seen by another provider. A CCR also refers to a new extensible markup language (XML) document standard for a summary of personal health information that clinicians can send when a patient is referred, and those patients can carry with them to promote continuity, quality, and safety of care.
CDA	Clinical decision architecture (CDA) is an XML-based document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange. Known earlier as the patient record architecture (PRA), CDA provides an exchange model for clinical documents, such as discharge summaries and progress notes and brings the health care industry closer to the realization of an electronic medical record. By leveraging the use of XML, the HL7 Reference Information Model (RIM) and coded vocabularies, the CDA makes documents both machine-readable (so they are easily parsed and processed electronically) and human-readable so they can be easily retrieved and used by the people who need them.
Data	Data are sequences of symbols to which meaning may be assigned and raw facts consisting of numbers, letters, and characters.
Data element	A data element is the smallest named unit of information in a transaction or database.
Data field	A data field is a limited area for listing data elements.
Data flow diagram	A data flow diagram is a special form of flow chart intended to help illustrate a process by showing events or by tracing the paths of data through a process or operation.
Data structure	A data structure is a hierarchical description of a set of data elements. A data set can be described according to its data structure.
Device	A device refers to any piece of equipment used in computer input/output operations.

TABLE 33-1 Terms and Acronyms Glossary—cont'd

Term/Acronym	Definition
EHR	The electronic health record (EHR) is a longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting. Included in this information are patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports and images. The EHR automates and streamlines the clinician's workflow. The EHR has the ability to generate a complete record of a clinical patient encounter, as well as supporting other care-related activities directly or indirectly via interface, including evidence-based decision support, quality management, and outcomes reporting.
Granularity	Granularity is an expression of the relative size of a unit. The smallest discrete information that can be directly retrieved. In security, it is the degree of protection. Protection at the file level is considered coarse granularity, whereas protection at the field level is finer granularity.
Health care enterprise	A health care enterprise is a health care business organization (e.g., Hospital Corporation of America).
Health information exchange (HIE)	HIE is the sharing action between any two or more organizations with an executed business/legal arrangement that have deployed commonly agreed-upon technology with applied standards for the purpose of electronically exchanging health-related data between the organizations.
Health information systems (HIS)	The National Committee on Vital and Health Statistics describes HIS as "a comprehensive, knowledge-based system, capable of providing information to all who need it to make sound decisions about health."
Health information technology (HIT)	HIT is a "marriage" between clinical health care activities and computer science for the benefit of patients and those who provide health care services.
IHE profile	An Integrating the Healthcare Enterprise (IHE) profile is a set of selected parameters that describes a particular reimplementation of a standard.
ISO/TC 215	International Organization for Standardization/ISO/TC 215 refers to the International Standard Organization (ISO) technical committee for Health Informatics (www.himss.org/ASP/topics_ISO.asp).
Information technology	Information technology (IT) is the hardware, firmware, and software used as part of the information system to perform information functions. This definition includes computers, telecommunications, automated information systems, and automatic data processing equipment. IT includes any assembly of computer hardware, software, and/or firmware configured to collect, create, communicate, compute, disseminate, process, store, and/or control data or information.
Interoperability	Interoperability means the ability of health information systems to work together within and across organizational boundaries in order to advance the effective delivery of health care for individuals and communities.
Lexicon	A lexicon is a group of related terms used in a particular profession, subject, or style.
Mapping	Mapping is assigning an element in one set to an element in another set through semantic correspondence. Mapping is also a rule of correspondence established between data sets that associates each element of a set with an element in the same or another set.
Messaging	Messaging refers to creating, storing, exchanging, and managing data messages across a communication network. The two main messaging architectures are publish-subscribe and point-to-point.

Continued

TABLE 33-1 Terms and Acronyms Glossary—cont'd

Term/Acronym	Definition
Metadata	Metadata refer to machine-understandable information for the Web. Metadata describe the content, quality, condition, and other characteristics of the data. Fundamentally, metadata describe who, what, when, where, why, and how about a data set. Without proper documentation, a data set is incomplete. Metadata are critical to preserving the usefulness of data over time. Metadata capture important information on how data were collected and/or processed so that future users of that data understand these details.
Modeling	Modeling is the process of defining concepts to reflect their unique definition and meaning. It is also a method used to define and analyze data requirements needed to support the business functions of an enterprise. Data modeling defines the data elements, their relationships, and their physical structure in preparation for creating a database.
Network	A network is a collection of hardware, such as printers, modems, servers, and terminals/ personal computers that enables users to store and retrieve information, share devices, and exchange information.
PHR	Personal health record. An electronic Personal Health Record ("ePHR") is a universally accessible, layperson-comprehensible, lifelong tool for managing relevant health information, promoting health maintenance and assisting with chronic disease management via an interactive, common data set of electronic health information and e-health tools. The ePHR is owned, managed, and shared by the individual or his or her legal proxy and must be secure to protect the privacy and confidentiality of the health information it contains. It is not a legal record, unless so defined, and is subject to various legal limitations.
Security	Security refers to measures and controls that ensure confidentiality, integrity, availability, and accountability of the information processed and stored by a computer.
Standard	A standard is a document established by consensus and approved by a recognized body that provides, for common and repeated use, rules, guidelines, or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context. A standard may also refer to a definition or format that has been approved by a recognized standards organization, or is accepted as a de facto standard by the industry. Standards exist for programming languages, operating systems, data formats, communications protocols, and electrical interfaces.
Structured document	A structured document is a specific set of rules with computer readable code for reducing XML file size, using any one of the available compression techniques.
Terminology	Terminology refers to a system of words used to name things in a particular discipline.
Transaction	A transaction is the exchange of information between two parties to carry out clinical, financial, and administrative activities related to health care. It also refers to an exchange of information between actors. For each transaction, an established standard is used, such as HL7 or Digital Imaging and Communications in Medicine (DICOM).
UML	UML is a graphical language for visualizing, specifying, and constructing the artifacts of a software-intensive system. The Unified Modeling Language offers a standard way to write a system's blueprints, including conceptual things such as business processes and system functions as well as concrete things such as programming language statements, database schemas, and reusable software components. UML combines the best practice from data modeling concepts such as entity relationship diagrams, business modeling (work flow), object modeling, and component modeling. It can be used with all processes, throughout the software development life cycle, and across different implementation technologies.
UMLS	The Unified Medical Language System (UMLS) is a large project sponsored by the United States National Library of Medicine (NLM) to produce a unified thesaurus and cross reference linking various medical nomenclatures, including the Medical Subject Headings (MeSH), International Classification of Diseases, Clinical Modification (ICD-9-CM), Systematized Nomenclature of Medicine (SNOMED), and the Terminology of DXPlain and Quick Medical Reference (QMR).

TABLE 33-1 Terms and Acronyms Glossary—cont'd

Term/Acronym	Definition
Wiki	A Wiki is a piece of server software that allows users to freely create and edit Web page content using any Web browser.
Workflow	Workflow refers to a process description of how tasks are done, by whom, in what order, and how quickly. Workflow can be used in the context of electronic systems or people (i.e., An electronic workflow system can help automate a physician's personal workflow.).
XML	Extensible markup language (XML) is a general-purpose markup language for creating special-purpose markup languages. It is a simplified subset of SGML, capable of describing many different kinds of data. Its primary purpose is to facilitate the sharing of data across different systems, particularly systems connected via the Internet. XML describes a class of data objects, called XML documents, and partially describes the behavior of computer programs which process them. XML is an application profile or restricted form of SGML, the Standard Generalized Markup Language (ISO 8879). By construction, XML documents are conforming SGML documents.

Taken from Healthcare Information and Management Systems Society (HIMSS). (2009). *HIMSS dictionary of healthcare information technology terms, acronyms and organizations* (2nd ed.) Chicago: Author.

TABLE 33-2 Standards Development Organizations Glossary

International Health Standards Development Organizations (SDO) and Others Headquarters in the United States			
Acronym	Organization	Organization Scope	Link
AAMI	Association for Advancement of Medical Instrumentation	AAMI is an alliance of over 6000 members united by the common goal of increasing the understanding and beneficial use of medical instrumentation. It sponsors international SDO work through their international and national standards development committees.	www.aami.org
ADA	American Dental Association	The ADA is the professional association of dentists committed to the public's oral health, ethics, science and professional advancement, leading a unified profession through initiatives in advocacy, education, research, and the development of standards.	www.ada.org
AHIMA	American Health Information Management Association	AHIMA is a community of professionals engaged in health information management, providing support to members and strengthening the industry and profession. It provides career, professional development, and practice resources; sets standards for education and certification; advocates public policy that advances HIM practice; facilitates member communication; and promotes the contributions of its members.	www.ahima.org
AHRQ	Agency for Healthcare Research and Quality	AHRQ's mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans.	www.ahrq.org
ANSI	American National Standards Institute	The purpose of ANSI is to enhance both the global competitiveness of U.S. business and the U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity.	www.ansi.org

Continued

TABLE 33-2 Standards Development Organizations Glossary—cont'd

International Health Standards Development Organizations (SDO) and Others Headquarters in the United States			
Acronym	Organization	Organization Scope	Link
ASTM	American Standards Testing and Materials	ASTM provides the value, strength and respect of market-place consensus. Its mission is to be the foremost developer and provider of voluntary consensus standards, related technical information, and services having globally recognized quality and applicability that promote public health and safety, and the overall quality of life; to contribute to the reliability of materials, products, systems and services; and to facilitate national, regional, and international commerce.	www.astm.org
CDISC	Clinical Data Interchange Standards Consortium	CDISC is a global, open, multidisciplinary, nonprofit organization that has established standards to support the acquisition, exchange, submission, and archive of clinical research data and metadata. The CDISC mission is to develop and support global, platform-independent data standards that enable information system interoperability to improve medical research and related areas of health care. CDISC standards are vendor neutral, platform independent, and freely available via the CDISC Web site.	www.cdisc.org
DICOM	Digital Imaging and Communications in Medicine	The DICOM Standards Committee exists to create and maintain international standards for the communication of biomedical, diagnostic, and therapeutic information in those medical disciplines that use digital images and associated data.	http://medical.nema.org
GS1	Global Standards 1	The mission of GS1 is to take a global leadership role in establishing and promoting multiindustry standards for product identification and related electronic communication. The goal is to enhance supply chain management, thus contributing added value to the customer.	www.gs1us.org
HIMSS	Healthcare Information and Management Systems Society	The mission of HIMSS is to lead change in the health care information and management systems field through knowledge sharing, advocacy, collaboration, innovation, and community affiliations. It sponsors national and international standards development.	www.himss.org
HITSP	Healthcare Information Technology Standards Panel	The mission of HITSP is to serve as a cooperative partnership between the public and private sectors for the purpose of achieving a widely accepted and useful set of standards specifically to enable and support widespread interoperability among health care software applications as they will interact in a local, regional, and national health information network for the United States.	www.hitsp.org
HL7	Health Level Seven	HL7 is an international community of health care subject matter experts and information scientists collaborating to create standards for the exchange, management, and integration of electronic health care information. HL7 promotes the use of such standards within and among health care organizations to increase the effectiveness and efficiency of health care delivery for the benefit of all.	www.hl7.org

TABLE 33-2 Standards Development Organizations Glossary—cont'd

International Health Standards Development Organizations (SDO) and Others Headquarters in the United States			
Acronym	Organization	Organization Scope	Link
IEEE	Institute of Electrical and Electronic Engineers	IEEE promotes the engineering process of creating, developing, integrating, sharing, and applying knowledge about electronics and information technologies and sciences for the benefit of humanity and the profession.	www.ieee.org
IHE	Integrating the Healthcare Enterprise	IHE is an initiative by health care professionals and industry to improve the way computer systems in health care share information. IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical needs in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information more effectively. Physicians, medical specialists, nurses, administrators, and other care providers envision a day when vital information can be passed seamlessly from system to system within and across departments and made readily available at the point of care. IHE is designed to make their vision a reality.	www.rsna.org/IHE/index.shtml
OASIS	Organization for the Advancement of Structured Information Standards (OASIS) Consortium	OASIS is a not-for-profit, international consortium that drives the development, convergence, and adoption of e-business standards. The consortium produces more Web services standards.	www.oasis-open.org

maintenance and prevention of disease and illness, medical care and treatment, including medication response, surgery, restoration and education related to the foregoing topics. Data flow for nursing includes documentation of all nursing activities, clinical data encoding, and sending and retrieving the identical information in human- and machine-readable formats. Nursing workflow and data flow work together simultaneously in EHRs.

To enhance discussion of the HIT standards landscape, a use case is employed. A generic use case describes a set of activities of a system from the point of view of its actors (a system or application responsible for certain information or tasks) that lead to a perceptible outcome for the actors. A use case is always initiated by an actor. In all other respects, a use case is a complete, indivisible description (Healthcare Information and Management Systems Society [HIMSS],

2009). Or more simply put, a use case is a scenario plus work flow.

THE GENERIC USE CASE

A 76-year-old diabetic female patient in a long-term care facility, who typically only requires the support of prepared meals and assistance with medications, has experienced an abrupt change in behavior as indicated by serial, standardized functional status assessments. Over the past 48 hours, the patient has been complaining of feeling weak and has become increasingly lethargic. Finally, she refuses to get out of bed, complaining of chills. The nurse takes her temperature and determines that she has a low-grade fever. In addition, the maximum sliding-scale insulin dose indicated in the medication orders is not controlling the patient's blood sugar as determined by finger-stick glucose

measurement. The primary care physician was called and a decision was made to transfer the patient to an acute care hospital for follow-up. To prepare for the transfer, the charge nurse prepares the long-term care nursing documentation with an additional functional assessment, indicating both what has been typical for this patient, and what the patient is currently exhibiting. The patient is transferred to the acute care setting, where her fever and glucose level are stabilized over a period of 3 days. She is then transferred back to the long-term care facility (Integrating the Healthcare Enterprise, 2007).

USE CASE VIGNETTES EXAMINE NURSING WORKFLOW

The segment/vignettes begin the process of examining the nursing workflow as related to necessary data flow for an EHR. The group of vignettes is sequential. Each segment describes the work and the data flow using basic concepts of data elements, modeling, architecture, messaging, semantic content (terminology and vocabulary), security, tools, and mapping (Figure 33-1).

Demystifying the Categories of Health Information Technology Standards

Health informatics professionals need knowledge and tools to advance the use and value of clinical and health information. Using technology can improve methods to collect, maintain, and transfer patient health information in electronic formats. To take advantage of what technology has to offer, there is a need to develop uniform practices, common techniques, or standards so that information can be communicated between individuals or points of care with disparate information systems. Institutional and interinstitutional strategies help health care providers, vendors, and consumers move beyond paper to safe, secure electronic methods to exchange health information. Standards development organizations help by offering guidelines and the experience of others for benchmarking change.

Framework for Developing Standards in the United States

Standards refer to a document or set of documents established by consensus and approved by a recognized body that provides, for common and repeated use, rules, guidelines, or characteristics for activities or their results, aimed at the achievement of the optimum

degree of order in a given context (HIMSS, 2009). HIT standards are adapted to

- ◆ enable the electronic exchange of data between two or more computer systems by establishing the format and sequence of data during transmission.
- ◆ efficiently accomplish interoperability between any health information systems.
- ◆ accurately reflect the existing clinical and administrative data contained in both paper and electronic data systems.
- ◆ consistently maintain patient data in expanding EHR systems.
- ◆ transfer health data using predictable business processes.
- ◆ measure and control clinical information to ensure ethical and regulatory demands.
- ◆ promote efficient clinical information sharing among computer systems and institutions.

Standards are organized in six general categories: data structure, data interchange, semantic content, security, and topic domains. The categories of related standards are listed in Table 33-3. Each category has the title, definition of the category with the standard types, and examples. The following section of concepts also has some standards examples (Table 33-3).

BUILDING KNOWLEDGE THROUGH HEALTH INFORMATION TECHNOLOGY STANDARDS CONCEPTS

Architecture

Architecture is “the fundamental organization of a system embodied in its components, their relationships to each other and to the environment, and the principles guiding its design and evolution” (Maier, Emery, & Hilliard, 2001, p. 108).

In the noninformation technology occupation, architecture is often represented by blueprints, which are usually incredibly complex, representing all of the details for building the structure. This detail includes the building’s floors or stories; rooms; windows and doors; and all of the dimensions of each of the details, including where the detail is placed (e.g., where the window or door is in the room). Architecture in HIT follows some of the same rules. Frameworks and architectures can be viewed as layers or using different views (e.g., front, side, or top down). Each layer adds constraints until it represents a specific system implementation. Views provide different perspectives of the same structure (e.g., business versus technology) (Larson, 2008).

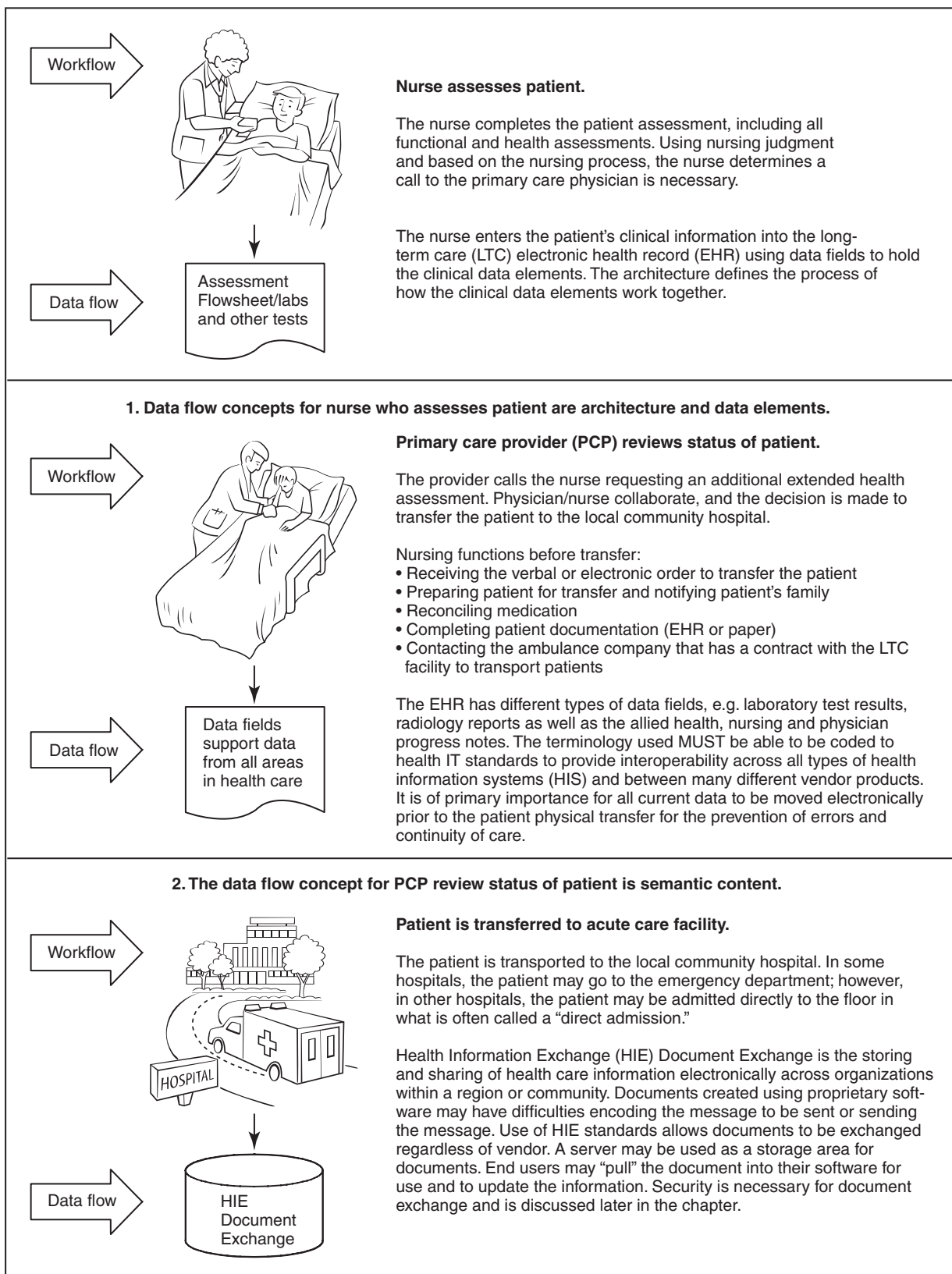
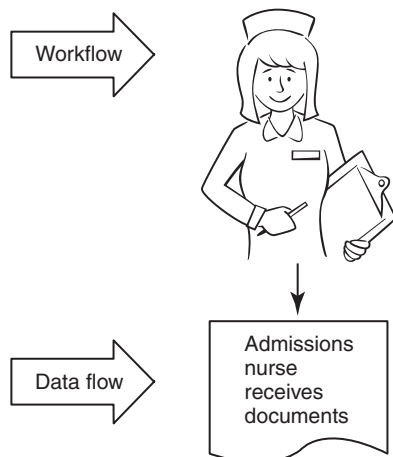


FIGURE 33-1 Examining the nursing workflow as related to necessary data flow for an EHR.

Continued

3. Concepts for patient transferred and using the document exchange are architecture and messaging.

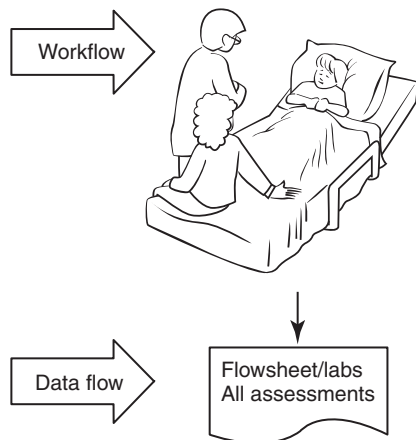


Admissions nurse reviews documents.

Patient arrives at the hospital/on the assigned unit often with the family. Documentation is reviewed, and a nurse is assigned to the patient. The patient may be admitted directly to the medical unit or enter the hospital via the emergency department.

Admissions/Medical unit “pulls” documents from the document exchange storage area. These documents may be the most recent clinical information (sometimes called an encounter record) or include all of the patient’s health history, test results, and reports.

4. Concepts for document exchange are architecture, messaging, data elements, semantic content, and security.

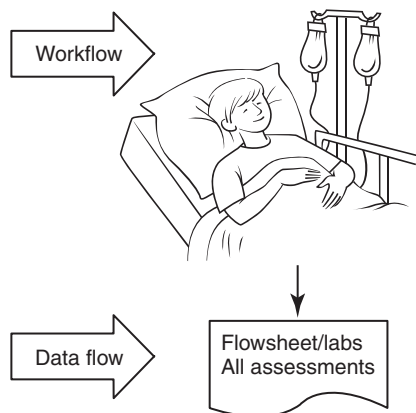


Admission to medical unit and assessment occur.

The nurse completes an admission health assessment/vital signs while the physician provides an admission history and physical and writes admission medical orders for the patient. Orders may include a problem list, diet, laboratory orders, fluid orders, activity orders, medications, and a beginning discharge plan.

The patient’s EHR is updated with the admission assessments from the medical-surgical unit. The current documents are stored on the hospital document exchanges.

5. Concepts for data flow are architecture, messaging, data elements, semantic content, and security.



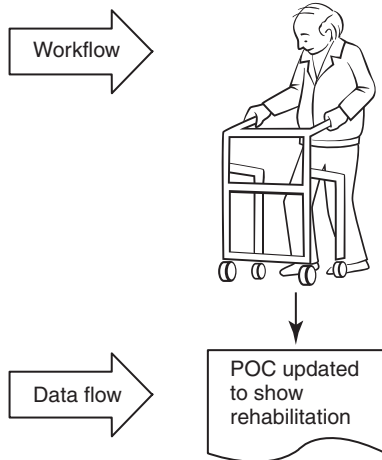
Plan of care (POC) is initiated.

The patient, family, and nurse collaborate on POC development, which include activity levels; skin, fall, and pain assessments; activities of daily living; and body system assessments. POC contains the medical and medication orders and the results of the orders, such as laboratory testing results and reports.

The EHR includes the current POC plus the lab results and other reports. Most EHRs have the ability to review flowsheet-trended reports and previous hospital encounter (admissions) records. The current hospital records also are sent to the patient’s personal health record (PHR).

FIGURE 33-1—cont’d

6. POC concepts for data flow are architecture, messaging, data elements, semantic content, and security.

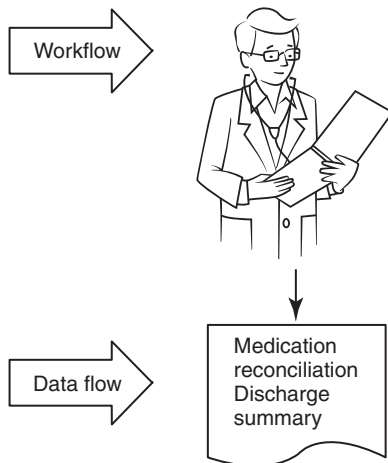


Rehabilitation occurs.

POC is updated with results of rehabilitation, testing, assessment trending, progress notes, and discharge planning. Rehabilitation is especially important because of the patient's age.

EHR continues to collect all of the health assessments, progress notes, test results, reports, and updates to the POC.

7. Rehabilitation concepts for data flow are architecture, messaging, data elements, semantic content, and security.

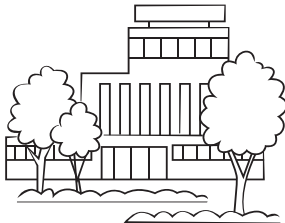


Patient progress is reviewed before discharge.

Progress notes and assessment trending continue to be documented. Utilization review has documented the patient's stay, and the day of discharge has been planned. The LTC facility has been contacted, and a day has been set for the hospital discharge and transfer to LTC.

The discharge summary, POC and transfer form have been completed in the EHR. The document exchange server is once again used for storage of the current EHR to enable the LTC facility to have updated records before the patient's arrival to the facility.

8. Concepts for document exchange are architecture, messaging, data elements, semantic content, and security.



Patient is transferred from the acute care hospital to LTC facility.

FIGURE 33-1—cont'd

TABLE 33-3 Health Information Management/Technology Standards Aligned Within Six Categories

#	Category	Definition	Standard Types	Standards Examples
1	Data Structure	A hierarchical description of a set of data elements; a data set can be described according to its data structure	Data Definitions Frameworks Models Templates Data Sets	<u>Data Definition</u> : Data fields <u>Framework</u> : EHR standards <u>Model</u> : Nursing Reference Terminology Model <u>Template</u> : Reusable form <u>Data Set</u> : Continuity of Care Record standard
2	Data Interchange	The process of transferring data from an originating system to a receiving system	Adaptation of clinical and administrative messages/messaging	<u>Imaging</u> <u>Text</u> : semantic content <u>Binary/numbers</u> data
3	Semantic Content/ Knowledge Representation	Terminologies, Ontologies, Vocabularies, Codes	Reference Terminology Universal Identifiers Images and Codes	SNOMED-CT LOINC ICD codes
4	Security	Measures and controls that ensure confidentiality, integrity, availability, and accountability of the information processed and stored by a computer	Confidentiality Integrity Authentication	Public Key Infrastructure Privilege Management & Access Control Non-repudiation Privacy
5	Digital Imaging and Communications in Medicine	A standard for handling, storing, printing, and transmitting information in medical imaging	File Format Communications Protocol	The DICOM Standard Picture Archiving and Communication System
6	Domains	The problem, or subject to be addressed by a set of information technology messages or by a system ("application domain"); a particular area of interest in health care	All types of standards including regulatory and requirements	Pharmacy Devices Public Health

Source: Healthcare Information and Management Systems Society (HIMSS). (2008). *HIMSS standards task force taxonomy of standards*. Retrieved February 9, 2009, from www.himss.org/content/files/2008_Taxonomy_of_Standards_STF_law.pdf
EHR, Electronic Health Record; *ICD*, International Classification of Diseases; *LOINC*, Logical Observation Identifiers Names and Codes; *SNOMED-CT*, Systematized Nomenclature of Medicine Clinical Terms.

Data and structure type standards provide constraints on any specific set of data elements, allowing all who use the standards to collect data across health care settings and time for purposes of clinical research; to contrast and compare trending data for clinical use in patient treatment; and to provide details of the relationships to other data, origin, and usage of the data. Structures have relationships with other structures (e.g., a data set within a template). The Continuity of Care Record Standard from American Standards Testing and Materials is a data set from a hospital discharge

template. The data set was standardized using the consensus process so many people made the decisions about which data elements to have in the standardized set. Once the standard was approved, then the data set can be used and/or referenced in various other projects and/or standards.

Data Elements and Metadata

Data exist in various forms as numbers or text and as bits and bytes stored in electronic memory. Data elements are the fundamental data structures in a data processing

system. These elements may have a specific set of values or range of values as part of the data element definition, either defined by size, characters, and/or type (e.g., alpha, numeric, and alphanumeric). Clear data elements are (1) *precise*—the definition should use words that have a precise meaning and avoid words with multiple meanings; (2) *concise*—the definition should use the shortest description that is still clear; (3) *noncircular*—the definition should not use the term being defined in the definition; (4) *distinct*—the definition should distinguish a data element from other data elements, a process called disambiguation; and (5) *unencumbered*—the definition should be free of embedding rationale, functional domain, or terminology/lexicon use, or procedural information. Consider the example of weight. The clinical data variable recorded is 120 pounds. Without additional contextual information, the datum has little value. For data to be interpreted and information produced, it must be organized so that patterns and relationships among data can be identified. In HIT, data are understood to be information that has been translated into a form that is more convenient to exchange or process, data often are converted into binary digital form (Whittenburg, 2008).

Metadata are “data about data.” Metadata provide a recognizable way of describing a basic element of data to enable finding, identifying, evaluating, and using the data. Metadata provide the information that makes data understandable, usable, and shareable. Metadata basic elements are purposeful content, structured format, and well-defined vocabulary, which together allow for a precise description of data content, location, and value. Many people create and use metadata, so an International Standard Organization (ISO) standard describes the definition, specification, and content for data element dictionaries and metadata registries. The international standard ISO/IEC standard 11179 on metadata registries addresses the semantics, representation, and registration of the descriptions of data. The 11179 standard specifies the kind and quality of metadata necessary to describe data and the management and administration of metadata in a metadata registry. The purpose of a metadata registry is to maintain a semantically precise structure of data elements (Whittenburg, 2008). Box 33-1 describes some of the uses of metadata in health care.

Data may be reused after the initial use for which the data were collected. A partial list of data reuses in health care are patient care, quality improvement, research, reimbursement, patient safety, decision support, administration, and public health reporting. The generic use case used in this chapter applies data throughout from the first vignette. Reviewing the vignettes allows a recon-

BOX 33-1 Examples of Uses of Metadata in Health Care

CONTROLLED VOCABULARIES

- **Medical Subject Headings (MeSH)** was created and is maintained by the National Library of Medicine (NLM) for indexing and retrieval of citations from the MEDLINE citation database. For more information, refer to <http://www.nlm.nih.gov/mesh/>.
- **The Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT)** was created and is contractually maintained by the College of American Pathologists (CAP). It is available (free to developers) through NLM's Unified Medical Language System (UMLS) for general use in documentation and communication of clinical medicine. For more information, refer to <http://www.ihtsdo.org/snomed-ct/>.
- **The Logical Observation Identifiers Names and Codes (LOINC)** is a clinical terminology important for laboratory test orders and results. Produced by the Regenstrief Institute in Indianapolis, LOINC is a universal standard for identifying laboratory observations. For more information, refer to <http://www.loinc.org/>.
- **The International Classification of Diseases (ICD)** is used to code and classify mortality data from death certificates and the International Classification of Diseases, Clinical Modification (ICD-9-CM/ICD-10) is used to code and classify morbidity data from the inpatient and outpatient records, physician offices, and most National Center for Health Statistics (NCHS) surveys. For more information, refer to <http://www.cdc.gov/nchs/icd9.htm>.

sideration of the types of data reuse options that are part of the HIT environment today.

Messaging

HIT messaging is creating, storing, exchanging, and managing data messages across a communications network. The two main messaging architectures are publish-subscribe and point-to-point. The type of message defines the format (i.e., to send an imaging message is different from sending a clinical piece of data, such as a blood pressure measurement). Messaging involves specific encoding rules to transmit the message. The message contains an identifier, the data to be moved, and a “container” holding the data together. These items make a HIT message that which can be sent between hospital departments, within a health information system, and beyond.

Messaging also may be called a transaction, defined as the exchange of information between two parties to carry out clinical, financial, and administrative activities related to health care. In health care systems, a way to communicate data/information between computer systems is to use encoding rules to send discrete messages, used with the systems having disparate software architectures, internal data formats, and representations. The message is a “container” or envelope for data/information conveyed between computer systems. There are data fields for each data item. The fields may contain numeric, text, binary, waveform, digital image, or other data that need to move between the HIS (Dickinson, 2008).

Each data element is a different data field requiring coding before being sent in the message. Examples of message content in data fields are message identification (ID), patient ID, patient name, provider ID, date/time, service rendered (e.g., vital signs), blood pressure, and heart rate. The message sent *MUST* be the identical message received. See Figure 33-2. The clinical data message also may be a structured document or fill-in-the-blank form. By using HIT standards, a complete document may be sent. Many structured documents contain a standardized data set, such as a preoperative standardized order set.

Modeling

Modeling is a method used to define and analyze the data requirements needed to support the business or clinical functions of a health care entity. Data modeling defines the data elements, their relationships, and their physical structure (architecture) in preparation for HIT standard development or for creating a database. Modeling is further defined as the representation, often mathematical, of a process, concept, or operation of a system, usually implemented by a computer program. For example, infor-

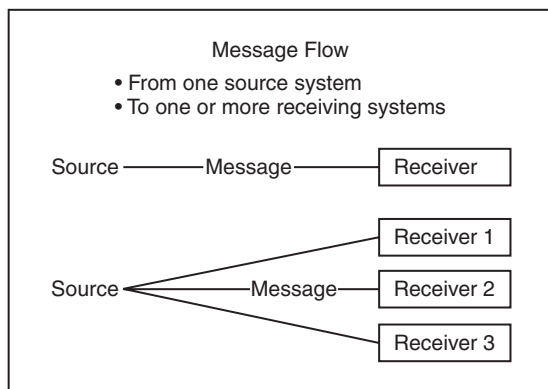


FIGURE 33-2 Message flow.

mation models can be expressed as diagrams or pictorial representations about the characteristics, information flow, and functions of an IT system. Additional attributes of modeling include providing a way to easily break down complex subjects or content into understandable components to clearly show relationships and interactions among different components and serving as a tool to help translate complex business/clinical requirements into a human- and machine-readable language. This process is analogous to a construction blue print and is vital before any software code is written to show context and relationships between the data (Stevens, 2008).

Figure 33-3 provides an example of how modeling could be used in nursing. The model for nursing actions may be used in aggregating data for a number of purposes, such as developing best practices.

Security

In recent years, HIT security has been a popular topic of discussion. All health care entities not only must follow the Occupational Safety and Health Administration (OSHA) regulations to protect their employees and comply with the guidelines of the Health Insurance Portability and Accountability Act (HIPAA) to protect the patient, but also they must protect any patient or employee data that may be shared across care settings. Hospitals often are supported by several different vendors, each providing different software applications that may not communicate (messaging) as the authentication and authorization flows across the vendor

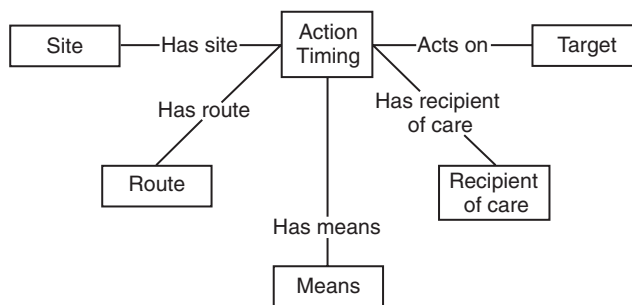


FIGURE 33-3 An example of how modeling is used in nursing research products. © ISO. This material is reproduced from ISO 18104:2003 with permission of the American National Standards Institute (ANSI) on behalf of the International Organization for Standardization (ISO). No part of this material may be copied or reproduced in any form, electronic retrieval system or otherwise or made available on the Internet, a public network, by satellite or otherwise without the prior written consent of the ANSI. Copies of this standard may be purchased from the ANSI, 25 West 43rd Street, New York, NY 10036, (212) 642-4900, <http://webstore.ansi.org>

applications. Each software program has its own way of handling security functions.

The security situation in health care and its communication and application security services have changed during the last decade for several reasons. First, systems have moved from mainframe-based propriety legacy systems to distributed systems running in local environments. Second, systems have more data stored in information systems and these data have become more valuable to the users. Third, patients are more transient and in need of their medical information at different locations. Finally, the patients in hospitals are sicker and may have more health care needs than previously. In the context of computer science, security is the prevention of or protection against access to information by unauthorized recipients and intentional but unauthorized destruction or alteration of that information. Security topics may include confidentiality, integrity, availability, accountability, security management, and information system safety.

Terminology/Vocabulary/Language/Lexicon = Semantic Content

The basis for communication in any meaningful exchange of utterances depends upon the prior existence of an agreed upon set of *semantic* (meaning in language) and *syntactic* (grammar) rules (ISO, 1987).

Clinical content is represented and stored in HIS. Some of the systems process data only on the syntactic level without a concern for the full semantic content present. Making clinical content machine understandable and interoperable is a goal for EHRs. Vocabularies may be defined as a set of terms used for a particular purpose. Terminology development in nursing has been motivated by multiple factors, including implementing computer-based systems in clinical settings, gaining reimbursement for nursing services delivered, documenting nursing contributions to patient care outcomes, educating patients and families as well as students, and enhancing the body of nursing knowledge. Nursing terminologies, in either paper-based or computer-based form, have been designed as enumerated classifications and implemented both as interface terminologies at the point of care and as administrative terminologies to examine nursing data across settings. At the present time, many standardized terminologies exist and no single standardized terminology is complete for the domain in terms of breadth or granularity. Nursing does not have a concept-based terminology that is easily transmitted between different vendors for use. It is important to remember how computer messages are moved from one computer to another. Computer readable data include data files plus computer files that have been translated or moved between a device to a sys-

tem computer capable of storing the data in a form that could be accessed and read by an automated sensing device.

Tools

Health informatics is the scientific field that deals with clinical information, data, and knowledge; storage, retrieval, and optimal use for patient care; problem solving; and decision-making. Health information science is the science of using system-analytic tools to develop procedures for management, process control, and decision making. Information technology tools are software, such as Microsoft Office or Adobe products. Tools are also built as in a database, modeling project, or specific software designed to test other software against a set of standards. Tools should work together allowing smooth movement from one step to the other, ending with testing of working systems. Examples of information technology (IT) tools are communication tools such as telephones, Web conferences, wikis, and blogs; modeling tools such as enterprise architecture models; spreadsheets; and databases.

Mapping

Data mapping is the process of creating data element connections between two distinct pieces of data or data models. Data mapping is used as a first step for a wide variety of data integration tasks, including transformation or mediation between a data source and a destination; identification of data relationships as part of lineage analysis; discovery of hidden sensitive data, such as the last four digits of a social security number hidden in another user ID as part of a data masking or de-identification project; and consolidation of multiple databases into a single database and identifying redundant columns of data for consolidation or elimination. For example, a company that would like to transmit and receive purchases and invoices with other companies might use data mapping to create data maps from a company's data to standardized ANSI ASC X12 messages for items such as purchase orders and invoices. In mathematics and related technology fields, map or mapping is often a synonym for function. Thus, a partial map produces partial function (Data mapping, 2009).

Why Nurses Should Care About Mapping?

Nurses should be interested in mapping to develop best practice guidelines. Considering the previously cited use case, best practices across care settings could be developed for skin care, falls, feeding practices, swallowing issues, exercise-related activity levels, and many other nursing diagnostic planned interventions. Such practices would allow clinical data for ambulatory patients in any

setting to be de-identified and shared and exacerbations to be tracked in a regional or national database. Currently, protocols exist for skin care, fall risk and others. What is missing is a definitive categorized list of de-identified clinical data for all 76-year-old women (for example) with a skin problem and glucose intolerance across care settings and time. This data could be used to make pre-emptive clinical decisions on precise care protocols based on specific nursing knowledge or a specific process, enhancing the knowledge base of nursing.

Consider the multiple services within a hospital and a particular patient admission chest x-ray. The chest x-ray could be used for different purposes by the patient care areas, reimbursement and funding, or for research or surveillance for communicative diseases. Data also may be reused as multiple data sources to be integrated into a combined use. Rules are an effective way to express mapping between information models. However, rules-locked data within local proprietary systems cannot be reused. With a common rule representation, such mappings can be published across the semantic Web, enabling an enterprise or community to progressively build up a rich network of mappings, unifying the information models.

HARMONIZATION AND INTEROPERABILITY

The Institute of Electrical and Electronics Engineers defines *interoperability* as the ability of two or more information technology systems or components to exchange information (functional interoperability) and to use the information that has been exchanged (semantic interoperability) (Institute of Electrical and Electronics Engineers, 1990).

Standards alone are not enough to ensure interoperable EHRs. Some areas of HIT standards have too many similar standards needing to be harmonized to function together for implementation in health information systems. Standards must be implemented in software applications to allow for interoperability among different vendor products in different ambulatory and hospital health information systems. These applications should be designed to provide a pathway and process for electronic communication among software products. As a result, de-identified clinical data are shared. The clinician provides quality care and helps direct future needs as relates to clinical or business requirements.

Standards harmonization may occur after the standard is completed and published; when two or more standards of similar content are mapped to supply different requirements of a use case or a particular HIT system. However, the mapping process is not always as

useful as one might think. The mapped standards may not meet the needed requirements, or the mapping does not produce identical content items. Concise clinical data are important; therefore, the process used to collate, send, or trend clinical data must be precise. Mapping may not produce a precise process. In that case, the standards developers may elect to adopt or adapt existing standards to meet the HIS requirements or bring several proprietary groups together to form a new group to develop a standard to meet required needs.

Harmonization of national standards is the prevention or elimination of content differences in standards having the same scope and similar or nearly identical information. These differences cause hindrances to technical interoperable use of standards across care settings and vendors. Processes to achieve harmonization include convergence, modeling, mapping, translation, and other technical specifications. No single standard has all the needed content and specifications for collecting, transferring, and comparing data across care settings without regard for different vendor applications.

In today's HIT environment, interoperability is as important as security or reliability. An increase in technical complexity drives more intricacy within HIT architecture, framework, and specific infrastructure; this leads to a greater demand for data, data re-use, and information integration as health care works to achieve better patient outcomes. This leads to increased demands on IT vendors, who must ensure that their product solutions are capable of successfully working in an interoperable HIT environment.

CURRENT HARMONIZATION EFFORTS IN THE UNITED STATES AND INTERNATIONALLY

In the United States, HITSP, supported by the American National Standards Institute and HIMSS, is working with the Office of the U.S. National Coordinator and the Department of Health and Human Services for the purpose of harmonizing and integrating standards that will meet clinical and business needs for sharing information among organizations and systems. Table 33-4 has additional information about these organizations. Internationally, a group of like-minded standards development organizations (SDOs) joined together to adopt, adapt, or develop standards required by health information systems. This group is called the Joint Initiative Council. Current members are Health Level Seven (HL7), European Committee for Standardization (CEN)/Technical Committee 251 Health Informatics, Clinical

TABLE 33-4 National U.S. Health Standards Development Organizations

Acronym	Organization	Organization Scope	Link
ASC X12	Accredited Standards Committee X12	ASC brings together business and technical e-business professionals in an open, cross-industry setting to develop and maintain electronic data exchange standards, based on X12 EDI, XML, and UN/EDIFACT formats and collaborates with industry organizations.	www.x12.org
DISA	Data Interchange Standards Association	Established as a not-for-profit, the Data Interchange Standards Association (DISA) is home for the development of cross-industry electronic business interchange standards.	www.disa.org
HITSP	Health Informatics Technology Standards Panel	HITSP facilitates the harmonization of consensus-based standards necessary to enable the widespread interoperability of health care information in the United States. Including a wide range of stakeholders, the Panel will assist in the development of the U.S. Nationwide Health Information Network (NHIN) by addressing issues such as privacy and security within a shared health care information system. The Panel is sponsored by the American National Standards Institute (ANSI) in cooperation with strategic partners such as the Healthcare Information and Management Systems Society (HIMSS), the Advanced Technology Institute (ATI) and Booz Allen Hamilton. Funding for the Panel is being provided via the ONCHIT1 contract award from the U.S. Department of Health and Human Services.	www.ansi.org/hisb
NCPDP	National Council for Prescription Drug Program	NCPDP creates and promotes standards for the transfer of data to and from the pharmacy services sector of the health care industry.	www.ncdp.org

Data Interchange Standards Consortium (CDISC), International Organization for Standardization/Technical Committee 215 (ISO/TC 215), and International Health Terminology Standards Development Organization (IHTSDO). Standards developed from the Joint Initiative Council are in process, but as of 2009, none have been published. More information about these organizations is available in Table 33-5.

SUMMARY

Recognizing the frequency of medical errors (Kohn, Corrigan, & Donaldson, 2000), the HIT community has been working to develop processes to increase patient safety and decrease medical errors. The Agency for Healthcare Research and Quality (n.d.) has resources in their Knowledge Library for EHRs and projects funded through their U.S. agency.

Over 10 years have passed since the Institute of Medicine report was published and much has been accomplished by HIT standards to address health care needs. The highlights of standards-related initiatives includes the work of the Healthcare Enterprise to develop use cases into technical frameworks, test these frameworks, and demonstrate interoperability with many different vendor applications. In addition the National Institute of Standards and Technology (NIST) developed tools to validate HIT messages sent between systems. Important work by HITSP focused on developing interoperability specifications for generic use cases that could be applied across health care settings. Finally, HIT standards have been developed across country borders for global use with each country's National Health Information Infrastructure. The road to increasing patient safety and decreasing medical errors is long and wide, with many reference points.

TABLE 33-5 International Health Standards Development Organizations (SDOs)

Acronym	Organization	Organization Scope	Link
CEN	European Committee for Standardization	CEN contributes to the objectives of the European Union and European Economic Area with voluntary technical standards that promote free trade, the safety of workers and consumers, interoperability of networks, environmental protection, exploitation of research and development programs, and public procurement.	www.cen.eu
IEC	International Electrotechnical Commission	IEC is the leading global organization that prepares and publishes international standards for all electrical, electronic, and related technologies. These serve as a basis for national standardization	www.iec.ch/
IHTSDO (formally known as SNOMED CT)	International Health Terminology Standards Development Organization formally known as Systemated Nomenclature of Human and Veterinary Medicine	The purpose of IHTSDO is to develop, maintain, promote, and enable the uptake and correct use of its terminology products in health systems, services, and products around the world and undertake any or all activities incidental and conducive to achieving the purpose of the Association for the benefits of the members. The IHTSDO seeks to improve the health of humankind by fostering the development and use of suitable standardized clinical terminologies, notably SNOMED CT, in order to support safe, accurate, and effective exchange of clinical and related health information. The focus is on enabling the implementation of semantically accurate health records that are interoperable. Support to Association Members and Licensees is provided on a global basis, allowing the pooling of resources to achieve shared benefits.	www.ihtsdo.org
ISO	International Organization for Standardization	Global Vision supports facilitation of global trade; improvement of quality, safety, and security; environmental and consumer protection; and the rational use of natural resources as well as the global dissemination of technologies and good practices.	www.iso.org
NIST	National Institute of Standards and Technology	NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.	www.nist.gov
UN/CEFACT	Centre for Trade Facilitation and Electronic Business under UN/ECE United Nations Economic Commission for Europe established immediately post WWII	The United Nations, through its Centre for Trade Facilitation and Electronic Business (UN/CEFACT), supports activities dedicated to improving the ability of business, trade, and administrative organizations, from developed, developing, and transitional economies, to exchange products and relevant services effectively. The focus is on facilitating national and international transactions through the simplification and harmonization of processes, procedures, and information flows, thus contributing to the growth of global commerce.	info.ece@unece.org

TABLE 33-5 International Health Standards Development Organizations (SDOs)—cont'd

Acronym	Organization	Organization Scope	Link
WHO	World Health Organization	WHO is the specialized agency for health of the United Nations whose objective is the attainment of the highest possible level of health by all peoples. Health is defined as a state of complete mental, physical, and social well-being and not merely the absence of disease.	www.who.org

BOX 33-2 Additional Resources for Electronic Health Records

Health Level 7 (HL7). Electronic health record. Retrieved March 17, 2009, from http://www.hl7.org/ehr/downloads/index_2007.asp

openEHR (2007). *Welcome to openEHR*. Retrieved March 16, 2009, from <http://www.openehr.org/home.html>

U.S. Indian Health Service. (n.d.). *Welcome to the RPMS electronic health record website*. Retrieved March 16, 2009, from <http://www.ihs.gov/CIO/EHR/>

Much more needs to be done. HIT standards adoption and implementation includes many vendor products sold to health care entities. Not-for-profit health care organizations could benefit from financial assistance for large purchases of IT systems. Clinicians, including nurses, can benefit with education on the use of health information systems, and federal and state HIT legislation is needed to facilitate the implementation of IT in healthcare.

Nurses are needed to participate in these activities. How can you participate? Educate yourself about IT use in health care. Attend AHRQ health information technology programs. Review Web sites for federal and state information on the use of IT in health care. Ask your physician about use of a personal health record for yourself and/or family. Volunteer to do hands-on learning related to HIT. Become a member of any of the Nursing Informatics Communities such as American Medical Informatics Association and Nursing Informatics Work Group, HIMSS and the Nursing Informatics Community, SNOMED Nursing Work Group, or the IHE Nursing Sub-Committee. Your help is needed (Box 33-2).

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Personal Health Records as a Tool for Improving the Delivery of Health Care

MIKYOUNG LEE

Medicine techniques have noticeably advanced and improved our chances to have a healthy life; on the other hand, the “system” of health care services has become more complex, specialized, and fragmented. Today, more and more people move from clinic to clinic and city to city to seek health care services. For example, a person who complains of a tingling sensation in the legs and back pain may visit a pharmacy, a chiropractic clinic, a primary physician, a hospital, and a rehabilitation facility. In another case, a person suffering from severe tooth decay may visit a pharmacy near home, a dentist 2 miles away from home, and an endodontist or a periodontist, if necessary, at different locations. Both persons consequently come to leave a trail of medical records that are not generally shared among health care providers. Each piece of information needs to be integrated to solve the individual’s health problems.

People typically do not have access to the entire catalogue of health information about themselves because it is dispersed among multiple health care providers, hospitals, laboratories, pharmacies, insurers, and related health care entities; however, this history is important in making clinical decisions (Krohn, 2007). We can easily presume that patients often need to repeat their story over and over to nurses, interns, residents, specialists, and so on when they are being admitted to a hospital or even to an emergency room. Often they cannot remember all the information off the top of their heads.

To consolidate all of patient’s/consumer’s health information and to track, update, and share it, a unified and person-owned health record, called a *personal health record* (PHR), has been proposed. The idea of a PHR is not new but has been presented in paper records for decades (Clarke & Meiris, 2006); it is similar to mothers’ diaries for their children’s health. The potential benefits

of a PHR, particularly its electronic applications, are newly appreciated from many perspectives.

As advanced telecommunication technologies, including the Internet, have transformed people’s daily lives in the way they work, socialize, bank, shop, and travel, the use of such technologies for getting health information also increases. The electronic PHRs, relying on the capability of the Internet to connect people and information, provide timely access to a patient’s complete health history, overcoming physical challenges to exchange personal health information across health care institutions. A PHR is valued as an ideal medium for quick, efficient, and cost-effective health care delivery and is gaining in popularity. This situation implies that health care providers have a new opportunity to influence health promotion, disease prevention, and illness management (Brennan & Friede, 2001). In this chapter, the definitions, social driving forces, common features, and types of PHRs are described. The critical issues and nurse’s role related to PHR development and implementation are discussed.

WHAT IS A PERSONAL HEALTH RECORD?

1. **Definition.** There is no universal definition of a PHR as precise definitions are still evolving. The American Health Information Management Association (AHIMA) defines a PHR as “an electronic universally available, lifelong resource of health information needed by individuals to make health decisions. Individuals own and manage the information in the PHR, which comes from health care providers and the individual. The PHR is maintained in a secure and private environment, with the individual determining rights of access” (AHIMA e-HIM Personal Health Record Work Group, 2005, p. 24). The Markle Foundation defines a PHR as “an Internet based set

of tools that allows people to access and coordinate their lifelong health information and make appropriate parts of it available to those who need it" (2003, p. 3).

Based on the concept of keeping personal health information, a PHR could be any method for aggregating and keeping track of all the health care episodes of an individual, such as immunization, allergies, operations, and medications (Kimmel, Greenes, & Liederman, 2005). Many people already maintain paper copies of their medical information at home (Endsley et al., 2006; Smith, 2006). However, a main disadvantage of a paper-based PHR is the lack of accessibility. As one sees in the definitions of PHR above, the fundamental concept is based on electronic, rather than paper-based application, enabling the users to (1) collect, organize, and monitor lifelong personal health data; (2) gather knowledge; and (3) share health information or personal data in a secure and confidential environment at any time and any place.

2. *Personal Health Record (PHR) and Electronic Health Record (EHR).* Electronic records of health information have many names: EHR, electronic medical record (EMR), and PHR are common ones. A key distinction among these names is location and ownership of the record. EHR seems to be accepted globally as the generic term for the vision of electronic patient care systems, while EMR and PHR can be described as forms of the EHR. However, a PHR is distinguishable from an EMR in that it is managed and controlled by patients (individuals); the EMR lies under the sole control of health care providers (Tang et al., 2005; Waegemann, 2003). The PHR is separate from and does not replace the legal medical record of any provider (AHIMA e-HIM Personal Health Record Work Group, 2005).

LAUNCH

1. *Federal Initiatives.* Many countries are combining PHRs with their national e-health infrastructures initiatives (Clarke & Meiris, 2006). In the United States, initiatives concerning EHRs and PHRs have been publicly launched since April 2004 when President Bush announced an executive order for the advancement of the EHR, promising that most Americans should have a personal electronic medical record within 10 years. Following this announcement, the Office of the National Coordinator for

Health Information Technology was established, highlighting the importance of the PHR as a nexus to support the goals initiated by the this office, such as informing clinical practice, interconnecting clinicians, providing personalized care, and improving public health (Thompson & Brailer, 2004). The Markle Foundation and the National Committee on Vital and Health Statistics are focusing on PHRs. The Centers for Medicare and Medicaid Services also supports private firms in conducting feasibility studies to create PHRs using existing claims data and to help design a user-friendly PHR for all 42 million Medicare beneficiaries (Greene, 2007).

At the same time, there is an emerging initiative to build interconnected electronic health information systems across hospitals and databases in given geographic areas known as Regional Health Information Organizations (RHIOs), whose goal is to improve the effectiveness, efficiency, and overall quality of patient care (http://www.himss.org/ASP/topics_rhio.asp). These RHIOs intend to eventually support a National Health Information Network (NHIN), a government-led project to promote nationwide connectivity and interoperability. Therefore, at the level of substantial implementation, PHRs will potentially work as building-blocks to support the actions of RHIOs and the National Health Information Network (Yasnoff et al., 2004).

2. *Consumerism.* People increasingly want access to information regarding their health concerns and to take a more active role in health care decisions (Krohn, 2007; Markle Foundation, 2005). We call them *health care consumers*. The phenomenon of seeking health information online is particularly increasing as the most popular reason to surf the Internet after e-mail and researching a product or service before buying it (Baker et al., 2003; Fox & Fallows, 2003; Nelson & Ball, 2004). Consumers also research which hospitals/clinics or providers are better by reviewing provider quality report websites (e.g., Hospital Compare [www.hospitalcompare.hhs.gov], HealthGrades [www.healthgrades.com]).

Health care seekers, however, can be easily overwhelmed by enormous amounts of indistinct information after surfing the Internet. A way to aggregate information, comprehensive but tailored to the individual's health status, is needed. This need can be met by some PHRs that include an interaction mechanism, such as querying health information tailored to individual needs or requesting feedback

to reinforce self-management of health care. In the PHR the individual is the center of health care with the ownership of the record. Therefore, PHRs are envisioned as an instrument to meet the individuals' needs for acquiring health information and this approach is consistent with the growing consumer empowerment concept of inviting patients/consumers to be partners in health care (Brennan, 1999; Kaplan & Brennan, 2001).

TYPES OF PERSONAL HEALTH RECORDS

More than 200 PHR products are now available and vary in terms of architecture, medium, features, functions, and business models. There are paper-based and desktop-stored only PHRs, but the majority of the newer PHR products are Internet based. Some PHRs are free; some charge the consumer directly for a PHR; others charge the consumer's employer. Depending on provider types, PHRs can be categorized as follows (Halamka, Mandl, & Tang, 2008; Krohn, 2007; Pisano, Parker, & Rafdal, 2006):

- ◆ *Employer sponsored PHRs* introduce responsibility and wellness in health care for employees (e.g., Dell, Intel, PepsiCo, and Wal-Mart).
- ◆ *Insurance sponsored PHR/Payer PHRs* often contain alerts, context-specific educational content, health risk assessments, and messaging with claims-based information.
- ◆ *Provider sponsored PHRs* enable an abstract of or parts of their clinical records to be automatically downloaded in the PHR or EHR as an adjunct to the hospital or clinic EHR.
- ◆ *Independent/Free-standing/Stand-alone PHRs* are maintained exclusively by the consumer but are not interoperable with other information systems.
- ◆ *Hybrid PHRs* are more advanced and include the best functionalities from other PHR models and offer consumers ownership and secure connectivity across information systems.

The ideal PHR would capture health information in different formats from different sources and allow data exchange. Let's assume a situation where the data cannot be exchanged between PHRs: an individual leaves his employer for another company, changes the insurance company, or uses different clinics/providers. The existing PHR may remain behind, and the individual would need to recreate a PHR with a beginning health history. This exchangeability issue is discussed later.

FEATURES AND FUNCTIONS OF PERSONAL HEALTH RECORDS

There is no standard model of the PHR. Although physical characteristics and formats vary, some components, such as contents, remain the same: patient demographics, security and privacy policy, history of present health conditions and past illnesses, history of visits and treatments, medications and supplements, laboratory/radiology results, diagnostics tests, immunizations, allergies, and family history (Kim et al., 2004; Kim & Johnson, 2002, 2004; Sun, 2001). Additionally, any information pertinent to an individual's health can be contained within PHRs. While the common contents represent information pulled from medical records, some concrete elements—sufficient for motivating individuals to precisely monitor their health conditions and to pursue healthy behaviors—need to be integrated into the PHR. It is also preferable for its design to be driven by health behavior change theories such as the health belief model, social cognitive theory, and diffusion theory (Lee, Delaney, & Moorhead, 2007). The design of the PHR needs to subsume a deep understanding of the individuals' daily life related to health challenges. For example, PHRs can include daily living habits (e.g., diet and exercise logs), social history, educational materials, disease self-management (e.g., blood sugar recordings or blood pressure records), screening instruments (e.g., development, behavior, depression), self-report of signs and symptoms, or functional status (Halamka et al., 2008; Kim et al., 2004; Krohn, 2007; Rath, 2008; Rocha, Romeo, & Norlin, 2007). A PHR can contain nursing-specific fields with self-assessment questionnaires and feedback to help individuals check changes in health conditions using a holistic view, that is, incorporating physiological, psychological, health knowledge, and social dimensions (Lee et al., 2007).

PHRs generally enable the users to enter, view, and exchange these data. In addition, PHRs provide such functions as scheduling appointments, renewing prescriptions, accessing health information resources, linking to affiliated clinics, communicating with providers, and joining online self-support groups. More advanced PHRs offer 'alerts' to trigger reminders of appointments, phone calls, or dues to receive evidence-based or nationally recognized treatments or tests (Greene, 2007; Krohn, 2007; Rocha et al., 2007). PHRs that have electronic referral systems linked with provider-owned EMRs can increase the efficiency of the physician referral process (Kulu-Glasgow, Delnoij, & de Bakker, 1998).

The current PHR is mostly text-based, but PHRs that can upload images and/or motion videos are possible (Kim et al., 2004).

The effort to create more advanced PHRs is continuing. However, it would be a key principle to design a PHR with individual-specific and consumer-level health care information. Another challenge is how PHR interfaces can improve the accuracy, completeness, and validation of consumer (layperson)-entered information. The guided entry of data would prompt accurate entry of more detailed information (Kim & Johnson, 2004). The large variety of data types and health terminologies also remains a challenge of PHR development.

BENEFITS OF PERSONAL HEALTH RECORDS

Many potential benefits of PHRs to patients, the public, health care providers, and the entire healthcare system have been acclaimed from the following perspectives:

1. *Efficiency in Health Care.* Transmission of and access to comprehensive and detailed personal health information across all sites of care would alleviate much of the time and frustration of both patients and clinicians from repeating the same health history taking. Clinicians instead could focus on updating information of patient condition and discussing possible treatment options with the patient (Kim et al., 2004). The consolidated information in the PHR may minimize the duplication of diagnostic and therapeutic interventions and exclude ineffective treatments. Also, it will save extra paper filing and generate more accurate data. More exposure to health information via PHRs, possibly on a daily basis, also can increase patient compliance with clinical care processes and further reduce length of hospital stays (Kim & Johnson, 2002; Protti, 2005; Rocha et al., 2007; Tang et al., 2005; Ueckert et al., 2003). PHRs offering estimated health risks tailored to individuals' characteristics and feedback or automated trending of health conditions would contribute to efficient health prevention and maintenance.
2. *Comprehensive and Continuous Care.* The PHR, as a coherent document, can result in comprehensive information and optimize the coordination of care. For instance, the integrated information from multiple health care providers would allow providers of each site to know a total list of medications patients are taking or what procedures or tests have been administered. A PHR also assures continuity through all the stages of care (health prevention, treatments,

rehabilitation, promotion) and continuity across places (primary clinics, hospitals, rehabilitation, long-term facilities, or homes) (Lee et al., 2007).

Because of this benefit, the elderly, people who are suffering from chronic illnesses or disabilities, and children with developmental and medical problems have particular demands for recording and keeping their records (Denton, 2001; Farmer et al., 2004; Greene, 2007; Markle Foundation, 2003, 2004; Millard & Fintak, 2002; Perrin, Lewkowicz, & Young, 2000). These populations and their caregivers expect to benefit from using a PHR for carefully monitoring their health problems, knowing where they are in the continuity of care, and managing their health care progress, which often is accomplished through multiple health care settings.

3. *Education and Empowerment in Health Care.* The PHR provides an opportunity for health professionals to educate patients/individuals about what health information to consider important (Kupchunas, 2007). Instructions of how to accurately monitor health status and update recording and reliable information about health conditions and recommended therapies will make the public more aware of their health conditions and encourage adherence to treatments. Consumers' health literacy and ability to participate in decision making can be enhanced. Involvement of family or other significant individuals in recording information in the PHR would be another opportunity for providing health education in cases in which the patient may be incapable of maintaining the record (Kupchunas, 2007; Rocha et al., 2007).

This education obviously leads to health care consumer empowerment in his or her own health care, which is an important philosophy of PHRs. Patients/consumers can be active managers of their own health care by documenting, tracking, evaluating, and monitoring their health conditions and updating their own records by themselves (Kupchunas, 2007; Munir & Boaden, 2001; Protti, 2005; Ueckert et al., 2003).

4. *Health Community.* Individuals with illnesses, especially those with chronic diseases, seek knowledge-sharing opportunities and collaboration with other patients and families to compare care experiences, therapies, and lessons learned with similar medical diagnoses or health problems. PHRs provide portals for doing so (e.g., chat rooms, forums, e-mails, or message boards) (Halamka et al., 2008; Rocha et al., 2007). These opportunities may be even more important as the health care system tries to meet the needs of a growing elderly population who may use the

Internet as a means of staying connected when mobility declines.

5. *Improvement in Patient-Provider Relationships.* Thorough information of health conditions, either accumulated by self-monitoring or transferred from clinic records, would facilitate communication and interaction between patients and their physicians (Morrissey, 2005). The explanations of test results and asynchronous messaging and consultations via PHRs also enhance communication between patients and clinicians (Rocha et al., 2007). Increased communication and interaction will lead to a better focus on individual health problems and treatments as well as improvement in patient-provider relationships.
6. *Enhancement of Patient Safety.* Comprehensive health information in one location (record) reduces the chance of conflicting information (Tang & Lansky, 2005). The PHR also can contribute to the prevention of medical errors because individuals can use the PHR to monitor and verify health data (Greene, 2007).
7. *National Health Care Database Establishment.* Integration of personal health data into local and regional repositories (e.g., the state's immunization registry, newborn screening and birth defects registries, national cancer registry, and other specified health programs' databases) will help in the creation of health care databases focused on improving quality of care and reforming health care policy. The findings and guidelines from database analyses can in turn be transferred into PHRs, thus informing the users of new health care recommendations for improving their health. PHRs can be a crossroads to mutually benefit health care entities, users, and the public in general.
8. *Research.* Only if users share their de-identified personal health record data can PHRs provide opportunities for cohort studies, health prevention studies, public health surveillance, and other clinical trials. For instance, a clinical trial of an employee health promotion program at the Hewlett Packard Corporation tested the value of a PHR for influencing knowledge, attitudes, beliefs, and behavior around "influenza prevention" (Halamka et al., 2008).

(Halamka et al., 2008; Krohn, 2007; Markle Foundation, 2004; Smith, 2006).

1. *Protection of Privacy and Confidentiality of Personal Health Information.* The incidence of identity theft is growing in the use of online resources. Further, personal health information is sensitive and highly private, such as sexually transmitted diseases, HIV, substance abuse, family planning, and mental health (Greene, 2007; Halamka et al., 2008). Individuals with chronic illnesses even worry they could be subject to limited promotions or termination when their health information is open to their employer-sponsored PHR (Smith, 2006). It is the highest priority that PHRs should be equipped with policies and technical mechanisms of accurate authentication, security, and privacy (Halamka et al., 2008; Markle Foundation, 2005). Also, the consent process is necessary for the deputies to access information of individuals who may not be able to use PHRs (Ueckert et al., 2003). For example, parents or caregivers of their children, adolescents, or persons with mental illness need special permission. Because the range of sensitive data is different for each individual, it might be sensible to create options to automatically hide certain sensitive information or to unhide the information at the user's discretion (Greene, 2007), to enable individuals to establish item-by-item permission, or to sequester sensitive information in a separate document (Halamka et al., 2008). Automated audit-trail function (record of who accessed or edited what data and when) may be a helpful option to support privacy.
2. *Interoperability and Security in Information Change.* A definitive feature of a PHR is the ability to collect and consolidate personal health data and to allow secure access at all points of the health care network. Interoperability is critical in the long run. The heterogeneous sources of information contain data in different codes, formats, structures, levels of granularity, and vocabularies to identify similar medical concepts (Krohn, 2007). If exchangeability and interoperability is not available, consumers using a certain PHR may need to complete another set of PHR documents for different clinics. A common framework/standard for data exchange is necessary. Many software companies and health care organizations (e.g., Microsoft, IBM, Google, Kaiser-Permanente, Intermountain Healthcare, etc.) are now cooperating to develop fully optimized PHRs. However, it is also a critical question which entities should host databases of PHRs and work as reliable core organizations

RELEVANT ISSUES

As previously noted, many potential benefits of PHRs have been acclaimed; however, many subsequent issues need to be addressed for optimizing such benefits

to facilitate the network across the various PHR providers.

3. *Standards for Data Coding and Exchange.* As transferability and interoperability are crucial attributes of PHRs, many standards are being developed and adopted: for record architecture to accommodate all types of data and support different views; for use of terminology to preserve the same meaning of the health status, diseases, and medical procedures against multilingualism; and for security to ensure user authentication, digital signature, and data transmission (Gearson, 2007; Greene, 2007; Halamka et al., 2008; Iakovidis, 1998; Krohn, 2007). These include the Health Level Seven Reference Information Model, the Digital Imaging and Communications in Medicine standard for imaging, the Logical Observation Identifiers Names and Codes vocabulary for laboratory tests, the Accredited Standards Committee X12 administrative transaction standard, and the Institute of Electrical and Electronic Engineers/European Committee for Standardization/International Organization for Standardization 1073 medical device communication standard (Markle Foundation, 2003). Standardized nursing terminologies (e.g., NANDA International, Nursing Interventions Classification, Nursing Outcomes Classification, International Classification of Nursing Practice, Clinical Care Classification) support the exchange of nursing information. The concerted effort of many disciplines and countries to improve these standards and adopt them into PHRs should be continued.
4. *Consumer Vocabulary and Health Literacy.* Understanding the content of the PHR may be a more important issue to users. Unless understandable, the content may be useless. In reality, laypersons are familiar with only a small portion of health care terms. Much of the health-related information found on the Web is written at higher reading levels, resulting in difficulty in retrieving, discriminating, and communicating information (Eysenbach & Jadad, 2001; Graber, Roller, & Kaeble, 1999). Terminology has been recognized as a main barrier to decision making and full participation in a user's own care. For example, although *myocardial infarction*, *contraception*, and *depressed mood* are Unified Medical Language System (UMLS)-preferred terms, consumers tend to use *heart attack*, *birth control*, and *sadness*, respectively. "Knowledge: Illness Care" is a standardized nursing outcome term, but a consumer might frame this need as, "I need information about what is wrong with me." Better interfaces that consider the

consumer's health literacy level will contribute to the wider use of PHRs because converting medical jargon to consumer/patient-friendly terms will help consumers understand health information and improve the usability of PHRs (Halamka et al., 2008; Krohn, 2007). This consumer-friendly terminology is referred to as *consumer health vocabulary*. An open resource (<http://www.consumerhealthvocab.org/>) and IMO Clinical Interface Terminology are examples that demonstrate the features of consumer health vocabulary.

5. *Evidence-Based Health Information.* When searching the Web for health information, we often confront results of mixed relevance because of a lack of search precision. It has been proposed that a development of the PHR operator would enable specific searches based on individual demographics, laboratory results, problems or medications, while at the same time protecting confidentiality (Halamka et al., 2008). To meet a personalized need for health information, installation of an evidence retrieval system or automated decision-support system within PHRs would constitute a great future project. Also, if nurses consider a PHR as the portal to disseminate nursing information to the public, the development of evidence-based nursing knowledge and mechanisms for retrieving the knowledge should be the nurse's next obligation in meeting consumers' needs.
6. *Selection of PHRs.* Consumers should be cautious when selecting a PHR product. In addition to the PHR structure for protecting confidentiality and security, consumers should be equally concerned about the following questions: Who owns the data? Should certain types of data be restricted? How is access control managed among multiple providers? Are communication channels, authentication, encryption, and security provisions compliant with regulations? (AHIMA Personal Health Record Practice Council, 2006; Krohn, 2007; Smith, 2006) Some agencies, such as BBB Online, TRUSTe, and CPA Web Trust certify the safety of PHRs (Smith, 2006). When using a certain PHR, verifying certification from these agencies may alleviate concerns. Another set of attributes to evaluate the sites include presentation, language, noise, audience, content, navigation, interactivity, vocabulary, and references (Lang & Collen, 2005). The quality of the information in terms of its accuracy, comprehensiveness, and readability also should be considered. Further efforts to build verifiable user-based attributes and criteria are necessary (Lang & Collen, 2005).

THE NURSE'S ROLE IN DEVELOPING AND IMPLEMENTING PERSONAL HEALTH RECORDS

In truth, an interdisciplinary team approach should be applied in the development and implementation of a PHR, composed of clinicians from nursing, physical therapy, occupational therapy, speech, psychology, medicine, and case management (Kupchunas, 2007). Each discipline shares responsibility for a portion of educational needs about health care and the PHR itself.

Nursing is an essential part of collaborative health care and nursing care has been documented in health records; therefore, it is logical that the nursing perspective should be a component of the PHR content (Lee et al., 2007). Nevertheless, nurses rarely have been involved in the development and expansion of the PHR, and few PHRs encompass nursing care elements. Nurses historically have taken and recorded a patient's health history at admission to the hospital or care facility. They have developed and implemented programs and practices to relieve discomfort and symptoms, to modify health behaviors, and to monitor changes in patient conditions. This aspect of nursing can be applied and transformed into guided entries or questionnaires within PHRs to inform patients or consumers on what they need to know about their condition(s) and improve self-management.

Nurses also can expand their role related to PHR implementation by assisting patients/individuals in establishing their PHRs. For instance, nurses can validate accuracy of patient-entered information, identify discrepancies between prescribed medications and over-the-counter ones, and update the medication list as appropriate. In addition, nurses can use this opportunity to initiate conversations about health prevention, maintenance, and promotion issues (Kupchunas, 2007). The PHR can be a bridge for nurses to actively move the field of nursing even closer to satisfying the needs of health consumers and the public beyond caring for only those seeking health care in clinics or hospitals.

SUMMARY

While the advent of the Internet was a turning point that profoundly changed our daily lives, the PHR is a decisive tool that will revolutionize the health care delivery system by (1) focusing on the individual's health needs and priorities, (2) increasing interconnectivity across health care entities on the basis of personal health information networks, and (3) guiding and empowering

individuals to participate in their health care. The PHR will generate greater quality, safety, accuracy, efficiency, and continuity in health care and enhance the care process for patients and care providers.

The general population is just beginning to be aware of PHRs (AHIMA Personal Health Record Practice Council, 2006; Raths, 2008). However, more than 7 out of 10 Americans support the creation of a nationwide health information network and a secure online PHR service; they believe PHRs will enhance health care quality and efficiency (Markle Foundation, 2005). The use of PHRs will obviously flourish. Many policy issues and technical challenges revolving around the development and implementation of PHRs will be the focus of research projects. It is time for nurses to consider PHRs as a new opportunity to enhance the capacity of nursing in consumer health and to make a difference in health care in this electronic era. Nurses need to be more actively involved in PHR projects, collaborating with other health care professionals.

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Global Challenges of Electronic Records for Nursing

ANNE CASEY

The greatest challenge facing nursing and health care is an aging population that will need to be cared for by fewer health and social care personnel within limited budgets. Emerging models of health service provision in developed countries focus largely on self-care; people are now expected to take responsibility for preventing ill health and disability and to take a more active role in managing their chronic conditions. To address future challenges, health care must become better connected. Irrespective of the organization and financing of future health services, electronic records and communications that are focused on the service user/patient will become the cornerstone of safe, effective, distributed health care. However, there is some way to go before electronic records achieve their potential: a recent systematic review (Urquhart et al., 2009) found that nursing information systems have failed to have any impact on practice or outcomes.

Following a brief introduction to the nature and scope of electronic records, this discussion on global challenges of electronic records for nursing is organized around four propositions:

- ◆ Nurses need to think in new ways if they are to support effective use of electronic records by health care consumers.
- ◆ Electronic record systems will not benefit nursing until nurses are better able to describe their work to inform system design.
- ◆ Electronic records pose a significant risk to patient safety, yet they are not subject to rigorous evaluation or risk management.
- ◆ Nursing content of electronic records must be standardized and based on evidence-based practice standards.

ELECTRONIC RECORDS

In health care, a number of different terms are used to represent the information that is stored about an individual, family, or group. The trend is away from discipline-specific records, such as nursing records or physiotherapy records, towards records that reflect a patient focus and team-based care. Terms such as *health record* or *patient record* and adjectives such as *multidisciplinary*, *shared*, and *patient-held* are becoming more widely used. In many organizations, nursing records still exist as separate entities, either on paper or in electronic “nursing systems.” In others, there may be a single patient record with no way of distinguishing which discipline contributed an entry, other than by the name or qualifications of the individual. Other models include a single record but with separate sections for the different disciplines. Designers of record systems are expected to customize designs to support multiple models, sometimes within the same organization; this customization is costly and time consuming. Alternatively, managers may try to use the introduction of electronic records to drive desired changes in practice in the belief that, for example, a single shared record will lead to more integrated team working. Unless this kind of change is carefully managed, it could result in the failure of both the system and the practice change.

Where electronic records are used, they are generally of two types: one held by the organization (referred to in this chapter as the “electronic patient record”) and one held by the patient/service use (referred to as the “personal health record”). The phrase “nursing elements of electronic records” is preferred since it refers to information in any type of record related to nursing assessment, care, and outcomes relevant to nursing.

Unfortunately, the research evidence does not help with the decision as to which type of record system is beneficial for a particular setting or patient group. In their review, Urquhart and colleagues (2009) identified studies that compared (1) different formats for nursing records, (2) paper records with computer records, and (3) patient held with centrally held records. The reviewers concluded that it was unclear whether changing an entire system of recording nursing care (e.g., from paper to computer) had any effect on care: "There was no evidence of any measurable difference in nursing practice or patient outcomes between the use of one kind of nursing record system and another" (Urquhart et al., 2009, p. 13). A significant issue raised by the nine studies in this review (eight randomized controlled trials and one controlled before and after study) was the relationship between practice and the record. The reviewers cite Spranzo (1993) who noted that the measured quality of nursing care remained constant despite significant improvements in the content of the record. Urquhart and colleagues (2009) concluded that, as a precursor to development of nursing information systems, qualitative studies are needed to explore the relationship between practice and information use by nurses.

DEFINITION, SCOPE, AND BENEFITS

In many countries a health record is defined in law, particularly in privacy legislation. In the UK Data Protection Act (HM Government, 1998), a health record is defined as:

... any record which (a) consists of information relating to the physical or mental health or condition of an individual, and (b) has been made by or on behalf of a health professional in connection with the care of that individual (Section 68).

In addition to handwritten and computerized records, the definition includes x-rays and reports, videos, radiographs, tape records, photographs, and so on. However, the electronic record is sometimes regarded simply as an entry point or portal to the multitude of records that may be held electronically in different places about the same patient. This way of thinking has evolved as technology and standards have made it possible to link records held by different organizations, making it easier to share information (with appropriate safeguards) so that it is available when and where it is needed to care for the patient.

The relatively new concept of the electronic personal health record is evolving rapidly, driven in part by universal availability through online providers such as Google Health. This type of record may be at the level of a simple diary of medication and appointments or it may be a complete "cradle to grave" health record, with links into and out of records held by provider organizations. Although definitions, functions, ownership models, and technical features differ (Kaelber et al., 2008), personal health records have two common features: the record is held by the person, and he or she controls access and content.

CONSUMERS AND ELECTRONIC RECORDS

NURSES NEED TO THINK IN NEW WAYS IF THEY ARE TO SUPPORT EFFECTIVE USE OF ELECTRONIC RECORDS BY HEALTH CARE CONSUMERS

Until recently, confidentiality and privacy have been the big challenges in relation to consumers and electronic records. As technology and practices improve, consumers are beginning to trust health professionals with their information in electronic format (Chhanabhai & Holt, 2007). However, a number of equally complex challenges remain, including patients' access to and use of health information, their access to electronic records, and their use of personal health records. Many nurses have not yet been adequately prepared to work alongside patients who have thoroughly researched their condition. They may feel uncomfortable with patients who request to see the nursing record or question its accuracy compared to their personal record. If nurses are not accustomed to viewing patients as active participants or partners in care, they will have to develop new ways of thinking and new practice competencies. Unfortunately, competencies in supporting patients to access and use health information may not yet be integrated into nursing curricula.

Access to and Use of Health Information

If people are to play an active part in the management of their own and their family's health, they need information about how to stay healthy, prevent accidents, manage illness, and live with disability. The goal of information management is that people will have the information they need to make decisions, in a form they can understand, at the time they need it. There has been significant investment and much success in using information technology to support healthy choices, care decisions, and self-management, from consumer

Web sites to text messages that remind people to take their insulin. The explosion of health information on the Internet has obvious drawbacks: How does the person distinguish between evidence-based, good quality information from authoritative sources and material that is irrelevant or harmful?

The trend towards greater involvement of patients and service users in the health care process is also a strong driver for the development of personal health records. The prospect of the person-held record coexisting with the records held by health organizations was discussed by the European Commission as far back as 1998 (Iakvodis, 1998). They also feature in the United States National Research Council's (2009) list of things not yet supported by information technology systems: "Empowerment of patients and their families in effective management of health care decisions and their implementation, including personal health records" (p. S-4). A number of studies have suggested that patient-held records empower patients and improve outcomes. However, Gysels, Richardson, and Higginson's (2007) systematic review of 11 studies related to patient-held records in cancer care found that, although most patients welcomed the record, there was no measurable effect on continuity of care and patient involvement. A major problem identified was disagreement between patients and health professionals regarding the function of the patient-held record. This is an area where more research is required, along with studies identifying attitudes of professionals to patients' accessing information in the organizational electronic record.

Hassol and colleagues (2004), among others, found that patients' attitudes towards accessing selected portions of the record are mainly positive, in contrast to less positive attitudes among clinicians. Canada, in particular, has invested in significant research efforts to investigate consumer views and barriers to implementation as well as to identify best practices (Wiljer et al., 2008). Uncontrolled patient access to the full electronic record carries obvious risks: misunderstanding what is recorded could have serious consequences. The Canadian Committee for Patient Accessible Health Records has identified the need for professional and patient education. It also recommended more research into "patient accessible" electronic records to ensure that evidence-based practices are adopted (Wiljer et al., 2008).

As the evidence base grows, it needs to be integrated into nursing practice and education so that nurses become competent in supporting patients and caregivers to access and use health information, including that which is held in their electronic records. The skills that

nurses use to search, sift, and evaluate material to inform practice are also needed by consumers. But there is a more critical and challenging nursing skill that is not yet widely taught or practiced: assessment of patient preferences and their readiness to access and use health information and electronic records. Early research into patients' decision-making preferences (e.g., Runenson et al., 2001) needs to be replicated and extended into this domain.

Understanding Nursing Work

ELECTRONIC RECORD SYSTEMS WILL NOT BENEFIT NURSING UNTIL NURSES ARE BETTER ABLE TO DESCRIBE THEIR WORK TO INFORM SYSTEM DESIGN

Electronic records have the potential to make a significant contribution to patient safety and to the quality, effectiveness, and efficiency of health care (National Research Council, 2009), particularly in an age when knowledge and information from across the globe can be shared at the click of a mouse. However, systems can only deliver these benefits if they are designed to reflect and support nursing work. Simply replicating paper charts in electronic records does not capitalize on many of the features of electronic systems that bring real benefits. As the National Research Council (2009) reported, current systems "provide little support for the cognitive tasks of clinicians or the workflow of the people who must actually use the system" (p. S-3). Electronic record development needs to move away from the paper paradigm towards systems that support workflow, decision-making, and communication, while also fulfilling legal and professional requirements for good record keeping. It is surprising that in 2009, despite developments in technology and increased investment, there is no good evidence that current nursing record systems provide benefits for nurses and patients (Urquhart et al., 2009). These authors argue that the problem is much more complex than simply a lack of involvement of nurses in system design: "The problem lies far deeper, in the nursing professions' understanding of nursing itself and how it is taught and practised" (Urquhart et al., 2009, p. 14). Across the globe, nurses find it hard to describe their work, other than in terms of activities or interventions, so it is not surprising that those who design systems struggle to deliver the promised benefits.

Describing Nursing Practice for System Design

Nursing work is complex; it takes place in settings as diverse as the critical care unit and the prison yard; it covers all clinical specialties and all age groups. As nurses, we espouse and often practice holistic care. A single patient

encounter could, for example, include personal care, health education, disease screening, physical assessment, counseling, medical treatment, and spiritual care. Despite this complexity and diversity, common elements can be encapsulated in general definitions of nursing and descriptions of the care process. The process description below illustrates that it is possible to provide sufficiently detailed but generally applicable descriptions of nursing practice to assist system designers in building more useful systems.

The Royal College of Nursing (RCN) defines nursing as:

the use of clinical judgement in the provision of care to enable people to improve, maintain, or recover health, to cope with health problems and to achieve the best possible quality of life, whatever their disease or disability, until death (RCN, 2008, p. 1).

The emphasis in the RCN definition is on the cognitive process of clinical judgement. Electronic support for the cognitive processes of health care professionals is essential “to help integrate evidence-based practice guidelines and research results into daily practice” (National Research Council, 2009, p. S-3).

Table 35-1 builds on the traditional nursing process steps of assess, diagnose, plan, act and evaluate, explicitly adding diagnostic reasoning and decision-making steps, with examples of the kinds of support that could be built into the design. Two cognitive processes (diagnostic reasoning and clinical decision making) need to be distinguished as they draw on different kinds of information and knowledge and therefore require different kinds of system support. The recognition of a health problem (diagnostic reasoning), for example, draws on knowledge of what is “normal” and what is normal for this person. To make a diagnosis, the nurse uses cognitive skills of collating assessment data, filtering, cue recognition, pattern matching, hypothesis testing, and so on. In contrast, deciding what action to take (clinical decision making) uses research evidence, best practice standards, and knowledge from personal experience of what works in this kind of situation. Examples of the cognitive processes required for effective decision making include narrowing of options; weighing alternatives; and balancing goals, options, and resources.

Attempting to describe complex processes in a simple table is challenging; detailed models are required to convey to system designers that

- ◆ many of the process steps are optional;
- ◆ a step may take seconds, hours, days, months or years; and

- ◆ the processes are not linear. For example, a trigger could lead straight to an action; an action could result in a decision to assess.

The design of electronic record systems for nursing must not constrain recording of nursing data to a specific sequence. Systems must, however, support linkage between practice elements where relevant (e.g., between an expected outcome and an actual outcome). Increasingly, as team working and patient participation in decision making and care spread more widely, the process model descriptions will need to be “provider neutral” to accommodate, for example, the patient being the actor or the assessment being carried out by a multidisciplinary team.

RISKS TO PATIENT SAFETY

ELECTRONIC RECORDS POSE A SIGNIFICANT RISK TO PATIENT SAFETY YET THEY ARE NOT SUBJECT TO RIGOROUS EVALUATION OR RISK MANAGEMENT

One of the most convincing arguments in support of electronic records is that they can improve patient safety by ensuring complete information is available whenever and wherever it is needed and by providing timely links to decision support. However, health software systems also may present the potential for harm (International Standards Organization [ISO], 2008). Increasing use of complex systems coupled with pressures of time could result in clinicians relying heavily on such systems, with less questioning of their accuracy, using the system “as a ‘foreground’ part of care delivery rather than as a ‘background’ adjunct to it” (ISO, 2008, p. vi). The National Research Council (2009) raised similar concerns: “Applications do not take advantage of human-computer interaction principles, leading to poor designs that can increase the chance of error” (p. S-3).

For some years now, nurses and other health professionals have relied on evidence and expert opinion to underpin their practice. In health care, as in other “safety critical” industries such as aviation, risk management plays a major role in innovation. Changes in practice are subject to evidence reviews, audit, and safety monitoring. How is it that electronic records and other kinds of health software are implemented without this rigor? Electronic record systems need to be proven to be safe and fit for purpose before they are introduced in live clinical settings. They must be seen in the same light as any other health care innovation; that is, they should be evidence based, risk

TABLE 35-1 Example Care Process Model for System Design

Practice	Examples of What Is Recorded/Communicated (and System Support for Evidence-Based Practice)
TRIGGER (e.g., patient concern, referral, admission, walk-in, time point, reminder) Decide: Next step: assessment or other action	Receive referral communication Record reason (for referral, admission, walk-in, etc.) ⇕ (System: suggest standard assessment tool)
Decide: What to assess and how (e.g., select assessment tool)	(System: import standard assessment tool such as Braden scale)
ASSESS (e.g., measure, observe, take history)	Record assessment data (System: plot; calculate score; display trends) ⇕ (System: suggest diagnosis or action) (System: trigger an automatic action [e.g., referral to tissue viability service if Braden score is high])
Make judgment/diagnosis: Based on: assessment data /knowledge of what is “normal” and what is normal for this person	Record diagnosis/problem/health issue ⇕ (System: suggest expected outcomes, standard pathway or other actions)
Agree on expected outcomes (goals)	Record expected outcomes
PLAN Decide: What needs to be done Include plan for review, discharge, etc.	(System: link to evidence based guideline; alerts and warnings [e.g., drug incompatibilities]) (System: import standard care plan/pathway) Record planned actions
Act (including self-care) (e.g., assess, educate, treat, care, refer, discharge)	Record completed actions Record (action) variance from pathway (System: send communication [e.g., referral, discharge letter])
REVIEW (RE-ASSESS) Decide: What to assess (as above)	Record outcomes Record outcome variance

managed, cost effective, maintained, and updated. Rather than simply accepting a new or changed system, nurses need to ask to see evidence of safety testing and report safety concerns/incidents in the same way that they would for other kinds of clinical incidents.

Support for controlling risks related to electronic records is provided by the ISO (2008), who has issued guidance on the application of safety risk management to the manufacture of health software and to the deployment and use of health software. ISO recommends that health organizations integrate their approach to health software risks with their general approach to clinical and corporate governance “to allow coherent analysis and response to the different manifestations of

the same underlying problems” (ISO, 2008, p. 7). At the core of the process is clinical hazard and risk evaluation, which is undertaken for changes to systems as well as before the implementation of new systems. These kinds of controls are only now being introduced into the National Health Service in England, and it is unclear whether risks are being adequately managed in other countries.

NURSING CONTENT OF ELECTRONIC PATIENT RECORDS

NURSING CONTENT OF ELECTRONIC RECORDS MUST BE STANDARDIZED AND BASED ON EVIDENCE-BASED PRACTICE STANDARDS

Content development for electronic record systems tends to be undertaken by panels of clinical nurses from organizations where the systems are to be implemented. Even where the same system is deployed across a number of units or organizations, it is common for content to be tailored to suit the local users. Sending and receiving electronic messages in real time is a feature of everyday life but is still not achievable in many health care settings, largely because the structure and content of electronic records are not standardized. The same limitation affects use of data about nursing care for audit, research, service planning, and policy. In their practice, nurses use a variety of assessment tools and care pathways, many of which are locally developed or adapted. There is wide variety in the structure of records and charts in every organization. The forms and messages that are used to communicate about patient care are largely unknown. For example, there is no standard set of information for a discharge summary that is sent from the hospital nurse to the home care nurse. System designers cannot design and implement all this variety, nor should they: standardization is essential to minimize duplication and maintain quality. Work is taking place at national and international levels to try to standardize the terminology and content elements, such as assessment templates, that are used in electronic records (Bakken & Currie, 2006; Goossen, 2006; Hardiker et al., 2006; Hoy et al., 2007). To date, the nursing informatics community, rather than the profession as a whole, has led this work, and although nurses involved in terminology development and content design may refer to evidence-based practice standards, the focus has been on record standardization, not on embedding best practice in a standard way in the record. However, a recent policy statement by the UK Royal College of Nursing on the nursing content of electronic patient records issues a challenge for the profession on record content standards: "Standards for the nursing content of electronic records . . . must be based on the best available evidence/expert consensus and agreed [upon] by the relevant professional bodies" (RCN, 2008, p. 1).

Content Challenges

A joint effort between the professional organizations and the informatics community is required if we are to ensure that nursing content of electronic patient records: "supports effective clinical judgements, decisions, care and communication; accurately represents the work of nursing and identifies the nursing contribution to patient outcomes; and reflects core nursing values such as patient focus, partnership working,

respect and choice" (RCN, 2008). The task for the profession is to define not only nursing practice standards (which they already do) but also the record content standards that relate to the practice standards and the data sets that will support audit and quality improvement in relation to the practice standard. For example, an evidence-based guideline for prevention of falls in older patients should also specify the validated assessment tool to be used to assess and record risk and the data requirements for auditing falls risk assessment outcomes. Figure 35-1 illustrates the essential relationship between evidence, practice standards, and the content of electronic records. Legal or regulatory requirements and general best practice for record content can be found in professional record keeping standards, but more specialist content requirements are usually embedded in guidelines and practice standards. For example, the UK National Institute for Health and Clinical Excellence (2007) guideline for management of head injury specifies minimum acceptable documented neurological observations including adult and child versions of the Glasgow Coma Scale.

Support and guidance from the informatics community will help ensure a migration from the current use of multiple, ambiguous, and sometimes ill-defined clinical terms towards consistent use of standard terminology and definitions across practice standards. This is a huge agenda and collaboration across disciplines as well as between countries is needed within practice standards. As central players in this activity, the professional nursing

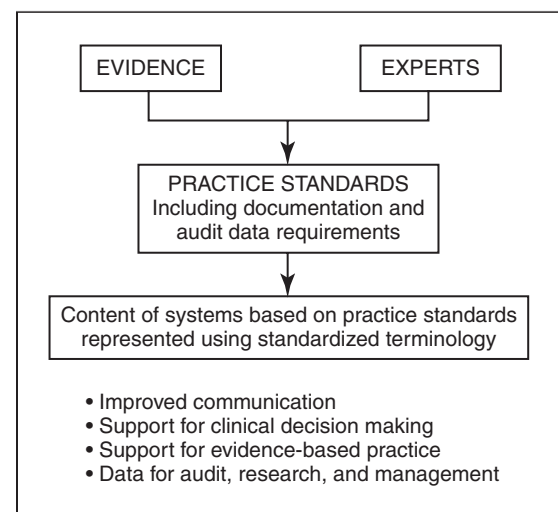


FIGURE 35-1 Relationship between evidence, practice standards, and content of electronic records.

organizations must engage in both national and international efforts. They also need to be in a position to endorse or approve record content standards developed by others, such as those “default standards” already in widespread use in systems. Most importantly, the development of new standards should not be undertaken without mature consideration and testing of relevant standards developed by others, anywhere in the world. Reinvention and localization are generally not necessary: the approach should be to adopt or adapt (with revalidation and testing) and only develop a new standard if there is not one already in use.

SUMMARY

This chapter has considered four significant challenges of electronic records for nursing: access and use by healthcare consumers, articulating nursing work to inform system design, risks to patient safety, and practice standards as the basis for record content standards. These more recently identified challenges must be added to the others that nurses face across the world, namely the need for nursing leadership in this effort, not just among informatics specialist but also from service and professional nurse leaders; integration of information management into nursing curricula, not just training in the use of systems; and overcoming barriers to adoption of electronic records by nurses. To many nurses, record keeping is still seen as an extra burden, a legal obligation that is not an integral part of patient care. Perhaps it would help to clearly separate old ideas of the nursing record from the new electronic tools that can, if designed properly, become indispensable information, knowledge, and communication tools for nursing practice. As the National Research Council (2009) stated:

In focusing on the goal to be achieved, namely better and/or less expensive health care, clinicians and other providers will appropriately be drawn to IT [information technology] only if, where, and when it can be shown to enable them to do their jobs more effectively (p. S-8).

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SECTION 5

Health Care Systems and Practice

The Impact of Evolving Health Care Systems on Nursing

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

In many ways the only consistency in the United States health care system over the last several decades has been the constant presence of change. Much of this change has been focused on trying to reduce the costs of health care, a somewhat elusive goal, by any measure available. A key focus on cost-containment efforts and the move toward managed care have been the important strategies of the last decade. These strategies have raised questions about every aspect of the system from where care is delivered, to the best provider of care, to the payer, and even to the status of the patient within the system. Length of stay has been reduced dramatically in hospitals during this time frame, which has caused some patients and their families to question whether the system still works for them. These changes are occurring during a time when patients are better educated about health and have an infinite supply of health information from the electronic world at their fingertips.

The current situation in health care is creating a good deal of disturbing turmoil, especially after the downsizing of the 1990s in which jobs were lost and the security of the past was shattered. Many nurses question whether the current system can withstand the many changes needed to ensure quality care for patients. Part of the instability in the system is that nursing as a profession is enduring one of its most severe shortages ever, and most experts state that this shortage will last longer and will not respond to the usual stopgap measures. Business models have become the preferred model for change, even in nursing. During times of great change, however, people also look for new solutions to focus on the opportunities rather than the threats. The chapters in this section illustrate the roles of nurses in this changing health care environment. Nurses need to be involved in creating a new health care system that is cost-effective, produces quality patient

outcomes, and meets the needs of all Americans, as the agenda for change increases the push for a redefined health care system under President Obama.

In Chapter 36, the debate chapter for this section, Mary Margaret Mooney clearly outlines the dilemma that nurses face: Should health care change be systematic and incremental, or should change be radical and systemic? Mooney maintains that the debate is less about whether change is needed and more about the pace, shape, and financing of the changes needed in the current system. As the title of this chapter implies, the assumption today is that Americans have a medical care system that works well for some and that they ought to move toward a comprehensive health care system that will work at some basic level for all. The number of uninsured Americans continues to rise as layoffs increase. Mooney maintains that discussions about change in United States health care often surface under the heading of reform and tend to be cyclical and to appear about once each generation. Reform can be framed as improvement and at other times as major repair or amendment to the current system. This chapter raises issues such as should the nation continue to focus on technology and drugs, or should the nation focus on increasing individual responsibility and developing caring communities? Are economic factors inappropriate solutions to the individual and social uncertainty generated by trauma and disease? Mooney presents both sides of this issue: incremental systematic change versus radical systemic change. For both viewpoints she discusses the responses to the key components of each. The importance of the role of nursing is stressed throughout this chapter and provides a great opportunity to debate the future that nurses envision and would prefer for the health care system.

In Chapter 37, Catherine Dodd provides a perspective on the interrelatedness of ideology, politics, and

policy when health care is on the domestic agenda of the president and a priority for the administration. The author challenges nurses to develop positions related to the role of nursing in a reformed United States health care system and to choose a political ideology that matches their beliefs, and work as leaders within professional nursing organizations to influence the dominant ideologies of the profession. The chapter includes an extensive historical perspective on political ideologies and health care that assists the reader to understand the complexities of this topic. Only on a few occasions has the profession of nursing demonstrated a commitment to a political ideology. Dodd concludes that it is time for the profession of nursing to be guided and inspired by the ideology talked about over the last several decades. Nurses must support universal coverage for health care for Americans.

The last two decades have seen a dramatic increase in the diversity of the United States population. In Chapter 38, Joyce Newman Giger defines health disparities from three perspectives: population-specific, sociological, or biopsychosocial. A health disparity is defined as the specific difference that a population experiences in terms of the presence of a disease, a health outcome achieved, or access to health care. The author states that there is a direct relationship between the nature of the health care delivered and the impact on elimination and/or minimizing health disparities. The two largest ethnic minority groups in the United States—African Americans and Mexican Americans—are described to illustrate the impact of disparities in the United States. This comparison includes the infant mortality rate, the potential for lost life, the incidence of obesity, the incidence of hypertension, the incidence of diabetes, and the common causes of death for each group. This chapter describes causative factors for health disparities and defines disparities in a more realistic way. The author concludes that it is important to remember that while the reasons for health disparities could be due to gene-environment factors, these factors do not fully explain the problem as it currently exists. More research is needed to better understand these differences.

In Chapter 39, Rose Rivers and SueEllen Pinkerton describe the impact of the Magnet Recognition Program on the ability of hospitals to create a competitive edge in the current United States hospital system. Organizations pursuing Magnet designation create an environment for all to succeed. A resurgence of interest in this program has occurred as the shortage of nurses

grows and intensifies. Becoming a Magnet hospital requires deep-rooted culture change in most cases and creates a more professional model of nursing practice. An important goal of Magnet status is to improve collaboration and communication among nurses and other health care providers. This is an important focus for quality care in the United States health care system. In addition, the authors raise some important questions: Is Magnet designation an achievable goal for all hospitals? Should all hospitals pursue Magnet status? Can hospitals with this status influence the greater health care environment? Will Magnet hospitals lead the transformation in health care? Will Magnet hospitals be the basis for new reimbursement models? The answers to these questions are important to the future directions of the United States health care system. This chapter identifies the potential impact of Magnet status on system reform and represents an important mechanism of change for hospitals in this country. A case study for discussion is presented to address these questions.

The research imperative for the nurse executives has been evolving over the last 50 years and has been delayed for several reasons. In Chapter 40, SueEllen Pinkerton, Kathy Jankowski, and Matthew Leshy describe these reasons: (1) the past controversy as to whether there is a body of knowledge for nursing administration to investigate, (2) few schools and colleges of nursing had graduate programs focused on nursing administration, (3) few nurse executives were prepared to conduct research in the past, and (4) the belief by many nurses that only clinical research should be fostered. Magnet hospital requirements have made this focus on research nurse executives' primary concern. This is a major role of the chief nurse executive today. Implementation of research findings is crucial for the nurse executive, and a part of this focus is finding the key interventions that promote retention of staff nurses and the creation of a work environment that improves patient safety by reducing the opportunity for error. Technology demands are also driving these initiatives. It is crucial that nurse executives develop and maintain a research imperative to focus on and enhance research in their organization. The next chapter, by Goode, is an excellent example of a nurse executive who changed the culture of an organization through evidence-based practice initiatives for new nurses in the organization.

In Chapter 41, Goode and colleagues describe a residency-based program for new nurses. The chapter

focuses on new baccalaureate graduates entering the workforce with a basic knowledge of evidence-based practice (EPB) but needing additional experience to build on this foundation from their educational preparation. The program assists new nurses entering the workforce at this hospital to integrate research findings and evidence into their clinical nursing practice. The program is a required component of the postbaccalaureate nurse residency program established by the University Health System Consortium (UHC) and the American Association of Colleges of Nursing (AACN). This residency is a one-year program developed by an acute care hospital in collaboration with a partner school of nursing. The authors believe that an EBP project completed within the first year of nursing practice allows new nurses to see the application of EBP in their own practice and highlights EBP as an important practice standard for the nursing profession. The chapter offers several examples of projects from this residency program.

A new chapter by Birmingham, Nell, and Abe focuses on determining staffing needs based on patient outcomes rather than by nursing interventions provided to patients. Estimating nursing care requirements for patients and projecting these requirements for the next shift and the following days have posed challenges for nurse executives over the last several decades. Recently this has been greatly impacted by nurse staffing legislation in several states mandating the use of patient acuity into hospital staffing plans and patient assignments. The authors describe a new innovative approach to determining staffing needs using an outcomes-driven acuity methodology. This method overcomes past obstacles, adopts a new nonlinear view of the nursing process, and places an emphasis on patients' clinical outcomes that are sensitive to nursing interventions. The approach uses evidenced-based outcomes within an organization's current documentation system and workflow and provides outcomes-driven acuity to the entire interdisciplinary care team with current information about the status of patients. This new-generation acuity methodology has the additional benefit of clearly making the contribution of nurses to patient outcomes visible. This chapter is a must-read for nurses who struggle to address staffing needs in today's health care environment.

Chapter 43 by Ann Rhodes, a nurse attorney whose practice focuses on compliance with the Health Insurance Portability and Accountability Act (HIPAA), provides an overview of the Act's impact. The Act, passed

in 1996, is a federal statute that includes several complicated health care provisions, the most well-known being the privacy provisions. The Act takes its name from the notion that employees can carry insurance from one job to another ("health insurance portability"). It focuses on three areas: privacy, electronic and computer security, and the processing of medical claims. Rhodes maintains that one of the absurd assumptions is that the enactment of the HIPAA rules would save money and reduce the costs of health care. Today it is clear that that has not happened. HIPAA rules were imposed on a complex system of health care that is already expensive, is distributed unequally, and is increasing in cost every year. The rules apply to every provider, regardless of size, location, or history of violation of privacy. This chapter addresses the impact of HIPAA on health care costs and the impact of HIPAA on research and health care. The chapter provides an excellent overview of HIPAA regulations and important information on the costs of this policy and its impact on health care for Americans.

In the last chapter in this section, Janet Specht and Geri Kirkbride describe current trends in long-term care in the United States health care system. The literature identifies seven attributes of an ideal long-term care (LTC) system: person-centered, professionally rewarding, integrated, affordable, accountable, community-based, and consumer directed. Today, care provided by nurses and assistive personnel in nursing homes is an important component of long-term care for older people and younger adults with disabilities. Concerns about the care provided in LTC resulted in regulatory changes designed to improve the process of care delivery and to contain costs. The chapter provides an overview of the Minimum Data Set and the Resident Assessment Information currently mandated in LTC. Current issues in the care of the elderly with dementia are discussed. Other issues to LTC are cost, access, quality in both institutional and community-based care, inequities in rural and urban distribution of care, and care for ethnic people of color and other special populations. Workforce issues and the need for culture changes in nursing homes are also important for improving care for the elderly.

Although the need for health care reform is obvious, the shape of the reform is not yet clear, and nursing must be diligent in providing a well-developed vision of the future. What is clear is that there is a definite movement from hospital-based and illness treatment care to community-based and health promotion care. Building coalitions among providers and with consumers is a

part of this shift in emphasis and will be a component of any health care reform of the future. The changes nurses are seeing in health care are threatening too many players, and politics continues to be a big part of the success or failure of new efforts. Although the future shape of the health care system is unknown,

clearly nurses must take an active role in being part of the solution and advocating for care for public good. The chapters in this section provide examples of how nurses can be active participants in the reform process and improve the quality of care provided to Americans through their expertise.

From a Medical Care System for a Few to a Comprehensive Health Care System for All

MARY MARGARET MOONEY

Because the strength of our nation is in its people, their good health is a proper national concern; healthy Americans live more rewarding, more productive, and happier lives.

Dwight D. Eisenhower (cited in Carter, 1958, p. 31)

When I wrote this chapter, the 2008 Democratic National Convention had just ended and the 2008 Republican National Convention was about to begin. While health care did not head the agenda of either candidate for the presidency, it was addressed in the platforms of both major political parties. By the time the chapter returned to me for editing, the election of 2008 and the inauguration of 2009 were history. By the time you read these words, health care will be under scrutiny because the economy is of great concern to both political parties and to the public in general.

The United States spends more per person on health care than any other industrialized nation. American health care is one of the largest industries in the world. The economy cannot be tweaked, twisted, or transformed without tweaking, twisting, or transforming health care. So whatever our elected officials have or have not promised to do about health care, in this economic climate they cannot ignore a business that consumes 16% of the gross domestic product.

The title of this chapter is based on an assumption that Americans have a medical care system that works very well for some and that Americans ought to be moving toward a comprehensive health care system that will work at some basic level for all. The assumption seems well founded given that voices from nearly all segments of society are calling for change. Nevertheless, no unanimity exists about the type of change in health care that is desired.

Although there continue to be some proponents of massive systemic change, successful antireform activities

of interests heavily invested in the current system have led to trepidation about adopting too radical a position. Past plans for major overhaul have crashed and burned, while sharply focused projects have succeeded to a greater or lesser extent (e.g., Medicare, insurance for children). A pragmatic outlook now prevails, and the most influential proponents for reform in health care delivery have opted for systematic, incremental changes with proposals overlapping one another regarding improvement of information technology, increased transparency, and control of costs.

The current discussion has much in common with the discussions of previous decades. At times the reform conversation is framed as improvement and other times as major repair or amendment. Improvement usually implies acceptance of current American health care practices and deems radical change unwise and unethical (Republican National Committee, 2008). Amendment arguments usually imply censure of the current state of health care in America as mediocre at best and corrupt at worst and conclude that radical overhaul is necessary. The position one chooses is influenced not so much by the facts, which are common to both sides, but by values—social, technical, and economic. The various proposals for some type of reform differ primarily in focus and priority based on the predominating value driving their authors' desire for change. Those who favor minuscule or no change tend to occupy positions of power that control the shape and financing of health care. They value the status quo because it promotes their values and serves their interests.

The gamut of hopes in the possibility of any reform ranges from the conviction that nothing will change until a major cataclysmic incident occurs to a belief that this generation can make change happen. Whatever might be our personal inclination, as nurses we cannot close our eyes and hope the bogeyman of catastrophic illness never sits on our doorstep or the tsunami of inadequate reimbursement never washes over our places of employment. Neither our professional social contract nor our code of ethics permits us to be uninvolved bystanders to the means and ends manifest in the panorama of health. Nurses need to ask the hard questions and not only listen carefully to the stories of their clients but also to the arguments of those with whom they do not agree. The glory and the burden of living in a free and pluralistic society is finding common ground for the promotion of the common good.

This chapter poses opposing arguments for adjustments in health care and its delivery. Should health care change be systematic and incremental, or should change be radical and systemic? Should Americans as a nation continue to focus on technology and drugs, or should they focus on increasing individual responsibility and developing caring communities? Should market forces shape health care, or are economic factors inappropriate solutions to the individual and social uncertainty generated by trauma and disease?

A rationale for incremental systematic change and a rationale for radical systemic change are presented. Following each is a response from the opposing viewpoint. An analytical summary completes the chapter. The reader is encouraged to seek more in-depth information about the possibilities for change and to ponder the repercussions of the various courses of action on the health of the nation and on the profession of nursing.

INCREMENTAL SYSTEMATIC CHANGE

The medical care system in the United States is very good, and it has come to its current level of excellence through incremental change powered by the push of entrepreneurship and the pull of beneficence. When mistakes are made along the way, they are corrected by professional and consumer pressure. Mismanagement of managed care, for example, prompted legislation to ensure things such as minimum length of stay for childbirth and mandated emergency care.

Ability to pay is a powerful predictor of the percentage of gross domestic product allocated to health care. The current medical system honors the quintessential

American value of individual freedom. Although it is unfortunate that this often makes the availability of health care a function of a recipient's socioeconomic status, this is preferable to the government orchestrating health care services. The government should do no more than grease the skids of the marketplace to facilitate good business practices that will reward good medical practices.

Polls have repeatedly indicated that most Americans think that the health care delivery system needs to be changed but are happy with their own doctors and care. What are needed are more avenues for access to and methods of payment for medical care. Health (medical) savings accounts offer an attractive way to set aside money for routine health care expenses. In current proposals for incremental change, an individual or family establishing a health savings account also would have an income tax deduction for high-deductible insurance policies that would offer protection from financial distress in the event of significant sickness or trauma. Budgeting for health care is as important as budgeting for other needs. Control of one's own resources and responsibility for one's own needs will encourage wise, cost-effective health care choices.

An aspect of most plans for incremental change is medical liability reform. Dollars now consumed by lawyers' fees, awards, and settlements should be kept in the health care system. Medical liability reform will lower overall health care costs by decreasing malpractice insurance rates, which will, in turn, help retain providers in communities.

Association health plans would give working families greater access to affordable health insurance by allowing small businesses to band together through trade groups and negotiate on behalf of their employees. Refundable tax credits for all Americans will make health insurance more affordable. Few issues in health care have as much resonance with Americans as does the freedom to choose one's own care provider and point of care. This freedom will weaken and disappear with substantive changes.

A precondition of freedom is the recognition of an individual's capacity to make his or her own decisions. In a free, capitalistic society, this capacity resides in the individual citizen and in the corporation as a legal entity. Life enhancement advantages of advances in drug therapy and surgical interventions are the result of decades of research and investment of resources by companies energized by the prospect of profit. If the profit motive is removed, a corporation will not be

eager to undertake the risk involved in generating new products.

Health care, including disease prevention and health promotion, is one of many commodities in the free market. Advantages exist to empowering individuals to exert greater control over health care products through increased access and concerted efforts to determine relationships between quality and cost. The nature of a free society is to advance. Society does not stand still, and it demands the same of its citizens. A free society requires and rewards individuals who are keen to better themselves. The ultimate exercise of freedom is the ability to spend one's money the way one wishes.

Historically, American culture is antithetical to any redistribution of wealth (tax and transfer system) that would be required to support the tenuous claim that all citizens have a right to basic health care. The great health care institutions were not founded because it was felt that the poor had a right to health care. These institutions were built by philanthropic or religious impulse and did well in serving the needs of the less fortunate until government intervention forced them to compete on the same playing field as for-profit entities catering to those of means.

In summary, incremental systematic change in health care should—and will—occur as it has in the past. Medical science and pharmaceutical discovery will advance best as players in a marketplace with minimum regulatory parameters. Americans of means can continue to enjoy the best health care in the world. Certain segments of the population may need to rely on limited governmental supports and supplemental programs provided by the compassionate volunteerism that is part of the American heritage. The system is not perfect, but no alternative will work better and sustain the individual freedom and private property rights that American society values so highly.

RESPONSE TO KEY POINTS OF ARGUMENT FOR INCREMENTAL SYSTEMATIC CHANGE

Incremental changes are too little and too late. Tax subsidies and vouchers are attractive, but the proposed subsidies are not enough to purchase adequate insurance. Plans that cap employers' premiums are more likely to shift costs to employees than they are to diminish growth in overall costs. Health (medical) savings accounts work well for the financially well-off, but if one's income is consumed by day-to-day needs for food, clothing, and shelter, health savings accounts (or saving accounts of any kind) are the stuff of fairy tales.

Point-of-care places are not free marketplaces. One simply does not shop for a cholecystectomy the way one shops for a new car. A mother is not going to comparison shop for best urgent care prices when her child spikes a dangerous fever in the middle of the night. The conditions of the need to "buy" and the ability to "sell" health care violate underlying parameters of a free market. The unfortunate outcomes of the managed care incentives and mandates of the 1990s offer ample evidence that the power of the market does not work in health care.

Expansion of Medicaid without the tax increases that are consistently opposed by those who do not want systemic change means that fees for services will be so low that even more providers will resist caring for Medicaid patients. Something is distinctly unpalatable about a system that pays a pediatrician \$30 for seeing the child of a poor person and \$100 for seeing the child of the legislator who supports the legislation that provides for the Medicaid payment for the child of the less-advantaged parent. The problems in health care delivery in the United States are systemic. Incremental changes will exacerbate, not solve, the health care dilemma.

RADICAL, SYSTEMIC CHANGE

Budgets are documents through which those responsible for an enterprise reveal their values. The federal budget for years has been a manifestation of legislative and executive schizophrenia as the growing consensus that there is a "right" to health care confronts the "right" to control one's own income and the "right" to be free of intrusive government regulation. At one point, voluntary managed care insurance products were touted as the way to ensure access to adequate services, to control costs, and to move toward covering nearly all citizens while at the same time avoiding universal health care coverage with its aura of socialized medicine and governmental intrusion. Managed care, as it has come to be synonymous with organized underuse, has shifted from promised child to pariah status.

Although not as great as was hoped, managed care is not as bad in principle as the lived experience of many would indicate. Plans like Kaiser Permanente enjoyed many years of satisfied patients and providers. Nevertheless, without universal health coverage with uniform benefits, managed care cannot avoid stinting on services. A mixed chorus of individuals and groups has sounded a call for universal health care coverage in the United States. Several plans for radical systemic change have been proposed. Some are outlines of

privately delivered, publicly financed, single-payer systems. Others are less radical and proffer a mix of payers and a mix of public and private financing—so-called play-or-pay schemes. Supporters of universal health care coverage have come to their positions by routes moral and by routes practical (Democratic National Committee, 2008). In addition to the increasing solidarity in the belief that all citizens must have access to comprehensive health care, there is a growing sense is that Americans already are paying as much as universal coverage would cost through pouring a big chunk of every health care dollar into executive salaries and stock options, into drug advertising, and into lobbying by groups that profit from the health care status quo. Furthermore, universal health care coverage is essential for a society based on principles of life, liberty, and the pursuit of happiness.

Today almost half of all Americans who have coverage receive their health insurance from a government program. The other half has, for the most part, insurance through an employer. Nearly 46 million Americans have no insurance at all. In 2006 the cause of death of 22,000 of these uninsured Americans was the lack of insurance (Dorn, 2008). There is a cost to provide comprehensive health care to all citizens, but there is a cost for lives cut short as well.

Unless we opt to increasing the categories in which the cheapest health outcome, death, is acceptable, health care spending will increase as technology advances. Cost will increase with incremental as well as with systemic change. Indeed, overall systemic change may be superior in controlling total costs. Systemic plans proposed are within the fiscal ability of the richest nation in the world. Increased direct health care costs will be partially offset by an increase in individual productivity, the resultant increased competitiveness of American business in the global marketplace, and the recovery of dollars spent on advertising and the paperwork required to support the current bureaucratic nonsystem.

The necessary increase in taxes will not destabilize the economy. Currently the United States has a total all-government tax share of the gross domestic product that ranks twenty-eighth among the thirty leading industrialized nations. Increasing the tax rate to 31% (from its current 26%) would still leave us in the bottom third of this ranking. In addition, tax dollars used to pay for health care recycle to the private economy (Morris, 2008).

In summary, radical change does not require selection of the most radical of suggested solutions.

Single-payer does not imply single plan, nor does universal coverage imply single payer. Dominant social preferences must be respected insofar as they do not sabotage the goal of health care access and affordability for all. Science and compassion must determine clinical decisions, not insurance status, or a voice emanating from the approval department of a faceless corporation. The cost-benefit ratio of universal coverage is favorable not only in human terms but also in the financial terms of a global economy. The richest nation in the world can provide for the basic health care needs of all its citizens.

RESPONSE TO KEY POINTS OF ARGUMENT FOR RADICAL SYSTEMIC CHANGE

The debacle of the managed care plans of the 1990s provides sufficient evidence that government financing of medical expenses results in deterioration in the quality of care for everyone—including the aged and the poor. Nevertheless, the strongest case against radical systemic change is a social-cultural one. A mandated approach is unpalatable to the citizenry because it violates the fundamental value of individual freedom. Nobody has a right to medical care. If a person cannot pay for what he or she needs, that person must depend on voluntary charity. The premise that one gains a moral claim to a good not by earning it but simply by needing it is erroneous.

The argument that universal health coverage will create a fair environment is not correct. Universal health coverage will not be fair (and fairness is one of the key elements of an acceptable universal system). Rich persons still will be able to get what they want when they want it. The rest of the population will be treated fairly in that they all will have to wait (note the experience in other countries) for the services they want. The distribution of benefits will not coincide with the distribution of costs. Even if the current level of tax progressivity is maintained, two-thirds of the tax increase required would come from the top fifth income level (Morris, 2008). There is consensus that a problem exists in health care. But twenty-first-century research models and projections for fixing the problem bear a striking resemblance to those that were found wanting and were rejected in the 1970s and 1990s. Current problems are due to governmental interference. A solution will not be found in more governmental control. For change to be effective, it must be sustainable. The difficulties being experienced by Social Security and Medicare demonstrate the inherent difficulty of

relying on taxation as a means of financial support for a service.

Universal coverage will not encourage healthful lifestyles. Healthful choices in nutrition, exercise, and recreational practices are not influenced by whether one is eligible for an annual checkup, immunizations, or care for minor and major illnesses. Such choices are the result of character and ultimate goals. Universal coverage will not control costs. Patients will seek more services, and physicians still will provide unnecessary services. The country is too diverse to expect that one health care plan can be satisfactory for all citizens. Racial, ethnic, and geographic barriers to care still will exist.

SUMMARY

Americans, rich and poor, feel insecure about their health care coverage. They want something done. This insecurity and the concern that the illness or injury of one member of a family can spell financial doom for the entire family have revived the conversation about change in health care delivery at both the micro and macro levels. Americans are not likely to frame this discussion about what should be done as "rationing by class" versus "distributive compassion." It is far more likely that Americans will talk about "market competition" versus "government regulation." Whatever terminology Americans decide to use, these are the questions that must be answered:

- ◆ Do we want to embrace as policy the de facto practice of endorsing a multitier health system in which a person's health care experience is determined by his or her ability to pay for it?
- ◆ Do we want to persuade the upper socioeconomic class of the nation's families to help pay for coverage for the lower socioeconomic class of the nation's families?

Although posed as questions to which "yes" or "no" would be an appropriate grammatical response, Americans know the answer is not that simple, not that clear, and not that unambiguous.

In the incremental/systemic conversation, there are few islands of agreement in a surging ocean of points of debate. It appears that both those who favor incremental change and those who favor radical change both agree on some degree of the following:

- ◆ Improvement of health literacy
- ◆ Effective use of services
- ◆ Minimization of administrative expenses

- ◆ Favoring care that is most medically beneficial
- ◆ Coordinated and integrated care continuum
- ◆ Including palliative and end-of-life care
- ◆ Expanding use of information technology
- ◆ Using evidence-based medical and nursing interventions (Catholic Health Association, 2008)

Areas in which there is sharper disagreement include the following:

- ◆ Core benefit package for each person across the lifespan versus individual freedom to choose and secure health care with benevolent support for clearly defined vulnerable groups (e.g., persons over 65)
- ◆ Level of care determined by ability to pay versus level of care undifferentiated by ethnicity, health, employment, age, or financial status
- ◆ Preventive care part of core benefits versus preventive care among items on smorgasbord of benefits that may be chosen by the individual
- ◆ Individual responsibility for financing of health care versus collective responsibility for financing of health care.

What is the best Americans can do in this country, at this time, to have the best possible health care? Do Americans lack resources, or do Americans lack the will to use resources differently? Perhaps if the search for answers to these questions proceeds from the islands of greatest agreement, Americans can navigate the waves of disagreement and reach a shore of consensus.

Whichever side of the debate one's philosophical stance favors, a pragmatic approach will be required. Political feasibility and financial sustainability are essential elements of any change that will have the vigor to weather the test of time. Nurses tend to want the best scenario, and in individual patient care that scenario is an admirable and necessary goal. In the public policy arena the best possible scenario is not usually anyone's individual choice for best scenario. Nurses know that effectiveness depends on good clinical care managed well, not on hard bargains. Yet how often under the rubric of "effectiveness" are nurses forced to abort clinical decision making because of a hard bargain struck far from the bedside? Why is this?

By numbers alone, nurses should be a formidable force in shaping health care. The pressure required for change of some kind is building. Nurses can increase and focus that pressure through thoughtful consideration of what is best for their patients and through participation in their professional organizations. Nurses

need to examine their assumptions, their expectations, and their way of doing business so they expand rather than limit the capacity for designing policy that is in the best interest of individual patients and does the most to promote the public good.

Beneficial changes will not occur until there is a clear, shared vision by a critical mass of citizens. A good idea is no good if the time is not right. Nurses have the moral capital to clarify for the larger public the good, the bad, and the ugly of incremental and radical proposals for change. What nurses may lack as a group is the confidence that they do have something to add to the conversation and that they can affect the outcome of the debate. This confidence is essential for taking an active role in identifying the steps that will be needed to bring about any selected change. Let us not sell short our expertise.

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The Challenge: Participate in the Era of Politics—Choose an Ideology and Lead

CATHERINE DODD

Since the beginning of the profession, nursing has concerned itself with promoting and protecting the health of those entrusted to the care of nurses. This is the basis on which the profession has long been involved in working to influence the health policy agenda of both the United States and the international health policy. Much has been published in the last 35 years about the involvement of nursing in politics, and indeed the profession has achieved higher levels of funding for nursing education and research; advanced-practice nurses have been recognized as providers by both Medicare and Medicaid. However, this chapter suggests that professional nursing represented by professional nursing organizations with lobbyists in Washington, D.C., has protected the profession but has not done and is not doing enough to influence the broader health debates during key political eras when policies shaping the health care system were being debated.

Many individual nurses engage in political advocacy based on their personal political ideology, but the profession of nursing has on only a few occasions demonstrated a commitment to a political ideology. Health care reform was a key part of the recent presidential election, and President Obama has spoken about the need for health care reform several times during his first 100 days in office. Yet during those first 100 days, one of the nine RNs invited to the White House to discuss domestic issues with the president gave President Obama her version of a “nurse’s perspective” on what is needed in health care reform, including improved nurse-to-patient ratios, a ban on mandatory overtime, and more affordable care for patients. Working conditions trumped explaining how nurses could provide cost-effective care in a reformed system.

The objective of the discussion that follows is to provide perspective on the interrelatedness of ideology, politics, and policy during tenure of United States

presidents when health care was on the domestic agenda to challenge nurses to develop positions related to nursing’s role in a reformed United States health care system, to motivate nurses to choose a political ideology that matches their beliefs, and then to work as leaders within professional nursing organizations to influence the dominant ideologies of the profession.

Nursing is one of the most trusted professions. The public values nurses’ opinions, beliefs, and ideologies. The profession of nursing must participate in the debates that will determine the kind of health care system that is created in the current and future political eras. Beneath the overarching issues of cost, quality, and access, which must be addressed in a reformed system, are those issues on which nurses are experts, such as chronic disease care management, obesity prevention, health promotion, and smooth transfers of care from one level to another. These topics are part of the current discourse in the health reform literature, but a review of the reform literature reveals an absence of nurse authors.

IDEOLOGY, POLITICS, AND POLICY

Policies are developed within governmental bodies that are political. The executive-regulative, legislative-statutory, and judicial branches of government employ politically elected and appointed officials. Hence, policy is linked inextricably to politics. Few would disagree that the United States health care “system” is broken. The policies that created our broken system are the result of political ideologies influencing their development. The policies that have created the United States “nonsystem” of health care are the product of political eras. Political eras are characterized by the political ideologies of the presidents who appoint their cabinets to craft and implement policies that reflect their political ideologies.

The political ideology of the majority party in Congress also influences policy. This “nonsystem” of health care is the result of dominant political ideologies of several presidents, with some influence by opposition from Congress when the majority party in Congress (the House of Representatives or the Senate, or both) was different from the president’s party.

What Is the Political Ideology of Nursing?

An *ideology* is a “deeply held system of beliefs that frames the possible and the ethical, orienting us to what is (‘reality’), to who we are, and to how we related to the world. Ideologies influence what we conceive of as imaginable and as right and wrong” (Estes, 1994, p. 139). Politicians have ideologies that are reflected in the ideologies of their political parties. Political parties represent systems of beliefs that frame how things should be and indicate what is right and what is wrong.

During only a few eras in the 115-plus-year history of nursing has the profession demonstrated a political ideology concerned with how the systems of care are developed, financed, and implemented at national and international levels. Individual nurses have been and are political leaders, and many of them were or are active in professional nursing organizations. However, with the exception of the early 1930s, the 1970s, and the period surrounding the administration of President Clinton (1992–2000), the profession of nursing has not demonstrated an ideology related to health care and the economic systems that influence health at the national level. One should note that some state nurses associations have been and continue to lobby for a broader agenda than the protection and expansion of the nursing profession, as do many unions that represent nurses. This discussion is confined to national political eras and ideologies.

The profession of nursing has been and continues to be involved in electing and lobbying presidents and Congress to protect and enhance the professional status of nursing. The American Nurses Association has lobbied on behalf of nurses since the Spanish-American War and has had a formal presence in Washington, D.C., since World War II. The American Nurses Association Political Action Committee has endorsed candidates in the presidential elections since 1984. Professional nursing advocacy has focused largely on improving the working conditions under which nursing care is provided and on protecting and enhancing the role of nursing in caring for individuals, families, communities, schools, and

armies. Nursing has taken positions to establish and support Social Security, to protect Medicare, and to fund preventive care; however, professional organizations devote few resources to working actively to pass policies that will increase access to care, improve quality, and eliminate health care inequities that characterize the health of the nation.

Ideology: Health Care as a Product of the Market

The American dream is to be successful and independent and to make money and purchase everything one’s family needs and wants. Individualism and entrepreneurialism are two ideologies that often go hand in hand and that have characterized the development of America. Our capitalist ideology reflects our belief that an unregulated market competition will produce a high-quality product by efficiently using resources and producing a product that consumers demand is at the center of “what makes our country great” and is as “American as apple pie.” The American health care system is a “product” shaped by a quasi-regulated market with significant government funding. The regulatory involvement of government (or some might say the intrusion of government) in competitive markets has varied from administration to administration. The government has the dual charge of preserving a healthy economy and promoting a healthy citizenry to work (and spend) in the economy. In health care the role of government is inconsistent. Policy makers (politicians) say that they want every child to have health care and that they do not want seniors to spend their final years in understaffed nursing homes, but they fail to enact laws that provide access to affordable quality health care services for all. In a previous edition of this book, Salmon (2001, p. 346) said, “Our health care ‘nonsystem’ is the direct result of such factors as professional self-interest, corporate interest, and political action.” These factors represent a market ideology that views health care as a commodity (a product to purchase) in a market versus health care as a human right. “Consumer-driven health care,” a catch phrase during George W. Bush’s first term in office, implies that consumers have the responsibility for choosing not only providers but what services they want from those providers and that prudent consumer choices will increase competition and drive down prices while improving quality. If only consumers could choose not to have chronic illnesses and if only all consumers had medical degrees to make informed choices.

Political Ideologies and Health Care: A Historical Perspective

In direct contrast is the kind of care promoted by early nursing leaders in the early 1900s, when thousands of immigrants crowded into settlement slums in New York City to work in factories. Lillian Wald, the founder of public health nursing, was active in politics. She successfully lobbied for parks for children and for nurses in public schools, and she brought health care directly to the people in their community at the Henry Street Settlement House (Jewish Women's Archive, 2009). Shortly after the passage of the Nineteenth Amendment granting women suffrage in 1920 during Democratic President Wilson's administration, members of Congress were elected who were concerned about women and children dying during childbirth and of starvation and poverty. Congress passed the Sheppard Towner Act, the first government funding for health care, specifically maternal-child health care (Ladd-Taylor, 1988).

Republican President Herbert Hoover's administration (1929-1933) was burdened by the Great Depression. Hoover was orphaned at a young age and was a self-made man; his ideology exemplified individualism and entrepreneurialism. To address the financial crisis of the country, he created grants to aid states to stimulate business (the market), but he said, "While people must not suffer from hunger and cold, caring for them must be primarily a local and voluntary responsibility" (White House, n.d.).

During this time, poverty plagued every American city. Public health nursing had grown, and the National Organization of Public Health Nurses along with the American Nurses Association (ANA) supported the plan of Democratic President Franklin Delano Roosevelt (1933-1945) for Social Security (Flanagan, 1976). The president and the Democrat-controlled Congress (House and Senate) greatly increased government funding for health and social services. Federal aid to the states for health and welfare in the form of funding for "crippled children, the aged, and aid to dependent children" was established (Lee & Benjamin, 1994). In 1935 the Social Security Act passed with 288 Democratic votes, 77 Republican votes, 1 Farm vote, and 6 Progressive votes. The Act created a social insurance program for children who had lost a parent, for the disabled who were unable to work, and for the elderly. The program was called the Old Age, Survivors' and Disability Insurance program. Roosevelt appointed the first woman cabinet secretary, Francis Perkins, and she urged him to include health care in the Social Security proposal, but opposition from the American Medical Association and

organized labor (which negotiated health benefits for employees) opposed a national health insurance plan, so Roosevelt decided to wait.

World War II distracted the nation. Democrat Harry Truman completed Roosevelt's term (1945-1953) as the war ended. He then ran for president and won on a platform of adding national health insurance to Social Security. The Democratic majority in the House of Representatives was lost during Truman's midterm election because the American Medical Association funded a campaign to defeat Democratic congressional candidates who supported Truman's national health insurance plan, calling it "socialized medicine" and creating fear that it would put the government in the doctor's office (Denker, 1993). The ideology of personal choice and not having a big government emerged in this election, and national health insurance never passed. The dominant ideology continues to oppose government intervention health insurance (with the exception of Medicare for the elderly).

During the 1950s and early 1960s under Republican President Eisenhower, the federal government passed the Hill-Burton law and funded the building of hospitals to keep pace with the growth of technology; the cost of medical care increased, and the health "industry" began. Soon there were too many hospitals. Many people had insurance coverage as a benefit of employment, but many others still paid the doctor directly, and payment was costly. Health policy was not on the national agenda again until the presidency of Democrat John F. Kennedy (1961-1963). Many people could not afford medical care, and the cost of hospitalization drained the savings of many of the elderly.

During Kennedy's administration, federal funding to states, counties, cities, and nonprofit organizations for medical care increased. Discussions about creating national programs to fund medical care for the poor and the elderly (Medicaid and Medicare, respectively) began. Under Democratic President Johnson, the largest expansion of government funding for health care was passed: Medicare A, a program to cover hospital costs for the elderly, and Medicaid, a program to pay for health care for the poor, were enacted. The Food and Drug Administration was created to ensure that drugs were safe before marketing. Neighborhood health centers were funded for the first time. The Civil Rights Act passed, removing obstacles to voting for African Americans and establishing access to the equal health care services (if they could afford them). Many antipoverty programs were put in place. The government began to subsidize private medical care on a large

scale, and medical entrepreneurialism blossomed. Private investor-owned hospitals, nursing homes, and clinics sprouted up. The health care industry grew with the influx of public funds. The dominant ideology was to expand access with public funds paid to private business.

ERA OF DEMAND FOR NATIONAL HEALTH INSURANCE

A marked shortage of nurses to staff the many hospital beds newly subsidized by Medicare and Medicaid drew the attention of Congress. Republican President Nixon (1969-1974) reluctantly signed the Nurse Training Act of 1971, in which Congress authorized \$885 million for three years. Unfortunately, because of the costs of the Vietnam War, President Nixon's budgets were far less than what Congress authorized. Congress added the funding back to the budget in the appropriation process, and Nixon vetoed the appropriation bill. In 1974 Nixon cut the nursing appropriation from \$160 million to \$49 million, but lobbying efforts by the ANA and the National League for Nursing were successful in convincing Congress to reinstate the funding despite President Nixon's cuts (Kalisch & Kalisch, 1982).

During Nixon's administration, the pressure to establish a national health program was great. He proposed national health coverage via an employer mandate to provide coverage, but it failed to garner the support of Republicans and enough Democrats to pass. Democrats opposed linking health coverage to the ability to work because when a person fell ill and could not work, that was when he or she needed coverage the most. Senators Edward Kennedy (D), Russell Long (D), and Abraham Ribicoff (D) and Representative Wilbur Mills (D) introduced national health insurance proposals (Etheredge, 2001) that failed to pass. Comprehensive health reform would not be considered again for nearly two decades.

Nixon's administration was responsible for the legislation that created health maintenance organizations as a new way of financing health care. Costs would be controlled by consumers choosing a health maintenance organization, creating market competition. Nixon signed legislation initiated by the Democrats in Congress to add those with disabilities and end-stage renal disease to Medicare.

During this time, nursing began to pay attention to proposals for national health insurance, realizing that Medicare and Medicaid were designed to ensure

payment only to hospitals and physicians. In 1974 the ANA adopted the following resolution:

- (1) Health, a state of physical, social and mental well-being is a basic human right. (2) Government at all levels must act to insure that health care services are provided for all citizens. (3) There is a need for integrated systems to deliver comprehensive health care services that are accessible and acceptable to all people without regard to age, sex, race, social, or economic condition. (4) There is a need for a national program designed to correct serious inadequacies in present health care delivery systems. (5) Nursing care is an essential component of health care. (Flanagan, 1976, p. 281)

That same year, the ANA formed a political action committee to help elect candidates that represented the ideology of nursing. The ANA also proposed a national health insurance program financed through payroll taxes or payment of premiums by the self-employed and purchase of health insurance coverage for the poor and unemployed from general tax revenues. This was an ideological position that all individuals should have access to care, that nursing should be a part of that care, and that if people could not pay for care, the government should pay for it out of tax revenues. Beyond just making the statement, the ANA made a commitment to support candidates for federal office who supported this ideology. However, the dominant political ideology was that health care was a product, a commodity to be purchased by consumers within the market created by the health care industry. In 1975 the Supreme Court ruled that antitrust laws applied to professional medical practice, thereby encouraging commercial competition and advertising by physicians. The ruling implied that medical "markets" would serve consumer interests by moderating prices and improving quality. As the cost of care increased, regulatory mechanisms were put in place to limit growth and address the maldistribution of physicians (Folland, Goodman, & Stano, 2004).

In 1975 the ANA established a separate fund to support state ratification of the Equal Rights Amendment, originally introduced in Congress in 1921, and Congress passed the amendment in 1972. The Equal Rights Amendment stated, "Equality of Rights under the law shall not be denied or abridged by the United States or any state on account of sex." The amendment failed to be ratified by 38 states before it died in 1982. The ANA moved its quadrennial convention to participate in the boycott of states that had not passed the Equal Rights Amendment. This action was an example of action based on the ideology of nursing: its system of beliefs.

ERA OF MARKET COMPETITION

Republican President Ronald Reagan took office in 1981. The Republican ideology was (and continues to be) to decrease the size of government. Reagan greatly downsized the Department of Health and Human Services (Etheredge, 2001). His ideology of a “new Federalism” decreased federal expenditures for domestic social programs and asserted that the role of government is to maintain the national defense and law and order (Estes, 1994). During this era (and subsequent George H. W. Bush and George W. Bush administration eras), the free market was the center of the economy, tax reductions (despite great increases to the national debt) would stimulate the market along with deregulation, and competition would stimulate reform, bringing about cost control. Reagan immediately cut taxes, and in doing so cut the income to pay for government programs. The resulting \$200 billion deficit was blamed on increasing the costs of Medicaid and Medicare (Etheredge, 2001). Government spending on Medicaid and Medicare became an “economic crisis.” To control costs, Reagan implemented diagnosis-related groups, or a lump-sum payment to hospitals based on diagnosis, as an alternative to fee-for-service reimbursement to hospitals. Reagan’s ideology also emphasized the cultural image of the traditional family in a time when divorce was becoming more socially accepted. The health care system during the Reagan era became dominated by a powerful medical profession and for-profit medical industries. Not surprisingly, the number of uninsured grew dramatically, and the cost of health care rose at two to three times the rate of inflation (Lee & Benjamin, 1994).

The ANA, frustrated with the growing cost of health care and with the conditions under which nurses were attempting to care for patients hospitalized for increasingly shorter lengths of stay, took a controversial action and endorsed a candidate in the presidential election, choosing the Democratic nominee in 1984 and 1988. Reagan won reelection in 1984, and George H. W. Bush won in 1988. These bold actions, criticized by many, were the result of nursing standing up for its political ideology of believing that health care is a right, not a product that only the privileged should be able to afford.

Republican President George H. W. Bush (1989-1993) inherited a large debt and continued Reagan’s economic ideology, claiming that the economic crisis demanded market intervention for health care cost containment through privatization, competition, and deregulation.

Bush did nothing to stop the investor-owned insurance industry attempts to decrease costs by shortening the lengths of stays in hospitals. Consumers and Congress—not the president—insisted on legislation to protect patients from being subjected to “drive-through deliveries” and “drive-by mastectomies.” Never before in history was Congress required to intervene to protect patients from insurance companies dictating patient care driven by the need to return a profit to their investors.

During Reagan’s and Bush’s combined 12 years of market intervention, national health expenditures rose from \$25 billion in 1980 to \$870 billion in 1992. As insurance premiums increased, many employers eliminated insurance benefits, increasing the number of uninsured. In 12 years, the market had failed to control health costs. A two-tiered system of health care reemerged, and the working poor lacked access to care.

ERA OF HEALTH CARE REFORM

Health care reform, the need to expand access and control costs while preserving quality, was a major issue in the 1992 presidential election. The ANA, along with the National League for Nursing, had developed Nursing’s Agenda for Health Care Reform, a policy paper that proposed greater use of nurses and advanced practice nurses along with investments in primary care in community-based settings to control costs (American Nurses Association [ANA], 2001).

Nursing had spent the time and money on research to back up the effectiveness of the agenda, and Democratic presidential candidate William Jefferson Clinton’s platform for reform paralleled that of nursing. In the 1992 presidential election, nursing demonstrated its ideology and endorsed Clinton for president. After Clinton was elected, the ANA worked with the President to pass his health care reform proposal. Clinton’s proposal for “managed competition” was not “national health insurance”; however, it did address quality, access, and cost, and it included nurses as essential providers in all settings. In Clinton’s proposal the government played a regulatory role in structuring a market in which employees would choose from several health coverage options (Nichols, Ginsburg, Christianson, & Hurley, 2004) and the government-managed (regulated) premiums, physician reimbursement, and pharmaceutical costs.

In the midterm congressional election (two years into Clinton’s first term), the ANA Political Action Committee withheld support from candidates who did

not support the health care reform proposal. Unfortunately, like Truman in his midterm election, Clinton lost the Democratic majority in Congress in 1994. In that election, the American Medical Association and the Health Insurance Association of America targeted swing congressional races where the incumbent supported Clinton's proposal with advertisements suggesting that if Clinton's reform passed with the candidate's support, the government would be in the doctor's office making decisions. Health care reform would be stalled for another 15 years, and unregulated health care costs continued to rise. Employers seeking lower health insurance premiums began to limit choices to health maintenance organizations, and many employers dropped health coverage entirely. For-profit health care continued to grow, and investor-owned insurers and health maintenance organizations began to make medical decisions, often denying much-needed care in order to make a profit. Many not-for-profit health care facilities began to resemble their investor-owned competitors, spending money on advertising and atmosphere in order to compete (Relman, 2005).

ERA OF EXPANDING ACCESS

Despite the \$490 billion deficit Clinton inherited from George H. W. Bush, Clinton balanced the budget during his term (1993–2001), and when he left office, there was a surplus of more than \$5.6 trillion over the next 10 years. Clinton proposed and signed into law the largest expansion of government-funded health coverage since the creation of Medicare and Medicaid, the State Children's Health Insurance Plan (SCHIP) that provides coverage for children up to 200% over the poverty level by matching state and federal dollars. SCHIP stayed in place until 2007, when President George W. Bush limited eligibility to families earning less than 250% of the federal poverty level. SCHIP was reinstated in 2009 during the first 20 days of Barack Obama's presidency (Monroe, 2009).

ERA OF TAX CUTS AND PRIVATIZATION, MORE MARKET-BASED CONTROL, DEFICITS, AND CUTBACKS

The election (some would call it a "selection") of Republican President George W. Bush in 2000 ushered in a new political era of market ideology and privatization of health and social services. Hospital systems were permitted to consolidate to increase market power, but the quality of care did not improve and the cost of care did

not go down because of new efficiencies (Cutler, 2004). Under the guise of adding a prescription drug benefit to Medicare, Bush and the Republican Congress set Medicare policy on the road to privatization. Under the Medicare Modernization Act (MMA), which narrowly passed the House and Senate on a partisan vote with only a few Democrats supporting it, Medicare covers the cost of prescription drugs under specific circumstances. There is no regulation of prescription drug costs in the MMA, and in fact, even though prescription drugs were already much more costly in the United States than in other countries, prescription drug prices increased. The MMA expressly prohibited negotiating lower prices for bulk purchasing. The MMA was the pharmaceutical industry's dream bill: increase prices and let the government subsidize industry profits. The MMA also subsidized HMOs by paying much higher rates than traditional Medicare; despite the fact that managed care was touted as saving money, for-profit HMOs profited greatly.

President Bush's ideology, like that of Republican administrations before him, was to limit government funding for health care. Under the new Medicare law, in six areas of the country the government provides vouchers to Medicare beneficiaries that they can use to purchase health insurance. If the insurance costs more than the voucher, individuals must make up the difference with their own money. This two-tiered system of health care ensures that the federal government pays a fixed amount for health insurance premiums and forces beneficiaries to pay the increase when the premium goes up, not the government. The program transfers the cost to the beneficiary rather than being a public system that treats every beneficiary equally, and in doing so, this voucher system created a private purchasing program in the name of Medicare.

Bush also proposed privatizing Social Security, promising younger workers a private savings account invested in the market that they would own. Social Security was designed as a social insurance program with defined benefits for the elderly, the disabled, and children who lose their parents; it was never intended to be a private savings plan. Bush's goal was to decrease the government contribution and increase private investment. The privatization of Social Security would have removed millions of dollars from the trust fund where it is invested in stable government bonds and would have failed to provide a guaranteed benefit package for future generations, thus leaving United States citizens only one disabling accident or major stock market decline (such as the fall of 2008) away from poverty.

Bush cited an economic crisis as his reason for Social Security reform, yet at the time, the Social Security Administration itself stated that the fund was solvent until 2042. The real economic crisis was created by the permanent tax cuts enacted by Bush and the Republican-controlled Congress that are projected to run a deficit of \$8.4 trillion by the end of 2010 (not unlike the crises created by the tax cuts of Reagan and George H. W. Bush).

Privatization is the recurring Republican ideology, as is individualism and relying on market competition to keep costs down. Estes (1994) describes dominant power relations as being sustained through ideologies in three ways:

1. Ideologies successfully help create cultural images by policy makers, experts, and the media.
2. Ideologies create an appeal to the necessities of the economic system.
3. Ideologies focus problems and their solutions on familiar organizational structures and professions rather than on the more fundamental issues of class, gender, and race.

The American Nurses Association opposed Republican efforts to privatize public insurance programs and sent letters to Congress; however, these issues were not used as criteria for consideration for campaign contributions and support by the ANA Political Action Committee, and nurses in key districts were not mobilized to lobby their members. In these instances, the ANA did not put "its money where its mouth is" because so few nurses were involved or demanded action by the ANA.

The wealthy will always have access to quality health care; it is the disenfranchised that the profession of nursing must help protect. Women who leave the workforce to care for children and then their aging parents accrue less retirement on lower wages and live longer on their smaller retirement incomes. Privatizing Social Security, privatizing Medicare, and failing to regulate the cost of prescription drugs adversely affects women and people of lower socioeconomic means. Nurses must be involved in this debate.

ERA OF RISING COSTS AND DECLINING COVERAGE WITHOUT RESPONSIBLE INTERVENTION

At the turn of the century, increases in the cost of health care resulted in a decline in health insurance coverage, as more and more employers dropped health coverage as a benefit (Gilmer & Kronick, 2005). The Institute of

Medicine found overwhelming evidence that the uninsured receive poorer care. The uninsured are less likely to receive preventive and screening services, and therefore serious diseases are detected later. The Institute of Medicine estimated that 20,000 people die each year because they are uninsured (Cutler, 2004). A direct link exists between health insurance as one factor in explaining why people of color rank the lowest on key health status indicators. Three-fourths of the 23 million uninsured in communities of color in the United States lived below 200% of the federal poverty level of \$37,670 for a family of four in 2003 (Lillie-Blanton & Hoffman, 2005). At some point in 2007, before the economic downturn of 2008, 50 million people were uninsured (Napel et al., 2009). Eighty percent of the uninsured in the United States are from working families, with two-thirds of the uninsured working families earning less than \$44,000 for a family of four or 200% of poverty in 2009 dollars (Rowland, 2009).

It is estimated that 1.9 to 2.2 million American families experience medical bankruptcy caused by medical expenses each year, and nearly 76% of them had medical coverage at the onset of their illness (Himmelstein, Warren, Thorne, & Woolhandler, 2005). During President Bush's first term, the Republican Congress passed a bankruptcy bill that made it easier for credit card companies to seize assets of families, regardless of health status, reflecting an ideology that invests in financial institutions rather than people.

Medicaid (health care for the poor) spending increased 65% from 2000 to 2005 and then leveled off in 2006. The federal government pays on average 57 cents out of every dollar Medicaid spends, and the states pay the balance. More than 50 million Americans rely on Medicaid for their health care. The greatest number of individuals who rely on Medicaid are poor families with children, but more than two-thirds of Medicaid dollars are spent on the elderly and those with disabilities, particularly on care provided by for-profit nursing homes (Henry J. Kaiser Family Foundation, 2007).

The number of people relying on Medicaid as a safety net is expected to grow by 1 million people for every percentage increase in the unemployment rate. As people lose their jobs in the recession, the number of uninsured (ineligible for Medicaid because of personal assets) is expected to grow by 1.1 million. Because Medicaid is funded by both state and federal governments, as state budgets shrink in the economy, so too does funding for Medicaid. States must either cut benefits or raise taxes (Rowland, 2009). The profession of

nursing historically stays away from tax policy, with the exception of “sin taxes” on tobacco and alcohol. Why doesn’t the profession’s ideology to expand coverage extend to paying for it through increased taxes?

Health care costs doubled between 1996 and 2006 and are currently 16.2% of the gross domestic product (GDP). In 2025 health costs are projected to make up 25% of the GDP and 49% in 2082. Between 2003 and 2006, United States health care spending increased by \$363 billion to \$2.1 trillion. In 2007 the United States spent \$7,421 per person on health care, nearly twice the average of other developed countries. A recent report published by the United States Department of Health and Human Services (USDHHS, 2009) estimates that the typical elderly couple may have to save nearly \$300,000 to pay for health costs not covered by Medicare.

Further, despite spending more per capita, United States citizens are not as sick as citizens of other countries. Outpatient care makes up the fastest-growing segment of the United States health care dollar. This is attributed to fewer inpatient stays and increased supply and demand for specialists and specialty procedures, which results in more high-intensity care. United States physicians and nurses are paid higher wages than their counterparts internationally, representing a cost to the United States health system of \$64 billion. The cost per outpatient visit increased by 8% per year for the years 2003 to 2006. The average United States hospital cost per day ranks the highest among the 29 member nations of the Organization for Economic Cooperation and Development. Americans pay 40% more per capita than Germans do for health care and received 15% fewer real health resources, with much of the United States money spent on high-cost, high-tech solutions for often preventable diseases (Farrell et al., 2008).

ERA OF HOPE AND CHANGE

Even before the election of President Obama in 2008, combined with the election of larger majorities of Democrats in both the House and Senate that rekindled real hope for change, some states moved forward and adopted different strategies to cover the uninsured, among them, Massachusetts and Maine in 2008 (Tolbert, Ebeler, & Schwartz, 2008). The current proposals at the federal level, which include the Massachusetts Model, the Obama Plan, the McCain Plan, the Baucus Plan, and the Wyden-Bennet Plan, have several approaches, some of which

represent differing ideologies and are contradictory. All of them, however, are controversial:

- ◆ Employer role: incentive or requirement—market ideology versus government regulation
- ◆ Strengthen regulation of insurance market or lessen regulation—government regulation versus market ideology
- ◆ Subsidize individual coverage and provide tax incentives or mandate coverage—government assistance (subsidy—tax incentive) versus ideology of individual responsibility
- ◆ Build on public programs: expand Medicaid and SCHIP or create a program
- ◆ Revise organization of insurance market: use purchasing groups or association health plans, allow new national offerings, and include reinsurance
- ◆ Change tax policy to eliminate tax deduction for employer coverage; create a single-payer plan (Tolbert et al., 2008)

Beyond these general “approaches,” additional “requirements” for a reformed system include universal coverage. Everyone must be in the system to eliminate cost shifting (overcompensation by insured patients) (Kahn, 2009). Bodenheimer (2008) identified the importance of supports needed to coordinate care as essential, and others agree. Discussions regarding payment reform and establishing a global DRG (diagnostic related grouping fee) charge for an entire “case,” including the 30 days after discharge, is an idea that is gaining steam (Guterman, Davis, Schoenbaum, & Shih, 2009). Corrigan and McNeill (2009) describe the Centers for Medicare and Medicaid pilot project, which bundles Medicare reimbursement based on “acute care episodes or ACE” as a care coordination demonstration project and a kind of “pay for performance” that incentivizes care management. Organizational changes, including multidisciplinary teams, and measuring and improving performance are essential to eliminate fragmentation and establish accountability (Corrigan & McNeill, 2009).

The importance of health information technology (HIT) is identified as saving money that can be passed onto the provider, improving patient safety and patient care, and improving care coordination and care management (Fisher et al., 2009). Should the savings be passed on to the doctors and hospitals, or should it be spent on expanding care? This is an ideological issue. Nurses have an important role in the coordination of care—in preventing costly hospital admissions and readmissions—but we are not publishing research on

why we should be at the center of chronic disease and care management.

THE ERA OF NURSES AT THE CENTER OF THE HEALTH CARE SYSTEM

Now is the time for the profession of nursing to be guided and inspired by the ideology put forth over the last several decades. Nurses must support universal coverage, and we must support nurse researchers who are proving that what nurses do improves lives and is cost-effective. We must publish outside of the nursing literature research on the effectiveness of nursing-centered care coordination.

We must also develop IT systems that communicate across care settings—from the nurse in the critical-care unit to the nurse in the home setting to the nurse in the hospice. Nurses are the health care professionals who cross all settings of care and are the best communicators. We must define how nursing fits into a reformed system and is not just an attachment to physician practices; right now, we are invisible.

We must write about our ideologies in newspapers, blogs, and mainstream media. We must invest our individual and collective resources of professional organizations to influence the policy makers, coalitions, and political campaigns. Writing letters and wearing buttons are not enough; nurses' actions must speak louder than their words. Nurses need to choose which political party reflects their beliefs about who deserves access to quality, affordable health care. Nurses need to insist that the professional associations that represent them hold elected officials and candidates to the standard that considers health care a right for all United States citizens, not just the privileged.

Nurses have a professional obligation to those entrusted to their care and to society to work individually and collectively to demonstrate that they have political ideologies that serve all of humankind, especially the most vulnerable. Each nurse has an obligation to be involved in politics to shape the policies that govern health care delivery. In the words of former vice president Hubert Humphrey, "The moral test of government is how that government treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; and those who are in the shadows of life, the sick, the needy, and the handicapped." Nurses choose elected officials, and their choice should reflect the ideology of nursing about health care. Nurses must be involved and vocal, lest their ideals be silenced and their ideology be invisible.

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Defining Health Disparities from Three Viewpoints: Reducing Inequality in Health Care

JOYCE NEWMAN GIGER

Since the United States was first colonized, diversity has always been a reality. In fact, with the immigration of European whites, the systematic capture and importation of black slaves from Africa, and the presence of American Indians on American shores from the very beginning, the heterogeneous, multicultural nature of the United States was established (Giger & Davidhizar, 2008). Without doubt, it has been a long-standing priority of local, state, and national legislators that there should be adequate standards for health and at least a minimal standard for care for all United States citizens (Dingley, 2004). It is clear that the multicultural, heterogeneous, pluralistic nature of United States society is beginning to create tremendous challenges for health care professionals. This chapter addresses this important topic by looking at the concept of health disparity from a biopsychosocial perspective and by further describing disparities that are present in the United States among two ethnically/racially diverse groups: African Americans and Mexican Americans. Many other health disparities could be considered in other groups, but space limits this chapter and allows only these groups to be addressed.

HISTORICAL ACCOUNTS OF HEALTH DISPARITIES

According to Mail, Lachenmayr, Auld, and Roe (2004), racial and ethnic disparities have long been identified as an enduring characteristic of the United States health care system. As indicated earlier, the last two decades have seen a dramatic increase in the diversity of the United States population. Concomitant with these changes is a growing understanding of the importance of recognizing, studying, treating, and ultimately preventing or eliminating disparities in health status and

in access to health care. While research is increasing about health disparities, much is left to be discovered and understood (Berkowitz & McCubbin, 2005).

HEALTH DISPARITY DEFINED FROM THREE VIEWPOINTS

The term *health disparity* can be defined from three perspectives: population-specific, sociological, or biopsychosocial. From the broadest perspective, a health disparity is defined as the population-specific difference in the presence of disease, health outcomes, or access to health care (HRSA Workgroup for the Elimination of Health Disparities, 2000). In 2004 there was an attempt to organize what was to become the first National Institute of Health Work Group on Health Disparities held in Washington, D.C. The task of this first working group was to narrowly define the term *health disparities* in a much more useful way. That first working group concluded that health disparities were “differences in the incidence, prevalence, mortality, and burden of disease and other adverse health conditions that exist among specific population groups in the United States” (Agency for Healthcare Research and Quality, 2003).

There can be no doubt that there is a direct relationship between the nature of the health care delivered and the impact on eliminating and/or minimizing health disparities. This is certainly an important factor, so much so that a definition of *racial and ethnic health care disparities* was provided by the Institute of Medicine’s Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care (Smedley, Stith, & Nelson, 2003). This definition states that a health disparity is “racial or ethnic differences in the quality of health care that are not due to access-related factors or clinical needs, preferences, and appropriateness of intervention” (Smedley et al., 2003, p. 32).

Health Disparity Defined from a Sociological Perspective

When a health disparity is viewed as having occurred because of designated chains of events and when there are notable differences in (1) environmental aspects; (2) access to, utilization of, and quality of care by virtue of race, gender, religion, and so on; (3) health status; and (4) health outcome, then this definition is offered from a sociological perspective. Poverty, for example, is a well-defined set of circumstances that is characterized by unacceptable social factors that ultimately can cause people and/or populations throughout the world to endure any number of health disparities (Giger & Davidhizar, 2007; 2008). But poverty, in and of itself, is not viewed as the single defining causative factor for health disparities in any given population (Giger & Davidhizar, 2007; 2008).

Health Disparity Defined from a Biopsychosocial Perspective

Many researchers have argued that neither the population-specific nor the sociological definitions allow for the inclusion of biological variations that often occur in groups of people regardless of race, ethnicity, socioeconomic status, and access to care issues. This is not to suggest that health disparities do not occur at alarming and disproportionately higher rates among persons who live at the federally defined poverty index or among ethnic minorities residing in the United States. The former statement simply suggests that biological variations may occur within, among, and across races/ethnicities. With this thought in mind, yet another approach to defining the term *health disparity* is offered from a biopsychosocial perspective. As indicated, this is perhaps one of the narrowest and most concise definitions because it provides for the incorporation of biological variations (Giger & Davidhizar, 2008). Giger and Davidhizar (2008) offer a more concise definition of the term *health disparity* by suggesting that a health disparity can occur when genes/biology, environment, and behavior all come together in a cataclysmic way to create a disparity. In other countries, terms such as *health inequality* or *inequity* are more commonly used, while in the United States, the term *health disparity* is almost exclusively used.

An Inequality Defined. When differences in age, rank, condition, lack of excellence in treatment, or dissimilitude (vast differences) in the services that are available exist, it is referred to as *inequality* (Giger & Davidhizar, 2007; 2008). Likewise, an inequity is

often defined as a condition of “being unequal” or “lack of opportunity, treatment or status.” Yet another compelling definition of the term *health disparity* is that it may be used, especially in public health and in the social sciences, to suggest that some form of an injustice has occurred (Giger & Davidhizar, 2007; 2008). Another view of health disparity is that in the context of public health and the social sciences, the term has begun to take on a meaning of injustice because of the dissimilitude in types of services, access to care, amount of care rendered, and the quality of the care rendered.

ELIMINATING HEALTH DISPARITIES

The Institute of Medicine charged a committee to study inequalities in care in the United States. This committee released a seminal report titled “Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care” (Smedley et al., 2003). It is interesting to note that this committee unequivocally noted that disparities in health care are fairly consistent regardless of the nature of the illness at the time services were rendered (Smedley et al., 2003). While it is certain that socioeconomic status plays a major contributing factor in unequal treatment, particularly where ethnic minorities are concerned, it is disheartening to learn that Braithwaite and Taylor (2001) noted that even if income levels were standardized and if all impediments regarding access to care were eliminated, disparities in health outcomes might still exist.

According to Atrash and Hunter (2006), health disparities in the American society may be so pervasive, particularly where ethnic minorities are concerned, that they can even affect life expectancies (Atrash & Hunter, 2006). These researchers go on to argue that this ideological thought gives credence for the need to eliminate cultural incompetence among health care providers (Atrash & Hunter, 2006). There is no health care professional who would be exempt from this argument, as we must all serve as advocates who champion the cause for providing culturally competent care for all clients entrusted to their care.

HEALTH DISPARITIES: RACE AND ETHNIC CONSIDERATIONS

While statistics are now available on health disparities in relation to various racial groups in the United States, it is interesting to note that these statistics do

not provide clear and compelling evidence as to what specifically caused the health disparity. To understand the relationship between a health disparity or a set of health disparities and their importance, the astute health care professional must also understand how it relates by race/ethnicity and on other key variables. Thus, the following discussion will reveal statistical facts about the two largest ethnic minority groups in the United States: African Americans and Mexican Americans.

African Americans

While the life expectancy for African Americans has slowly edged upward over the last several decades, it has not kept pace with that for whites or other ethnic minority groups residing in the United States (Giger & Davidhizar, 2008). It is commonly known that the life expectancy for African Americans continues to lag behind that for whites. In late 2007, the life expectancy for African Americans was 71.0 years, compared with 76.9 years for whites (Brunner, 2007). When it comes to life expectancy, African American men fare worse than all of the other male counterparts in general and all other groups with gender included. For example, in 2000 the life expectancy for African American men was 68.3 compared with their white counterparts at 74.8 (Brunner, 2007). While African American women's life expectancy is higher than that of African American men, they do not fare as well when compared to white women (75.0 compared with 80.0) (Brunner, 2007).

Infant Mortality Rate. Overall, the infant mortality rate in the United States declined slightly from 7.2 in 1990 to 6.87 in 2005 (U.S. Department of Health & Human Services, 2008). Yet African Americans continued to have a higher infant mortality rate (13.7 per 1000 live births in 2005) compared with white Americans (5.7 per 1000 live births in 2005) (USDHHS, 2008).

Age-Adjusted Death Rate. Among all statistics, those regarding African American males, which are focused on the age-adjusted death rate, are the most startling. For example, in 2005 the rate of deaths for African American males was 55% higher for heart disease, 26% higher for cancer, 180% higher for stroke, and 100% higher for lung disease than for the rest of the general United States population (USDHHS, 2008).

Potential for Life Lost. One interesting statistical compilation is called the potential for "life lost." This is how many years a person could have lived compared with his or her age-appropriate white counterparts who did not die of similar conditions because of their entry into the health care delivery system earlier, more

aggressive treatment, ready availability of financial resources to treat the condition, and culturally sensitive and competent services that were provided (Cherry & Giger, 2008). Perhaps the greatest disparity with the rate of deaths or the potential for life lost for African American males was attributable to homicides, which was 700% higher than that of white males (USDHHS, 2008). The life expectancy for African American males nonetheless continues to shrink and certainly this shrinkage may be attributable to disparities in health concerns, especially chronic illnesses that contribute significantly to premature deaths before 65 years of age among African-American males (Cherry & Giger, 2008).

African American Children and Obesity. It has been said that if the health care statistics espoused in *Healthy People 2010* are dismal for African Americans, Latinos, and American Indian women and men, they are even more so for their children (U.S. Department of Health and Human Services, 2000). Being overweight is a common problem in the general United States population, and yet it is said to be at epidemic proportions for children in this country (Strauss & Pollack, 2001). By 1998 statistical evidence had greatly increased to suggest that children were beginning to have a problem with overweight status in this country. In fact, available data suggested that among children, overweight status had increased by 21.5% for African American children, 21.8% among Hispanics, and 12.8% among non-Hispanic whites (Strauss & Pollack, 2001).

Health Disparities for Diabetes

Diabetes is a prevailing problem among African Americans. It has been suggested that among African Americans, some 40% will have Type 2 diabetes by age 40 (Cherry & Giger, 2008). In fact, diabetes was so pervasive among African Americans that in 2005 it was reported as the underlying cause for more than 40,000 deaths and a contributory factor in approximately 160,000 other deaths (U.S. Department of Health and Human Services, 2008). In the United States population, it is estimated that some 7.8% (11.4 million) of all non-Hispanic whites have diabetes, compared with 13% (2.8 million) of blacks and 10.2% (2 million) of Hispanics. It is interesting to note that by proportion of the population, American Indians have a disproportionately higher incidence of diabetes at 15.1% of their population (105,000), while Alaskan Natives experience the lowest percentage (5.3%). American Indians who reside in the southeastern area of the United States have the greatest incidence of diabetes at 25.7% (American Diabetic Association, 2002).

By race, diabetes is ranked as the seventh leading cause of death in the United States among whites, blacks, Chinese, and Filipinos. In general, United States women have a higher mortality associated with diabetes than their male counterparts (USDHHS, 2008). Notably, in 2002 the age-adjusted death rate for diabetes by race was whites, 22.8%; blacks, 50.1%; American Indian or Alaska Native, 50.3%; Asian or Pacific Islander, 18.4%; and Hispanics, 33.6% (USDHHS, 2008). While the *Institute of Medicine Report on Unequal Treatment* (Smedley et al., 2003) suggests that there are a number of incidences where ethnic minorities receive unequal treatment in regards to health care, it is further illuminated in regards to care of diabetes.

Unequal Treatment and Unequal Burden of Diabetes. According to Cherry and Giger (2008), blacks, Hispanics, and American Indians experience 50% to 100% of the mortality associated with diabetes than do their white counterparts. Yet, despite this compelling fact, the disease appears to be more profoundly undermanaged among these vulnerable populations. According to the *Institute of Medicine's Report on Unequal Treatment*, on average, blacks with Type 2 diabetes are more likely to be treated with insulin as opposed to an oral antihyperglycemic agent than are their white or Mexican counterparts. Nonetheless, it is essential to remember that the prevalence of diabetes varies according to race and gender; it increases with age; and at all ages it is highest among Americans Indians, Hispanic women, and African Americans.

Potential for Life Lost Due to Diabetes. By definition, the potential for life lost in years is essentially computed by estimating how many more years an age-appropriate white would have lived given similar circumstances. In the case of diabetes, in 2001 the estimated years of potential life lost before the age of 50 for women with diabetes was 318.3 per 100,000 for African American women; 306.4 per 100,000 for American Indian/Alaskan Native women; 167.9 per 100,000 among Hispanics; and 111.1 per 100,000 for non-Hispanic white women (Giger & Davidhizar, 2008).

Mexican-Americans

Several diseases are more prevalent among Mexican Americans compared with their other racial/ethnic counterparts. It is thought, for example, that Hispanic Americans suffer primarily from adult-onset diabetes, with diabetes ranking as the third leading cause of death for Hispanic women between the ages of 45 and 74 (Vásquez, 1997). According to Reinert (1986), the Texas Special Committee on Diabetes Service noted

that the incidence of diabetes among Hispanics was not only five times the national average but that complications associated with diabetes are also more frequent among this population.

Mexican Americans and Poverty. There is no doubt that according to Braithwaite and Taylor (2001), socioeconomic status plays a major contributory factor in the development of a health disparity. For example, Bastida and Pagan (2002) noted that Mexican American men tended to have a lower probability of structured employment, which may have no effect on earnings because of their potential to earn outside of the specifically defined workforce. In contrast, Hispanic women had lowered productivity and earnings but no significant impact on probability of employment. Luyas (1991) found that among low-income, Mexican American women with Type 2 diabetes, the diabetes onset was often explained in terms of economic and family problems. In one study where Mexican Americans with Type 2 diabetes residing in California were interviewed, two interesting phenomena were found (Eid & Kraemer, 1998). In general, Mexican Americans tended to be concerned about the cost of health care, and this concern was particularly manifested among individuals who had no health insurance (Eid & Kraemer, 1998). On the average, these subjects tended to blend the treatment plan of conventional medicine with native customs. In a similar study, Otiniano, Black, Ray, Du, and Markides (2002) found that Mexican Americans with diabetes who had less than 12 years of education were more likely to report diabetic complications than those with a high school education. Findings from this study also suggested that circulation problems were the most common complications reported by 40% of respondents in this study, with eye problems reported by 38%.

Hypertension. Among Mexican Americans, hypertension continues to be a major health problem with increased prevalence (USDHHS, 2008). In fact, it is reported that Mexican Americans are slightly more likely to have high blood pressure than are non-Hispanic whites (29% vs. 27%) and slightly less likely to have high cholesterol than are their non-Hispanic white counterparts (18% vs. 21%) (Steward & Silverstein, 2002). It is interesting to note that even when Mexican Americans are diagnosed with high cholesterol, which ultimately requires medication, they were less likely than their white counterparts to take cholesterol-lowering drugs (Nelson, Norris, & Mangione, 2002).

Pernicious Anemia. Pernicious anemia is a condition that is most often seen in the elderly, yet it has been shown to occur in people of Latin American

origin at a younger age than in whites in the same age group (Carmel, Johnson, & Weiner, 1987). In fact, there is some available data that suggest a contributory factor for this condition might be low socioeconomic status. The reason for this is believed to be a lack of certain nutrients like those in iron-rich foods and this deficiency has a profound effect on hemoglobin and hematocrit (Giger & Davidhizar, 2008). According to Overfield (1995), there is also some evidence to suggest that given similar socioeconomic conditions, Mexican Americans tend to have higher hematocrit levels than their white counterparts. Among Hispanics residing in the Southwest, one study suggested that there may be a poorer prognosis with melanomas because they arose from the palms, sublingual regions, mucous membranes, and soles of the feet; tended to be in more advanced stages; frequently occurred in the elderly; and metastasized more readily (Black, Goldhahn, & Wiggins 1987).

Communicable Diseases. Among Mexican Americans, it is thought that approximately 85% of the common health problems involve communicable diseases (USDHHS, 2008), including respiratory tract infections, diarrhea, skin disorders, nutritional problems (particularly during the first year of life), macroscopic parasitosis, and amebiasis. Throughout the world, although thought once eradicated, one of the most severe medical problems is tuberculosis, which is believed to occur in areas with crowded living conditions, low income, substandard housing, and inadequate health care such as that which existed for many in Mexico. Newly arrived immigrants including Mexicans are at the most risk for the incidence and transmittal of tuberculosis (Giger & Davidhizar, 2008). Mexico is commonly associated with a high prevalence of tuberculosis, and therefore it is believed that Mexican Americans may have a predisposition to a higher prevalence of tuberculosis than other Americans (Phipps, 1995). One study found after surveying 845 African American, Mexican American, and white adolescents in San Diego that among these subjects, Mexican American adolescents had a higher rate of positive tuberculin tests, necessitating treatment (Fitzpatrick et al., 1990). In another study, McQuillan, Kruszon-Moran, Deforest, Chu, and Wharton (2002) found that among their subjects, adult Mexican Americans were slightly less likely than other Americans to have protective levels of antibodies for diphtheria and tetanus.

Hepatitis C. It is an established fact that hepatitis C occurs at a higher rate among Mexican Americans (Giger & Davidhizar, 2008). For example, for hepatitis C,

the rate among United States whites is 1.5%, compared with Mexican Americans at 2.1% (Cronin, 1997). Today, it is estimated that some 3.9 million people in the United States have hepatitis C, a blood-borne virus that can be fatal (USDHHS, 2008).

Once blood banks began screening for hepatitis C in 1990, the rate of new infections began to decline. It is noteworthy that although half the number of persons who obtained hepatitis C before 1990 were believed to have acquired it from blood, the other half likely did so by sharing needles or straws to inject drugs (Cronin, 1997). As far back as 1997, Cronin noted that more people could die from the complications of hepatitis C than from AIDS. Nonetheless, some 70% of the cases of hepatitis C often result in liver damage that ultimately leads to death.

Childhood Obesity. Statistical data available suggest that there is a growing incidence of childhood obesity among Mexican Americans. One group of researchers (Alexander & Blank, 1988) noted this in a classic study and reported that this alarming rise in obesity may be a result of mothers believing that a fat baby is a healthy baby; the obesity rate is 29%, compared with 21% in the general population (Carter-Pokras, 2000). The mothers in Carter-Pokras's study tended to have a greater body mass index than mothers in the control group. Carter-Pokras also noted that these mothers were "pushier" when it came to feeding their children.

To prevent the complications of adult obesity stemming from childhood obesity, health care providers need to readily identify mothers and their children who are at risk for obesity and encourage a weight-reduction program. All health care professionals should make an assessment of the potential need for nutritional education among Mexican American clients. It is suggested that some Hispanic women may have cultural dietary variations prenatally (White, Linhart, & Medley, 1996). For example, like their southern African American counterparts, among some Hispanic women during pregnancy there may be antepartal cravings, including for clay (Giger & Davidhizar, 2008). Nonetheless, it is essential to remember that Mexican Americans are generally more likely to be obese than their white counterparts.

Leading Causes of Deaths among Mexican Americans. The two leading causes of death in Mexico are pneumonia and gastrointestinal diseases that are related to bacteria and parasites. Accidents and violence are believed to be the third leading cause of death, and cardiovascular disease is believed to be the fourth

leading cause of death. Up to 78% of all farmworkers suffer from parasitic infection compared with 2% to 3% of the general population (National Center for Farmworker Health, 1996).

HIV/AIDS. Among Hispanics, the cumulative total of deaths reported from January 1999 through December 2001 was 81,793 (USDHHS, 2008). While the number of deaths attributable to AIDS has steadily risen, it is highest among Hispanic men. For example, among Hispanic men, the cumulative total of deaths through December 2001 was 67,557. For Hispanic males 15 to 24 years of age, the number of deaths reported was 1373. For Hispanic women of all ages, the number of cumulative deaths reported through December 2001 was 14,236. Unlike their African American counterparts, the cumulative death rates remain relatively low for Hispanic women between 15 to 24 years of age. For example, the number of cumulative deaths for Hispanic women from 15 to 24 was 7 compared with 8 for whites (USDHHS, 2008). According to Aplemis (1996), because of the unsanitary working and housing conditions of migrant farmworkers and a limited opportunity to protect themselves, the opportunity for higher risk for HIV infection exists among Mexican Americans. In fact, findings from one study of farmworkers in Florida suggest that the rate of HIV infection was 5%, about 10 times higher than that of the general population (Aruffo, Coverdale, & Vallbona, 1991).

Rates of HIV infection found in other studies among farmworkers working in the eastern migrant stream have ranged from a low of 2.5% in North Carolina to 13% in rural South Carolina (Jones et al., 1991; Lyons, 1992). Another study of 587 subjects interviewed in Harris County, Texas, found that only 58% of Hispanics indicated that they understood that the use of condoms during sexual intercourse decreased the risk of contracting AIDS (Aplemis, 1996).

Psychological Characteristics. Mexican Americans often encounter serious health problems resulting from the stress of coping with poverty (Reinert, 1986). These problems include being overweight and an increased risk for suicide. According to Bechtel, Davidhizar, and Tiller (1998), for some Mexican Americans, alcohol consumption is a way of celebrating life, so alcohol is consumed in all aspects of life and contributes to the increased incidence of accidents, violence, homicides, unintentional injuries, and other lifestyle-related problems. In a review of the literature, Arrendondo, Weddige, Justice, and Fitz (1987) found that for Mexican Americans, alcoholism is possibly one of the most crucial health problems.

SUMMARY

This chapter examined the causative factors for *health disparities* and succinctly defined this term in a more tangible fashion. It is essential to remember that while the reasons for health disparities could be due to gene-environment factors, these factors do not fully explain the problem as it currently exists. Thus, behavior must also be linked to causation and not simply economics. Explaining health disparity from a biopsychosocial perspective provides an explanation that is more plausible than the previous limited theories of causation. The challenge ahead is for research with powerful analytical procedures for combining data using a triangulated approach from all aspects of the biopsychosocial perspective. Such research can transform what is known about health disparities in the United States among vulnerable populations (Esperat, Feng, Owen, & Green, 2005).

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Magnet Designation: Creating New Synergies

ROSE RIVERS ♦ SUEELLEN PINKERTON

This chapter describes the competitive edge. Magnet recognition through the American Nurses Credentialing Center Magnet Recognition Program (2008) is the gold standard for excellence in nursing care and patient outcomes. In addition, Magnet recognition creates a tangible and visible link between nursing and overall hospital success. Being Magnet-designated calls for a transformation, and the level of thinking in the organization must change to whole systems thinking in order to change the level of practice.

MAGNET RECOGNITION: A SOLID FOUNDATION

The Magnet Recognition Program provides a road map and blueprint for improving patient care quality, specifically the impact of nursing care on quality. The focus on nurse-sensitive indicators lays the groundwork for nurses to focus on their sphere of influence. Its publication, *Scope and Standards for Nurse Administrators* (American Nurses Association, 2004), provides the foundation for the program. These standards support the principles for professional practice models, including role expectations for the chief nursing officer (CNO). The Magnet model described in the *Application Manual* (2008) is a framework that consists of the domains of transformational leadership; structural empowerment; exemplary professional practice; new knowledge, innovations, and improvements; and empirical outcomes. This model reflects a grouping of the Sources of Evidence into 5 domains rather than the 14 Forces of Magnetism. The concepts of the 14 Forces, which were identified over 25 years ago, are within the model components. An important note is that the 14 Forces were identified as the hallmark for the sustained success of Magnet-designated goals, based on continued research.

During a severe nursing shortage in the early 1980s, some hospitals were recognized for their retention of

quality nurses. These hospitals were not experiencing the nurse vacancy and turnover problems that their counterparts were. The American Academy of Nursing commissioned a study to determine which factors accounted for the success of these hospitals. Forty-one hospitals participated in the study that identified and described the variables that contributed to an environment that supported the recruitment and retention of nurses. These hospitals were assigned the status of “Magnet hospitals” because they were able to attract nurses in the midst of the severe shortage. The original study was published as *Magnet Hospitals: Attraction and Retention of Professional Nurses* (McClure, Poulin, Sovie, & Wandelt, 1983). Researchers continued to study the identified Magnet hospitals, building on the work of the original study, which resulted in a compilation of the works that was published by the American Nurses Association (2002) in *Magnet Hospitals Revisited: Attraction and Retention of Professional Nurses*.

Continued shortages of nurses called for long-term sustainable strategies to address the issues affecting the recruitment and retention of qualified nurses. In 1993 the American Nurses Credentialing Center (ANCC) began the Magnet Hospital Recognition Program. A few years later, this program became the Magnet Nursing Services Recognition Program for Excellence in Nursing Services. The initiative began with a pilot program to identify Magnet hospitals, and in the late 1990s, the program was extended to all hospitals and long-term care facilities. The Magnet Recognition Program has grown to achieve international status and influence.

The Magnet Recognition Program took some lessons from the first generation of Magnet-designated hospitals to build the current program. Research has built the framework for excellence that is the basis for Magnet designation; the framework is not a set of standards that was “made up.” In addition, as noted in a white paper by The Joint Commission on Accreditation of Healthcare

Organizations (2002), titled "Health Care at the Crossroads: Strategies for Addressing the Evolving Nursing Shortage," the Forces of Magnetism and standards align with the goals of the commission. The goals of the Institute of Medicine regarding patient safety are congruent with the focus of the Magnet Recognition Program on the nurse work environment. Many of these strategies are noted in the Institute of Medicine's (2003) report *Keeping Patients Safe: Transforming the Work Environment of Nurses*.

The Importance of Magnet Recognition

Magnet recognition is gaining attention in environments that are external to the health care system. In focus groups conducted with chief nurse executives and Magnet coordinators, Havens and Johnston (2004) presented one CNO report where the chief executive officer and the chief operating officer of the hospital were surprised to find out that at their annual bond rating meeting in New York, bond raters already knew about Magnet hospitals. The bond raters also wanted to know the vacancy rate, turnover, and general health of the nursing staff in the hospital. They recognized the benefit of a strong nursing force to the viability of the hospital. According to Havens and Johnston, "They said that the financial picture of a hospital is in jeopardy if they do not have a strong nursing department" (p. 581). Magnet recognition is also mentioned as a factor in the placement of hospitals on the *U.S. News & World Report* "Best Hospitals" list and in naming the "Best Children's Hospitals." Magnet recognition also has been a factor in the successful negotiation of managed care contracts.

Recent popular magazines and newspaper articles have recommended Magnet designation as a factor consumers should support and consider in selecting a hospital. This assumes consumers have some voice in selecting a hospital. Most recently, recruitment ads for chief nurse executives have mentioned looking for a CNO who will lead the Magnet effort. In a position of influence, the ANCC (2008) has set educational requirements for the hospital CNO, who, at the time of application to the Magnet Recognition Program, must possess a master's degree, and either their master's degree or bachelor's degree must be in nursing. Some schools of nursing also are looking exclusively for Magnet facilities to use as clinical sites for student experiences, believing that Magnet-designated facilities embrace and display a work environment that supports exemplary professional nursing practices with strong role models for students.

The Path to Magnet Recognition

Magnet recognition creates a tangible and visible link between nursing and overall hospital success. Today's hospitals cannot afford to have nursing be the weak link in the chain. A Magnet culture strengthens the nursing link. To be successful, hospitals must have a great purpose and vision, and Magnet can be the tool to achieving them. Magnet is about doing the right things right. Magnet status is about positioning nurses to offer better care to patients and saying "no" to mediocrity and "yes" to excellence through the application of evidenced-based leadership, management, and clinical practices.

The effect of the nursing shortage has created a momentum for the examination of current practices in hospitals. Some of the benefits of achieving Magnet status are high patient and family satisfaction, exemplary professional practice with improved clinical outcomes, strong collaborative relationships, and high staff satisfaction, leading to improved recruitment and retention of nurses and other employees.

A healthy, growing phenomenon is to help other hospitals, typically thought of as competitors, to achieve Magnet status. Promoting the "Magnet environment" as the norm presents an opportunity to change the image of nursing from being a difficult, unattractive career choice to becoming a prestigious, challenging profession. A "Magnet culture" encourages innovation regarding professional development. New knowledge, innovations, and improvements is one domain in the Magnet model (ANCC 2008), which is consistent with the hallmark of organizations receiving Magnet recognition.

Creating new opportunities that foster growth by making the best use of expert nurses is a win-win-win situation for the hospital, nurse, and patient. With all of the outcomes related to Magnet designation, the question becomes how to sustain and improve upon them. Historically, the nursing shortage has generated solutions that impact recruitment and retention, such as a variety of bonus pay programs. Some popular programs offer 40 hours' pay for 24 hours worked (usually on the weekend) and other variations to attract nurses. These models have not been sustainable in the long run. Costly gimmicks are not the answer to nursing shortages. Cultural transformation is required to sustain results.

Typically, becoming a Magnet-designated hospital requires deep-rooted culture changes. Magnet status is not a cover-up, but it requires changing old ways of

thinking and doing, including the thinking and doing of senior leadership. Magnet designation infers excellence and sets the expectation for excellence to consumers and from providers. Magnet status sets the expectation for continuous learning because excellence is a journey that has no finish line.

A Whole-System Effort

Pursuing Magnet designation is creating an environment in which all can succeed. Support of nursing is support of overall patient care quality. Strategically positioning the CNO leverages the ability of staff nurses to improve patient care quality through input and involvement throughout the organization. A significant focus on nurses is required to improve patient outcomes, given their centrality to patient satisfaction and quality of care.

Magnet designation as an organizational goal becomes a catalyst to align the hospital vision, mission, philosophy, and values. Nursing leadership becomes an anchor. Organizational response to nursing becomes a unifying force in which collaboration is the norm to meet the patient demands. Nursing governs nursing practices, including human resource allocation, in this type of environment.

The challenge to achieve Magnet designation is a call to action and for action. It is CNO driven and hospital supported. It helps to build bridges between nurses and the CNO. It opens the door for “crucial conversations” (Patterson, Grenny, McMillian, & Switzler, 2002) that address long-standing issues and concerns, such as professional jealousy and horizontal violence. Magnet designation as a mutual goal serves to improve collaboration and communication. Other departments are major players in the pursuit of Magnet status, often participating to the extent of completing a gap analysis on their own departments or adopting the Magnet model as a leadership framework for their departments. Pursuing Magnet designation is not a solitary effort. Nursing is not an island unto itself; therefore, interdisciplinary partnerships are key to achieving Magnet designation.

SUMMARY: FUTURE IMPLICATIONS FOR MAGNET DESIGNATION

As more and more hospitals seek Magnet designation—some not successfully—one question is whether Magnet designation is an achievable goal for all hospitals. Should all hospitals pursue Magnet designation? Can Magnet-designated hospitals influence the greater

health care environment? Will Magnet hospitals lead the transformation in health care? Will Magnet hospitals be the basis for new reimbursement models? Will Magnet hospitals have fewer risk management issues? Will compassion fatigue (Compassion Fatigue Awareness Project, 2009) be a factor in Magnet hospitals? Should the ANCC have so much influence in determining standards for hospitals and CNO educational preparation? How can non-Magnet hospitals influence the standards set by the ANCC? What is the balance between the American Nurses Association collective bargaining activities and Magnet designation? What is the role of the American Organization of Nurse Executives in Magnet designation? Will tensions arise between non-Magnet and Magnet hospitals and become divisive for nursing?

CASE STUDY

Maggie Winters was hired recently by the New Light Hospital as the CNO. One of her hiring goals was to consider and recommend Magnet designation for the hospital. She completed a careful gap analysis and found a large gap between her goals and the goals of the nurse managers regarding Magnet recognition. The managers are not convinced that the hospital should pursue Magnet designation. What should be Maggie's course of action? Should she wait until she has been at the hospital for a few years? If so, why? Should she expect the nurse managers to follow her lead even if they are not convinced? What if they try to undermine her goals? Should she gain staff nurse support and hope nurse managers will follow? What is the role of education? What internal and external resources are available to Maggie? How does Maggie quantify the cost-benefit of Magnet recognition? How should Maggie go about informing the board of directors/trustees, administrative leadership, and physicians about a Magnet-designation goal? What are some approaches to whole-system thinking about Magnet designation? What competitive edge should Maggie seek?

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The Research Imperative for the Nurse Executive

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The research imperative for the nurse executive has been evolving over the last 50 years, just as the research imperative for the nursing profession has been evolving. Nurse executives, however, initially did not move as expeditiously in conducting research and disseminating the findings as clinicians did for several reasons:

1. Many nurses felt there was no nursing administration body of knowledge to investigate.
2. Few schools and colleges of nursing had graduate programs for nurses who were interested in studying a curriculum of nursing administration.
3. Fewer nurse executives were prepared to conduct research.
4. Once nursing administration curricula became available, some faculty still believed only clinical research should be conducted to meet graduate school requirements.

All of these factors fed on one another and for a period of time kept the body of knowledge for nurse administrators from being acknowledged and developed very quickly.

Fortunately, attitudes and opportunities have changed, with the following results:

1. Many nurse executives are prepared at the doctoral level and are project investigators for research.
2. Many nurse executives have research monies in their budget to support research and fund salaries for research directors.
3. Many schools and colleges of nursing offer graduate degrees in nursing administration and support the pursuit of administrative research and the generation of knowledge.
4. Grants are available that support the pursuit of administrative research.

Additionally, organizations with Magnet designation are challenged to provide sources of evidence to demonstrate Magnet excellence for the domain of “New Knowledge, Innovations, and Improvements.”

IMPACT OF MAGNET RECOGNITION PROGRAM MODEL AND DOMAINS ON RESEARCH PRODUCTIVITY

Magnet Designated Organizations

The new Magnet model, described in the 2008 edition of the American Nurses Credentialing Center (ANCC) Magnet Recognition Program *Application Manual 2008*, identifies five domains:

- ♦ Transformational leadership
- ♦ Structural empowerment
- ♦ Exemplary professional practice
- ♦ New knowledge, innovations, and improvements
- ♦ Empirical quality outcomes

The sources of evidence for the domain of new knowledge, innovations, and improvements include describing and demonstrating structures/processes used to develop, expand, and/or advance nursing research and nursing research studies from the past two years that were generated from such structures/processes (p. 50). Research generated as part of this activity will most likely focus on clinical research designed to impact patients. In an organization where nursing research is truly integrated into the culture or the organization, there will also be an opportunity to conduct research to support the generation of knowledge in nursing administration. This includes the impact of innovations in care delivery, such as technology, on patient outcomes and the impact of innovations in the work environment, such as shared governance, on staff satisfaction (McCloskey et al., 1994).

Organizations Not Magnet Designated

Some organizations do not choose to participate in the Magnet Recognition Program (ANCC, 2008), or they may have applied but have not been designated. What is their responsibility for research productivity? Will not participating in research or not having a strategic plan for research place these organizations at a disadvantage competing for and recruiting nurses? Will

these organizations be assumed to be less focused on patient care outcomes improvement? How do they impact the standards being set by the Magnet Recognition Program (which may directly or indirectly impact them) if they do not participate in the program? Is there an unwritten expectation that CNOs, no matter their educational preparation or support from their employing organization, have a professional obligation to engage in clinical and administrative knowledge generation? What if the organization has limited financial resources and limited access to nurses with the educational preparation to lead, support, and/or conduct research?

OPTIONS FOR RESEARCH SUPPORT TO THE ORGANIZATION

External Support

If seeking research support, organizations that are part of an academic health center, especially those with a school or college of nursing, have a range of opportunities. Collaborative relationships are one option. In this structure, an organization may pay a portion of the salary for a faculty member, and, depending on the structure of the agreement, the faculty member may teach research, conduct research, support the research efforts of the staff, or participate in any other number of activities designed to integrate research into the culture of the organization.

In some communities, organizations interested in research may form a collaborative and contract as a group with a school or college of nursing. This may help organizations with limited financial resources, but this approach may provide fewer hours of support to the individual organization. As the faculty shortage intensifies, this may be less of an option as nursing educators have difficulty filling faculty vacancies.

Organizations with an interest in research and with nurses prepared to conduct research but perhaps with limited experience may bring in a researcher to consult with the staff. This affords the organization the opportunity to develop the research competencies of the staff, stay within their budgetary guidelines, and have access to the latest elements of the research process.

Even if physically disconnected from a school or college of nursing or academic health center, some CNOs participate by being a preceptor for a graduate student in a nursing program. This affords the opportunity for academic stimulation and a challenge to the CNO and staff to provide a worthwhile learning experience for the student.

Internal Support

Some organizations are fortunate enough to have the financial resources to support a center for nursing research or to have research as part of a center for nursing excellence. The financial support may be an ongoing organization budgetary allocation that supports all of the activities and personnel in the center.

Financial support may also come from an individual or group interested in the advancement of professional nursing, such as an individual donor to the foundation of an organization or an organized Friends of Nursing that accepts and collects donations from a variety of individuals and groups. The financial support may come from outside the organization but be used exclusively for internal organizational activities.

Other Funding

Needless to say, the opportunities are endless, usually only limited by one's creativity. Grants provide financial support, but they almost always require extensive applications, and they often need experienced nurses in grant writing to help with the completion of the application and the management of the research. Some pharmaceutical companies support research efforts, but careful exploration of any possible conflicts of interest is important. Other equipment and supply companies may give donations to an organization's nursing fund for participation in the testing and evaluation of new equipment and supplies.

The ideas listed thus far are not exhaustive, but the message is that funding and/or support are available in different amounts and from many sources for the CNO wanting to establish research efforts in their organization. What opportunities should be considered in collaborating with other professions? What role should nursing take in these types of collaborations?

DISSEMINATION OF RESEARCH FINDINGS

Just as important as participating in and conducting research is the dissemination of research findings. Many organizations conduct research and publish findings for others to study, discuss, and implement. Research findings that are important for consideration in practice and administration are also published in many journals. Prompt attention to publications with efforts to implement them in a timely way is an imperative for the CNO, especially given the 8- to 10-year timeline usually associated with dissemination and adoption (Rogers, 1995).

CNO Imperatives for Staff Nurses

An example of published findings for which a CNO has an imperative to disseminate is research on near-miss/adverse events (Ebright, Urden, Patterson, & Chalko, 2004). The findings reported on eight cases involving novice nurses. All of the cases occurred during a 12-hour shift, and six of the cases were during the 7:00 PM to 7:00 AM shift. Nine themes were identified, and three of them occurred in all eight cases: clinically focused critical thinking, seeking assistance from experienced nurses, and knowledge of unit and work flow patterns (p. 534).

Some of the implications were (1) critical thinking of the novice nurses was not at the level needed to prevent the situation, (2) the need for more experienced nurses as a resource was needed, and (3) orientation may not have been adequate. These findings bring the following questions for the CNO to consider. Are 12-hour shifts the best option? Do they provide continuity to the patient but negatively impact the novice nurse? Should novice nurses work the 7:00 PM to 7:00 AM shift when there are fewer resources available to them? How should the CNO balance retention of more experienced nurses who prefer the 7:00 AM shift with the need for the experienced nurse resource on the 7:00 PM shift? Although this study focuses on novice nurses, CNOs must consider several important factors based on this research. Decisions about the length of shifts and the mix of staff nurses on each shift should be guided by patient outcome data, staff and patient satisfaction data, and research findings.

The Staff Nurse Work Environment. Attention to the work environment is an imperative for the CNO. Nurse turnover has been related to dissatisfaction with elements in the work environment. The American Association of Critical-Care Nurses (2005) has published the *AACN Standards for Establishing and Sustaining Healthy Work Environments: A Journey to Excellence*, which provides a framework to ensure patient safety, enhance staff recruitment and retention, and maintain an organization's financial viability. The standards are as follows:

- ◆ Skilled communication
- ◆ True collaboration
- ◆ Effective decision making
- ◆ Appropriate staffing
- ◆ Meaningful recognition
- ◆ Authentic leadership

These standards provide a framework for CNOs to use as they evaluate the efforts of their organization related to work environment issues.

In a baseline status report on work environments from survey questions based on the AACN healthy work environment standards (Ulrich et al., 2006), the results of the research identified that one in five nurses (20%) planned to leave their current position in the next 12 months, and 28.6% planned to leave within the next three years. Of those, 44% said better leadership might cause them to reconsider. What research findings could be a stronger imperative for a CNO? Ensuring the competency of the nursing leadership is central to the CNO spreading his or her influence through the organization to impact the care of patients. Likewise, strong leadership is essential for messages from the patients and staff to be carried to the CNO. A healthy work environment helps create the foundation for these critical exchanges.

The Impact of Technology. A powerful research focus on the hospital work environment and staff nurse retention is the dissemination of technology and automation of processes. A study funded by the Robert Wood Johnson Foundation (Bolton, Gassert, & Cipriano, 2008) reported that all nursing workflows such as “admission, discharge and transfer, care coordination; care delivery; communication; documentation; medication; patient movement; and supplies and equipment” could be improved with technology. Nurses also want tracking technology to reduce wasted time looking for equipment and supplies.

Findings from a study that examined healthy work environments and complexity compression (Pinkerton, Rice, Cusanza, & Jankowski, 2008) also suggested a need for improvements in technology. Several high-impact and high-frequency indicators of complexity compression (Krichbaum et al., 2007) were apparent, such as bed turnover, documentation, medication delivery, and technology at the bedside. Analysis of qualitative data revealed that nurses were hoarding supplies, keeping par levels high, and hiding equipment to avoid wasting time searching for equipment. This finding is related to the recommendations from the study by Bolton et al. (2008). Without question, there is a research imperative in the technology area for CNOs.

One other study identified documentation, medication administration, and care coordination as targets for improving the efficiency of nursing (Hendrich, Chow, Skierczynski, & Zhenqiang, 2008) based on the amount of time spent in those areas. Documentation accounted for 35.3% of nursing practice time, medication administration for 17.2%, and care coordination for 20.6%. These data should be considered in light of the fact that only 7.2% of nursing practice time was used for patient assessment.

This alone can be a full-time research imperative for the CNO. How should a CNO proceed to impact and influence the choices for technology? How does a CNO get budgetary allocations for technology? How does a CNO convince other administrative leadership that technology choices impact patient care directly? How does the CNO convince the administrative leadership that technology to support patient care and nursing practice is as important as technology to support finance?

One Final Imperative

Complexity compression (Krichbaum et al., 2007) is defined as what nurses experience when they are expected to assume additional, unplanned, and unexpected responsibilities, while simultaneously conducting their usual, multiple responsibilities during a work shift. Complexity compression will continue to be a factor as the acute care work environment becomes more intricate but CNOs have an imperative to control or diminish it as much as possible. What can CNOs do to support staff nurses in their already complex work environment? Is this where efforts need to be placed to improve the competency of nursing leadership? How can the CNO create a healthy work environment? What is the role of technology?

SUMMARY

The literature abounds with data and recommendations to improve the retention of staff nurses for which the CNO has a major role and responsibility. Implementation of research findings is crucial for the CNO. The CNO must commit to finding the key interventions that promote retention of staff nurses and, just as important, create a work environment that improves patient safety by reducing the opportunity for error. The nurse executive has a research imperative to focus on and enhance research in his or her organization.

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Laying the Foundation for Evidence-Based Practice for Nurse Residents

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New baccalaureate graduates enter the workforce with a basic knowledge of evidence-based practice (EBP). Building upon this knowledge and integrating research findings and evidence into their clinical nursing practice is important. Thus, engaging new graduates in EBP is a required component of the postbaccalaureate nurse residency program established by the University Health System Consortium (UHC) and the American Association of Colleges of Nursing (AACN). The UHC/AACN residency is a 1-year program run by an acute care hospital in collaboration with a partner school of nursing (Goode & Williams, 2004; Krugman et al., 2005; Williams et al., 2007). All new graduates who are hired into this residency program must complete an EBP project. Having this requirement for nurse residents sends the message that EBP is an expectation for clinical practice and supports what they are taught in their baccalaureate program. This chapter describes the residency curriculum requirements related to EBP and provides samples of projects completed by nurse residents at the University of Colorado Hospital (UCH).

BACKGROUND

Governmental agencies that are clearinghouses for clinical guidelines, such as the Agency for Healthcare Research and Quality and the Institute of Medicine, have sanctioned the use of EBP as the basis for all health care delivery. These agencies have emphasized that practice supported by evidence improves patient outcomes and clinical practice. Nursing educators have reported “if evidence does not inform the nurse’s clinical judgment, nursing practice can become rapidly outdated and patient care can ultimately suffer” (Brancato, 2006, p. 195). Sigma Theta Tau defines EBP as the integration of the best evidence available,

nursing expertise, and the values and preferences of the patient and family (www.nursingsociety.org). Rycroft-Malone and colleagues (2004) and Sacket and colleagues (2000) defined EBP as the process of shared decision making between practitioner; patient; and others significant to the patient, based on research evidence. The outcome of this decision-making process should be person-centered, evidence-based care (Rycroft-Malone et al., 2004).

It is necessary to gain commitment from both the individual nurses and the organization as a whole to create a culture of EBP. Creating this culture for nurses entering practice can be challenging. However, strategies that are supportive and focus on removing barriers can demonstrate the value and relevance of EBP for nursing. Polit and Beck (2008, p. 30) emphasize that “EBP provides an important framework for self-directed lifelong learning that is essential in an era of rapid clinical advances and the information explosion.” New graduate nurses are in a prime position to both adapt to this framework and propagate the new culture. During the hiring process, new nurses at UCH receive a letter from the chief nursing officer (CNO) informing them of the expectations for using evidence in practice. Statements from the letter are displayed in Box 41-1. This letter clearly establishes the importance of EBP in the organization before employment.

The hospital’s job descriptions, nursing philosophy, and professional practice model all include expectations for EBP. EBP is the encompassing framework for the shared leadership model. When the councils and committees in the shared leadership model make decisions, it is an expectation that their decisions will be based on evidence. Policies and procedures are evidence-based and the level of evidence is documented. Our organization supports transformational leadership, in

BOX 41-1 Excerpts from the Chief Nursing Officer's Recruitment Letter

"We believe nurses need to be well-educated to fully participate as a partner in the multi-disciplinary team. This means that we hire only BSN new graduates into our national post-baccalaureate residency program."

"We believe that nursing practice should be based upon the evidence. We want nurses at all levels to be comfortable searching for the evidence, using evidence in practice, and asking questions. We provide evidence-based practice classes and mentors to assist you. Our theorist is Florence Nightingale, the first nurse-outcomes researcher. We hope you also embrace using evidence-based practice methods in your care to provide best outcomes to patients."

contrast to supporting command and control leadership. Transformational leadership enhances the integration of evidence into practice.

Stetler and colleagues (2007) conducted a case study to understand organizations that seem able to find and use evidence at multiple levels in an ongoing, integrated fashion in contrast to those that do not. Through purposive sampling, two contrasting cases (departments of nursing) were selected along with three embedded units in each organization. One case was judged as a "role model" per a nomination process involving the American Organization of Nurse Executives. The comparison case was self-identified as early in the journey to EBP. UCH was selected as the role model. Several findings were indicative of a supportive organizational EBP culture. They included higher scores on the Organizational Learning Survey; higher scores on Transformational Leadership; and statistically significant higher scores on the Practice Environment Scale, indicating a more positive work environment. Visible behaviors included articulating a vision, setting expectations, role modeling, and direct participation of key leaders (Stetler et al., 2007).

While new graduate nurses entering practice experience many stressors, supporting and teaching them to search, evaluate, and apply research and best evidence to their practice helps them gain confidence early in their career. Anecdotal reports from new graduate nurses indicate that utilizing evidence in practice and conducting EBP projects as part of their residency curriculum is an important experience. This is enhanced by sharing the project with their unit because it helped

each nurse resident become a more integral part of the unit care team.

NURSE RESIDENCY EBP CURRICULUM

A research nurse scientist introduces new graduate nurses to EBP as early as day two of the clinical orientation. The hospital's history of incorporating EBP and an introduction to the hospital's Evidence-Based Multidisciplinary Practice Model are presented. During the residency, considerable time is devoted to discussing the various resources available to the nurse in support of EBP. These resources are displayed in Box 41-2. The nurse residents attend one 4-hour "graduate nurse seminar" each month throughout their 1-year residency program. During the monthly seminars, the nurse residents are introduced to various EBP-generated policies, procedures, and protocols.

At approximately month seven, the nurse residents attend an 8-hour course entitled "EBP: Beyond the Basics." Program presenters include the hospital's CNO and director of professional resources (both are nurse researchers), College of Nursing faculty and hospital-based research nurse scientists, and the residency program coordinator. The course provides an overview of the structure, process, and outcomes of utilizing EBP in an acute care magnet hospital. The CNO discusses EBP as it applies to each unit and the hospital at large using actual examples.

The nurse residents' final projects require a literature review to gather the evidence on a topic of their choice. Residents may choose to supplement the literature with their own data collection related to the selected topic. They may work independently or in small groups. To disseminate their findings, the residents may organize and hold a journal club for their unit, revise a policy or

BOX 41-2 Resources to Support Evidence-Based Practice

- EBP council
- EBP "champions" on each unit
- Quarterly research grand rounds
- Unit-based journal clubs
- Access to facilitators: Clinical nurse specialists, educators, research nurse scientist, residency coordinator
- Unit-based access to library for searches
- Transformational nurse leaders
- Nurse informatics specialists who embed EBP protocols in documentation

procedure, or present a poster at the program completion celebration. The progress of each project is overseen by a resident facilitator. The residency coordinator reviews multiple past projects completed by residents that were presented at regional and national conferences.

At month 11 of the residency program, the nurse residents meet once more for a 2-hour EBP workshop. Time is permitted during this workshop to share project concerns, access resources in the computer laboratory, and continue to prepare for dissemination. At the hospital-sponsored graduate nurse residency program completion celebration, the nurse residents showcase their EBP final projects to their peers and nursing leaders from throughout the institution.

EXAMPLES OF NURSE RESIDENT EVIDENCE-BASED PRACTICE PROJECTS

Three examples of evidence-based projects from new graduate nurse residents help clarify the impact of this program on the careers of new nurses and the quality of patient care they provide. Their stories reinforce the importance of this approach to orientation for professional practice.

RESIDENT PROJECT—MEDICAL INTENSIVE CARE UNIT/SURGICAL INTENSIVE CARE UNIT

Starting as a new graduate in an intensive care unit (ICU) can be overwhelming. Even after becoming comfortable with roles and tasks, the ICU remains challenging for many new nurses. Nurses frequently experience distress when questioning if the care they provide is morally right. Moral distress has been defined as “the painful psychological disequilibrium that results from recognizing the ethically appropriate action, yet not taking it, because of such obstacles as lack of time, supervisory reluctance, an inhibiting medical peer structure, institution policy, or legal considerations” (Corley et al., 2001, p. 250).

Moral distress has been identified and studied in ICU nurses for over two decades and is a strong predictor of job satisfaction and retention. In a 2005 study, critical care nurses emerged as the group most at risk for experiencing moderate to severe moral distress (Elpern, Covert, & Kleinpell, 2005). Fifteen percent of nurses reported resigning a position due to experiencing moral distress (Corely et al., 2001). Nurses report experiencing anguish, sleeplessness, nausea, migraine headaches, gastrointestinal upset, tearfulness, and a sense of isolation,

but they are unable to identify these as the signs and symptoms of moral distress (Hanna, 2004). Among critical care nurses in one study, 41% met Beck’s Depression Inventory II criteria for clinical depression and 65% met the Pittsburgh Sleep Quality Index criteria for “poor sleeper” (Pendry, 2007). The four most distressing situations that emerged from the literature were discordant expectations, role conflict, futile care, and end-of-life care.

In 2006, the AACN published recommendations and strategies for recognizing and dealing with moral distress. The most important way to cope with moral distress is for nurses to acknowledge it and to recognize its impact. The University of Colorado Hospital has implemented the AACN recommendations. The hospital utilizes ethics committees, a palliative care team, and standardized end-of-life protocols. Families are involved in decision-making through family meetings. If an employee is experiencing feelings of distress, support and counseling are provided through the Employee Wellness Program.

The information yielded from the literature review for this project was disseminated in a poster presentation for the residents, nurse leaders and incoming new graduates starting their first week in the ICU. The poster presentation was then displayed in the unit break rooms for senior nurses to review.

RESIDENT PROJECT—ORTHOPEDICS UNIT/MEDICINE SUBSPECIALTIES UNIT

Many new graduates tend to view their first year of nursing practice in terms of simply learning to manage the overwhelming number of decisions made on a daily basis without harming a patient. I initially saw the New Grad Program mainly as a resource offered by the hospital to soften the inherent stress and culture shock of being introduced to a nursing environment. To me, the required EBP project had much more academic than practical value. I thought it seemed like a lot to ask of a first-year nurse. In fact, I was convinced that I would be perfectly content to go my whole nursing career without ever conducting research or publishing.

By the time we were asked to pick a topic of interest for our projects, I had become interested in the different “cultures” of pain. Specifically, I was fascinated by the psychosocial patterns of those with chronic pain and how well we as nurses were able to address their pain. My project partner had been a social worker before becoming a nurse. She had an interest in the sociological aspects of clinical practice and wanted

to explore the disparities that stem from subjective judgments. When searching the literature with regards to pain, cultures, and subjectivity, the vast majority of studies suggested that minorities (specifically Latinos and African Americans) were less likely to receive the same pain management as their Caucasian counterparts despite having very similar pain contexts (Ramer et al., 1999).

The literature identified that different expectations between the patient and health care workers of “what pain was, how it was expressed, and how it was treated” contributed to poorer pain management for minorities. When these differences go unnoticed and unexpressed, they can be interpreted as a lack of caring or even a conflict in the pain management relationship. Moreover, documented evidence existed showing less actual pain treatment (Epps, Ware, & Packard, 2008).

My graduate nurse project partner and I summarized recommendations from the literature that focused on assisting the nurse in avoiding potential cultural misunderstandings and helping to create a common pain management framework between the patient and nurse. Most of the recommendations took the form of communication protocols between nurses and patients. They were somewhat analogous to the situation, background, assessment, recommendation (SBAR) communication protocol between nurses and physicians. If SBAR was a way to “get to the point,” protocols might assist the nurse and patient to “get to the same point,” with the ultimate goal of improved pain management among different cultures.

When the project was presented to the staff on our unit, responses ranged anywhere from “I didn’t know that (regarding the existence of racial disparities)” to “We’re already doing that (regarding the communication protocol recommendations).” For those that did not realize cultural disparities in pain management existed, it was an invitation to consider their own potential biases. For those that were not using the communication protocols, the discussion provided an opportunity for the staff to dialogue about the potential clinical value of such communication. In either case, it was a way to tease out knowledge of the larger group.

As both a nurse and a minority, I no longer think of this EBP research as academic. I have incorporated many recommendations from the EBP literature into my own practice and believe my ability to assess and manage pain in minorities has greatly improved. With a year’s worth of hindsight, I can see why it’s so important for new graduate nurses to embrace the culture of

EBP. I truly believe that at our hospital commitment to using evidence in providing excellent patient care is not a notion, it’s a practice. As with all practices, the earlier one starts on them, the more natural they become.

In discussing the potential publication of this narrative, the irony was not lost on me when the CNO of our hospital said something along the lines of, “After all, who really thinks about researching and publishing when they are just getting started?” Not me, certainly. But, I have been fortunate enough to be challenged by my new graduate residency program into thinking, “I can do better; why not me?”

RESIDENT PROJECT—PERIOPERATIVE UNIT

This project explored the current evidence-base for surgical-attire guidelines and the effect of the attire on patient and staff satisfaction. A FOCUS PDCA approach was used. This approach utilizes the following steps: Find a process to improve; Organize the work on improvement; Clarify current knowledge; Understand process variation and capability; and Select a strategy for continuous improvement. PDCA is an acronym for Plan, Do, Check and Act. The project focused on examining current guidelines restricting staff from wearing cloth hats as part of their uniform in the operating room (OR) and the effects of wearing cloth hats on patient and staff satisfaction.

In the pre-op setting, the patient is faced with as many as 10 new individuals with hats, green scrubs and questions. All of these staff members talk to the patient with in approximately a 45-minute time frame. The patients that come to our hospital are often times facing difficult and lengthy surgeries, and they and their loved ones can be very anxious. While every care team member is important, the operating room (OR) nurse has the unique opportunity to continue to communicate with the family during the surgery.

For the patients leaving the pre-op area and entering the OR, it can be an overwhelming and unnerving experience. Upon entering the OR, there is a sea of people, all wearing masks over their faces and looking the same. The patient struggles to place any of these people from their pre-op experience. While interviewing the patient in pre-op, I always like to tell them what the OR will be like and that when they enter to look for me, “I will be wearing the polka dot hat today. Just remember my hat and you will be able to find me.”

Later in the day, when the patient comes to the OR, I ask if they remember me; I am the nurse with the polka dots, and it usually gives them something to

recognize and a sense of comfort. This concept was made apparent to me when one afternoon, after finishing a kidney transplant, the patient woke up and actually said, "Polka dots, you're still here!" That was a very gratifying moment. This is what led me to believe that the policy change could increase both patient and staff satisfaction.

In surveying OR staff at both the inpatient operating rooms and the outpatient operating rooms at the UCH, some interesting facts about perceptions of staff and patient satisfaction emerged from the data. Inpatient staff thought being allowed to wear cloth hats would increase staff and patient satisfaction, but the outpatient staff felt differently. While some thought it would increase staff satisfaction, they overwhelmingly felt that it would not increase patient satisfaction. I concluded the difference in opinions is due to our different settings. Inpatient registered nurses spend a longer period of time with the patient and their families in pre-op and also frequently continue to have communication with the family during an extremely lengthy surgery, while the nurses in the outpatient setting do not usually have that opportunity due to the short, fast nature of their cases. Staff felt that the largest compliance issue with wearing cloth hats would be following guidelines for home laundering.

In conducting a literature review, it was found that the evidence supported the fact that cloth hats did not affect patient safety in any way (Association of periOperative Registered Nurses, 2007; Belkin, 2007; Jurkovich, 1999; Kiehl, Neely & Maley, 2000; Scott, 1999; Wallace, & Warren, 1997). No increase in infection rates could be related to the use of home-laundered surgical attire, including cloth hats. The remaining steps of the project are to propose a formal change in the current policy related to surgical attire in the operating room and update the evidence in the policy.

SUMMARY

One framework reported in the literature indicates that successful implementation of EBP can be explained by a function of the relationship between three elements: evidence, context, and facilitation (Rycroft-Malone et al., 2002). Most successful implementations occur when the evidence is scientifically robust, matches professional consensus, and patient needs; the context (organization) is receptive to change, has a sympathetic EBP culture, strong leadership, and appropriate monitoring and feedback systems; and there is appropriate facilitation by skilled facilitators (Rycroft-Malone et al.,

2002). New graduates in the nurse residency program at the UCH are supported in their projects by very skilled facilitators who are clinical nurse specialists, nurse educators, or research nurse scientists. In addition, they practice in a culture where EBP is an expectation.

One barrier to successful implementation of EBP is knowledge. This new graduate residency program is breaking down the knowledge barrier by preparing new graduate nurses for EBP. Our patients benefit when we teach and adopt EBP. Completing an EBP project within the first year of nursing practice allows new nurses to see the application of EBP in their own units and highlights EBP as an important practice standard for the nursing profession.

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Determining Staffing Needs Based on Patient Outcomes versus Nursing Interventions

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Goode and Krugman (2001) said, “Nurses want to base clinical and managerial decisions on the best currently available evidence to improve outcomes” (p. 60). Estimating nursing care requirements for patients and projecting these requirements for the next shift and day continue to be a challenge for nurse executives. Recent nurse staffing legislation in several states mandates the integration of patient acuity into hospital staffing plans and patient assignments. The patient acuity systems of the past, however, have historically been plagued by subjectivity, additional nurse workload, and a perceived lack of value both by nurses caring for patients and hospital leaders. A new innovative approach to determining staffing needs is an outcomes-driven acuity methodology, overcoming past obstacles, adopting a new nonlinear view of the nursing process, and placing emphasis on patients’ clinical outcomes that are sensitive to nursing interventions. Using evidenced-based outcomes within current documentation systems and workflow, outcomes-driven acuity provides the entire interdisciplinary care team with current information about the status of patients. This new-generation acuity methodology also makes the contribution of nurses to patient outcomes visible.

HISTORICAL PERSPECTIVE

Perhaps the earliest documented considerations toward classifying patients based on patient demand for nursing care can be traced back to Florence Nightingale, who placed the sickest patients nearest the nursing station and the patients who were the least sick the farthest away (Abdellah & Levine, 1965; Giovannetti, 1978). Various terms used in measuring patient needs and variability for nursing care and services across the past 50 years have been imprecise and often confusing. Box 42-1 presents common definitions associated with nursing resources

management. Thompson and Diers (1991) have suggested that both patient acuity and nursing intensity are important but are measured differently: “Acuity describes patients; intensity describes nursing resources” (p. 135). For the purposes of this paper, *nursing intensity* refers to the amount of nursing resources, including both position and time (i.e., RN and unlicensed assistive personnel), required for patient care. The nursing intensity varies with the patient acuity level and clinical events such as patient admissions, discharges to home, transfers to other units or facilities, as well as the time spent accompanying an unstable patient off the clinical area for a test or procedure to continue care and ensure safety.

Historical reviews of patient classification systems (PCS) have been published elsewhere (Aydelotte, 1973; Edwardson & Giovannetti, 1994; Giovannetti, 1978, 1984; Jennings, 2008; Malloch & Conovaloff, 1999), and it is beyond the scope of this chapter to present the full account of this history. Box 42-2, however, presents the current limitations of acuity systems identified by Jennings (2008).

THE CURRENT HEALTH CARE ENVIRONMENT

Throughout the current decade, national concern for the safety, quality, and cost of United States hospital care, along with a shortage of nurses, has exacerbated the pressure on hospitals to increase quality and contain costs. *Nursing’s Social Policy Statement* reflects the profession’s societal contract for the provision of safe and quality nursing care and services for all people (American Nurses Association [ANA], 2003). A clear and compelling case has been made for the association between nurses and nursing care with clinical and organizational outcomes (Aiken, Clarke, Sloane, & Sochalski, & Silber, 2002;

BOX 42-1 Nursing Resource Definitions

Acuity: Measurement of a patient's severity of illness related to the amount of nursing care resources required to care for the patient

Acuity System: System designed for the purpose of determining the amount of care required by patients to support staffing decisions and productivity analysis

Patient Classification: System for categorizing patients according to their severity of illness and need for nursing resources

Workload: Amount of work for a unit or department that varies based on patient volume, patient acuity, and patient activities; sometimes referred to as "target staffing" or "variable staffing"

Hours per Patient Day (HPPD): Paid hours divided by patient days

(Finkler, Kovner, & Jones, 2007)

BOX 42-2 Limitations of Acuity Systems

- Lack credibility with clinical nurses and administrators
- Tools often complex and time-consuming for nurses
- Focus on tasks diminishes the expert nursing knowledge inherent in patient care
- Not designed to detect census variability within the shift
- Reliability and validity are infrequently monitored

(Jennings, 2008)

Kane, Shamliyan, Mueller, Duval, & Wilt, 2007; Kohn, Corrigan, & Donaldson, 2000; Needleman, Buerhaus, Mattke, Stewart, & Zelevinsky, 2002; Needleman, Buerhaus, Stewart, Zelevinsky, & Mattke, 2006; Page, 2004; Wunderlich, Sloan, & Davis, 1996).

As the relationship between nurse staffing and patient safety and quality of care has received greater attention in the scientific literature and public press, the issue has also received more focused attention in the policy arena. According to the ANA (2009), 13 states and the District of Columbia have enacted recent nurse staffing legislation. The California nurse staffing legislation is the most widely known, with its provision of minimum nurse-to-patient ratios for all acute-care hospitals (Cal. Admin. Code tit. 22, §70217, 2005)

augmenting the previously legislated requirement for patient classification systems in 1996 (Seago, 2002). While California remains the only state with legislated nurse-to-patient ratios, Illinois passed Senate Bill 0867, legislating "Nurse Staffing by Patient Acuity," in 2007 (210 ILCS 85/10.10). It mandates all hospitals in Illinois to establish a staffing committee, comprised of at least 50% direct care registered nurses, delegated with the authority to make nurse staffing recommendations based on a patient acuity model. Similar legislation requiring acuity systems for staffing adjustment has recently passed into law in Washington (70.41 RCW, 2008; 72.23 RCW, 2008) and Ohio (Ohio Rev. Code Ann. 3727.50, et. seq., 2008). Many nursing unions have called for legislated nurse-to-patient ratios, but state-level nurse executives and hospital associations oppose the ratio approach and recommend engaging staff nurses in staffing committees and the use of acuity systems as an alternative. The ANA published the *Principles for Nurse Staffing* (1999) and subsequently published the ANA principles utilization guide (2005). In the guide, the ANA acknowledges that there is no definitive answer to what is the right staffing level in clinical units, stresses the importance of professional judgment on the nursing needs of patients included in a staffing system on any unit, and provides organizations with a checklist of questions to consider regarding acuity systems.

The health care industry has shifted its attention to the specification and measurement of outcomes. Emphasis on outcomes management is evident in the recent federal reforms, moving the health care reimbursement system into one that values both quality of care and cost outcomes. For example, the Centers for Medicare and Medicaid Services (CMS) has recently enacted payment reform to disallow added payment for patients who experience hospital-acquired conditions (HACs) or adverse events in the hospital such as pressure ulcers, catheter-associated urinary tract infections, and central line infections (Kurtzman & Buerhaus, 2008).

Poor outcomes in many hospitals are directly attributable to nursing care, due either to lower than expected nursing care hours or differences in skills, knowledge, or experience of the nurses assigned to care for a particular patient (Kane et al., 2007). The ability to measure the direct effect of nurses and nursing care on individual patients is hampered by a lack of information linking nursing care within hospital administrative and discharge databases (Welton, 2008).

A TIME FOR CHANGE: BUSINESS HISTORY OF THE OUTCOMES-DRIVEN ACUITY SYSTEM

Entrepreneurs Michael Warner and Beth Pickard started the company AtStaff, Inc. in 2002. Warner and Pickard have been well known for excellence in nurse staffing and scheduling software systems. In the 1970s, Warner, an operations researcher working on a scheduling system (Trivedi & Warner, 1976; Warner, 1976b; Warner & Prawda, 1972), developed an automated system for multiple health care sites (Warner, 1976a). In the 1980s, Warner and John Holton formed Atwork, Inc. Joined by Pickard and others, they then developed the Automated Nurses Scheduling Office System (ANSOS) as a complete nurse scheduling and management system. ANSOS went on to define the market, with over 1200 installations in the United States and abroad, and the system was used to automate many of the patient classification systems. In 1995, Warner and Holton sold Atwork to Medaphis (now owned by McKesson). Several years later, Warner and Pickard conducted a market analysis and determined that while the use of nurse staffing/scheduling systems had become common, little progress had been made in capturing more accurate calculations of nursing intensity. In the marketplace, well-known mathematical predictive modeling techniques were not applied to extend the prediction span for patient census and demand for nursing care. They developed software in 2002 that took advantage of these predictive modeling techniques for patient demand and nurse staffing management to produce one integrated system, resulting in resource management improvements (Pickard & Warner, 2007).

In early 2000, new legislative nurse staffing mandates in several states sparked renewed nursing administrative interest in acuity systems. In the market, the limitations of acuity technologies caused confusion between nursing and financial managers (Box 42-2), and their high failure rate across organizations led to Warner and Pickard's early reluctance to explore acuity system development (Eck Birmingham & Warner, 2008). Warner and Pickard understood that what was needed was a completely new approach to patient acuity.

They designed a new acuity methodology that focused on identifying the variability in patients' nursing care needs, tracking patient outcomes, and doing so as a by-product of routine electronic nursing clinical documentation. This new approach would ultimately provide a valid and reliable means of establishing safe and effective staffing levels and staff mix to meet the

needs of each patient and family. The methodology would also involve and satisfy workforce members in the staffing and scheduling processes in an effort to promote greater employee retention amidst nursing shortages. With the demand for acuity systems on the rise, in 2005 Warner and Pickard developed the patent pending ClairVia Outcomes-Driven Acuity system. Their vision for this system is outlined in Box 42-3. Focused on the resources required to foster patient progress and on the outcomes of nursing care, this system attempted to overcome the problems of the past and provide a new generation of acuity methodologies (Eck Birmingham & Warner, 2008). From here on, we refer to the ClairVia Outcomes-Driven Acuity system as the Outcomes-Driven Acuity system.

Conceptual Basis for the Outcomes-Driven Acuity Methodology

As the health care industry started to focus on the specification and measurement of outcomes, Pesut and Herman (1999) recognized the need for the nursing process to shift or evolve in its development to meet contemporary nursing practice demands. They proposed a third-generation nursing process model, the Outcome-Present State-Test (OPT) Model of Reflective Clinical Reasoning, which builds on the traditional views of the nursing process, yet is more comprehensive, patient-centered, nonlinear, and relevant to taxonomies describing nursing knowledge. The OPT model "is more circular and fluid, exposes several problems, includes

BOX 42-3 Vision for a New Generation of Acuity Methodology

- Focus on the patient and family
- Track patient condition or status continuously
- Capture workload for patient admissions, discharges, transfers, and short stays
- Provide transparency and no additional work in electronic clinical nursing documentation
- Nurses caring for patients validate and value the system data
- Use standardized terminology for patient outcomes and progress
- Avoid acuity creep
- Receive collaborative endorsement from nursing and financial leaders
- Make nursing contributions to patient outcomes visible
- Statistically valid and reliable

the ‘big picture,’ notes how the nurse can make a difference, and focuses on why and how one can act to promote or achieve the transition from a present to a desired state” (Pesut & Herman, 1999, p. 27).

This model shifts thinking from “the problem” to the desired state of patient health in terms of specified outcomes, and the nursing actions, decisions, or interventions required to achieve those outcomes. The OPT model is depicted in Figure 42-1. In this model, nurses need the cognitive skills to determine whether the patient is progressing toward the expected outcomes and, if not, to determine the nursing actions needed to achieve the patient’s desired state of health. More simply stated, the OPT model helps nurses identify the actions and interventions to take to assist patients to achieve desired outcomes. The focus on outcomes provides an explicit direction for nursing action and thinking beyond the present to the patient’s future. The Outcomes-Driven Acuity methodology is conceptually consistent with this model and aids in framing concurrent and future (or prospective) thinking about the nursing resources that are required to facilitate the patient’s progress from their present to desired state.

This model also emphasizes the importance of documenting the entire nursing process, including problem identification, diagnosis, planning, interventions, and evaluation. Optimally, in an effort to better understand the relationships between the processes of care and the patient outcomes achieved, all nursing organizations would simultaneously document the nursing interventions for the patient and the effect on the outcomes.

NURSING OUTCOMES CLASSIFICATION

The method selected to describe patient outcomes was the Nursing Outcomes Classification (NOC) (Moorhead, Johnson, Maas, & Swanson, 2008), a standardized terminology that organizes patient outcomes that are sensitive to nursing interventions. Developed and maintained at the University of Iowa’s College of Nursing, NOC is a comprehensive, standardized language of patient outcomes developed to evaluate the effects of nursing interventions. The outcome classification system provides an easy-to-use, clinically relevant language proven by more than 16 years of scientific testing and clinical implementation (Keenan et al., 2003; Keenan, Tschannen, & Wesley, 2008; Moorhead et al., 2008; Westra, Delaney, Konicek, & Keenan, 2008). Clinicians, students, educators, researchers, and administrators in a variety of clinical, educational, and research venues use the classification system to discuss and document evidenced-based outcomes of nursing care. From a conceptual standpoint, the OPT model reported by Pesut and Hermann (1999) fits very well with NOC, outcomes management, and nurses’ assessment of patient progress toward expected outcomes.

How NOC Is Organized

NOC provides a structure to measure outcomes across time and across settings, allows the addition of new outcomes, and assists nurses in identifying the outcomes for the problems they address for patients, families, and communities. The three levels within the NOC taxonomy structure are *domains*, *classes*, and *outcomes* (Moorhead, Head, Johnson & Maas, 1998). The fourth edition of

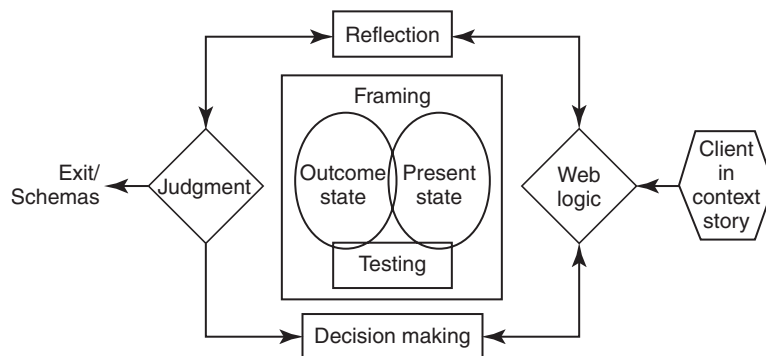


FIGURE 42-1 The Outcomes-Driven Acuity (OPT). From Pesut D, Herman J (1999). Clinical reasoning: The art and science of critical and creative thinking, 1/e, p. 25. © Delmar Learning, a part of Cengage Learning, Inc. Reproduced with permission, <http://www.cengage.com/permissions>

NOC presents seven broad domains: *Functional Health*, *Physiologic Health*, *Psychological Health*, *Health Knowledge and Behavior*, *Perceived Health*, *Family Health*, and *Community Health* (Moorhead et al., 2008). Classes under each domain further describe the domain. A few examples of classes in the physiologic health domain include *Cardio-pulmonary*, *Fluid and Electrolytes*, and *Tissue Integrity*.

The third NOC level is the outcome level, and it includes a comprehensive list of standardized outcomes, each with a definition and a set of indicators. The outcomes are presented as variable concepts (e.g., mobility, wound healing, and pain control) that can be measured on a continuum rather than as discrete goals that either are or are not met. Nurses assess the outcome states of patients in comparison to healthy individuals of similar age and similar gender. Indicators associated with each outcome assist in defining the scope of each outcome. For example, *Infection Severity* is defined as the “severity of infection and associated symptoms” (Moorhead et al., 2008, p. 404), and indicators include fever, rash, tenderness, pain, and a white blood count elevation.

Nurses use a five-point Likert scale to assess each patient outcome from one to five. A Likert rating of 1 is the least desirable or greatest deviation from normal, and a rating of 5 is the most desirable, or a healthy, normal state. An example of a rating scale is available in Table 42-1. Nurse competency and interrater reliability between nurses using NOC is easily attained and previously documented in numerous clinical settings (Keenan et al., 2003; Keenan et al., 2008; Moorhead, Johnson, Maas, & Reed, 2003; Maas, Johnson, Moorhead, Reed, & Sweeney, 2003).

OUTCOMES-DRIVEN ACUITY METHODOLOGY

The Outcome-Driven Acuity system methodology is a combination of patient assessment, standardized outcome terminology, clinical reasoning, decision rules, and budgetary decision making. It uses the clinical data in an electronic clinical documentation system or the

nursing components of the electronic medical record application. The Outcome-Driven Acuity system contains two components: patient outcome acuity assessment and the translation of outcome assessment data and other factors into staffing recommendations.

Patient Outcome Acuity Assessment

The clinical information in the Outcomes-Driven Acuity system, based on NOC, is referred to as the Patient Outcomes Acuity Assessment. The source of the outcome acuity assessment for an individual patient is the clinical data that the nurse enters into the electronic clinical documentation system as part of routine documentation standards for the hospital or ambulatory setting. The process by which the Outcomes-Driven Acuity system application links the electronic patient clinical data with NOC outcomes takes place behind the scenes and is transparent to the nurse.

To develop the outcome acuity assessment, first the organization must select the NOC outcomes and associated indicators that are relevant to the clinical area and then establish clinical mapping, by which electronic patient clinical data elements are linked to the NOC outcomes and indicators. Each NOC outcome is rated based on values of indicators. In each stage, nurse experts’ clinical reasoning and decision making is essential for content validity of the selected NOC outcomes. Pesut and Hermann (1999) defined *clinical reasoning* as “reflective, concurrent, creative, and critical thinking embedded in nursing practice” (p. 24), whereas “clinical decision making is the selection of the interventions and actions that move clients from a presenting state to specified or desired outcome state” (p. 41).

Initial Selection of NOC Outcomes: Patient Clinical Discussion. In the first stage, expert staff nurses giving direct care in a clinical area learn about NOC and identify the outcomes and associated indicators that best represent nursing practice for their patient population. The nurse experts, who may be clinical nurse IIIs or IVs

TABLE 42-1 Example of Self-Care in the Functional Health Domain

Domain: Functional health

Outcome Label and Definition: Self-Care: Activities of Daily Living (ADL): Ability to perform activities needed to function in the home or community independently with or without assistive device

Likert Scale:

Severely Compromised	Substantially Compromised	Moderately Compromised	Mildly Compromised	Not Compromised
1	2	3	4	5

(Moorhead et al., 2008)

if the organization has a clinical ladder recognition program, form a small working group (e.g., three people or 10% of the work group) and are referred to as patient outcomes experts (POEs). Their peers and managers select the POEs for their clinical credibility. POEs participate in a series of clinical practice discussions involving the following questions:

1. What outcomes best represent our clinical practice?
2. What outcomes are most influenced by our nursing interventions?
3. How representative are these outcomes to our patient outcomes?
4. What outcomes are less relevant to our practice and may be omitted?
5. Overall, if this outcome list is to be representative of our patients and practice, what outcomes do we need to include?

The POEs discuss a set of 20 to 30 outcomes, which are preselected by Outcomes-Driven Acuity system clinical consultants based on a description of the patient population in the clinical area. The POEs additionally review the outcomes recommended by nursing organizations representing 33 clinical specialty areas (Moorhead et al., 2008). Organizations identified the recommended outcomes as being important to 100% of patients in the practice specialty (Moorhead, Johnson, & Maas, 2004). The POEs ensure that all domains, excluding community health, are represented by at least one outcome to reflect the full-spectrum and holistic view of patient outcomes in their clinical care settings. Indicators of each NOC outcome detail the outcome and its definition, which additionally supports outcome selection by the nurses.

The robust clinical practice discussion by the POEs results in consensus on a set of NOC outcomes, including associated indicators for the clinical area. For most clinical areas, *Fall Prevention Behavior*, *Infection Severity*,

and *Tissue Integrity: Skin & Mucous Membranes* are selected in order to monitor and prevent hospital-acquired conditions (HACs). The POEs strive to select no more than 20 of the most relevant outcomes per clinical area. Initial content validity or sampling adequacy of the content area (Polit & Beck, 2004) is established through the outcome selection process. This process also embodies a shared governance approach that engages nurses in clinical reasoning and decision making regarding the outcomes sensitive to their nursing interventions. The engagement among staff nurses regarding their practice contributes to a professional practice environment that not only is clinically sound but also fosters nurse retention.

Clinical Mapping. Nurses document patient problems or nursing diagnoses, assessment data, and interventions in their nursing electronic clinical documentation application. As nurses save data, or at predefined intervals, the clinical data documented electronically is sent to the Outcomes-Driven Acuity system. The system filters the documentation to locate clinical data mapped to the outcomes and indicators selected by the POEs.

Table 42-2 presents an example of clinical mapping for a respiratory assessment in the nursing documentation system to the outcome *Respiratory Status*, which is defined as the “movement of air in and out of the lungs and exchange of carbon dioxide and oxygen at the alveolar level” (Moorhead et al., 2008, p. 579). Table 42-2 lists a subset of the clinical elements in the nursing documentation system for the respiratory assessment in the leftmost column, indicators from NOC and other data in the next column, and the clinical value or finding of the patient assessment in the third column. The far right column contains an interpretation regarding the clinical value or findings as determined using the Likert scale for the outcome.

TABLE 42-2 Clinical Mapping Example for a Respiratory Assessment

Clinical Documentation Data Element	Indicators	Assessment Finding or Value	Likert Rating
Breathing Pattern	Breathing pattern	Dyspnea	3
Breath Sounds	Breath sounds	Diminished LLL	3
Chest Expansion	Chest expansion	Equal	5
Procedures	Intervention: Treatments	Turn, cough, and deep breath	2
Oxygen Device	Intervention: Oxygen device	Nasal cannula	3
Pulse Oximeter	Oxygen saturation	97%	5
Tubes/Drains	Intervention: tubes/drains	Chest tube	1
ABG PaO ₂	Partial pressure of oxygen	N (90)	5

The POEs review the results of weighting outcomes to further identify those outcomes that demand greater nursing resources. For example, POEs in a critical-care environment typically weight physiologic outcomes more heavily than those for family health, since the interventions for physiologic outcomes stabilize the patient's respiratory and cardiovascular status to sustain life.

It is not within the scope of this chapter to fully detail the clinical mapping process, but in general, the system applies business rules to the *indicators* within each outcome. Rules related to *order of importance* or *equal importance* are applied. The system assigns each indicator an order of importance. When the system receives values for indicators, the specific indicator that receives the value of the highest importance is the Likert score applied to the outcome. For example, in Table 42-2 this type of rule is applied to the interpretation of indicators for respiratory status: as intervention and monitoring is performed to the least desirable indicator, "intervention: tubes/drains," for a patient with a chest tube. In equal importance, the system applies a mathematical average of indicator scores received to the outcome. For example, this type of rule may be deemed applicable for the outcome *Self-Care: Activities of Daily*

Living (ADL) that includes indicators such as feeding, hygiene, toileting, and walking, which are all considered to be of equal importance. The program does these calculations automatically and behind the scenes, such that they are transparent to the nurse caring for the patient. Once the Likert rating for each outcome is calculated, the patient acuity assessment is populated. The assessment is specific to a patient in a specific clinical area at a specific time. The system highlights current patient outcome ratings in blue.

The POEs and other experts, such as clinical educators and clinical nurse specialists, review the clinical mapping to validate the interpretation of clinical data, the application of importance rules, and the weighting of outcomes. They make changes as necessary. This is a second level of content validity to ensure that the mapping is clinically sound.

Once the patient acuity assessment has been populated in the software, it is available for nurses, case managers, and other professionals to review and monitor patient progress to expected outcome. Figure 42-2 presents an example of a populated Patient Acuity Assessment. First and foremost, the tracking of patient outcomes is a valuable nursing tool when patients are not progressing as expected. It provides data for nurse review to subsequently

clairva At Staff Medical Center User: Janet Johnson Logout

Home Schedule Staffing Views Demand **Acuity** Patient Assignment Reports Tools Configure Help

Executive Manager Employee Thu., Dec. 11, 2008

Patient Acuity Assessment

Assessment Date: 12/11/2008 5:24 PM ☒ Printable View

Patient: Brown, Billie Service: Surgical Acuity Level: 5
 Location: 5W MedSurg Admit: 12/07/2008 4:09 PM Last Assessed: 12/10/2008 3:23 PM - IF
 Room/Bed: 503 Projected Departure Date: 12/14/2008 Assessed By: RHiggins

Respiratory Status: Movement of air in and out of the lungs and exchange of carbon dioxide and oxygen at the alveolar level	Severely deviated	Substantially deviated	Moderately deviated	Mildly deviated	Not deviated	Does not apply
Infection Severity: Severity of infection and associated symptoms	Severe	Substantial	Moderate	Mild	None	Does not apply
Cognition: Ability to execute complex mental processes	Severely compromised	Substantially compromised	Moderately compromised	Mildly compromised	Not compromised	Does not apply
Compliance Behavior: Personal actions to promote wellness, recovery, and rehabilitation recommended by a health professional	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	Does not apply
Discomfort Level: Severity of observed or reported mental of physical discomfort	Severe	Substantial	Moderate	Mild	None	Does not apply
Family Participation in Professional Care: Family involvement in decision-making, delivery, and evaluation of care provided by health care personnel	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	Does not apply
Gastrointestinal Function: Extent to which foods (ingested or tube-fed) are moved from	Severely	Substantially	Moderately	Mildly	Not	Does not

NOC © 2008 Mosby, Inc.

Save (Complete) Save (Same as Last) Save (Finish Later) New Cancel

Done Local Intranet 100%

FIGURE 42-2 Patient Acuity Assessment.

intervene with care, services, or specialty referrals; physician communication; or continued surveillance. The Likert scores highlighted by broken lines around the boxes represent the outcome rating the patient should meet in order to be transferred to the next care setting or discharged to home. Reviewing the outcomes assessment with the patient and family is an excellent way to involve the patient and family to mutually understand the clinical progress needed for transfer or discharge.

Patient Acuity Outcomes Assessment Reliability.

The POEs participate in classroom training to learn how to conduct a patient outcomes assessment and achieve a competency certification. Trainers use and discuss specific patient examples with the POEs to gain agreement on the Likert scores for many outcomes and diverse patient types. POEs conduct audits to assess interrater

reliability among themselves during this initial educational phase and later against clinical documentation-generated patient acuity assessments. The audit process is automated and easy to use. Clinical reasoning and decision making is guided by many questions, such as "How does this patient compare to a nonhospitalized individual of similar age and similar gender?" Robust reports for goal achievement for interrater reliability provide data for discussion and competency (Figure 42-3).

Translating into Acuity Levels and Staffing Recommendations

The operational work of accurately analyzing patient outcome acuity assessments, determining acuity levels of similar patients, and making staffing recommendations is conducted through a series of key stakeholder

Acuity Interrater Reliability Report
11/17/2008 through 11/21/2008

Summary
6N MedSurg 12345 : 6N MedSurg 12345 : MED

Total number assessments audited	Total number outcomes audited	Acuity match N/%	Assess acuity > audit acuity N/%	Audit acuity > assess acuity N/%	Acuity level correlation*
25	500	22/88%	2/8%	1/4%	92%

*Correlation is the degree to which two or more variables are related and change together.

Interrater reliability for all NOC outcomes in audit
6N MedSurg 12345 : 6N MedSurg 12345 : MED

NOC outcomes	Number assess/audit	Absolute agreement	Near agreement	Outcome rating correlation
Respiratory status: Ventilation	25	80%	85%	90%
Tissue perfusion: Peripheral	25	80%	90%	88%
Vital signs	25	85%	90%	92%
Fall prevention behavior	25	78%	88%	85%
Tissue integrity: Skin and mucous membranes	25	80%	95%	94%

Assessments/audits by patient
6N MedSurg 12345 : 6N MedSurg 12345 : MED
Sort selection in italics

Patient name	Assessed by	Audited by	Number of outcomes	Weighted average	RN acuity	Audit acuity
<i>Smith, Maureen 8091121</i>	RHiggins	KArn	25	2.87/2.57	4	3
Caregiver	RHiggins		KArn			
Type	RN		Audit			
Date/time	06/01/2008 13:00		06/01/2008 15:00			
Respiratory status: Ventilation	Substantially compromised		Substantially compromised			
Tissue perfusion: Peripheral	Moderate		Mild			
Vital signs	Mildly compromised		Not compromised			

FIGURE 42-3 Sample Acuity Interrater Reliability Report.

discussions including POE groups, staffing committees (if applicable), shared governance practice groups, nursing unions (if applicable), and the chief nurse executive leadership group. The number of acuity levels is driven by the span of the budgeted hours per patient day (HPPD) across the organization and the degree of acuity level variability among the patient populations. The number of acuity levels range from 5 to 12, with the larger number of levels typical in tertiary centers. Data is analyzed regarding the personnel budget for direct care-giving staff (clinical hours per patient day), length of stay, and detailed information regarding nursing resources required for patient admissions, transfers, and discharges.

Most patient acuity systems do not account for the time spent admitting, discharging, and transferring patients. In the Outcomes-Driven Acuity system, the amount of time for admission, discharge, and transfer (ADT) is treated in a specific way for nurse staffing. The impact of ADT time is referred to as *ADT Impact*. ADT Impact is a function of the number of patients in the unit, the average length of stay in the unit, the time spent for ADT, and the probability of each event. The result of removing ADT Impact from HPPD is referred to as the *ADT Adjusted HPPD*. This approach of specifically calculating the impact of patient activity on nursing intensity is significantly more accurate than bundling it into the HPPD. An example of the distribution of HPPD and ADT Impact across different types of units is shown in Table 42-3. A shorter average length of stay and higher average ADT time have greater effects on the ADT Impact and consequently the Adjusted HPPD is significantly shorter than the Budgeted HPPD.

Units with similar HPPD are basically expected to have a similar midacuity level. This necessitates examination of HPPD, associated with clinical direct care giving staff, distribution across the entire organization

by unit, and identification of different groups of units (if any) that budget and deliver similar HPPD. This examination and identification result in the determination of the midacuity level on each unit and provide internal consistency, aligning acuity levels across the organization. The midacuity level reflects the majority of patients or the average or typical patient condition during his or her stay in the unit. Information gathered from the POEs also aids in determining the necessary number of acuity levels and the variability of nursing intensity. POEs provide expected acuity levels in the unit. On most units, the majority of patients will fall into three acuity levels. In most health care organizations, two to seven acuity levels for a unit are employed—two on a normal nursery unit and seven on a universal unit—which manages care for patients from critical care through intermediate and medical surgical care. Figure 42-4 shows an example of how the acuity levels are distributed across the organization based on HPPD and acuity level variability in patient population.

Audit. Once the number of acuity levels is determined, the clinical documentation interface is initiated, and patient outcome acuity assessments are generated by the ClairVia interface using the mappings created and verified by the POEs. POEs begin conducting audits using the Outcomes-Driven Acuity system to compare the results of the documentation-driven Likert scores to their own ratings. The audit process used by auditors begins with a patient assessment page without previous Likert selections marked so the auditor is not aware of or influenced by the selections generated by documentation. A sample audit page as it appears before the audit is started is shown in Figure 42-5.

A typical audit process for the POE auditor includes listening to the clinical patient report by the RN, reviewing the clinical documentation, and conducting the audit assessment. Using the Interrater Reliability Report,

TABLE 42-3 Relationship between HPPD, ADT Impact, Average ADT Time, and Average LOS across Various Units

Clinical Area	Budgeted HPPD	ADT Impact	Adjusted HPPD	Average ADT Time in Minutes	Average Length of Stay
ICU	16.56	1.07	15.49	111.25	3.5
Step Down	10.88	0.75	10.13	61.25	2.8
Pediatrics	9.42	0.90	8.52	68.75	2.9
Medical	8.70	0.64	8.06	65.00	3.7
Observation	9.00	2.19	6.81	51.25	0.8
Rehab	7.28	0.17	7.11	41.25	11.3

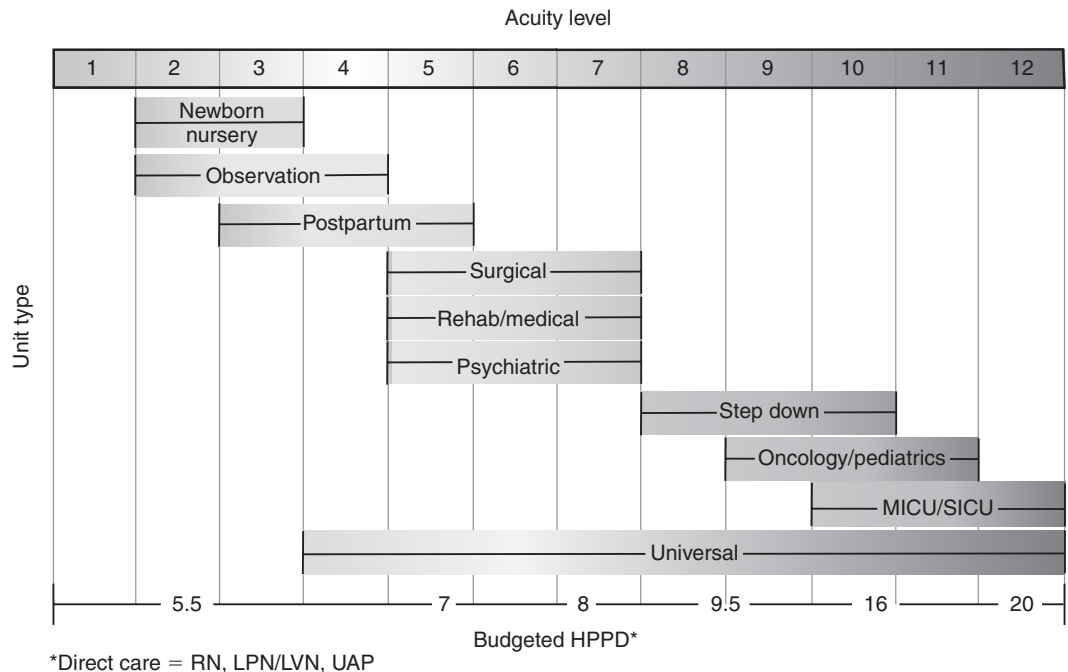


FIGURE 42-4 Correlating Acuity Level with Hours per Patient Day.

Patient Acuity Assessment Audit

Assessment Date: 04/20/2009 10:33 AM

☒ Audit

Audit Printable View

Patient: Brown, Billie

Service: Surgical

Accuity Level:

Location: 5W Med Surg

Admit: 04/18/2009 9:09 AM

Last Assessed: 04/19/2009 8:23 AM - IF

Room/Bed: 503

Projected Departure Date: 04/23/2009

Assessed By: Interface

Respiratory Status: Movement of air in and out of the lungs and exchange of carbon dioxide and oxygen at the alveolar level	Severely deviated	Substantially deviated	Moderately deviated	Mildly deviated	Not deviated	Does not apply
Infection Severity: Severity of infection and associated symptoms	Severe	Substantial	Moderate	Mild	None	Does not apply
Cognition: Ability to execute complex mental processes	Severely compromised	Substantially compromised	Moderately compromised	Mildly compromised	Not compromised	Does not apply
Compliance Behavior: Personal actions to promote wellness, recovery, and rehabilitation recommended by a health professional	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	Does not apply
Discomfort Level: Severity of observed or reported mental of physical discomfort	Severe	Substantial	Moderate	Mild	None	Does not apply
Family Participation in Professional Care: Family involvement in decision-making, delivery, and evaluation of care provided by health care personnel	Never demonstrated	Rarely demonstrated	Sometimes demonstrated	Often demonstrated	Consistently demonstrated	Does not apply
Gastrointestinal function: Extent to which foods (ingested or tube-fed) are moved from	Severely	Substantially	Moderately	Mildly	Not	Does not

NOC ©2008 Mosby, Inc.

Save (Complete)

Save (Same as Last)

Save (Finish Later)

New

Cancel

FIGURE 42-5 Sample Patient Audit Page.

POEs then review the comparison of the documentation-driven assessments to their audits. The goal is to verify that the mapping of the clinical documentation and business rules are appropriate for each outcome and to reach an interrater reliability score of 85% at the outcome level of absolute (Likert ratings match) or near agreement (Likert ratings differ by 1), with no Likert scores having a variance of more than one. Adjustments are made to the mapping of clinical assessment data to Likert ratings for indicators to improve accuracy and interrater reliability. Additional assessments are audited until the POEs agree that the mapping and business rules are appropriate. At this point, the clinical documentation import continues automatically generating patient acuity assessments from documentation. One of the major advantages to allowing clinical documentation to generate Likert ratings is the resulting consistency. An identical combination of values and charting received for two different patients for the same group of indicators will result in the exact same Likert score for the outcome.

Once at least 1000 assessments are completed by the interface on a unit, the raw data are pulled and the median of the weighted average acuity scores is calculated. Only 95.45% of the acuity scores that fall between the 2.275th percentile and the 97.725th percentile are retained. The 95.45% is equivalent to the percentage of scores that fall in the range of mean ± 2 standard deviations assuming a normal distribution. The median of these raw scores is matched to the midacuity level, and ranges of scores are assigned to each expected acuity level (the midacuity level $\pm 1-3$), aligning to a bell curve across units with similar HPPD and the same number of expected acuity levels. Figure 42-6 shows how the numbers of assessments are allocated to account for variability; a range of raw scores is associated with a specific acuity level.

The POEs provide the staffing ratios that are used to approximate the HPPS that would be delivered to each type of patient. For example, a nurse expert states that he or she could comfortably care for five patients with the same type of midacuity level to maintain or improve the patients' outcome status. This clinical expert opinion is then used to associate nursing ratios with each of the primary five acuity levels for the clinical area using a proportional algorithm. The result is an acuity-staffing methodology that does the following:

1. Produces overall staffing levels that are budget neutral (if the chief nurse has requested this for the majority

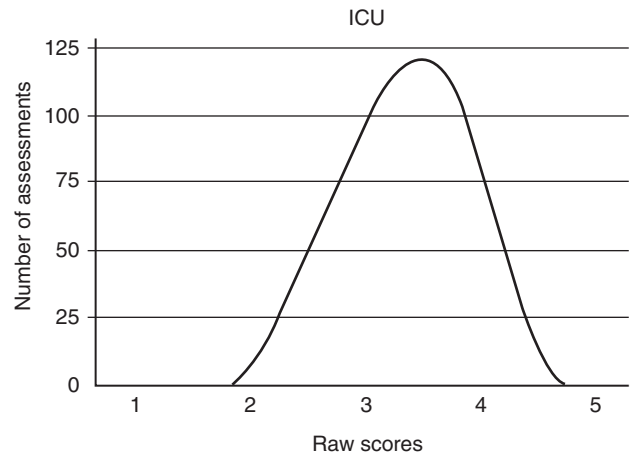


FIGURE 42-6 ICU Raw Data Analysis.

of clinical areas, selected areas may require additional workload study)

2. Recognizes the need for additional workload associated with ADT events, while keeping overall staffing budget neutral
3. Identifies variations of workload between acuity levels based on a distribution of workloads and clinical nursing expert opinions
4. Provides workloads based on what is needed to improve the patient's outcomes at each acuity level during the patient's stay and as the patient moves among clinical areas
5. Provides an acuity level and outcomes assessment as a by-product of routine clinical documentation

Once the expected acuity levels are defined in terms of nursing intensity and aligned to be budget neutral, the raw data are further analyzed to calculate the average raw score upon admission or transfer in. This score is then identified as the default acuity level, which is the level used for staffing from the time the patient arrives until the time documentation is completed and sent to the Outcomes-Driven Acuity system, when an acuity assessment is generated. Each acuity level is associated with the amount of time required by skill, and a time of day adjustment is made only on those units where some difference in nursing intensity are routinely observed, typically at night.

Features of the Outcomes-Driven Acuity System

Historically, staffing has been a "once a shift" activity. The goal of any acuity methodology, however, is to measure the variability in nursing intensity in order to

support staffing decisions, prospectively, concurrently, and retrospectively. The Outcomes-Driven Acuity system enables staffing to be an ongoing and continuous process.

On a shift-to-shift and hourly basis, the Outcomes-Driven Acuity system translates each patient's acuity level into demand-based staffing needs, calculated by hour to accurately reflect nursing intensity. As an ADT event occurs the skill level of the care provider required for the event replaces the time required based on the acuity level of a patient to better estimate resources needed.

The Outcomes-Driven Acuity system records unforeseen events, such as cardiac arrest or a sudden strict isolation precaution, in order to reflect events not captured in an outcomes-driven assessment and have a significant impact on nursing intensity. A nurse who goes off the unit to accompany an unstable patient decreases the availability of nursing resources and is seldom captured in previous acuity systems. Recording unforeseen events allows nursing to accurately account for the use of resources, matching actual time worked for payroll purposes and future trending. The Outcomes-Driven Acuity system provides justification for resource use. Hence, units that appeared "over-staffed" using traditional midnight census and HPPD

calculations are now seen as "appropriately staffed" for the clinical situation.

When the acuity methodology is applied to daily staffing and decision making, the result at a high level is depicted in Figure 42-7. The y-axis represents the number of direct care nurses, and the x-axis represents the time line. The black line in the graph represents the number of staff scheduled, and the gray line represents the target staffing or workload calculated by hour of day and day of the week. The utilization of nursing resources is calculated by the scheduled number of nurses divided by the targeted number of nurses in one- and two-hour increments. This provides a more precise measure of productivity. Managers are provided with targeted staffing needs predicted by month of the year, day of the week, and time of day, based on six-week historical data of volume, acuity, and events.

The determination of staffing needs is changed dramatically in the Outcomes-Driven Acuity system. The system is based on patient acuity, patient events, and data derived from electronic clinical documentation, and it removes acuity creep. Furthermore, it expands its values beyond prediction of staffing needs by changing the nurses' way of thinking, assisting nurses to frame the concurrent and future thinking of patients in

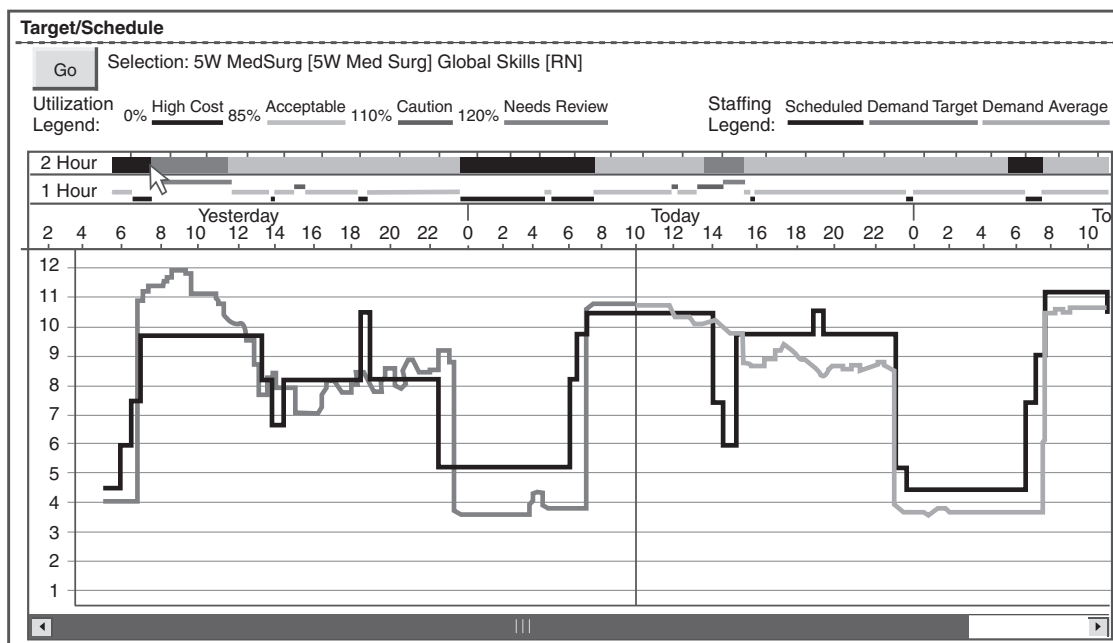


FIGURE 42-7 Target to Schedule Staffing View.

context and to look back on the “present” from a point of time in the future.

In short, the following are the features of the Outcomes-Driven Acuity system:

1. Identifies the variability in patient acuity
2. Distinguishes between ongoing nursing care and ADT activities
3. Provides retrospective justification for unexpected events
4. Provides precise nursing resource utilization data
5. Predicts nursing intensity by skill level and time of day and day of week based on historical data
6. Removes acuity creep
7. Changes nurses’ way of thinking in practice toward outcomes specification

SUMMARY

Many traditional acuity methodologies have calculated staffing based on the expected time required for nurses to deliver clinical activities or interventions. What they do not calculate, however, is the *effect* of those interventions. The ClairVia Outcomes-Driven Acuity system focuses on the patient (and family) and calculates the required nursing resources to assist the patient from a present state to a future or desired outcome state. The significant engagement of expert nurses and nurse executives is central to this methodology and fosters high reliability and validity. The application of automated nursing documentation to transparently drive patient outcomes acuity assessments offers a standardized coding scheme for the measurement of outcomes in comparable ways across populations and settings.

The ClairVia Outcomes-Driven Acuity system lends itself to provide a systematic and critical evaluation of effectiveness of nurse practice and staffing innovations (McCloskey et al., 1994). The use of sophisticated predictive modeling techniques and the analytic recognition of the workload impact of admissions, discharges, transfers, and short stays add to the efficient resource utilization to provide high-quality care. The time is now to make the contribution and value of nursing care to patient outcomes visible.

Acknowledgments

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Impact of the Health Insurance Portability and Accountability Act

ANN M. RHODES

Several years after the implementation of the provisions of the Health Insurance Portability and Accountability Act (HIPAA),¹ it is safe to conclude that it has not reduced the cost or increased the efficiency of health care. HIPAA is a federal statute that includes several complex provisions, the most well known being those related to protection of privacy of health information. The original intent of the legislation was to address “job lock”: the problem of employees who have health conditions and change jobs, only to find that they are “locked out” of employee health insurance coverage because of a preexisting condition clause in the health plan at the new job.

The Health Insurance Portability and Accountability Act takes its name from the concept that employees can carry insurance coverage from one job to another (“health insurance portability”). The statute authorized administrative rules that have the force of law, including penalties for noncompliance, in three areas. All of these areas affect health care costs. The first is privacy and privacy protection of health information. The statute created the authority for extensive regulations for a national standard for health care privacy, applying to all health care providers that transmit information electronically. The second area is electronic and computer security. Rules were developed that created consistent standards for all computers that contain information that is identifiable and relates to a person’s health or medical treatment. The third area relates to the processing of medical claims for payment and requires the use of a uniform set of identifiers and transaction codes for all providers and health insurers in processing claims for reimbursement. This is intended to achieve greater efficiency and cost-effectiveness in the processing of health care claims.

Briefly, the HIPAA statute and rules were enacted and implemented without any realistic or systematic

assessment of the actual cost of implementation and compliance. Because the Department of Health and Human Services believes that the HIPAA standards ultimately will result in cost savings to the provider community, the costs of implementation and compliance were not factored into the base year calculations for the prospective payment system (the federal prospective payment fees for service are the benchmark for many private insurers). This means that the HIPAA regulatory mandates come at the expense of patient care: The funds required for organizations to comply with the standards for privacy and computer security by the federal rules must be reallocated from existing budgets. This generally means cuts in areas that have a direct impact on patient care.

The first component of the HIPAA rules to be implemented, and the area with which institutions have the most experience, is the Privacy Rule.² Most institutions assumed significant costs in hiring individuals to serve as privacy officers (a requirement of the federal rules), paying for consultants to assist in compliance efforts, and in time spent in developing policies and procedures that are specifically required by the Privacy Rule. Additional costs were associated with the requirement of training all staff members in the specifics of the Privacy Rule. In addition, the unquantifiable costs of the diminished quality of patient care are a consequence of poorer communication between and among care providers because of questions about what communications are appropriate under the Privacy Rule.

During the development of the legislation, numerous congressional hearings were held, and extensive comment was received by Congress on the subject of privacy of patient care information. In the hearings, individuals testified about problems they had experienced when information about their health status or medical treatment was shared without their authorization. Particular

concern was focused on electronic transmission of health information and the use of faxes, cell phones, e-mail, Internet communications, and database management. This led Congress to address, through statute, the preventable, improper disclosure of information and inappropriate access to information.

The statute authorized the Department of Health and Human Services to enact, through its rule-making authority, detailed standards and requirements to protect privacy. The Privacy Rule went into effect on April 14, 2003. This rule created a minimum national threshold for privacy standards aimed at protecting information and avoiding improper dissemination of protected health information. The stated objectives of the privacy standards include streamlining and promoting efficiency in the electronic information-sharing process, establishing parameters and limitations on health information sharing, and reducing costs in health care and billing functions.³

This chapter addresses the impact of HIPAA of health care costs, specifically whether the stated goal of reducing costs has been achieved. It also addresses the impact of HIPAA on research and health care. To put the issue of cost savings in context, it is important to discuss both the scope of HIPAA and the nature of health care costs in the United States.

THE SCOPE OF HIPAA

First, HIPAA and the subsequent administrative rules established standards and requirements in areas besides privacy. A set of rules on computer security⁴ went into effect in April 2005, and additional rules requiring the use of uniform identifiers for health care entities and the use of consistent standards for electronic transactions in health care records were a part of these rule changes. All of the rules were to be fully implemented by May 23, 2007, and after that date penalties went into effect for all entities not in compliance. A lack of complaints suggests that this deadline was met by most organizations. The most visible rule, and the one with the greatest impact on patient care, however, is the Privacy Rule.

Privacy Rule

The Privacy Rule applies to health care providers, health plans (insurers), and health care clearinghouses (such as billing services), which must transmit protected health information (confidential information) in electronic form.⁵ The term *health care provider* is defined further in one section of the law by place of service, such as a

hospital, skilled care facility, outpatient clinic, home health agency, or hospice.⁶ In another section, health care provider is defined by the services provided and the nature of the provider. This specifically includes nurses and nurse practitioners.⁷

Institutions must comply with the Privacy Rule, and they have a number of responsibilities to perform and document to show compliance. If the provisions of the Privacy Rule are violated, the institution can be subject to civil and criminal penalties (fines and money damages). A 2005 opinion from the United States Department of Justice stated that the institution (rather than individuals, supervisors, or board members) will be liable for damages resulting from an unlawful disclosure in most circumstances.⁸

The Privacy and Security Rules are specific and prescriptive, affecting medical records, billing records, enrollment, case management, and claims records of an individual. This includes any record in any format or medium that is used to make a health care decision. Protected health information is defined broadly to include any information that relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; or the payment for health care provided to the individual that identifies the person or could be combined with other information to identify the person. Protected health information can be disclosed only if it is authorized, permissible, or compelled.⁹

The Privacy Rule requires the following: a privacy officer to oversee implementation and compliance; the use of a privacy notice that is distributed to each patient and describes the patients' rights under the Privacy Rule; and a substantial body of policies and procedures with an institutional structure to monitor compliance, conduct audits, and investigate concerns. All consent forms and patient information materials must be HIPAA compliant, which means that the materials must contain the required notices to advise patients of their rights and they must not disclose protected health information inadvertently. The Privacy Rule also mandates that every staff member receive training in the rule.

Compliance with HIPAA is expensive. Compliance requires experienced, skilled staff; the production of thousands of pages of documents; and the time and energy of all employees. Some costs can be quantified: the salary of the privacy officer, for example, and the cost of printing privacy notices. More significant is the time and expense required to train staff to maintain a high level of awareness of these complex rules.

The Privacy Rule requires that every patient receive a “Notice of Privacy Practices,” the contents of which are dictated by rule. Each health care entity (hospital, clinic, pharmacy) needs to document that that patient received this notice. Patients receive this notice on their first encounter with a hospital or clinic. Although a great deal of useful information is contained in the document about the patient’s rights regarding health care information and its uses and protection, it is reasonable to assume that many patients and family members are unable to comprehend much of the content because of the stress of being in the health care system and the complexity of the information. In addition, patients from diverse backgrounds may find the information in the privacy notice difficult to absorb. Concern over the effectiveness of communication with diverse groups has been raised by a number of consumer and advocacy groups and was summarized in a report by the General Accounting Office of the first year’s experience with the HIPAA Privacy Rule.¹⁰

Under the Privacy Rule, every patient has a number of rights that can be exercised by the patient or on the patient’s behalf by a personal representative. These include the following:

- ◆ The right to be assured that the personal health information will be treated in a confidential manner and disclosed only when necessary
- ◆ The right to authorize release of information
- ◆ The right to request a restriction on the uses and disclosures (“use” generally refers to revealing information within an institution among health care professionals, and “disclosure” refers to making information available to an entity outside the institution or for a purpose unrelated to care; consequently, use and disclosure are two different things, although the information may be the same)
- ◆ The right to request confidential communications
- ◆ The right to access protected health information
- ◆ The right to amend the record if an error has been made
- ◆ The right to receive an accounting of the disclosures made of the information in the record¹¹

Patients have the opportunity to object to some of the uses of protected health information—for example, inclusion in the directory of the institution and release of information for marketing purposes.¹² In these instances, patient requests to be excluded must be respected. One note, however, is that one of the costly and unquantifiable consequences of the Privacy Rule is

the staff time involved in complying with the patient requests in these areas, communicating the patient requests, and following up to ensure that the requests are handled appropriately.

Some uses of protected health information can occur without patient authorization, and these categories are broad in some cases—much broader than most patients realize. These uses include uses and disclosures required by law; uses and disclosures for public health activities; uses and disclosures to monitor communicable diseases; uses and disclosures to monitor workplace injuries; disclosures about victims of abuse, neglect, or domestic violence; uses and disclosures for health oversight activities (audit, licensure, accreditation, inspections, or related activities); disclosures for judicial and administrative proceedings; disclosure for law enforcement purposes; uses and disclosures for specialized government functions; uses and disclosures to avert threats to the public health; uses and disclosures for research purposes; and uses and disclosures to determine cause of death or for organ transplantation.¹³ Some of these provisions could be used by law enforcement to obtain a great deal of information about patients, and in this area, the Privacy Rule in fact may have reduced patients’ privacy protection.

Security Rules

The second major area of action under HIPAA was the enactment of Security Rules that require physical, technical, and administrative safeguards of electronic data. Institutions are required to designate a security officer to oversee initial compliance efforts, conduct an extensive audit of current systems, and ensure ongoing compliance with the rule’s requirements. Based on the initial audit that covered everything from password protection to disaster recovery plans, the institution determined what was required to bring it into compliance. For many institutions, compliance meant significant investment in new equipment or additional programming costs. Many institutions were required to purchase new systems and software, conduct extensive training, employ consultants and additional staff, send staff to training sessions, and assume substantial costs for consultants to conduct audits and advise them on compliance measures. All of the actions must be documented, and, as with the Privacy Rule, dozens of policies and procedure had to be developed.

In the commentary that accompanied a draft of the Privacy Rules, the Department of Health and Human Services estimated that the regulations would cost

\$17.6 billion initially but would lead to cost savings over time. In the commentary that preceded the Security Rules, the Department of Health and Human Services acknowledged the “seeming disconnect” between two statements: In Section A of the Security Standards, the comments state, “No individual small entity is expected to experience direct costs that exceed benefits as a result of this rule,” and in Section E (factors in establishing the Security Standards), the comment is: “We cannot estimate the per-entity cost of implementation because there is no information available regarding the extent to which providers’ plans and clearinghouses’ current security practices are deficient.”¹⁴

This comment is significant for two reasons: first, it makes clear that the rules are being enacted with no idea what the fiscal impact is on the entities affected by them, and second—and perhaps more problematic—is the statement that there is no evidence that there are any known deficiencies in the systems the rules are intending to address. Is it any surprise, then, that a contributing factor in the increase in health care costs is the unfunded mandate of federal legislation by rule?

By several measures, the cost of health care is rising at the fastest rate in history. In 2007, total national health expenditures were expected to rise 6.9%—twice the rate of inflation. Total spending was \$2.3 trillion in 2007, or \$7600 per person.¹⁵ Total health care spending represented 16% of the gross domestic product (GDP), up from 14% in 1999. Many theories have been advanced to account for the costs and the increases: the cost of medication, with demand for specific medication encouraged by massive and expensive direct-to-consumer advertising; high-technology and expensive equipment that are widely available despite early efforts to control the proliferation and redundancy of expensive services; an aging population; more treatments that extend life in formerly fatal illnesses; and public health problems such as smoking and obesity that result in medical complications. In addition, consolidation of hospitals and insurers that exercise substantial market power and the conversion from nonprofit to for-profit of hospitals (with the resulting concentration of uninsured and underinsured in public hospitals) have contributed to rising costs of care and increased insurance premiums.

Premiums for employer-based health insurance rose by 6.1% in 2007. Health insurance expenses are the fastest-growing cost component for employers. Since 2000, employment-based health insurance premiums

have increased 100%, compared to cumulative inflation of 24% and cumulative wage growth of 21%. According to the Kaiser Family Foundation and the Health Research and Educational Trust, premiums for employer-sponsored health insurance in the United States have been increasing four times faster on average than workers’ earnings since 2000.¹⁶

The HIPAA rules were imposed on a complex system of health care that is already expensive, heavily regulated, and distributed unequally, and it is increasing in cost every year. The rules apply to every provider, regardless of size, location, or history of violation of privacy. The HIPAA rules are a classic unfunded mandate: a legal requirement with penalties for noncompliance but no funds provided to implement the requirement or to meet the ongoing costs of compliance. The health care entities identified for the application of the HIPAA rules are required to comply with the rules and to absorb the costs of compliance, which means increasing rates for services (that may not be recovered by payments) or reducing other things in the budget to cover the costs associated with meeting the requirements of the rules. Both of these alternatives have an impact of costs and care.

COSTS OF HIPAA

How much do the HIPAA rules cost? The cost to each institution can only be estimated, and it is virtually impossible to determine an accurate aggregate figure. The estimates from the Department of Health and Human Services (the entity writing the rules) and the estimates from health care provider groups were vastly different. The Department of Health and Human Services has asserted that the use of electronic transactions, uniform identifiers, and code set standards will result in savings of \$29.9 billion over 10 years.¹⁷ The rationale is that the regulations related to uniform transactions and code sets (the third part of the HIPAA rules) streamlined the processing of health care claims, reduced the volume of paperwork, and resulted in better service. This component of the rules established standard data elements, codes, and formats for submitting electronic claims. All health care providers use the same codes and formats to bill for services.

The American Hospital Association estimated that the cost of implementing only the Privacy Rules (keep in mind that HIPAA encompasses the Privacy Rule, Security Rules, and uniform transaction and code sets) was \$22 billion.¹⁸ This number included only hospitals

represented by the association. Other organizations (clinics, academic units) have spent billions more on compliance, including consultants, computer systems integration assistance, printing of privacy notices, and staff training.

A review of the literature fails to uncover any retrospective analysis of the systemwide costs of HIPAA implementation. It is possible that once the Department of Health and Human Services made it clear that the rules were not going to be amended and that costs were not going to be a deterrent to their implementation, institutions simply went forward and absorbed the costs.

One institution conducted a study to assess the costs of HIPAA implementation and to evaluate patients' knowledge of privacy protections.¹⁹ All HIPAA start-up and implementation costs were collected prospectively. A random sample of 2000 patients who received services at the Mayo Clinic after the implementation of the HIPAA rules (April 14, 2003) were surveyed about knowledge of HIPAA, content of the rules, and privacy. The results showed that the total HIPAA start-up costs were \$4,663,672. Amortized (prorated over a period of years) costs were \$1 per patient visit or \$5 per patient per year. Costs for the privacy portion of the rule were \$2,734,855. These costs were about \$0.90 per patient visit or about \$4 per patient per year. Knowledge of HIPAA and privacy were tested with a 10-item quiz, which showed that patients indicated a high level of awareness of HIPAA and improved feelings of privacy. In this instance, the costs were found to be modest, and patients reported high levels of knowledge about HIPAA and confidence about privacy protection.

There has been no systematic analysis of costs, however, so no aggregate figures on cost are available. It is clear, even from the preceding study, that costs have not gone down as predicted by the Department of Health and Human Services. Has efficiency and greater accuracy been achieved through the use of standard transaction and code sets? It is too soon to tell, in part because the effective implementation date of those rules was moved many times because so many institutions did not have the computers and software to comply with the rules. They have not been in use long enough to judge their impact.

Has the protection of patient privacy improved? This is not likely. The rules have been in effect for six years, and it is possible to assess the financial and substantive effect of the rules. Regarding cost, no one has ever suggested that the Privacy Rule would save money.

Implementation and compliance are costly in staff time and direct expense. The question becomes "Is this substantial investment paying off in better protection of patient privacy?" I would suggest that the answer is "no." The protection of confidentiality, no doubt, is an essential obligation to a patient. The expectation of privacy is the foundation of the patient-provider relationship.

Violation of a patient confidence is prohibited by law in most states (located in the rules that define and regulate professional practice, generally), and protection of the patient's privacy is an element of professional codes of ethics. Most institutions have policies that require all staff members to maintain confidentiality. There are (and always have been) exceptions: disclosures that are required by law in the case of child abuse, for example. In addition, violation of privacy is recognized as a compensable injury in tort law in most jurisdictions. If a patient can demonstrate that confidential health information was disclosed and that the disclosure caused harm, a lawsuit can be filed and money damages recovered. This means that before the Privacy Rule promulgated under HIPAA, health professionals already were required by law and by professional ethical standards to maintain patient confidentiality. Violating confidentiality, except under legally permissible disclosure circumstances (such as child abuse) subjects a professional to possible licensing sanctions and civil liability as well as discipline in the workplace. Violations may also undermine patient care by violating the trust of a patient and diminishing the patient's confidence in the system and reducing the likelihood that the patient will be candid and forthcoming in future communications with health professionals.

Substantial incentives to maintaining the integrity of health information were in place before HIPAA. During the congressional testimony that preceded the enactment of HIPAA, the focus of violations of patient confidentiality was twofold: anecdotal evidence of breaches of confidentiality caused by unusual circumstances (such as a truck containing patient records overturning, causing the records to be blown across fields) and misuse of health data for discriminatory purposes by employers, insurers, and lending agencies. During the hearings, members of Congress were not informed of the widespread violation of privacy by health providers, but the burden of complying with the Privacy Rule has affected every practicing health professional.

Hospitals and other health care providers have incurred enormous costs to comply with the security standards. Interestingly, the department that wrote the standards admits that the cost of compliance cannot be determined:

We are unable to estimate, of the nation's 2 million-plus health plans and 1 million-plus providers that conduct electronic transactions, the number of entities that would require new or modified security safeguards and procedures beyond what they currently have in place. Nor are we able to estimate the number of entities that neither conduct electronic transactions nor maintain individually identifiable electronic health information but may become covered entities at some future time. As we are unable to estimate the number of entities and what measures are or are not already in place, or what specific implementation will be chosen to meet the requirements of the regulation, we are also unable to estimate the cost to those entities.²⁰

Thus the rules have been expensive (but not quantifiable) to implement in response to a problem that may not have existed and for which protections and remedies at law were in place already for individuals who suffered unauthorized disclosure of confidential information, thus violating privacy. The predicted savings of HIPAA have not occurred, and the other predicted benefits and efficiencies of the rules cannot be measured.

The HIPAA Privacy Rule, however, has had a demonstrably negative effect in one important area: research. Recent findings from the Executive Leadership Group of Vice Presidents for Research of the Association of Academic Health Centers (AAMC) found that the Privacy Rule of HIPAA has serious and often detrimental effects on biomedical research. The Vice Presidents for Research conducted focus groups with leading researchers to assess the impact of HIPAA on research activities and found several significant areas of concern, including ambiguity and misinterpretation of the rules, administrative burdens, and recruitment of research participants. The specific areas of research particularly affected by HIPAA include access to stored tissue and genetic databases; data warehouses, Clinical and Translational Science Awards, and medical records; community research. The AAMC report found that the burden that HIPAA imposes on researchers is not offset by any corresponding benefits, as HIPAA may, in fact, not offer any greater protection to research participants than current long-standing effective regulations in the research arena.

SUMMARY

The rising cost of health care, frequently referred to as a "crisis," has been the subject of debate, commentary, and politicization since the 1970s. To date, costs continue to rise, the percentage of the gross domestic product devoted to health care keeps increasing, the number of uninsured is increasing, and a gap in the quality of care between the insured and the uninsured is growing. In the complex world of health care and undesired medical inflation, does the federal government have any business dictating privacy and security standards to health care by law when this action will surely drive up medical costs? The federal government, as the nation's largest purchaser of health care, is in a unique position to tell all providers how the business of providing care will be run, even if this results in increased costs and only marginal benefits to patients. The entity that funds health care services can impose rules on the providers that deliver the care, even if the rules create additional expense and foster ineffective outcomes.

The Health Insurance Portability and Accountability Act as a "prescription" for cost control is not delivering as promised, nor is it an enhancement to patient privacy and security. It is still too soon to tell whether it will deliver the promised efficiencies. The Act has some unpleasant side effects: cost increases, substantial staff time invested in documenting compliance, patient confusion, and demonstrated damage to biomedical research. Nonetheless, the rules are here to stay.

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Trends in Long-Term Care

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Long-term care (LTC) is a variety of services that help meet both the medical and nonmedical needs of people with a chronic illness or disability who cannot care for themselves independently for long periods of time. Long-term care is recognized widely as a complex concept that, although targeting health services, is set within a social, political, and economic context. Long-term care for older adults has become a significant part of the United States health care system. As an aging population continues to grow, so does the demand for health care services.

The seven attributes of an ideal long-term care system include person-centered, professionally rewarding, integrated, affordable, accountable, community-based, and consumer directed (Miller, Booth, & Mor, 2008). These attributes are consistent with the trends seen in long-term care and in fact may fuel the efforts for reform or at the very least establish the values for the needed reform.

The American public is increasingly concerned about long-term care. One piece of evidence of this concern is the increased number of newspaper articles about the topic. LexisNexis reported 1533 articles from 1989 to 1994 and 7681 from 2001 to 2006 (Miller et al., 2008). Other evidence includes the Institute of Medicine (IOM) studies that focus on aging and LTC, the formation of the Campaign for Excellence Program, the development of the Nursing Home Compare Web site to promote public access to data about nursing home quality, the National Commission for Quality Long-Term Care (2006), and the formation of the Nursing Home Collaborative by the John A. Harford Centers for Geriatric Nursing Excellence (2007).

Further evidence of the need to address the system is the record number of medication errors that result in 44,000 to 98,000 deaths annually, with 50% of the fatal errors occurring in people age 60 or over. Twenty percent of Medicare beneficiaries have five or more chronic diseases. Most of these individuals are receiving

some form of LTC, many in nursing homes (Aspeden, Wolcott, Bootman, & Cronenwett, 2006). This chapter focuses on trends for nursing homes, one component of long-term care, relating the trends to the ideal qualities of long-term care. Issues addressed include the minimum data set (MDS) system of documentation, dementia care, culture change, and the quest for quality of care, all of which reflect significant trends in nursing homes.

Nursing homes are an important component of long-term care for older people and younger adults with disabilities. In December 2008, there were 15,711 nursing homes in which 1,410,902 people resided (American Health Care Association, 2008). Medicaid and Medicare are particularly important sources of funding for nursing homes, with three-quarters of residents dependent on one of the two programs—principally Medicaid—giving the federal government an especially large interest in the care provided. In 2006, Medicaid and Medicare together accounted for 60% of spending for nursing home care. Medicaid spent \$53.7 billion on nursing home care, and Medicare spent \$21.2 billion, for a total of \$7.9 billion (Kaiser Commission on Medicaid Facts, 2009).

USE OF THE MINIMUM DATA SET FOR DOCUMENTATION IN LTC

Concerns about the care in LTC resulted in regulatory changes that were designed to improve the process of care delivery and to contain costs, an important issue in the care of the elderly and the disabled. The need for stronger federal regulations in LTC was recommended. In 1987 Congress passed the Omnibus Budget Reconciliation Act (OBRA '87) and the Nursing Home Reform Act (NHRA); the results were expanded compliance requirements for certified facilities, including the use of a comprehensive clinical assessment tool (Office of the Inspector General, 2001). *The Minimum Data Set* (MDS)

is a familiar term in the long-term care industry. The MDS is one part of the Resident Assessment Information (RAI), which also includes the triggers, and the Resident Assessment Protocols (RAPs). The RAI is developed to guide the assessment process. The triggers identify from the data gathered for the MDS when additional assessment is needed, and the RAPs detail the content of that assessment.

Implementation of the MDS, a comprehensive geriatric assessment tool, occurred under federal mandate and required a standard method of data collection at specified time intervals (Brown, 2002; Richelson, 2006). The initial version of the MDS was implemented nationally in 1990; it has been revised once and is currently under refinement, with the MDS 3.0 scheduled to be released in 2010. The goals of the MDS 3.0 revision are to introduce advances in assessment measures, increase the clinical relevance of items, improve the accuracy and validity of the tool, and increase the resident's voice by introducing more resident interview items.

Providers, consumers, and other technical experts in nursing home care requested that MDS 3.0 revisions focus on improving the tool's clinical utility, clarity, and accuracy. Centers for Medicare and Medicaid Services (CMS) also wanted to shorten the tool while maintaining the ability to use MDS data for quality indicators, quality measures, and payment. The tool is designed to improve resident assessment and help staff develop individualized care plans to address the needs identified using the MDS.

In 1998 the prospective payment reimbursement system was phased into nursing homes, linking financial reimbursement to submitted data from the MDS (Grimaldi, 1999; Snowden et al., 1999). Also, in 1998 the federal government, in an effort to monitor quality, required all MDS assessments to be computerized (Mor, 2004). By 2002 over 10 million assessments a year were being entered into a national nursing home database on nursing homes that are Medicare or Medicaid certified (Centers for Medicare and Medicaid Services, 2009). The quality measures come from data collected through the MDS. In 2002 CMS began the Nursing Home Quality Initiative (NHQI), which resulted in the development of Nursing Home Compare, a Web site that allows consumers, providers, and researchers to compare information and quality.

Several outcomes are linked to the MDS. It has been described as the single most important instrument that can impact care, care planning, financial success or failure, legal defense, survey outcomes, quality assurance,

and communication among facility staff (Day, 2002). Assessment data have a variety of uses for providers, states, the federal government, and the public. Providers use the information to establish plans of care for their patients and residents, to submit requests for Medicare payments, and to support internal quality improvement processes. States use the data in their facility survey and certification processes and in their Medicaid programs. CMS uses the assessment information to calculate measures or indicators of provider performance and to compute Medicare claims payments. The MDS has been cited as an example of how a clinical assessment tool can be used in databases for research and policy applications, ranging from case-mix reimbursement to outcomes measurement and quality performance monitoring (Mor, 2004).

The effectiveness of the MDS tool has been evaluated, as well as the assessment of training needs for staff and surveyors. Several studies have evaluated the accuracy of the MDS. Bates-Jensen and colleagues (2004) completed studies that reported mixed findings; the results of their own study found significant differences in documented care and the MDS. Government reports reveal the need for improved accuracy in completing the MDS (General Accounting Office, 2002). The Office of the Inspector General (OIG) released two reports following the review of the use of the RAI/MDS in skilled nursing facilities; both were based on a review of three different sources: records, a survey of MDS coordinators, and a survey of nursing home administrators. The results revealed differences in the responsibilities, training, and educational preparation of the MDS coordinator (OIG, 2001). Differences in coding raised concerns about staff training and responsibilities (OIG, 2001, p. 11). Seven of the eight states sampled also had at least one nursing home that coded all of the residents differently than the experts. It was recommended that CMS take steps to ensure the accurate completion of the MDS. Accurate completion and compliance with the MDS process has become the responsibility of the MDS coordinator, a role that emerged as a result of the mandated MDS by the OBRA of 1987 (Colón-Emeric et al., 2006; Richelson, 2006).

Assessment information is central to planning and providing quality resident care, so it is critical that assessment data are accurate and complete. Government initiatives to monitor and improve MDS accuracy are highlighted in the 2008 Action Plan for Further Improvement of Nursing Home Quality (Centers for Medicare and Medicaid Services, 2008). The initial Data

Assessment and Verification (DAVE) program was initiated in 2001 and focused on ensuring accuracy and reliability of MDS data. DAVE 2 was a two-year program that started in October 2005 and provided onsite visits to nursing homes by trained nurse reviewers to examine resident records, assess the accuracy of MDS information, and provide educational support to facility staff. The project resulted in the development of Web-based training and educational materials to help nursing homes improve coding accuracy.

Other DAVE 2 tasks included the development and testing of targeting protocols to identify facilities at high risk for MDS coding errors, development and testing a nursing home self-audit process, and exploration of further options for federal/state partnerships to monitor and improve MDS accuracy (CMS, 2008). Mistakes in coding of the MDS may result in poor care planning, substandard resident outcomes, and inaccurate financial reimbursement to facilities.

Oversight of the completion, accuracy, and quality of care planning has been recognized as the responsibility of the MDS coordinator (Crowley, 1999; Dellefield, 2006; Nichols & Willis, 2004). The role became vital when reimbursement became linked to resident assessments. Coordinators work with an interdisciplinary staff to ensure that each resident's assessment data are coded accurately and that the written and electronic documents necessary for Medicare reimbursement are completed (OIG, 2000, p. 4). The instrument must be conducted or coordinated by an RN who signs and certifies the completion of the assessment. While the creation of this new role has been recognized, the scope, function, and the extent of involvement in data collection often depend on the size of the facility and the development of the role (Colón-Emeric et al., 2006; Crowley, 1999; Vickery, 2001; Young & Reeves, 1996).

There is no standardized training for MDS coordinators. Components of effective MDS training have been studied, but currently training is dependent on facility policy (Young & Reeves, 1996). The American Association of Nurse Assessment Coordinators, founded in 1999, offers training and certification for the MDS coordinator (Vickery, 2001). MDS coordinators may have multiple assignments, or their responsibilities may be incorporated into existing roles, such as the Director of Nursing or other non-RN staff (Richelson, 2006; Vickery, 2001).

Additionally, organizational barriers may prevent the provision of educational programs, limiting staff development (Ross, Carswell, Dalziel, & Aminzadeh, 2001). The MDS coordinator is an important source to

improve the quality of care in long-term care (Colón-Emeric et al., 2006; Piven et al., 2006). Further research is needed to understand relationships between the role and resident and facility outcomes. The recent revisions of the MDS to make it more resident centered, easier for nursing home staff to complete, and a more accurate measure of quality that is consumer-friendly all demonstrate trends to move toward the ideal qualities of long-term care.

TRENDS IN DEMENTIA CARE

Three trends in dementia care are highlighted here. One is the tremendous increase in the expected number of people with dementia as the cohort of persons over 85 increases at a faster rate than any other age group. Dementia prevalence rates for this group are currently 50%. It is expected that by 2040 the numbers of individuals with dementia will double in developing countries (Ferri et al., 2005). Currently, approximately 50% to 80% of persons living in nursing homes have dementia. Today, the LTC system and the staff in these facilities do not have the structures, processes, and knowledge to provide quality care to the current population of residents with dementia. Preparing for the dramatic shift in demographics of the elderly population demands large changes in the system and the needed resources to provide quality care. Second, there is a need to identify and test interventions to prevent behavioral problems, promote functional ability, and prevent excess disability of persons with dementia. Pharmaceutical intervention is still the primary treatment for persons with dementia even though psychotropic medications have been shown to be ineffective in controlling behavior problems in persons with dementia and also cause many untoward side effects that lead to excess disability (Talerico, Evans, & Strumpf, 2002).

A second trend in dementia care is the effort to reconceptualize dementia as a continuum with a variety of causes and rates of progression (Hachinski, 2008). While we have staged dementia for some time, it has primarily been based on behaviors and functional losses. We have not identified, developed, or tested interventions tailored to the stages of dementia or to the level of needs, deficits, and desires of the individual or family. We often treat people like they have lost all cognitive ability once dementia is diagnosed. There is much variance between individuals in the early stages, including variations in behavior, function, cognition, and care needs. Providers tend to treat all types of dementia as one entity, with one set of interventions. Individuals

with frontal lobe dementia have very different symptoms and needs from the person with Alzheimer's disease (AD).

The diagnosis of dementia must be distinguished, or *dementia* will become a meaningless label like *chronic brain syndrome*. Hachinski (2008) argues that instead of accepting a diagnosis of dementia as an unalterable progressive condition, close attention to risk factors may prevent progression, particularly in vascular dementia. In addition, some interventions have shown promise in slowing progression of the disease.

A third trend in the care of those with dementia in long-term care is for care providers to listen and pay heed to their needs (Genova, 2007; Taylor, 2007). Individuals with dementia are requesting changes in long-term care services, treatment options, and the ability to influence and control their care. Questions have been raised about why nobody with AD is on the board of the Alzheimer's Association and why these people are not consulted about what persons with dementia need and want. Persons with dementia want to know why they are not included in care conferences and why those who are providing care and treatment are not discussing dementia with them.

They also question why so much concern has been aimed at caregivers, with a general acceptance that nothing can be done for the persons with dementia. Many persons with dementia question why so much money is aimed at basic research to determine the cause of AD or medications to treat AD and much less on interventions to assist persons with dementia to maintain function and control for as long as possible. As with other consumers of LTC, people who have dementia want and deserve to be the person in the center of their care and the major player in the development of their care. Responding to these questions and concerns represents a considerable change for the system and a trend toward providing person-centered care and increased consumer involvement in service delivery.

WORKFORCE ISSUES

Much attention has been focused on workforce issues in LTC, with a number of approaches tried. The IOM report has focused more attention on this issue and provides some guiding strategies (Aspenden et al., 2006). Buckwalter's chapter, which focuses gerontological nursing, addresses part of this issue. There must be professionally rewarding work environments for attracting and retaining a high-quality workforce who have a passion for working with older persons in long-term care.

Part of this effort must be aimed at improving the image of LTC so the work is valued and respected within nursing and on a broader cultural level. This means that we first must value and respect the elderly and persons with disabilities who are served in LTC. This is a societal issue, not just a long-term care issue, but long-term care is a societal issue as well. Culture change has been one effort to address this need and is an important trend in LTC.

CULTURE CHANGE

Person-centered care is provided in a system that recognizes and accommodates the need for different services and support depending on individual needs and preferences. This concept underlies the current effort and growing influence of the culture change movement. Culture change efforts come in response to the regimented, one-size-fits-all structures and processes aimed at efficiency and primarily caring for the medical needs of persons who live in these facilities. It also comes in response to the need to address quality of life issues, not only quality of care—in essence, a more holistic view of the elderly and those who care for them. Culture changes may require changes in organizational practices, physical environments, relationships at all levels, and workforce needs, which lead to better outcomes for consumers and direct care workers without making services costs prohibitive.

A part of this effort is also aimed at accommodating persons whose functional abilities or physical condition changes over time without having to move to a different facility or even a different room. This is referred to as "aging in place." How to design the environment to accommodate this idea, as well as an effective staffing configuration, is one of the challenges facing long-term care. There is no doubt, however, that it is an important step. One innovative model for aging in place is Tiger Place in Columbia, Missouri. Tiger Place is an innovative housing facility conceived and developed by the MU Sinclair School of Nursing faculty in tandem with Americare Systems, Inc., of Sikeston, Missouri. The purpose of the project is to develop a new model of long-term care for older adults to be able to age in place in the home environment of their choice with supportive health care services as needed. This model aims to prevent the recurrent relocation of older adults when their needs for care intensify. This approach minimizes the anxiety, depression, and functional loss that often occur when older adults relocate. Tiger Place also allows residents to have pets

(http://www.americareusa.net/independent_living/Columbia_MO/zip_65201/american/1335).

Pioneer Network is an organization that is promoting and leading the cultural change movement (Pioneer Network, n.d.). It is a voluntary organization made up of providers, consumers, researchers, and policy makers. The organization is described as an umbrella organization for culture change efforts and person-directed care. Pioneer Network acts as a connector for multiple stakeholders, including researchers, practitioners, and policy makers. The need for evidence-based practice incorporating empirical findings on implementation, sustainability, and outcomes of culture change is imperative to the future of culture change in long-term care.

The goals and values of the Pioneer Network that guide culture change are listed in Box 44-1. These values reflect the values of an ideal long-term care system that is person-centered with strong consumer direction and efforts to address workforce issues as well. There is beginning research on the outcomes of culture change for consumers and staff. Grant (2008) completed a study of 17 Beverly Corporation for-profit nursing homes funded by the Commonwealth Fund. He studied the relationship of the extent of culture change implementation to business and operations of the homes.

BOX 44-1 Goals and Values to Guide Culture Change in LTC

- Know each person.
- Each person can and does make a difference.
- Relationship is the fundamental building block of a transformed culture.
- Respond to spirit as well as mind and body.
- Risk taking is a normal part of life.
- Put the person before the task.
- All elders are entitled to self-determination wherever they live.
- Community is the antidote to institutionalization.
- Do unto others as you would have them do unto you.
- Promote the growth and development of all.
- Shape and use the potential of the environment in all its aspects: physical, organizational, and psycho/social/spiritual.
- Practice self-examination, searching for new creativity and opportunities for doing better.
- Recognize that culture change and transformation are not destinations but a journey, always a work in progress. (Pioneer Network, n.d. *Mission, vision, and values*)

The five elements evaluated were decision making, staff roles, physical environment, organizational design, and leadership practices. Homes with an implementation of a greater number of culture change initiatives were found to have an improved competitive position in the market, improved occupancy rates, and improved operational costs. The fact that the innovation may be cost effective will increase the adoption of the innovation. However, measurement of outcomes for the residents of these transformed facilities is critical in evaluation of the effectiveness of the change.

Another concern is the role of the nurse in the culture change movement. Nursing is viewed as a “medical model,” and as a result, the role is devalued in the culture change movement. Nurses are often consultants on health matters and not viewed as leaders in the transformation of the environment. This is unfortunate and must be addressed both in ways that nurses are educated and prepared to holistically care for elders and in their important role in culture change efforts. Organizations like the Pioneer Movement have nurses in their leadership who believe in the contributions of nurses. However, nurses need to also be more visible in these organizations to identify nurses’ roles in the change of the culture of long-term care.

The Green House initiative is another effort at culture change. The concept of the Green House was first conceived and articulated by William Thomas as a radically changed, “deinstitutionalized” nursing home. Green Houses are small, self-contained houses for 10 or fewer elders, each with private rooms and full bathrooms and sharing family-style communal space, including hearth, dining area, and full kitchen. Primary staff, certified nursing assistants called Shahbazim, are “universal workers” who cook meals, do laundry, provide personal care, assist with rehabilitation, and promote the elders’ quality of life. Nurses, doctors, and other professionals comprise a visiting clinical support team for the residents and Shahbazim. Multiple Green Houses comprise a nursing home, meeting all nursing facility regulations and working within state-reimbursement levels, which allows for aging in place. In 2003 the first four Green Houses were built in Tupelo, Mississippi, on the campus of a retirement community. Forty residents were relocated from the traditional nursing home, half of whom were from the secure dementia unit. Experiences to date are positive for residents, family, and staff. The Green Houses were expected to result in a measurably better quality of life, social involvement, and emotional well-being for residents, with no decline in health outcomes.

One route to better outcomes for residents is through increased involvement and interaction with their family members, another hypothesized difference. Families also are expected to be less burdened and more satisfied. Compared with certified nursing assistants (CNAs), Shahbazim are expected to know their residents better as people, to be more likely to perceive that they have the power to influence resident outcomes positively, and to be more engaged and satisfied with their work. Administrative outcomes should include less staff absenteeism, injury, and turnover. MDS-derived quality indicators should be no different from or better than traditional nursing facilities.

A two-year evaluative study with four waves of data collection at six-month intervals is underway to study Green House outcomes, comparing the Green House elders, family, and Shahbazim to the residents, family, and CNAs at two comparison sites (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). Many studies are being conducted throughout the country to evaluate this innovative concept aimed at improving the quality of care of elders who require assistance.

NURSING HOME QUALITY

One of our nation's most challenging health care problems is providing quality care for nursing home residents. The Institute of Medicine Committee on Nursing Home Regulation (1986) defined quality of care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (Wunderlich & Kohler, 2000, p. 21). In 1986 this committee issued the report *Improving the Quality of Care in Nursing Homes*. Recommendations from this report resulted in the passage of the Omnibus Budget Reconciliation Act of 1987 (OBRA '87). The Nursing Home Reform Act was an outcome of OBRA '87 and included regulations designed to drive improvements in resident care and outcomes. The impact of regulations resulted in many changes to improve care delivery.

In 1996, in the context of evolving LTC options and persistent concerns about quality, the Robert Wood Johnson Foundation requested that the IOM again examine the quality of care provided in long-term care settings, including nursing homes. Some improvements, such as a reduction in the use of physical and chemical restraints, were seen despite serving a more seriously ill population. It was determined that the quality of care had generally improved since the implementation of

OBRA '87 (Wunderlich & Kohler, 2001). While seeing improvements in some facilities, studies identified that serious quality of care (QOC) problems persisted in some nursing homes. In addition to these clinical outcomes, concerns remain about the quality of life for nursing home residents. The IOM made several recommendations, including the funding of research toward developing quality assessment instruments that can be used appropriately across different long-term care settings with different populations.

The Structure of Nursing Home Quality

One of the criteria identified for an ideal long-term care system was accountability for both professionals in LTC and for LTC organizations. Some of the steps taken to assure quality do address this need for accountability. Federal and state governments pay for the majority of total nursing home costs. The care of nursing home residents is a high priority for the Department of Health and Human Services (HHS), and CMS. CMS contracts with state level quality improvement organizations (QIOs) to assist nursing homes to make improvements in an increasingly large number of priority areas. Federal and State surveyors conduct onsite reviews of every nursing home but weaknesses in this oversight process have been identified. Coordination between states and the federal government is often lacking (Hess, Schwartz, Rosenthal, Snyder, & Weil, 2008). States can shape the health system in many ways but there has been little systematic effort to monitor states, learn from their choices, and spread innovations from state to state.

Quality Initiatives

In 2001 CMS piloted the Nursing Home Quality Initiative (NHQI), a diverse work group charged with improving nursing home quality. In 2002 the national NHQI was launched and continues to be a broad-based initiative, supporting improvements in nursing home quality (CMS, 2009). Following the success of the NHQI, in 2006 the *Advancing Excellence in America's Nursing Homes* campaign was launched (CMS, 2008). The two-year campaign, a collaborative effort with more than 20 national organizations, was designed to reinvigorate efforts to improve the quality of care and quality of life for those living or recuperating in America's nursing homes. This program was designed to build on existing initiatives such as Quality First, CMS' & Nursing Home Quality Initiative, the Campaign for Quality Care, and the culture change movement. The national campaign is focused on measurable goals such as reduction in

high-risk pressure ulcers; reduction in the use of daily physical restraints; improvement in pain management in long-stay residents; improvement in pain management in short-stay (postacute) residents; setting individualized quality improvement targets; regularly assessing resident and/or family satisfaction and incorporating this information in their quality improvement activities; regularly measuring staff turnover and working to reduce turnover rates; and adoption of consistent assignments, where residents are regularly cared for by the same caregiver (CMS, 2008).

SUMMARY

Even with the significant improvements in the care of older adults, the long-term care system continues to face significant challenges. Issues include cost, access, and quality in both institutional and community-based care; inequities in rural and urban distribution of care; and care for people of color and other special populations. In addition, there are increasing concerns for the health and well-being of family caregivers and a growing recognition of the need for an adequately trained and stable workforce in LTC. The National Institute of Nursing Research (2006) has identified a broad range of significant issues, both clinical and organizational, and all represent important foci for future nursing research: mobility and falls, skin breakdown, physical and chemical restraints, infections, urinary incontinence, depression, and quality of life. There is also much interest in examining issues such as culture change.

The public image of the nursing home is a place to await death for individuals who have no one to care for them. Most problems of quality care are related directly to situations in which good nursing care could make a difference—for example, dehydration, pressure ulcers, falls, infection, overmedication, and depression. With the advent of prospective payment, the acuity level of nursing home residents has increased. The nursing care needs of residents require a high level of skill and knowledge. This situation is compounded by the exceptionally high rate of turnover among both professional and supporting staff. In addition to clinical and organizational issues in nursing homes, there is the problem of image within the profession. Nurses who choose to work in nursing homes often are characterized as less capable than nurses who work either in the community or acute-care settings. There are many topics for research in this area of LTC, and, given demographic trends, the need for this research and action is urgent.

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SECTION 6

Health Care Organization and Finance

Identifying and Controlling Health Care Costs

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Since the last edition of *Current Issues in Nursing*, the debate over health care costs has become a central concern of most Americans. This focus has come about as discussions of Medicare reform have intensified, and the costs of medications and use of prescription drugs have soared. Americans are concerned about the escalation of out-of-pocket costs associated with health insurance and the increasing issues of medical errors. In spite of this focus on costs, not many nurses have developed programs of research or careers around nursing economics. The concern for costs is determining a number of decisions that affect both nurses and patients receiving nursing care. This section introduces some of the issues around the costs of nursing and health care in today's health care environment.

In the debate chapter, Joseph York and Mary Gibson maintain that spending on health care in the public and private sectors has followed an upward trajectory since the early 1960s and has become one of the most challenging public policy issues facing the United States. This chapter examines how different aspects of the health care market contribute to the high cost of health care and then explores the effectiveness of various strategies to control health care spending in this country such as government regulation, proposals for a single payer national health insurance plan, managed care, managed competition, disease management, consumer directed health care, and retail clinics. York and Gibson summarize the health care spending drivers as hospital services, prescription drugs, and physician services, medical conditions and health spending, and technology and medical innovation. On the consumer side, the implications are the effect of personal disposable income on health care expenditures, increased cost sharing, prescription drugs, and availability of coverage. The strength of this chapter is the detailed examination of potential solutions to the problem. In the end, the authors conclude that consumers should participate in

health care treatment decisions, especially from a financial standpoint. This chapter provides an excellent foundation for the viewpoint chapters that follow.

In the first viewpoint chapter, Patricia Hinton Walker and Michelle Troseth focus on helping nurses better understand how emerging "business coalitions" within and related to the delivery, financing, and shaping of health care affect nurses individually and collectively in local and global markets. They present examples of coalitions in the market and policy arena and discuss possible new coalitions for the improvement of health care through research. The authors stress that the bottom line orientation of health care requires that nurses continue to be smart about the business side of the delivery system, the purchasing system (as employees), and how coalitions and partnerships are shaping health care for the future. The chapter includes a definition of coalition and the purposes and reasons to build coalitions and serves as a crash course on organizational structures and coalition building. The authors challenge nurses to become active players in shaping the new health care organizations. Four interesting case studies complete the chapter and illustrate the new wave of coalitions. These case studies focus on a coalition developed to address the need for health care reform in the future; an example of a business coalition built for the purpose of purchasing services/benefits and cost savings; a coalition of groups coming together to address quality of life issues and positive experience in death; and an opportunity related to coalition building that highlights issues in the study and measurement of population health management and improving outcomes in the context of patient safety within the military and federal health system. The authors provide excellent content on coalitions that can be used to build nursing partnerships for the future to improve patient care.

The corporatization of health care with a focus on mergers and acquisitions is the subject of the next

chapter, by Marjorie Beyers. The author clearly defines both concepts. Mergers and acquisitions use business approaches to achieve service goals. Successful mergers and acquisitions create synergy among the existing and acquired organizations. The author discusses how mergers and acquisitions impact changes in health care in terms of hospital mergers and health care business mergers. The chapter also highlights what stimulates businesses of all types to consider a merger or an acquisition. Included in the discussion are the nine top health care issues for 2009. They are (1) the impact of the economic downturn, (2) the number of persons with insufficient or no health insurance, (3) mergers and acquisitions in the pharmaceutical industry, (4) the growing focus on wellness and prevention rather than on care of the sick, (5) genetics, (6) the growth of health care and communications technology, (7) incentives of pay for performance, (8) incentives for a healthier lifestyle, and (9) the new coding system, ICD-10. Nurses in all types of roles are likely to be affected by mergers and acquisitions in today's health care arena. This chapter provides a good overview of what to anticipate during a time of merger or acquisition and concludes that nurses are now key players in this common place event in health care today.

The changes and challenges in home health care is the topic of the next chapter, by Mary Ann Anderson, Carol Bailey, Gary Bargstadt, and O. Ed Reitz. Home health care is the delivery of continued nursing and therapeutic services provided in a home-based setting. Six Medicare-covered disciplines typically are involved in home health care: skilled nursing, home health aides, physical therapy, occupational therapy, speech therapy, and social services. The focus of these services is on preventing complications and preserving client independence and health. Nurses providing care in the home must provide an accurate completion of the OASIS, the Outcome and Assessment Information Set, as an important part of their role. Scoring the OASIS requires precision and truth and is essential for home health care reimbursement. Specialized training is necessary to meet this government regulation, and completing the assessment tool requires a significant time commitment by nurses. Today the OASIS is pervasive in home health care settings and is a framework for almost every aspect

of home health care provided by nurses. Agency survival is increasingly dependent upon efficiencies in service delivery and the limited number of home visits is a critical factor in this puzzle. Home telemonitoring is a possible solution that is currently being used in this arena. As care increasingly moves into the home setting, all nurses must be concerned with the funding and quality of care available to consumers in their homes. This chapter provides the reader with an excellent summary of the impact of OASIS on home health care services. More data for analysis of this service will be available through OASIS and will strengthen evaluation and changes in practice provided by nurses in the home.

In the final viewpoint chapter, Tess Judge-Ellis and Bernard Sorofman focus on the use of medications: the costs and implications of their use for patients, the health care system, and society. Using an interwoven case study, they argue that drugs are too cheap and that health care providers do not acknowledge the dangers of drugs. They support this view with the idea that drugs are toxic if used too much and are debilitating if used in a manner that does not address the physiological needs of the patient. They suggest that not enough focus is put on medication mismanagement. They discuss the problem of patient nonadherence as a contributing factor in the situation and the issues of easy access to medications in our culture. The authors provide an interesting perspective with the intent to stimulate debate. This chapter is an important contribution to this section on the costs of health care, providing a timely discussion regarding prescription drug costs in this country.

The nursing profession continues to face a variety of economic issues in practice. These are important issues for the profession and for the patients in all settings. Today, nurses and nursing students are gaining critical knowledge about costs of health care, and nursing is playing an increasing role in health care cost-containment efforts. Nurses need to continue to make the costs of health care a nursing concern and take appropriate actions whenever the opportunities arise. Health care reform is a major issue on President Obama's agenda. Nurses must be involved in the discussions that shape any new health care reform. The cost of health care is central to any reform plan.

Controlling Health Care Costs: Balancing Public and Private Solutions

JOSEPH W. YORK ♦ MARY M. GIBSON

Spending on health care in both the public and private sector has been on an upward trajectory since the early 1960s and has become one of the most challenging public policy issues facing the United States. Health spending continues to grow faster than the overall economy and employee compensation, raising concern that greater numbers of Americans, particularly those with lower incomes, may lose access to care. Factors generally cited as contributing to the dramatic rise in health care spending include growth in pharmaceutical expenses, new medical technologies, increased consumer demand, the cost of health care labor, greater negotiating power on the part of hospitals and providers, and the aging of the population (Heffler et al., 2004; Thorpe & Ginsburg, 2001).

While many Americans have benefited from this increasing investment in health care, the size and pace of growth has placed strain on the systems used to finance health care, including public programs such as Medicare and Medicaid and private employer-sponsored health coverage. Efforts to control spending through market forces or government regulation have had little long-term effect. The questions of affordability and whether individuals receive a corresponding value in relation to the escalating cost of care have caught the attention of policymakers, legislators, employers, and consumers. These individuals must collectively decide how to balance effective cost-control policies with the increased demand for services that will inevitably come with an aging but prosperous population.

This chapter examines how the different aspects of the health care market contribute to the high cost of health care and then explores the effectiveness of various strategies to control health care spending in this country.

HEALTH CARE SPENDING GROWTH AND ITS DRIVERS

Health care spending in the first years of the millennium has increased on an annual basis at a higher rate than the overall U.S. economy, when compared against gross domestic product (GDP). GDP is defined as the value of goods and services produced by labor and property located in the United States over a given period of time, usually a quarter or a full year (Bureau of Economic Analysis, 2008). While GDP has increased in the 3% to 4% range for most of this decade, overall health care spending increases reached a peak of 13.4% between 2002 and 2003 (Ginsburg et al., 2006) and has since moderated to a 6.6% to 6.7% increase in 2006 and 2007 (Keehan et al., 2008). However, it is not clear whether the moderation in growth will be sustained over the next few years. As the so-called baby boom generation approaches retirement age, health care utilization, especially through Medicare, is expected to accelerate (Ginsburg et al., 2006).

What factors drive health care spending increases? The largest health care sectors in the United States are hospital services, drugs, and physician services. Figure 45-1 illustrates the major components of estimated spending on health care in the United States for 2007. The major contributors to health care spending are analyzed in the following section.

Hospital Services

Hospital services account for almost one third of all health care spending in the United States. Because of its prominent role, even small changes in hospital service can have significant effects on overall health care spending. Innovations in medical technologies and continued pressure from payers to provide services in the most cost-effective setting continue to drive services into the

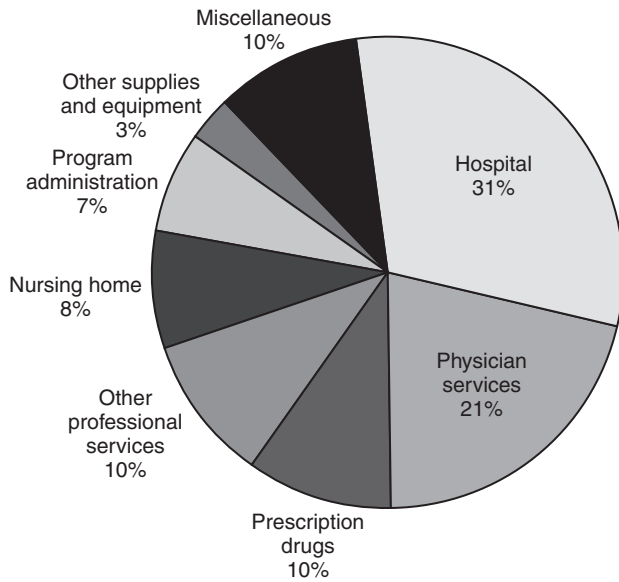


FIGURE 45-1 Distribution of U.S. health care spending by sector for 2007. Data from Keehan et al. (2008). Health spending projections through 2017: The baby-boom generation is coming to Medicare. *Health Affairs*, 27(2), w145-w155. Retrieved October 10, 2008, from <http://content.healthaffairs.org/cgi/reprint/27/2/w145>.

outpatient setting, a less expensive alternative to inpatient care. But, the trend in hospital prices has continued to accelerate in recent years as hospitals have consolidated their negotiating power over health plans in many areas of the country. Several additional factors have contributed to the acceleration in hospital prices over this period of time, including a strong labor market for hospital workers, especially nurses. A shortage of trained personnel has driven up wage rates as well as the number of hours worked, and many health care facilities have passed the increased wage costs along to payers, including health plans and consumers. Another factor driving up prices may be that with diminishing profit margins for Medicare patients, hospitals are continuing to shift more costs to private payers. In the future, the recent Medicare payment rate reduction “give backs” following payment cuts mandated by the Balanced Budget Act of 1997 could put downward pressure on hospital price increases. If, in fact, Medicare use increases as a result of large numbers of workers entering retirement, Medicare can be expected to continue to attempt to manage overall spending through various reductions in payments to hospitals.

Hospital revenue growth is also moderated somewhat by utilization management tools that are being implemented with renewed enthusiasm by private health plans and payers in an effort to keep downward pressure on the use of inpatient hospital services. Insurers are reinstating tools, such as prior authorization requirements, and enhancing disease and case management programs to selectively target high use and high cost services in an effort to keep hospital costs and premiums under control. In addition, cost sharing for hospital care is becoming more common in plan design. Per-stay and per-day copayments for inpatient care are being added to plans as an additional incentive to reduce utilization and length-of-stay.

Physician Services

The second largest segment of U.S. health care spending is on physician services, at 21% for 2007. When other professional services (e.g., dentists, psychologists, physical therapists) are considered along with physicians, the cost of health care professional services equals that of hospital spending. However, physician services are one of the slowest growing segments of health care spending, with an annual increase of 5.5% to 5.9% in recent years. This has been the longer-term trend and most likely represents price controls by Medicare and insurance companies, with most of the growth resulting from increased volume of patients seen by physicians (Ginsburg et al., 2006).

The long-term prospects for controlling physician and other professional service expense may be challenging. In the 1990s, discussions centered on an impending physician surplus in some specialties, with some policy experts recommending restricting the growth of residency and fellowship training programs in these areas (e.g., Wennberg et al., 1993). However, in the past few years, increasing rates of physician retirement and difficulty in recruiting physicians in some areas of the United States have led to new initiatives to increase the numbers of medical and osteopathic students through class expansion and establishment of new schools (Association of American Medical Colleges, 2008). While these efforts will put new doctors into the workforce, the time lag between entering medical school and entering practice, at minimum 7 years, suggests that the country will not enjoy significantly larger numbers of doctors for at least a decade. When coupled with potentially greater demands from the retiring baby boom generation,

physician shortages will likely lead to higher costs for physician services, at least temporarily.

Prescription Drugs

Prescription drugs have steadily increased their prominence as a health care cost component, with a number of years of growth in excess of 13%. Prescription drug spending moderated somewhat in the middle years of the current decade, but the lower growth is not expected to endure. In December 2003, Congress passed the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003. Until the passage of MMA, many seniors either purchased supplemental insurance plans to cover prescription drugs, which were not part of the original Medicare benefit package, or paid for prescriptions themselves. MMA was expected to reduce the rate of growth in spending in the private sector as individuals who now have supplemental coverage enroll in Medicare. In 2006, with the first full year of Medicare Part D, the operational name for the MMA, prescription drug growth began to accelerate again, at 8.5%, versus 6.6% for overall health care spending (Catlin et al., 2008). The variety of alternative plans for Medicare Part D can be confusing for the casual reader (see www.cms/hhs.gov). The important point is that for the first time, partial prescription drug coverage is available to all Medicare recipients. This benefit lowers the overall cost of drugs, often a significant cost for seniors, and therefore will tend to encourage greater use, which was the case for 2006 (Catlin et al., 2008).

In the mid-1990s, the availability of newer, higher priced drugs and rising per capita prescription use fueled increases in spending that were several times higher than for hospital care or physician services. Factors often cited as contributing to the double-digit growth rates include spending on research and development (R&D); spending on promotion, including heavy direct-to-consumer advertising; and the availability of prescription drug coverage (Keehan et al., 2008).

More recently, several factors have led to a temporary moderation of prescription drug costs. Greater use of generic drugs, which tend to be priced lower than name-brand equivalents, and pharmacy benefit plans that require individuals to pay more for name-brand drugs have helped to slow the rate of drug spending. In addition, many employers are now requiring individuals share the cost of prescription drugs, either through higher copayments, or through coinsurance, where an individual pays a percentage of the total cost instead of a fixed-dollar amount.

While the use of increased cost-sharing incentives may have also helped to slow the trend in drug utilization rates, several other factors have been important. There have been relatively fewer new drugs approved for sale, several blockbuster prescription drugs have been abruptly removed from the market, and others have been re-classified to over-the-counter status. The amount of spending on prescription drugs represents only 10% of total spending, but this relatively low number reflects the recent faster conversion of prescription drugs, which constitute something of a monopoly for the pharmaceutical firms, into over the counter versions that often sell at discount.

Longer term, the pursuit and demand for new and better pharmaceuticals is unlikely to abate. Discoveries in science, particularly in the field of genomics, will open the door to new classes of drugs that will be pass on large investments in research and manufacturing costs to the consumer either through high prices or through taxes for public programs such as Medicare and Medicaid.

Medical Conditions and Health Spending. Understanding the link between health spending and specific medical conditions can also shed light on spending growth. A study using data compiled by the U.S. Department of Health and Human Services found that 15 medical conditions accounted for half of the growth in spending between 1987 and 2000 (Thorpe, Florence, & Joski, 2004). Of these, heart disease, mental disorders, asthma, cancer, and trauma were responsible for nearly one-third of the increase. Researchers were also able to show that spending could be explained as changes in the number of individuals receiving treatment, the cost per treated case, or spending due to population growth and that the importance of these factors varied by medical condition.

For some conditions, increased spending could be explained by the rise in the number of individuals treated, reflecting two trends: better recognition and diagnosis of the disease, and increased prevalence in the population. For instance, the cost of treating mental disorders nearly doubled as a result of improvements in diagnosis while the increased cost of treating asthma appeared to be related to an increased number of individuals suffering from the disease.

For other conditions the cost to treat each case rose significantly. For instance, in heart disease, the cost to treat each case rose nearly 70% between 1987 and 2000, reflecting the use of new medical technologies and drugs. However, while spending per person went up, death rates associated with heart disease decreased.

This observation suggests that some spending increases are warranted when health indicators improve as a result of treatment.

Technology/Medical Innovation

The impact of technology and innovation on health care costs is mixed. Many believe that advances in medicine, including technological and clinical developments that result in new products, processes or procedures, whether they are diagnostic, therapeutic, preventive, or administrative, are a key driver in the escalating cost of health care. Others support the position that the subtle and complex relationship between technical innovation and health spending is not well understood and that medical technologies are not inherently cost increasing. Individual technologies can (1) reduce or increase the unit cost of treatment, the risk of complications, clinical incomes or hospital revenues; (2) require repetitive use or eliminate the need for further treatment; (3) expand or leave constant the population of those at risk for medical treatment; or (4) improve or complicate the patient's quality of life.

IMPLICATIONS FOR CONSUMERS

Implications for consumers focus on several areas such as the effect of personal disposable income on health care expenditures, increased cost sharing, prescription drugs, and availability of coverage. Economic uncertainty can further affect the degree to which employers, who fund a large part of insurance, use these mechanisms to put further pressure on consumers to share in the cost of their care.

Personal Disposable Income

With consumers paying a larger portion of the cost of services, the level of discretionary personal income may affect spending decisions on medical services, particularly those currently not well covered by many payers such as dental services, medical equipment, and other professional care services (McWilliams et al., 2007). Nursing home services currently also have high out-of-pocket cost sharing, although the relationship to disposable income is less direct given the contributions of Medicare and for longer stays, the potential eligibility for benefits under Medicaid.

Increased Cost Sharing

Although the growth in health insurance premiums has moderated recently after years of accelerating rate increases (Claxton et al., 2007), the continuing rise in

health care spending will continue to exert upward pressure on premiums into the foreseeable future. Employers have responded to the continuing rise in health insurance premiums by shifting more costs to consumers through various types of cost-sharing arrangements. This premium "buy-down" in the form of higher deductibles and copayments is expected to result in an increased share of personal income going to pay medical costs. Employees are also paying a greater portion of the premium through higher monthly payroll deductions.

In addition to copayments for physician services, a growing number of individuals with employer-sponsored coverage now have separate hospital cost-sharing arrangements. In spite of rising costs, employers have been reluctant to reduce covered benefits, preferring instead to implement cost-sharing arrangements. Once rare, these cost-sharing arrangements can include a separate annual deductible and copayment for hospital services, coinsurance for hospital services, or both. All of these mechanisms tend to reduce health care utilization as consumers make spending decisions between health care and other personal necessities.

Individuals Covered Under Public Programs

Government control of health care spending through programs such as Medicare and Medicaid differ from control mechanisms available through private insurance. Medicare is a compulsory government-based insurance plan for all U.S. citizens 65 years and older. Medicaid, once referred to as "public aid," is designed to cover individuals at every age who lack health insurance and fall below a certain income level. Medicare, with rates and rules set at the national level, has coped with spending increases in much the same way that private insurance does: by increasing premiums, deductibles, and copayments. Medicaid beneficiaries on the other hand are more likely to lose benefits as states, which set rules individually, adjust eligibility rules that exclude a portion of the population or include cost sharing. However, some evidence indicates that even minor cost sharing through deductibles or other mechanisms can discourage Medicaid recipients from making full use of available health care services. In a study that compared chronic renal dialysis use between low-income patients across a number of developed countries, the United States, with the highest cost sharing, also had the lowest utilization of services. This suggests that low-income patients, who must make difficult spending decisions

on a daily basis, are especially cost conscious for even small expenditures (Hirth et al., 2008).

Outlook for Cost Trends

There is no indication that the overall growth in health care spending will abate any time in the foreseeable future. Factors that influence the rate of growth include use and intensity of services; aging of the population; prices for services; and the state of the economy, including labor markets, health insurance plan designs, and an aging population. Current projections suggest that the overall growth in health spending will increase at an average annual rate that is 2.1 percentage points greater than the growth of our national economy. As a result, spending on health care is expected to increase from 16.3% in 2007 to 19.5% of GDP in 2017 (Keehan et al., 2008). If this trend continues, health care premiums will continue to rise and payers will likely push for additional tools to manage the growth in underlying health care costs.

Administrative tools to control costs will include greater financial responsibility for patients in the form of higher deductibles and copayments as well as a relatively new tool, health savings accounts. All of these strategies are designed to motivate individuals to consume health care more judiciously.

APPROACHES TO CONTROLLING HEALTH CARE SPENDING

Concern over rising health care costs has led to numerous approaches to control spending. One natural way of distinguishing among the various programs and proposals is to think of them in terms of government regulation versus market forces. For instance, as discussed elsewhere in this chapter, the federal government has attempted with some success to slow the rate of health care costs in its own programs, Medicare and Medicaid. Market-driven strategies on the other hand arise from individual organizations such as insurance companies and employers who use various methods to reduce health care spending by their policyholders and employees. Some of these strategies include controlling access to health care, bargaining with providers (e.g., hospitals and physicians), and shifting costs to individuals. Some newer innovations include strategies that combine government and market approaches, such as health care spending accounts and exerting pressure on government to reform medical liability rules. Finally, some organizations have begun looking at ways to compensate health care providers for quality and efficiency.

This section looks at several of these current and developing strategies.

Government Regulation

Before World War II, government regulation of health care was largely absent. Proposals to expand insurance availability and to nationalize health care first emerged in the 1930s in response to widespread poverty resulting from the Great Depression. However, opposition by the American Medical Association effectively undermined these efforts (Starr, 1982, pp. 271-275). Despite periodic revival of efforts to develop a national health care program, by the end of the twentieth century, America remained one of the few industrialized countries that had not instituted a nationalized health care plan. Nevertheless, because of programs such as Medicare and Medicaid, direct federal expenditures on health care represent 45% of all U.S. health care spending (Catlin et al., 2008). Government thus has a vested interest in controlling health care expenditures and also has the power of law to enforce regulations intended to hold down health care costs.

While the aim of the Medicare and Medicaid programs was to improve the health of vulnerable populations, early estimates of the costs of these programs proved to be optimistic. In the case of Medicare, reimbursement rates to providers were for “reasonable and customary” charges, based on the fees charged in the same community by similar providers. In response to alarming increases in health care spending during the high-inflation years of the 1970s and early 1980s, Congress passed the Medicare Prospective Payment Plan in 1983, which established Diagnosis-Related Groups (DRGs). Rather than pay for each service or supply provided in the course of a patient’s care, the DRG established a set fee that would be paid to a hospital for treating a patient with a particular disease. The system included adjustments for case severity, teaching hospitals, and disproportionate share of uncompensated care related to a particular hospital, but even with adjustments, the program put the responsibility for controlling the cost of care directly on the provider.

Despite constant adjustments to the Prospective Payment Plan program, Medicare spending continued to grow disproportionately through the next decade. In 1997, the Balanced Budget Act was passed. It included provisions to further reduce payments to providers, while maintaining benefits for Medicare enrollees. The natural reaction of physicians and hospitals has been to raise their prices to other patient populations, especially commercial insurance and self-pay patients, a

practice termed *cost shifting*. Thus, even when the federal government has been able to regulate its own expenditures, the country's overall health care spending has been affected very little by the various adjustments to Medicare.

Spending on Medicaid programs has also increased dramatically over time, but for different reasons. From the outset, Medicaid has set reimbursement rates for providers, so that government could regulate the growth in fees charged by hospitals and physicians. However, the numbers of eligible individuals tend to grow during economic downturns, resulting in increases in overall spending. In the first years of the Millennium, overall rates for Medicaid spending grew by upwards of 9.5% annually, even as state and federal tax revenues fell while the country suffered through a recession. Medicaid is also distinguished from other programs in that it is administered by individual states with differing rules for coverage. The states receive varying amounts from the federal government, which allots anywhere from 50% to 83% of a state's Medicaid budget, depending on the state's overall economic strength.

Efforts to manage Medicaid spending growth focus on a few key strategies. First, eligibility requirements can be modified. Most states place family eligibility in terms of the family's earning power compared with the national definition for the poverty level. Typically, a state may rule a family eligible for Medicaid benefits if their income is no greater than 1.5 to 2 times the national poverty level. States can sweep large numbers of eligible individuals and families into and out of their programs by modifying the means test. Second, states can tighten reimbursement rates to providers. This tactic works well in regions where the Medicaid-eligible population is relatively small and cost shifting can cover the revenue shortfall for hospitals and physicians. However, providers who care for primarily Medicaid populations often cannot handle reductions in revenue and may shut down, or in the case of individual physicians, move elsewhere. In these cases, states often must provide additional grants and funding to certain providers to ensure that they can continue to care for these needy populations. A third approach has been to require small deductibles and copayments by Medicaid patients. Finally, most states have adopted managed care plans for their Medicaid populations to better regulate utilization of services. The managed care plans usually consist of states contracting with existing health providers to furnish care for Medicaid patients, often at a capitated rate (meaning that the state will prepay a set amount per individual enrolled without regard to how

much service the patient consumes). The incentives for developing a managed care mechanism include controlling costs for the state, who negotiates an overall lower rate with the managed care company than it currently spends on fee-for-service, while at the same time, the managed care plan encourages more rational use of health care by Medicaid populations. The performance of managed care plans for Medicaid populations has been successful where the rates paid were sufficient to cover costs. However, over time significant numbers of plans have folded or refused to accept further enrollments due to the low capitation rates offered by some states. Thus, while managed care has promise for controlling Medicaid spending; it is often hampered when managed care plans decide the rates being offered are not attractive.

Single Payer/National Health Insurance Plan

Dissatisfaction with many aspects of the U.S. health care system has led to proposals for a single-payer system, often referred to as National Health Insurance (NHI). A single-payer plan would ensure coverage for every person for any medically necessary service, regardless of age, employment, or economic status. This is the current situation in the United States through the Medicare and Medicaid programs, as discussed above. Both of these plans are seen by many as templates for offering comprehensive health care to all citizens and legal residents of the United States.

Proponents of single-payer plans see many advantages to these proposals over the current mix of plans now in operation in the United States. Advantages include the following:

- ◆ The cost of administering multiple public and private plans (Medicare and Medicaid, along with insurance companies and health maintenance organizations [HMOs], to name a few) would be reduced to one administrative unit.
- ◆ Hospitals and doctors would spend less on maintaining complex billing and collection systems because they would only have to bill to one entity.
- ◆ Charges by providers (hospitals, clinics, physicians, and other health care professionals) could be controlled through prospective rate setting. Rates would be decided through negotiation between the national plan and providers, such as is now the case with Medicare. Because all patients would be covered by the plan, costs could not be shifted to self-paying or insurance-covered patients.
- ◆ Pharmaceutical costs, the fastest rising segment of health care at present could be controlled by a

national formulary that specified approved drugs and supplies. Pharmaceutical companies and retailers would also be subject to rate setting that ensured a reasonable cost for each product.

- ◆ Better access to health care, including coverage for drugs and supplies, may reduce the incidence of patients deferring treatment only to be admitted later for more serious problems, with resulting large hospital charges.

In 1994, a national panel convened by Hillary Clinton, wife of then-President William Clinton, developed a proposal for a national health care plan that was intended to guarantee universal health coverage regardless of an individual's employment status, income, or other factor (The President's Health Security Plan, 1993). Entitled The Health Security Act, this plan proposed to reduce the nation's overall health care expense burden by creating one simplified administration system. Regions and individual states would administer health boards that reviewed utilization and approved referrals to specialists much as managed care systems do. Funding would be provided by a tax on employers, regardless of the size of company, of 7.9% on wages. All Americans would be automatically covered, and would receive comprehensive care from the physician of their choice. The proposal differed from many national health care plans in that it preserved individual choice and had a somewhat decentralized orientation through the state and regional administrations. Unfortunately for the Clinton administration, the public debate quickly grew acrimonious, with questions about funding and the actual freedom of consumers to choose medical treatments, and was ultimately dropped.

The success of a single-payer plan in the United States can only be analyzed in the abstract because no one has been successful in implementing it in this country. However, critics have focused on two bodies of evidence to argue against development of such a plan. The first body of evidence comes from experience with Medicare. Because all health care administered to citizens over age 65 is paid through Medicare, one can look at the financial performance of this plan to see how a restrictive payer plan might function. For instance, an important feature of Medicare is its deductibles and copayments for many services. These patient payment features have risen at rates of 5% and up in recent years as Medicare attempted to close the gap between spending and income from payroll deduction.

The other perspective on single-payer plans comes from comparisons with other countries that have adopted a national health insurance plan. Proponents

for single-payer plans point out that the United States exceeds every other country in terms of per-capita spending, but lags in health outcomes. Figure 45-2 shows how several major countries compare in terms of health care spending as a proportion of GDP as of 2004. The U.S. spending has tended to be about 50% higher than other industrialized nations. Yet, in many important health measures, the United States demonstrates lower indices for many basic measures of health care outcomes (Table 45-1).

The most direct comparisons can be made with the systems in Canada and Britain. These two countries are most like the United States in terms of culture, especially in regards to diverse populations as measured by ethnic background, economic status, and dispersion between urban and rural populations. The major difference between Canada and Britain versus the United States is that both Canada and Britain provide national health plans that cover all citizens in those countries, while over half of U.S. residents receive coverage through an employer or through individual private health insurance plans. Many attribute the lower health care indicators to the variance in health care coverage available to U.S. residents. However, other measures suggest that the picture is not that simple. When the outcomes for serious illness are compared among the three nations, the United States demonstrates better outcomes in

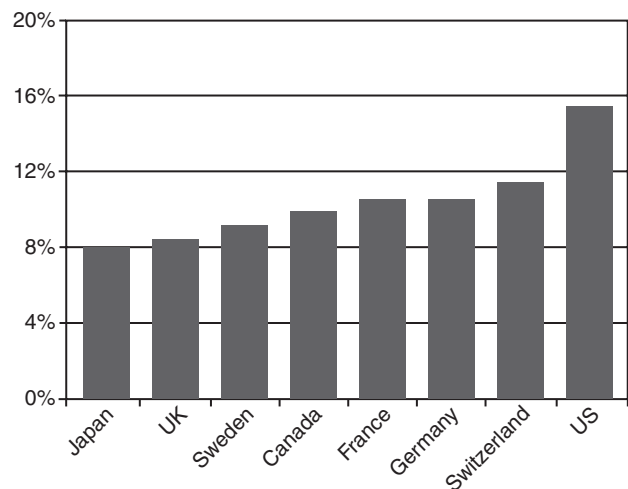


FIGURE 45-2 Overall healthcare spending by selected developed nations, 2004. From Anderson, G. F., Frogner, B. K., & Reinhardt, U. E. (2007). Health spending in OECD Countries in 2004: An Update. *Health Affairs*, 27(5), 1481-1489. Copyrighted and published by Project HOPE/Health Affairs. The published article is archived and available online at www.healthaffairs.org.

TABLE 45-1 Comparisons of Various Health Care Indicators for Industrialized Countries

Indicator	U.S. Status Versus Comparable Nations*
Life expectancy at birth	Lowest for both males and females (79.4 yr for females, 73.9 yr for males)
Obesity (BMI >30)	Highest (26% of adults)
Infant deaths per 1000 live births	Highest (7.0 per 1000)
Percentage low-birth-weight infants	Second highest at 7.4; Japan highest at 7.5 per 1000 live births
Child immunization rates	Lowest (84%)

Data from Davis et al., 2007.

*Comparable nations include Australia, New Zealand, Canada, France, Germany, Japan, and the United Kingdom.

some key areas (all comparisons from Davis et al., 2007, and Goodman et al., 2004):

- ◆ Average length of hospital stay is 5.9 days in the United States, 6.2 days in Britain, and 7.1 days in Canada.
- ◆ Surgery waiting time in the United States averages 0.9 months, 1.5 months in Canada, and 2.2 months in Britain.
- ◆ Mortality rates for breast cancer (percentage of patients diagnosed with the disease who die from it) are 25% in the United States, 28% in Canada, and 46% in Britain. For prostate cancer, the U.S. rate is 19%, Canada 25%, and Britain 57%. Colon cancer likewise is lowest in the United States and Canada at 18 deaths per 100,000 population, compared with 20 deaths per 100,000 population for the average of developed countries.
- ◆ Infant mortality rates (7.2 deaths per 1000 deliveries) are higher in the United States than in Canada (6.1 per 1000) or Britain (6.9 per 1000). However, when geographic and ethnic differences are examined within a single country, the mortality rates for the United States are substantially the same for similar populations in the other two countries. For instance, the infant mortality rate in New Hampshire is 4.4, compared with 4.6 for Prince Edward Island in Canada, a relatively prosperous province. Saskatchewan's rate is 9.1, reflecting its largely rural and poorer population. Similar comparisons can be drawn for United Kingdom regions.

These findings suggest that health care delivery is neither more efficient nor more effective for national plans versus the private system of the United States, and the United States tends to have shorter lengths of stay and better outcomes for serious diseases. Countries with national plans tend to provide better screening and routine care because individuals are more likely to see a doctor when they don't have to pay a large amount for the visit. These observations may reflect the decision on the part of national plans to focus on routine care and screening of their populations, while restricting access to more complex care for the smaller segment of the population with serious illness. Economists often discuss the tradeoff between time and money; in this case the national health plan requires patients to wait longer for certain procedures, saving money in the process because it hires fewer specialists and purchases smaller numbers of specialized equipment. The shorter waiting times for surgery in the United States as cited above may correlate with better outcomes for prostate, breast, and colon cancer.

In summary, while national health care plans are less expensive than private plans on a nation-wide basis and demonstrate better overall health standards, the savings may be at the cost of the seriously ill populations in those countries. Regulating spending on more expensive procedures may equate with longer waiting times and potentially higher mortality rates. Whether this is a trade-off that citizens are willing to make is a question that requires serious public debate.

MARKET-DRIVEN STRATEGIES FOR CONTROLLING HEALTH CARE SPENDING

While many countries around the world encourage private enterprise, the United States may stand apart in terms of its constitutional restrictions on government function and its emphasis on market-driven philosophy. For most of this country's history, health care has been provided on a fee-for-service basis, with patients paying for services as they are provided, either directly or through a third party, such as private insurance. Even Medicare for much of its early existence paid for services using a menu of reasonable and customary fees that reflected a community standard to determine an acceptable level of payment.

However, during the 1980s, rapidly accelerating health care spending led both government and private insurers to search for ways to contain this growth. Not only was it a component of a high overall inflation rate, but it also was making it difficult for American

companies to compete with international counterparts who did not have to absorb high costs for employee health services. The response from the commercial marketplace has been managed care, along with sharper bargaining on the purchase of health care services and attempts to better manage utilization.

MANAGED CARE

The term *managed care* actually encompasses a variety of systems designed to control individual access to the health care system by restricting the available providers and participating in the decision of what care should be delivered. It's hard today to imagine that only 25 or 30 years ago, a person with an insurance card could make an appointment to see any doctor they chose, including specialists, and that the physician could decide with little oversight from the insurance company where the patient might be hospitalized, for how long, and what procedures might be performed. Today, even the simplest health insurance plans often require choice of a primary care doctor who acts as a "gatekeeper" for access to the health care system, coupled with approval by the plan for most procedures, and justification for any hospitalization of the patient. The penalty for not using this system is either a greatly reduced payment or none at all from the insurance company.

Managed care organizations (MCOs) did not have a large presence in the United States until passage by Congress in 1973 of the Health Maintenance Organization Act. This law sought to promote the growth of HMOs by requiring employers to offer an HMO choice in their employee health care plans, and also provided start-up funding for HMOs. The impetus for the HMO Act came from the observation that fee-for-service plans encourage health care providers to offer more rather than fewer services and procedures, while a prepaid plan would be more efficient and careful in what services it provided to members (referred to as *utilization*) (Kongstvedt, 2002, p. 10). In exchange, the managed care plan could offer lower premiums to employers.

Over the following years, HMOs grew in size and numbers. However, concerns over the restrictions placed on patients who could only see the doctors employed by their particular HMO, and only be hospitalized in the institution specified by the HMO, led to different arrangements such as preferred provider organizations (PPOs). PPOs differ from HMOs in that they allow patients to seek care outside the system, but with a reduced reimbursement rate, such as 60% to 70% of allowed charges. PPOs still require certification for

hospitalization and other mechanisms for managing utilization.

It is difficult to estimate the impact of managed care organizations on health care spending in the past two decades. Perhaps most telling is that they have almost completely replaced traditional health insurance plans for company-sponsored benefits. However, the growth in health care spending appears to have risen with few exceptions at a rate well over inflation in the period of time in which managed care plans dominated the private sector of health care funding. Why hasn't managed care lived up to its promises? One possible reason is that employers, who purchase health care benefits for employees, have been caught in the middle when MCOs refuse to provide services that employees demand, but may not be justified. In order to placate certain classes of workers, employers have sought more liberal plans (Nichols et al., 2004). Secondly, competition among MCOs has not been as strong as expected. Within cities and regions, dominant MCOs hold near-monopoly positions and don't feel threatened about losing patients to other systems. Thus, for instance, while a city such as Chicago with a population of 3+ million might have five or six large provider systems, towns with populations of 250,000 may only have one large private system that is not motivated to negotiate lower prices.

Managed Competition

Managed competition describes a concept where, unlike managed care, the consumer (employer or individual) joins groups that have the market power to negotiate lower costs from providers. One way this might work is for employers to set a fixed price for health care services, with employees making up any additional charge. This would lead to competition among providers to either become more efficient or to distinguish themselves by some value-added component such as quality or cutting edge technology. Public agencies, employer groups, or government would establish the base price for coverage.

The forces needed to drive managed competition have not emerged in the past decade. As noted in the previous section on managed care, employers are often reluctant to force their workers into making tough decisions about health care. Because health care quality is traditionally difficult for the layman to assess, providers have not been eager to promote themselves based on relative health outcomes for their patients. Finally, the competition concept is only operative where competing organizations exist, and, as noted previously, many communities do not have multiple health care

organizations competing in the same niche. Thus, although managed competition has much to merit as a concept, it has yet to play out in the marketplace.

Disease Management

A relatively recent concept is of *disease management*, which occurs when providers focus their management on a few chronic diseases prevalent among their patient population. Problems such as diabetes, asthma, hypertension, and coronary artery disease consume a disproportionate share of health care spending as a reflection of their prevalence and difficulty in management. By establishing standards of care and protocols based on best evidence, the hypothesis is that costs will go down as efficiency and effectiveness of treatment rises. This is similar in concept to quality improvement programs in industry, where focusing on the most expensive steps in production can improve quality and lower cost by addressing human error, inefficient processes, and redundancy.

Many providers use disease management concepts as an approach to working with populations with common chronic diseases. The growing popularity of evidence-based medicine as a means of analyzing the literature to determine what treatments work best with particular populations is a starting point for the development of standard treatment plans. When standard plans are in place, health care workers at lower levels can be trained to work with patients, a potential cost savings. By providing better care to patients, it is also expected that spending will drop as a result of fewer emergency room visits and hospital stays. Finally, quality of life should improve for the patients, a very real and positive consideration for developing disease management protocols.

Unfortunately, demonstration of actual savings through the implementation of disease management has not materialized. A report by a group practice that provides care to Kaiser Permanente members in California (Fireman, Bartlett, & Selby, 2004) looked at treatment for approximately 3000 patients with coronary heart disease, heart failure, diabetes, and asthma over a 6-year time period in which disease management procedures (e.g., clinical guidelines, patient self-management education, frequent testing, control of risk factors, and performance feedback to health care workers) were implemented. What Fireman and colleagues (2004) discovered was a number of improvements in disease indicators, such as reduction in blood pressure, fasting glucose levels, and cholesterol, as well as better compliance in taking medications. Another important finding was that for patients

with diabetes or asthma, hospitalizations decreased (although total inpatient days did not), as did emergency room visits for asthmatics. However, despite very good quality measures, the authors could not demonstrate a reduction or even stabilization of costs associated with the four diseases selected. Even when costs were adjusted for increases in the Consumer Price Index (CPI), real increases of 19% to 27% were reported. What this study may demonstrate is that the cost of effectively managing certain chronic diseases will lead to higher health care consumption, as patients receive more frequent screenings and seek more care when warning signs occur. Because disease management leads to better health outcomes, it is a compelling approach to treating patients. However, it cannot be promoted as a cost-reduction technique without additional study.

Consumer-Directed Health Care

In the sixth edition of *Current Issues in Nursing*, Seefeldt, Garg, and Grace (2001, p. 385), note that in the discussion of health care costs, "the biggest stakeholder of all, the consumer of health care services, is rarely mentioned as part of the debate." Yet, the trend has been to reduce consumer choice at the point of service and to encourage use of services provided within a network. One problem with encouraging patient choice is what economists term a "moral hazard." When employees are handed an insurance card that is accepted by most providers, they have no incentive to shop for health care on the basis of price or efficiency. In fact, they may not have enough information to search out quality, relying instead on advertisements and recommendations from friends and family. The moral hazard occurs because health care then becomes a "free good" for these consumers; they tend to overuse the available services because someone else is paying the bill.

A simple solution to the moral hazard issue is to require patients to pay a portion of their bills. This can be in the form of deductibles (patient pays the initial portion and only then does the coverage begin) or copays (patient pays a percentage of the total bill). However, cost sharing by patients has not had a noticeable effect on the rise of health care spending, and in many cases employers have found it difficult to persuade employees to accept insurance plans that require significant out-of-pocket expenditures by employees.

Shifting health care costs to employees and individuals is a practice that has real limits, and one that places the greatest burden on individuals who need care the most, for themselves or for members of their families.

Health savings accounts (HSAs) have recently emerged as a solution that combines cost sharing with protection from the expense of chronic or catastrophic disease or injury. Briefly, HSAs are accounts into which employees deposit pretax funds (in other words, they don't pay income tax on the money put into the account). The employees can withdraw funds to reimburse deductibles, co-insurance, prescriptions, eyeglasses, hearing aids, and many over-the-counter health care items. As long as the withdrawal pays for an allowed service or supply, the amount is not taxed. HSAs have been in existence for a number of years, but until the December 2003 Medicare revision, they had significant disadvantages, chief of which was that money not spent in an account by the end of a calendar year was forfeited. This required careful planning on the part of the employee, and many avoided investing funds that might be lost due to changes in health needs. The forfeiture provision was eliminated in the 2004 law and the move from "use it or lose it" to "keep it and save it" has resulted in larger numbers of companies offering HSAs to employees.

HSAs can be attractive benefits to both employees and employers. The employer can offer lower-cost health insurance policies that have higher deductibles and copayments and even pass along the savings to employees to encourage them to start up their funds. Employees can use the funds for a variety of health care needs, including out-of-system care that otherwise would be too expensive. If they move to a different company, the funds can accompany them. Some programs even issue a debit card that the employee can use to pay for goods and services, eliminating virtually all paperwork. From a larger, national perspective, it is hoped that HSAs will motivate individuals to make more careful decisions on how to spend their health care funds and encourage them to seek out lower-cost services.

Early evidence that HSAs can have an economic impact is encouraging. In 2003, Aetna launched its *Healthfund*, a patient-directed account with many of the features of HSAs. In the first 12 months of operation with 13,500 subscribers, Aetna found the following:

- ◆ Employers experienced a 3.7% medical cost increase, compared to double-digit increases for a similar population.
- ◆ For the one full replacement plan sponsor in the study, medical costs decreased by 11%.
- ◆ The low medical cost increases for all members in the study were driven by two major factors: a reduction in certain physician visits, including an 11% reduction in primary care office visits; a modest 3% increase in specialist visits; and a reduction in utilization of

facility services, including a 3% decrease in emergency room visits, a 14% decrease in outpatient visits, and a 5% decrease in inpatient admissions

- ◆ Members experienced a 5.5% decrease in pharmacy costs driven by a 13% decline in overall prescriptions and a 7% increase in overall generic utilization.

These are dramatic results, and further experience is needed to confirm whether HSAs can sustain decreased health care spending. However, because they address some of the fastest growing health cost drivers, such as pharmacy and outpatient procedures, they may have an overall effect on health care spending.

Retail Clinics

A recent phenomenon in the United States has been the expansion of private stores offering routine care for shoppers, termed *retail clinics*. While large chain and grocery stores have long offered pharmacy services, retail clinics provide some of the care that patients might otherwise seek through a doctor's office visit or through the local emergency room. Retail clinics are designed to treat routine health care problems such as colds, earaches, urinary tract infections, and immunizations. Care is delivered by physician assistants or nurse practitioners and more serious problems are referred to a physician for follow-up (Mehrotra et al., 2008). A study of retail clinic use in Minnesota found that the cost to visit a retail clinic was \$50 to \$55 per episode. This represents an attractive cost savings for those lacking health insurance; the convenience of visiting the retail clinic during a family shopping trip is also a bonus (Thygeson et al., 2008). Retail clinics represent a small segment of the health care market—only 6% of routine care for common problems is being provided through these sites—but it may grow in the future.

THE EMERGING ISSUE OF QUALITY

Interest in reimbursing health care providers based on performance has risen in recent years, in part related to concerns over quality of care, error, and outcomes. The Center for Medicare and Medicaid Services (CMS), the federal agency that administers Medicare and Medicaid programs, has developed programs that help the public identify high and low quality providers. More recently, CMS has begun Pay for Performance, or P4P, a program that will affect hospital reimbursement for charges that result from poor care.

In the Hospital Compare program (www.hospitalcompare.hhs.gov/), the public can view comparative charts of hospital quality regarding patient care

experiences, processes, and health care outcomes. Figure 45-3 shows a chart generated from Hospital Compare, reporting compliance between three hospitals in the administration of pneumococcal vaccination to patients with community-acquired pneumonia. It is clear that the rates vary dramatically among three randomly selected hospitals. CMS continues to expand the numbers of available measures, and the expectation is that consumers as well as the media will use this information to determine whether local hospitals are providing quality care for conditions and procedures that interest them.

In October 2008, CMS began administering P4P, a program designed to encourage better patient care and reduced expenses by eliminating Medicare payments to hospitals for avoidable conditions that occur during inpatient stays, such as postoperative infections and bedsores. If hospitals are unable to document that a condition on the P4P list existed at admission and attempt to bill for its treatment to Medicare, the claim will be rejected. Requiring hospitals to absorb expenses for hospital-acquired, avoidable conditions is expected to motivate providers to develop better patient care practices.

Another approach to quality is the development of patient safety programs. Concern over the volume of

medical error occurring in health care settings has led to federal funding research into improvements in patient safety as well as protection for institutions that develop and use error-reporting mechanisms. Reducing error can lead to lower health care spending through mechanisms such as decreasing inpatient length of stay, eliminating extra procedures and services needed to reverse the injury caused by the initial error, and ultimately, reducing professional liability premiums.

It is too early to tell whether these programs will lead to better efficiency and lower spending in the treatment of patients. However, a number of problems will have to be solved to ensure the viability of quality programs. In terms of reducing spending, examination of the Kaiser Permanente Program by Fireman and colleagues (2004) suggests that costs do not decrease when quality is the focus. Health care providers may also object to this level of scrutiny of their operations, claiming that the measures are not valid indicators of quality. This most likely may occur for those providers who are of marginal quality and would most benefit from the improvements. Financial incentives will also have to be significant enough to fund operational changes by providers. If payments are too small, physicians and hospitals may decide to ignore them. On the other hand, very large payments may divert funds from other uses and result in overall spending increases. Finally, “what gets measured gets done.” Providers may become focused on those services and indicators that are part of the quality program and then neglect others because the financial incentives do not exist to improve them. Paradoxically, this could lead to decreases in quality in other areas of the practice or institution.

PROFESSIONAL LIABILITY INSURANCE REFORM

Professional liability insurance to both individual health professionals and to institutions has often been cited as a major driver of health care expense. Many physicians face malpractice premiums in the range of \$150,000 to 250,000 annually (Albert, 2004), and some have retired or moved in response to these heavy expenses. Providers also pass along increased insurance premium costs to their patients, contributing to rising spending rates. Another indirect consequence of high liability costs is the practice of “defensive medicine,” which refers to physicians ordering tests and procedures not directly related to the patient’s well-being but that could protect the physician from accusations that they missed a condition or problem that wasn’t obvious or suspected. No one has reliable figures on the cost of

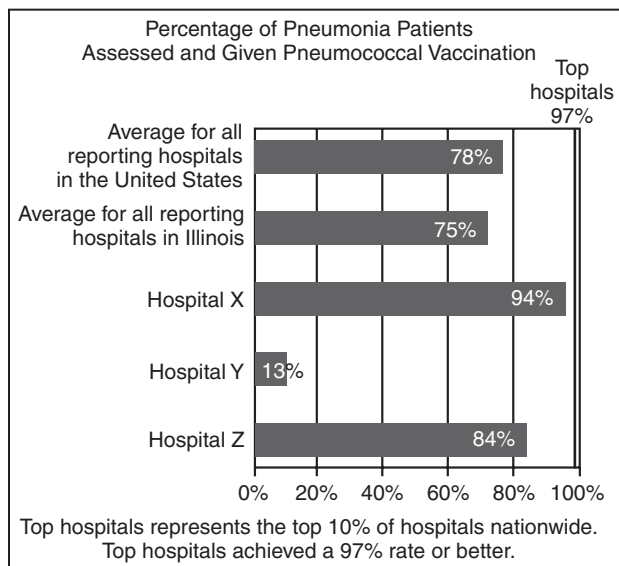


FIGURE 45-3 Example of Hospital Compare analysis table generated for three hospitals within a given geographic area, using Hospital Compare at www.hospitalcompare.hhs.gov/. The rates displayed in this graph are from data reported for discharges January 2007 through December 2007. Copyrighted and published by project HOPE/Health Affairs. The published article is archived and available online at <http://www.healthaffairs.org>.

defensive medicine because physicians often rationalize the additional services in terms of better care for the patient.

Faced with the unpleasant prospect of losing physicians who move to areas where their malpractice insurance premiums might be lower, many states have sought to reduce increases in insurance premiums by setting maximum awards for pain and suffering. From time to time, the U.S. Congress considers national professional liability reform. Approaches include setting national caps on noneconomic awards (e.g., pain and suffering) and punitive damages, reducing joint and several liability (where any one party can be made to pay the entire award if other parties to the suit cannot), and even limiting the fees that an attorney can charge for bringing a malpractice suit to court. Evidence that these could be effective provisions comes from California, where increases in professional liability insurance premiums have been lower than in other states, in part, because California was one of the first states to set award caps.

SUMMARY: WHAT WORKS?

Despite the best combined efforts of government and the private sector, no strategy has emerged that leads to stability in health care spending. Advocates for government administration ("Medicare for all") see economies in a single-payer plan that can control prices and access, while promoters of market-based plans focus on economic incentives that combine aspects of choice, quality, and competition. Unlike other consumer goods and services, however, health care is often "purchased" under stress and without adequate information for the consumer. Coupled with that is the sentiment that no expense be spared (especially if it involves a third-party payer) to maintain health and well-being. The idea that consumers should participate in health care treatment decisions, especially from a financial standpoint, continues to be an important consideration that most proposals include. That sentiment continues to resonate throughout this chapter, and it may turn out that the best solution to rising spending will be to return the control of spending to the consumer. Whether mechanisms such as HSAs will have a significant impact on health care spending is yet to be seen. However, the failure of every other strategy so far is a compelling argument to consider new perspectives as well as fresh ideas in how to manage the cost of health care while maintaining quality.

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Business Coalitions: Shaping Health Reform through Technology and Science

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The U.S. health care industry is on the cusp of real reform under the leadership of the new players in the Obama administration at the U.S. Department of Health and Human Services (USDHHS). While some believed past change was rapid, all signs indicate that even more rapid change is already on its way in the first months of the new Obama administration. New business coalitions, governmental structures, and significant investments are being initiated in order to better improve health care coverage and manage health care costs. Most past coalitions focused on the delivery of health care; however, some of the emerging coalitions and partnerships are focused on issues that initially might appear to be peripheral to health care reform but are, in fact, essential. These include patient safety; health information technology (HIT); personal health information technology; the new focus on personalized medicine; and research coalitions charged with addressing a new direction of significant investment, comparative effectiveness research (CER).

This chapter focuses on information related to new types of alliances, coalitions, and partnerships that have been created or are forming to address health care reform, specifically those that have been formed to address the impact of technology in health care in the context of planned health care reform. For example, the new Federal Coordinating Council brings together a 15-member board from governmental structures that currently address health care financing, some delivery systems, and research-focused agencies/efforts within the USDHHS, the Department of Defense, and the Veterans Administration (USDHHS, 2009). With the rapid change associated with health care reform, readers are encouraged to use the Internet to explore the many strong historic business coalitions and newly emerging ones (too numerous to present here) that are relevant to their roles in the health care delivery or education system.

The challenge of delivering safe, effective, and efficient health care will continue to have significant implications for the nursing profession in practice, education, and research. Recent coalition developments are clearly involving nurses in leadership roles, as described in the types of national coalitions addressed in the next section and in the exemplars provided at the end of this chapter. These developments will have a growing impact on nurses and their families as consumers of health care, as practitioners in health care systems across the continuum of care, and as employees in the health care delivery system. Discussions regarding the high cost of care in the United States and the negative impact of this legacy on the economy will continue to influence changes in health care delivery, patient safety, and the integration of technology and science into practice. It must also be noted that the growing shortage of health care workers, such as nurses, compounds the problem.

CONTEXT FOR COALITIONS

When health care costs rose significantly in the 1980s, one of the ways that businesses and employers tried to combat this was through the development of coalitions (Rooney, 1992). Usually these coalitions attempted to both control costs and contain them on a community-wide basis. Although these approaches met with marginal success, many different forms of coalitions are developing today in response to advances in technology and science. Understanding then what a coalition is and how it differs from an alliance, partnership, or consortium, is in order because the literature contains many references to coalitions but uses different labels. Merriam-Webster Online Dictionary defines a coalition as “a temporary alliance of distinct parties, persons, or states for joint action” (Coalition, 2009). In contrast, an *alliance* is an association that furthers common interests

of members; a *partnership* refers to a legal relationship usually involving close cooperation between parties with specified and joint rights and responsibilities; and a *consortium* means an agreement, combination, or group formed to undertake an enterprise beyond the resources of any one member. For the purposes of this chapter these terms are used somewhat interchangeably, depending on the particular reference.

Is a coalition an organization? Can we better understand how to work in this newest evolution of organizational change in response to rapid changes in the delivery of health care and in the buying up, loose-knit, changing organizational relationships in health care? The answer to both of these questions is “yes,” and it is even more important that nurses and other providers understand what is happening in the evolution of coalition building, particularly in the context of the rapid reshaping of health care. According to Mitchell and Shortell’s (2000) synthesis of the literature, at least five complex factors influence the success or failure of organizations like coalitions. They are the context surrounding the organization, its strategic intent, maintaining a diversified resource base, the degree of membership heterogeneity present, coordination skills, and how the organization responds to demands for accountability (p. 242).

In 1983, Tichy described three coalition models—classic or mechanistic, human resources organic, and political—that are still relevant. First, the *classic or mechanistic model* focuses on structure, span of control, and specialized task functions. This model is similar to a typical bureaucratic organization with detailed job descriptions and a rigid chain of command where decisions are made along vertical lines with minimum flexibility. Some government organizations are organized in this way. The *human resources organic model* is more focused on the human perspective because it is based on shared decision making, with lots of vertical and lateral interaction in the organization. Supervisors are usually motivators and facilitators who communicate through expectations rather than strict orders and tasks. Traditional academic organizations and those focused on innovation are more likely to be structured in this way. The *political model* is the third approach and can be viewed as an arena in which multiple coalitions vie for control of the organization through ongoing processes of bargaining and negotiation. This model is best studied from the perspective of understanding internal (usually full-time employees) and external coalitions (partners, alliance members, networked groups) that make up the

larger organization (Mintzberg, 1977). Nurses and other providers need to understand and learn how to influence organizations in which change strategies are based on making political adjustments; understanding where the greatest power and influence is held; and mastering the skills of negotiation, bargaining, and coalition building (Tichy, 1983). Many coalitions and alliances have been formed using a political model, hoping to influence change in different aspects of the health care system.

Although most of these coalitions function based on consensus in planning, issuing policy statements, and even lobbying for change, each type has strengths and weaknesses. One weakness in particular must be noted in the political model. Sometimes, organizational and/or agency cultural issues are difficult to resolve among the different cultures, beliefs, or perspectives of the different organizations, groups and/or associations that make up a coalition (Tichy, 1983, p. 49).

How does one study coalitions, learn to work within them, and manage them in the same way as traditional organizations? How have technological advances and the advances in both access and use of technology and the Internet in health care changed and enhanced the nature of coalitions? What do we need to know about emerging new coalitions? And finally, how will this affect nursing, research, and administration? These questions are addressed in the following sections.

TYPES OF COALITIONS RELEVANT TO THE CHANGING HEALTH CARE ENVIRONMENT

Large groups such as the National Business Coalition on Health continue to try to address health care challenges in this country. Their priorities, which are outlined in their policy statements available on their Web sites, are often the same with many emphasizing some form of health care coverage for all, cost management, improvement of health care quality and safety, equitable financing, and simplified administration. In addition to emerging global coalitions that address pandemics such as HIV/AIDS, there continue to be mergers, alliances, and acquisitions among provider groups (such as hospitals, health maintenance organizations, and preferred provider organizations), insurance carriers, suppliers, distributors, and other related industries as the health care industry continues to struggle with cost and quality issues.

Whereas health care costs and universal coverage fuel the efforts of many coalitions, an emphasis on technological and scientific advances has become much

of the driving force behind the new coalitions, partnerships, and alliances that are developing at local, state, national and international levels to address the health needs of changing populations in all of these settings. Examples include the Behavioral Health information technology focus of the California Health Care Foundation the Get Connected Common Vision of the Pacific Northwest Coalition of Health Care Organizations, the Personalized Medicine Coalition, the Virginia Business Coalition on Health. A new emerging coalition is the Global Business Coalition on HIV/AIDS, Tuberculosis, and Malaria, which combines business groups and governmental agencies such as the Agency for Healthcare Research and Quality to address chronic disease conditions such as diabetes. Another newly formed group is the Federal Coordinating Council that is attempting to shape CER in order to address disparities, cost, and the need for new perspectives on evidence-based practice (and medicine) in nursing and health care practice.

The National Coalition on Health Care (NCHC), still one of the largest coalitions, continues to advocate for health care reform and calls for changes in current managed care approaches. Managing care for the improvement of population-based outcomes is here to stay, but some of the focus may be shifting to include health promotion and prevention, not just disease management, under the new Obama administration's health care agenda. In addition, patient safety issues remain at the front of the current health care concerns. At this writing, a number of patient safety coalitions are active in at least 17 states (Comden & Rosenthal, 2002). These statewide coalitions are trying to address the unique needs of their respective populations, and much of their attention is focused on educating providers about patient safety. The structure, membership, and mission of state coalitions are very different within the context of their patient safety mission. Some are focused on education (Georgia) and others on reporting (Arkansas); one state, Minnesota, provides a clearinghouse (Comden & Rosenthal, 2002).

The NCHC believes that addressing access, quality, and affordability of health care is urgent. They also support health care coverage for all, cost containment, equitable financing, and simplified administration. Finally, they believe that government, business, and consumer stakeholders have a shared responsibility to address the needs of the nation's diverse populations (NCHC, 2009). NCHC's mission is to address quality and patient safety issues across the health care continuum. Because nurses are at the forefront of many patient safety issues, they need to be increasingly aware

of business coalitions (such as those previously mentioned) in order to continue to explore opportunities for involvement and visibility. The NCHC has nursing representation through the American Nurses Association. Since many of the issues mentioned have been at the heart of nursing practice historically and currently, nurses need to be "at the table" and informed because of the power of these groups in the regulatory and political arenas.

With the growing need for health care reform in an economically depressed environment, new business (and political) coalitions are flourishing and making a difference. As mentioned previously, new coalitions and other organizations are developing in three new areas: HIT, the emerging field of personalized medicine with the genome discoveries, and CER. The high priority and visibility of HIT and CER are evidenced in the dollars being invested by the Obama stimulus package for health reform. For example, \$1.1 billion is going to USDHHS, specifically to the Agency for Healthcare Research and Policy, the National Institutes for Health, and to the office of the Secretary of USDHHS to focus on the new emphasis on CER. The second major area of investment is in HIT, with approximately \$19.5 billion going to the Office of the National Coordinator to invest in informatics in order to have all health care represented in some form of electronic format by the year 2014 (USDHHS, 2009). Of course both CER and HIT have significant implications for nurses at the bedside, as well as advanced practice nurses from both master's and doctorate of nursing practice educational programs.

PURPOSES AND REASONS FOR COALITION DEVELOPMENT

The political model is relevant to both longstanding business coalitions and new coalitions related to health care. Many companies and organizations in a variety of industries are choosing alliances, coalitions, and partnerships as vehicles for change and this phenomenon is occurring on a worldwide basis. Because of this, nurses who are administrators, entrepreneurs, practitioners, and educators need to improve their knowledge about business practices, coalition-development, and use of technology in order to lead and manage other nurses and interdisciplinary providers in today's organizations. (See exemplars.) Thus, nurses and other clinical professionals need to embrace new ways of thinking and explore the benefits of building coalitions to be well-positioned for the changing workforce

and the changing health care environment. New competencies are needed.

Meister (1998), in her book *Corporate Universities*, identifies competencies that Fortune 500 companies expect of employees. These include leadership development, collaboration and communication skills, technological literacy, business literacy, learning to learn skills competency, and self-management of one's own career. It is increasingly important for nurses to be active players, helping to shape future organizations/coalitions and contribute meaningfully to innovative ways of getting things accomplished. The partnerships and coalitions described in this chapter demonstrate the effectiveness of nursing leaders with these leadership skills.

One key to assisting health care organizations in developing successful coalitions and alliances is to understand the reasons for coalition development and the process of building coalitions. Coalitions develop for several reasons, but the most obvious reason is that no one organization has all the required resources, skills, knowledge, and expertise to produce the product. A second reason that coalitions are formed is for political advantage. In some cases a coalition is a good way to co-opt potential future competitors or, through partnering, to prevent resources from getting in the hands of a competitor. A political coalition also may provide access to new markets. A third reason for coalition development is to share risks and costs. "Alliances allow participation in high volatile industries, where knowledge spreads rapidly, at substantially lower investment and risk than would be the case for a single organization" (Zuckerman, Kaluzny, & Ricketts, 1995, p. 3). The health care industry clearly meets this criterion.

Bell and Shea's (1998) observations related to coalitions retain their relevance. Partnerships are rapidly becoming the primary structure of contemporary business, as organizations partner with vendors, unions, customers, and even competitors to take advantage of market opportunities, leverage intellectual capital, and create more innovative enterprises. Because many business coalitions are formed not only for political reasons but also to acquire resources, skills, and knowledge, they may seem to be linkages without logic. Coalition building however, follows no distinctive pattern. Again, Bell and Shea (1998) liken the development and maintenance of partnerships and alliances to the level of difficulty of a dance: the highest (most difficult) level of partnership is the tango (with very different partners who must move carefully and totally together); the waltz (tamed and simplified interaction); the square dance (with strict rules and protocols but little emotional

intensity or closeness—actions called by outside forces); the twist (moving separately, but somewhat connected); and finally the line dance (partners are completely independent but moving in the same direction without entanglement). Bell and Shea focus on selection of the right partner, the building of trust, evolution of the relationship, and learning from mistakes to improve the dance over time. It would behoove many of us in health care and education to examine the nature of the partnership and the type of "dance" in order to prevent unrealistic expectations in the development and growth of the alliances and partnerships we experience in our work settings (See the exemplars below for application of these concepts).

INTRODUCTION AND BACKGROUND FOR EXEMPLARS

The authors have chosen to highlight four exemplars of a new wave of coalitions, or partnerships. These exemplars highlight important issues for nursing and health care and provide unique illustrations relevant to the practicing nurses, nursing students, nursing faculty, and nursing administrators in charge of large (and small) health care delivery systems. Also, for individuals interested in research, these examples provide a context for current and future generation of evidence-based practice through research and research utilization. Finally, the opportunities for coalition building between and among members and organizations guided by the nursing profession highlights the importance of nurses being aware of the nature of coalition building in practice, education, and business.

Clinical Practice Model Resource Center

One sustainable example of forming partnerships to co-create best places to give and receive care is the Clinical Practice Model Resource Center (CPMRC) and its International Consortium. The Clinical Practice Model Professional Practice Framework began in 1983 by nurse leader, Bonnie Wesorick in Grand Rapids, MI. The CPM framework provides the foundation that has guided the continuous evolution of evidence-based tools, skills, and infrastructures necessary to create and sustain an integrated health care system and health, healing work cultures. Wesorick recognized early the need to tap the wisdom of healers—both those who provide daily direct care and those who support those that do—to grow a sustainable professional practice framework. The health care organizations that join the CPM Professional Practice Framework became part of

the CPMRC International Consortium. Through the consortium's collective work and the connections of over 1000 organizations, the CPM framework provided context and clarity for all components for point-of-care health care transformation. It is grounded in systems-thinking, complexity science, and Polarity Management with a simplicity that focuses the collective work of the CPMRC International Consortium. The collective wisdom delineated a clear set of fundamental elements to create and sustain the best places to give and receive care. The elements are shared purpose, scope of practice, competency, integrated competency, dialogue skills, healthy relationships, partnership infrastructure, and evidence-based intentionally designed tools (paper and automated), and professional exchange/patient hand-off (Wesorick, 2002).

The CPMRC has dedicated its efforts to strengthen fundamental elements and leading health care transformation by being the first organization to integrate interdisciplinary evidence-based practice via a professional practice framework into the electronic health record (EHR) in a way that is "preconfigured" or "prebuilt." This effort has enabled organizations to benefit from previously accomplished work to provide seamless care across the continuum. The concept of interoperability focuses on the ability of information technology systems to seamlessly share data across the entire spectrum of care. Interoperability, however, also involves people and their capacity to use and exchange clinical information in near-real-time across multiple disciplines, care settings, and distance. The future of HIT will significantly impact health care outcomes and patient safety as it integrates evidence-based practice, interdisciplinary integration, and personalized medicine. Practice standards must integrate with the emerging HIT functional and standards conformance needed to secure exchange of patient and clinician information. While the infrastructure of HIT standards is established and adopted at federal levels, the CPM Professional Practice Framework has demonstrated a high degree of practice standardization and interoperability at the point of care. As the evidence changes, the CPM framework can change/add/delete relevant information and data while always maintaining the whole and intentional design of the framework. In the end, this not only ensures that clinicians and patients have the most recent evidence-based information at their fingertips, but also saves millions of dollars by preventing one more organization from recreating the wheel and adding to the already fragmented and inefficient health care system. In 2007, Elsevier acquired CPMRC to help

them in their quest to bring evidence-based content to clinicians via workflow tools that can work within HIT systems around the globe. The best clinical decision support tools must be evidence based and owned by the clinicians that use them every day. A growing and diverse health care consortium has demonstrated that the CPM framework can be co-created and replicated in multiple care settings resulting in positive outcomes for organizations, clinicians, and patients.

EXEMPLAR 1: CLINICAL PRACTICE MODEL RESOURCE CENTER INTERNATIONAL CONSORTIUM

The CPMRC International Consortium had grown from 8 to over 260 clinical settings. The consortium gathers face-to-face in two different settings to advance its work and celebrate its progress. The first setting is the CPMRC Consortium Gatherings that support work-focused efforts around scope of practice, evidence-based intentionally designed tools, partnership council infrastructures, interdisciplinary integration, and so on. The wisdom from the consortium is what has led to the depth and breadth of how interdisciplinary care should be designed within HIT systems to support evidence-based practice and scope of practice. In the future, it will be the consortium that designs how genetics and personalized medicine will be integrated into the CPMRC Patient Profile, which is part of the documentation system used by interdisciplinary clinicians to know and document the patient's story. In the future because of advances in genomic sciences, we will be able to integrate information about the patient's genetic makeup into their patient profile and further individualize their care at a personalized level. The second way the consortium members engage is the CPMRC International Conference, which highlights dynamic speakers from health care and other industries to stimulate new thinking and to showcase outcomes from CPMRC consortium clinical settings. In addition, the consortium connects on an ongoing basis via teleclasses, teleconferences, live-meetings, online evidence-based tool review and consensual validation processes, and collaborative learning communities (CLCs).

As the CPMRC International Consortium has grown, of the need for a evolved. The CPMRC Consortium Director coordinates all consortium activities, facilitates the CPMRC Advisory Board meetings, and serves as a direct liaison to the CPMRC. The CPMRC prepares leaders in each organization to serve as "CPM Site Coordinators" and provides them with the knowledge

and tools needed to grow the CPM Professional Practice Framework within their organization. The CPM Site Coordinators are a direct link to the CPMRC Consortium Director and also to each other. The significance of the networking among the CPMRC Consortium sites cannot be underestimated: it is a powerful social network with a common vision and mission. The goal of the CPMRC has always been to provide the guidance and tools to create the internal capacity necessary for each organization to successfully implement and sustain the CPM Professional Practice Framework. A partnership between the CPMRC and each consortium clinical setting truly exists.

EXEMPLAR 2: PRACTICE-TECHNOLOGY PARTNERSHIPS

The CPMRC and its International Consortium have worked in partnership to co-create best places to give and receive care for over 20 years. Example 1 described the nature of this coalition in the form of a consortium that works to bring and validate evidence-based clinical tools and resources at the point of care.

The CPMRC introduced evidence-based clinical practice guidelines (CPGs) in 1984. At the same time, it also developed and piloted the evidence-based clinical documentation system that was integrated with the CPGs to help nurses shift from task-dominated patterns, rituals, routines and traditional “always done it this way” practice toward a more holistic, critical-thinking, collaborative, and knowledge-based practice. The CPMRC paper clinical documentation system was successfully demonstrated in a multistate 6-year pilot. Before the pilot work was even completed, it was clear the clinical documentation system would need to be moved into a health care technology system to leverage knowledge-based information into nurses’ daily workflow and to honor the patient’s story at the highest level.

In 1988, CPMRC began searching for a health care technology partner along with a 529-bed Midwest hospital that would serve as the initial laboratory of automating the CPM Professional Practice Framework. After years of searching, investigating, and looking for just the right partner, Emtek, a Motorola Company was selected in the early 1990s. In the meantime, CPMRC and the CPMRC International Consortium agreed to advance the CPM Professional Practice Framework into an interdisciplinary professional practice framework. In 1998, CPMRC’s evidence-based, interdisciplinary clinical documentation system was activated in an EHR in two adult critical care units, one pediatric critical care

unit, and a neuromedical surgical unit. Emtek was later acquired by the Eclipsys Corporation, and in 2001 Eclipsys developed a formal partnership with CPMRC to develop and distribute a clinical documentation solution that was based on a professional practice framework. Between 2001 and 2003, CPMRC and Eclipsys worked in a strategic partnership, and then in 2004 the two companies merged to further advance the integration of interdisciplinary evidence-based practice and workflow within a health care technology system. This level of partnership enabled nurses and allied health team members whose expertise and work was based on a professional practice framework to partner deeper with experts within health care technology to focus on principles of intentionally designed automation and remain focused on practice advancement and healthy work cultures supported by an implementation methodology that supported both (Wesorick, Troseth, & Cato, 2004).

Another practice-technology partnership with the CPMRC is Epic Systems Corporation based out of Madison, Wisconsin. Epic partnered with CPMRC in 2004 and began offering health care systems the option to receive preconfigured evidence-based content within their clinical workflow tools. Epic and CPMRC continue to partner with each other and their joint clients on delivering and continually advancing the CPM Professional Practice Framework to advance practice at the point of care.

At the end of 2007, CPMRC was acquired by Elsevier, the world’s leading providers of scientific, technical, and medical information products and services, and now is developing practice-technology partnerships with any HIT company committed to improving practice and knowledge within the clinical workflow at the point of care. Many of these partnerships are being driven by nurses and their allied health colleagues that want technology systems that support their professional scope of practice and improved patient outcomes. More than 260 clinical settings are part of the CPMRC International Consortium with the majority of those either implementing or utilizing clinical information systems. Some examples of consortium members that have benefited from these practice-technology partnerships versus having to create and build their own clinical practice content in the electronic medical record are found in Box 46-1.

Technology alone will not improve practice. By intentionally working together to co-design technology that supports evidence-based practice in a holistic framework, we begin to see many positive outcomes.

BOX 46-1 Health Care Organizations Using the Consortium

Fairview Southdale Hospital ²	Abington Memorial Hospital
Rush-Copley Hospital ¹	Holmes-Regional Medical Center ¹
Blessing Hospital ²	Maine General Hospital
University Health System	UK Healthcare
Alamance Regional Hospital	Gundersen Lutheran Hospital
Kaiser Permanente	Nationwide Children's Hospital
Phoenix Children's Hospital	Sentara Health System
Texas Health Resources	Hennepin County Medical Center

In addition, chief nursing officers from four of these sites were selected as best practice exemplars at the Technology Informatics Guiding Education Reform (TIGER)¹ Summit held in 2006 and Sigma Theta Tau International Biennial² Conference held in 2007.

Reported outcomes from sites that have implemented CPM Professional Practice Framework within well-designed HIT have reported the following:

- ◆ 100% Joint Commission compliance
- ◆ Increased nursing satisfaction
- ◆ Decreased patient falls
- ◆ Decreased decubitus ulcers
- ◆ Outperformance in U.S. and mean regional Centers for Medicare and Medicaid Services core measure averages by 85% to 95%
- ◆ Tobacco cessation teaching compliance
- ◆ Decreased ventilator associated pneumonia
- ◆ Increase in perceptions of healthy work cultures
- ◆ Magnet alignment and recognition/recertification

Practice-technology partnerships allow groups to share their core business and expertise, work together, and deliver a co-designed product that benefits nurses and interdisciplinary teams (Wesorick et al., 2004).

EXEMPLAR 3: PRACTICE-EDUCATION PARTNERSHIPS

The CPMRC and its International Consortium have worked in partnership to co-create best places to give and receive care for over 20 years. Example 1 described the nature of this coalition in the form of a consortium that works to bring and validate evidence-based clinical

tools and resources at the point of care. Example 2 described how practice-technology partnerships brought the CPM Professional Practice Framework to the point of care in EHRs. This third example focuses on practice-education partnerships that take various forms to help bridge the gap between education and practice and better prepare nursing students for the twenty-first century. The CPM resource has its roots in bridging the gap between education and practice when a former student challenged CPMRC founder Bonnie Wesorick to do something about the reality gap between what was taught in academia and what was lived in the real practice world (Wesorick, 2008). This challenge by a former student was the catalyst to begin the discovery of what was most needed to transform and sustain evidence-based professional practice and a healthy work culture at the point of care.

Through the years as both the CPMRC and its International Consortium grew and expanded, several partnerships formed to introduce the CPM Professional Practice Framework into educational settings and deepen partnerships between CPMRC consortium hospitals and their affiliate nursing schools. One of the earliest experiences was in 1988 when Goshen College joined the CPMRC consortium. As a school of nursing, Goshen is committed to supporting its faculty and students with CPMRC's holistic framework and to teaching students how to write care plans using evidence-based clinical practice guidelines versus starting from scratch every time. At a CPMRC International Conference, Goshen faculty member, Norma Jean Weldy, presented a paper entitled, "Taking the Tears out of Care Plans." She shared how the CPM Clinical Practice Guidelines were valuable tools in helping students plan their patients' care and in deepening student understanding of the professional scope of practice. Rather than spending hours researching and writing care plans for patients from scratch, Weldy and her faculty colleagues coached their students on how to utilize the appropriate evidence-based medical/surgical or human response clinical practice guidelines. Based on the patient's story, patient care is individualized depending on what best meets the patient's needs and/or their individual preferences. Students and faculty also participated in guideline review processes and consensual validation (Westmoreland et al., 2000), which gave students early exposure to critical steps in developing evidence-based tools and then experience using them in clinical practice.

This early exposure to evidence-based tools and resources is critical to address the limited understanding and utilization of evidenced-based practice that

still exists in nursing today. For example, a study by Pravikoff, Tanner, and Pierce (2005) looked at registered nurses in the United States and found that 34.5% of the sample only needed information infrequently, almost half were not familiar with the term *evidence-based practice*, and more than half believed that their colleagues use research findings in their practice. Pravikoff and colleagues (2005) found that barriers to evidence-based practice included a lack of value for research. The researchers concluded that registered nurses in the United States are not ready for evidence-based practice because of the gaps in their information literacy and computer skills; their limited access to high quality information resources; and above all, the attitudes toward research. Goshen College and other schools such as Grand Rapids Community College School of Nursing and St. Luke's College School of Nursing were among the first to introduce and utilize the CPM Clinical Practice Guidelines in both didactic and clinical rotation learning experiences. The CPMRC also has had hospital consortium members invite area faculty from schools of nursing to attend CPMRC consortium events over many years to explore how the CPM framework can further enhance teaching-learning experiences and prepare students for entry into practice environments that utilize evidence-based tools and resources on a daily basis.

The CPMRC has also recognized the impact that practice-technology partnerships (Example 2) are having on further developing and expanding various practice-education partnerships. When Blessing Hospital in Quincy, Illinois, adopted the CPM Professional Practice Framework as part of their implementation of clinical documentation in the EHR, they partnered with Blessing-Rieman College of Nursing to ensure that faculty and students were also utilizing the best practice and technology tools available. Today they continue to partner together to provide the best teaching-learning experiences and introduce the students to components of the CPM framework through the entire 4-year bachelor of science in nursing program (e.g., scope of practice education, evidence-based clinical practice guidelines and documentation system in a health information system, faculty and students engagement with Partnership Councils, etc.). At a 4-hour preconference workshop at the 18th International CPMRC Conference, the chief nursing officer from Blessing Hospital and the assistant dean from Blessing-Reiman College of Nursing presented a Practice-Education Case Study sharing their approaches, key learning, and recommendations (Mason & O'Sullivan, 2009).

Other academic schools of nursing, such as Johns Hopkins University School of Nursing and University of Pennsylvania School of Nursing are preparing students by integrating evidence-based practice and technology into their curricula. These efforts are aligned with the call from the TIGER Initiative. Driven by the "decade of health care technology" declared in 2004 by President George Bush and the subsequent announcement of the Office of National Coordinator, several nursing leaders in the United States recognized the critical need for the nursing profession to be an integral part of the informatics revolution. This resulted in a strategy session at Johns Hopkins University School of Nursing, bringing together nurses from academia, government, and industry. They confirmed the need to transform nursing education and practice and agreed to plan for an invitational TIGER Summit. The TIGER Summit was held in November 2006 and resulted in a 10-year vision and a 3-year action plan (TIGER, 2007). The intent and subsequent action steps were focused on engaging all of nursing in making evidence and informatics an integral part of all that nurses—not just the informaticians—do. CPMRC was a sponsor of the TIGER Summit and active in the executive leadership for planning the pre- and postsummit activities. CPMRC continues to lead practice-education partnerships that now embrace the role of technology.

At the Sigma Theta Tau Biennial in 2007, CPMRC and Johns Hopkins University School of Nursing presented A National TIGER Model for Education Transformation (Troseth & Hill, 2007). This session focused on the practice-education partnership related to how the CPM Professional Practice Framework and evidence-based tools were being integrated into the curriculum and skills lab along with the technology partnership with the Eclipsys Corporation. In addition, Sigma Theta Tau International arranged tours for nurses from around the world to take a tour of John Hopkins to see first-hand how the school was integrating evidence and informatics into their curriculum and learning lab.

The University of Pennsylvania Healthcare System is in the process of implementing the CPM Professional Practice Framework along with the roll-out of their inpatient acute care EHR. Nursing and interdisciplinary teams are being introduced to individual and integrated scopes of practice, evidence-based clinical practice guidelines, evidence-based clinical documentation and content validation, and Polarity Management, (dialogue, partnering relationships, etc.). In the first part of 2009, the University of Pennsylvania School of

Nursing also committed to evidence and informatics by entering into a practice-education partnership with CPMRC as they implement technology in the school of nursing so students can experience both throughout their learning experiences. The students will benefit from using evidence and informatics in both their educational settings as well as the clinical learning experiences at University of Pennsylvania Healthcare System facilities.

Practice-education partnerships will continue to change and grow as both practice and academia work collaboratively to reform nursing education. Through partnerships, we can co-create the future of preparing faculty and students for the twenty-first century as we continue to see rapid changes in practice environments as a result of new knowledge and innovative technology. In February 2009, Grand Valley State University–Kirkhof College of Nursing in Grand Rapids, Michigan, announced the campaign for The Bonnie Wesorick Center for Healthcare Transformation. This endowed center will provide scholarly leadership that unites interdisciplinary healers in the research and implementation work essential to transform practice at the point of care. It will further define and enhance the practice-education partnerships and leverage the CPMRC International Consortium for nursing research.

EXEMPLAR 4: PRACTICE-BUSINESS PARTNERSHIPS

The CPMRC and its International Consortium have worked in partnership to co-create best places to give and receive care for over 20 years. Example 1 described the nature of this coalition in the form of a consortium that works to bring and validate evidence-based clinical tools and resources at the point of care. Example 2 described how practice-technology partnerships brought the CPM Professional Practice Framework to the point of care in EHRs. Example 3 focused on practice-education partnerships that have taken various forms to help bridge the gap between education and practice and better prepare nursing students for the twenty-first century. This final example focuses on how CPMRC has partnered with other businesses that have like-minded missions to share approaches and techniques in transforming health care with a major focus on Polarity Management Associates.

In 2001, the CPMRC began many partnerships with like-minded businesses ranging from independent consultants to those that also serve the health care sector. Examples are Clinical Financial Management Associates who partnered with CPMRC to tie clinical and financial outcomes together and the Pacific Institute for Research

Evaluation to develop a methodology to measure the learning and outcomes experienced by Partnership Councils through outcomes engineering and journey mapping.

At the same time, CPMRC established a significant partnership with Polarity Management Associates (PMA) located in Middleville, MI, very close geographically to the CPMRC. PMA was founded by Barry Johnson, PhD, who has proposed dilemmas are not problems to be solved but rather problems to be managed; he called his theory Polarity Management (Johnson, 1992). He also developed Polarity Maps to help organizations identify and map common polarities in order to prevent living in the downside of a pole. Barry has worked closely with the CPMRC team and the CPMRC International Consortium for nearly a decade and has done collective work to identify the most common polarities in health care today. Bonnie Wesorick, founder of CPMRC has worked exclusively with Barry Johnson as the voice of health care on his Polarity Management Mastery Team and has published how Polarity Management is a key leadership skill in creating and sustaining healthy, healing work cultures and integrated service at the point of care (Wesorick, 2002). Other key leaders of CPMRC have been certified in Polarity Management and actively participate in ongoing workshops and activities sponsored by PMA.

The CPMRC has integrated Polarity Management into the CPM Professional Practice Framework as an essential skill for health care transformation. CPMRC introduces Polarity Management to every organization and/or health care system it engages and then teaches them how to use it as a skill on an ongoing basis through the CPM Transformational Services and Consortium collective work. Through its work with practice and technology, CPMRC is assisting health care settings to manage the practice-technology polarity at the point of care. It is valuing and being attentive to *both* practice AND technology that will help achieve the final goal of having “meaningful use” with EHRs across the nation. The practice-business relationship between CPMRC and PMA is an excellent example of BOTH/AND thinking and a sustainable partnership working together for a higher purpose.

IMPLICATIONS FOR NURSES AND THE NURSING PROFESSION

This chapter is designed to help nurses better understand how emerging business and other coalitions within and related to the delivery, financing, and shaping of

health care and health care technology will impact nursing. We hope that this chapter encourages nurses to take leadership positions wherever they emerge in the context of health care reform and HIT.

The authors believe that nurses as providers not only must accept increased responsibility for the delivery of safe and effective care but also must be at the table in increasing numbers as leaders in practice, education and research, and as consumers of research data related to the new focus on CER. This chapter presents examples of coalitions in HIT and those coalitions hoping to influence the content and direction of CER that will have a significant impact on nurses and other health care providers. Hopefully, health care reform will provide nurses with the opportunity to affect aspects of care that nurses have valued throughout history: coordinating care across the continuum, attention to prevention of disease and health promotion, attention to the role of the family and community, and empowering patients (now clients/consumers/customers) in their own care. Changes in health care reform and in HIT, specifically the EHR and the personal health record, require nurses to be savvy about the business side of the delivery system, to embrace technology, and to appreciate how coalitions and partnerships are shaping health care for the future.

The question is whether nursing is ready for these challenges. Nurses have a unique opportunity to position themselves for places of influence in the development of new coalitions, alliances, and partnerships such as those previously mentioned. New opportunities are emerging in both education and practice, but nurses must accept the challenge of exploring new frontiers, learning new competencies, and responding in entrepreneurial ways. Leadership opportunities can be found in mastering and teaching at least six of the competencies identified by Meister (1998) as requirements for future global corporations/coalitions: (1) learning to learn new skills competence, (2) leadership development, (3) business literacy, (4) collaboration and team building, (5) technology literacy, and (6) management of one's own career. These ideas are not new, but they are relevant to advancing nursing's role in the rapid changes anticipated with health care reform. With the changes technology and science are bringing to practice, education, and research, nurses must be willing to take some risk; apply knowledge and expertise in new ways; learn new skills; and work in a new reshaped, market-driven business environment. We must also find creative, innovative, and cost-effective ways to facilitate learning across global boundaries. Technology is the answer, but it will require new ways of teaching, learning, and practicing.

"Many of tomorrow's most intriguing opportunities...will require the integration of skills and capabilities residing in a wide variety of companies" (Hamel & Prahalad, 1994, p. 276). Business coalitions will be increasingly dominant in many global health care markets. How will we respond? Which dance will we want to perform? How will we prepare for the dance? Will we join the more complex dances that require significant knowledge and competence in the areas of building and maintaining alliances, coalitions, and partnerships, or will we just sit on the side lines while other professions assume many of the responsibilities that traditionally have belonged to nurses? We can just join the line dance, or we can create new dances for local and global challenges of partnership.

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Mergers and Acquisitions

MARJORIE BEYERS

Our lives are impacted by mergers and acquisitions in many ways. The services we use, the stores we frequent, and the products we purchase come from a corporate world in which companies change through new ownership, through acquiring other companies, or by merging with others. The health care industry has only recently taken on the characteristics of the corporate world. Over the past 50 years we have experienced the formation of health care systems, the growth of managed care, and numerous other changes that have resulted in today's complex and often tumultuous health care industry. In this chapter, we explore the future impact of mergers and acquisitions on health care and, more specifically, on the lives and work of nurses.

Historically, health care was more or less homogeneous. Hospitals, physicians, and nurses dominated the health care services, and health care itself was considered a local community service of value to citizens served by the institutions and people who administered the organization and those who provided the services. Most hospitals were either public or private. Today, health care is heterogeneous. There are many types of health care entities, specialized services, and a new focus on wellness and prevention. It is not unusual to see hospitals working together to form health care systems or to see a hospital become an integrated health care service. Sponsorship of hospitals by religious groups and by citizens, once the predominant factor in a hospital's identity, has now become clouded by new types of sponsorship and ownership.

In previous times, nurses in administrative roles such as vice president, director, or manager were more affected by mergers and acquisitions than practicing nurses. Today, nurses in all types of roles are likely to be affected by mergers and acquisitions. Not only hospitals, but also all of the complex businesses that supply services and products to them are now merging and being acquired. Traditionally, a merger or acquisition that touched the lives of practicing nurses took place at

the hospital board or executive level. Although the community and individuals were greatly affected, the practice of nursing did not change significantly. As health care increasingly applied new business models and practices in their operations, the formerly self-contained hospital began using external services to provide basic care. For example, it is not unusual for a hospital system to contract with a company that supplies all of its laboratory services. Nurses at every level in the organization now work with a diverse group of players in providing patient care. Nursing practice is now influenced by the health care organization's business model.

HOW DO MERGERS AND ACQUISITIONS IMPACT THE CHANGES IN HEALTH CARE?

To answer the question of how mergers and acquisitions change health care, it is useful to examine what they are before discussing their impact on health care and, specifically, on nursing practice. A *merger* is the formation of a new company by combining existing businesses. For example, two or more hospitals may merge to form a new health care system, with a new brand and identity. *Horizontal mergers*, those that combine companies in the same business, and *vertical mergers*, those that combine companies that provide different phases of the same business, are most common in health care. An *acquisition* differs from a merger in several ways, but the main difference is that one company takes over another company and "folds" that company into its own. In a broad sense, mergers and acquisitions are similar, in that they change the business model and operational aspects of work life that are strongly felt by employees (Mergers and Acquisitions, 2009).

Hospital Mergers

Why do hospitals and other health care entities merge or acquire others? From a sponsorship or ownership perspective, the main reason for a merger or acquisition

is to add value to a company. In addition, increasing growth and productivity are two major reasons to merge. In health care, a motivating factor is the need to sustain services over time by joining efforts with others. For example, a system of hospitals or an integrated health care system, or a larger hospital formed through a merger or acquisition saves money by consolidating services. Typically focus was on human resources, financing, and purchasing, which often could be standardized without significantly affecting the decision making of care providers. Gradually, the extent of standardization is being extended, in part because of the capability of technology and in part because of the regulatory and quality issues that challenge health care providers.

Health Care Business Mergers

Health care organizations have become more complex over time. Depending on the business model used for operations, these organizations may be self-contained, or they may outsource one or many functions. Companies or businesses, such as specialized care experts for emergency rooms, physical therapy, and laboratories, have developed to supply the needs of these health care organizations. In addition, health care organizations use a myriad of services including satisfaction surveys, products such as software for information management, quality monitoring, human resources, and others. In addition, health care organizations may join together or form a group to procure services, such as supplies and materials, to benefit from group purchasing, which increases leverage for pricing through volume and sometimes scope. As the number and type of health care–related businesses increase, the likelihood of mergers and acquisitions among them increases.

Health care businesses merge or acquire others for the same reasons cited for hospitals—growth and profitability. Rapid technological advances, the short-term life of many products, and an explosion of knowledge are some of the factors that drive the innovations and business start-ups that form the pipeline for mergers and acquisitions. In nursing, there was a time when nurses who engaged in business or activities other than mainstream health care were regarded as mavericks. In today's world, nurses who become entrepreneurs are welcomed into the mainstream of nursing and participate in professional organizations and activities. Some of the businesses or companies used by health care organizations have their origins first in an innovation; then in a small business; and eventually, in a product or service that adds value to a larger company, making the small business a target for a merger or an acquisition.

Because health care–related businesses often provide services and products that are consistently used by nurses in practice, they often influence the way care is provided. Consequently, when these products or services are changed through a merger or an acquisition, the changes may indirectly or directly influence nursing practice. Consider the record keeping, patient communication, and other devices now used by hospitals. Changes in the format, the content, or the method of delivery all involve changing the behaviors of nurses. The learning curve may vary, but changing practice takes time and energy and may necessitate adaptation of other areas of practice to the new way of accomplishing a task. Although most vendors do plan for gradually incorporating legacy products (i.e., those already in use in organizations) into their new ones, nurses now must be flexible and resilient in adapting. It should be mentioned that not all businesses survive. Losing a product or service because a company has ended the business also requires adaptation (Townsend, 2009).

WHAT STIMULATES BUSINESSES OF ALL TYPES TO CONSIDER A MERGER OR AN ACQUISITION?

As noted, adding value is one of the main reasons to pursue a merger or acquisition. This value may be measured in financial outcomes, improved sustainability of the business over time, improved quality of services, improved productivity, or even improved positioning to increase market share. Value may also be measured in terms of an organization's ability to deal with regulatory issues, attract and retain qualified staff, or to expand the scope and type of services provided. A continuing reason for merging or acquiring another organization is improved synergy, gained by reductions in duplication of functions, which in turn reduces costs and may, in some cases, improve the function's effectiveness. Another reason for merging or acquiring another business is to acquire expertise or products or services that improve both service to the community and market share (Mergers and acquisitions, 2009). Because health care is a human service, the value of a merger or acquisition may be colored by factors such as culture, perceptions, or by tradition.

Organizations are comprised of numerous functions necessary for operations. Health care organizations are typical, in that people with specific expertise are required for an effective and successful operation. For example, an organization most often has a board of directors engaged in governance of the organization as a

whole. It also has an administrative staff and specialized staff, such as nurses, therapists, housekeepers, maintenance persons, and others, to carry out the functions needed for products or services. The people who make an organization work are key to successful mergers and acquisitions. In fact, relationships and communications are pivotal in efforts to merge one or more organizations. People often seek employment and retain employment in an organization because they identify with the mission, the values, and the purpose of the products and services. Many people form strong loyalty to the organization. It is this sense of loyalty that is most affected by a proposed merger or acquisition. Further complicating matters, the perceptions of what is of value to the organization may vary widely among the different types of personal expertise people offer to the organization. The potential for conflict is an important consideration in assessing the value of a merger or an acquisition.

The assessment process that precedes a merger or acquisition is essential to making informed decisions about the value to the organizations involved. Due diligence is the process used to examine all aspects of the organizations to be merged or acquired. This due diligence involves assessment of the financial position and balance sheets of the organization staffing and the ability to retain and attract qualified staff, the scope and quality of services or products, the status of operational systems for management, and evaluating the organization and the benefits of the merger or acquisition to the organizations involved and to the communities served. Often consultants with expertise in the area of mergers and acquisitions are engaged to conduct the due diligence process. These same consultants or others are engaged to guide the organizations through the process following the merger or acquisition. Factors such as culture and diversity, understanding and acceptance of the change by the employees and community members, and the perceptions of value are the focuses of work during this change (Galpin & Herndon, 2007). Agencies, businesses, and interested persons external to the organization also contribute to the success or failure of mergers or acquisitions. Since the passage of the Sherman Act in 1890, mergers have been scrutinized to ensure that they benefit the public. Each state varies in its requirements for mergers and acquisitions. Approval by the Federal Trade Commission and the Department of Justice is usually based on protection of the public. In health care, this protection involves ensuring that people have access to the services they need and want; that there is competition to prevent a monopoly and to protect pricing and availability of services; that the newly formed

organization will meet the standards of practice and expectations of the public; and that requirements of regulators, legal issues, and interested parties such as insurers can be met. Antitrust actions brought by one or more interested parties may lead to stopping or dissolving mergers (Blesch, 2009). Because health care is local, the perceptions of community members carry weight in accepting the change and also in using the services provided. Groups within the community may successfully or unsuccessfully oppose the change, necessitating focused attention to gain support and market share.

THE FUTURE OF MERGERS AND ACQUISITIONS

Tracing the history of mergers and acquisitions is interesting, but in times of social and economic unrest, may not be useful. Instead, looking at the current situation of health care and of specific organizations in the context of the environment is more productive. Pricewaterhouse Coopers (2009) cites nine top health care issues for 2009. They are (1) the impact of the economic downturn; (2) the number of persons with insufficient or no health insurance; (3) mergers and acquisitions in the pharmaceutical industry; (4) the growing focus on wellness and prevention rather than on care of the sick; (5) genetics; (6) the growth of health care and communications technology; (7) the incentives of pay for performance; (8) incentives for a healthier lifestyle; and (9) the new coding system, ICD-10. These issues paint a picture of continued challenges to health care at every level of the organization. Health care financing has long been a challenge. Adoption of new technology, changing use of services by the employees and public, incentive programs based on quality and patient safety, and changing the coding systems require capital and human energy.

A five-year projection of mergers and acquisitions published by Irving Levin Associates (2006) indicates that mergers and acquisitions occur in phases. From 1992 to 1996, the acute care industry was in a phase of "Empire Building," in which high expenditure deals involving many patient beds in various geographic locations took place. During this phase, the sky was the limit and often referred to as merger mania. The next phase, from 1996 to 2000 is termed "Jockeying for Position." The "Current Market" phase from 2001 to 2005 is considered to be a continuation of activities begun in previous years. After 2006 is the "Looking to the Future" phase, in which hospitals continue to reorganize. The report notes private equity firms probably will concentrate on small, emerging for-profit hospitals. Today due

diligence involves determining the costs, financially and otherwise, as measured against the benefits of a merger or an acquisition (Irving Levin Associates, 2006).

This period from 2008 onward will likely be characterized by health care organizations' response to a turbulent market, as well as to changing health care practices and other factors such as payment and health care reform. Review of the popular literature yields little insight into the scenarios one might expect in the health care field in the next few years. Barron's roundtable participants noted that during this time of economic turmoil, the strong will survive and the weak will struggle or cease to be. Given this prediction, it can be expected that struggling hospitals will be seeking relief through partnerships, bids to be acquired, or other types of relationships to help them reduce costs and maximize resources.

Another factor affecting mergers and acquisitions in our society is the Internet. The notable effect of Internet use on all types of services and products will inevitably influence health care's future. The United States Postal Service has increasing deficits due in part to use of the Internet instead of "snail mail." The size of magazines and newspapers has been diminished even as access to news on the Internet has increased. In health care, patients can search the Internet for information about their conditions, for advice on wellness, for tips on how to engage in healthier living, and on advanced scientific information about health and disease. This trend will affect the business model, the growth, and the value of health care organizations.

Yet another factor that will influence mergers and acquisitions is the scrutiny of quality of care and patient safety. Transparency of performance data and publication of financial and service data and other types of information, now readily accessible, indicate that health care organizations are responding to a new environment in which openness is valued. In times of scarce capital, it can be opined that health care organizations will spend their available cash and credit on creating new buildings and sites epitomizing the healing environment. Engaging in efforts to raise capital and financing for information systems that facilitate a universal patient record and that create integrated health care systems through communication technology may take precedence over merging or acquiring other like organizations. A new wave of partnerships and acquisitions may occur to combine, unite, and consolidate new technologies in organizations. Nurses in practice are closer to this action now than ever before because of

the transparency of data and access to information. Health care is becoming international, and nurses now may know about and understand what the trend toward a universal high quality of care means for communities, for patients, and for care providers.

SUMMARY

Nurses are now players in the merger and acquisition market. As more nurses become entrepreneurs, making their innovative ideas and specialized talents come to life in a business, they are creating new opportunities. Health care organizations engage these nurses to provide their products and services, such as a nurse residency program, staffing software and methodologies, talent management, and others. Vendors from larger companies have and will continue to seek acquisitions from among these entrepreneurs to expand their businesses and to improve their offerings. Nurses have been and continue to be at the core of health care services. Previously, there has been little activity to provide nursing services through external vendors except for temporary staffing for nurses at every level. Using vendors to provide services to the nursing function, however, is becoming more common as health care organizations become more complex and more competitive. Mergers and acquisitions are tools that these nurses can use to advance their businesses. Formerly noteworthy and emotion laden, mergers and acquisitions are now a common aspect of life in health care.

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The Cost of Home Health Care: Changes and Challenges

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THE CURRENT CONTEXT OF HOME HEALTH CARE

There are a variety of delivery sites for patient care. The continuum of care includes clinics, private provider offices, hospitals, nursing homes, and home health care agencies. Home health care (HHC) is part of comprehensive health care where services are provided in the patient's own environment for the express purpose of optimizing the patient's level of independence as well as promoting, maintaining, or restoring health (Kisa & Ersoy, 2005). Optimally, patients can avoid hospitalization or institutionalization and remain in their homes (Pande et al., 2007). The majority of patients cared for in HHC are elderly adults (Tanner, 2008). The Medicare-covered services provided by HHC agencies include skilled nursing care, home health aides, physical therapy, occupational therapy, speech therapy, and social work (Anderson et al., 2005).

HHC agencies may be free-standing organizations or be a part of another, larger organization, such as a hospital. They may be a for-profit or not-for profit organization, and will vary in size (small to large) and location (rural to urban). Currently, the more traditional providers of in-home care services are getting increased competition from "outsiders," such as Walgreens and other businesses, and from skilled nursing facilities that are developing their own HHC agencies (Remington Report, 2008). Home care agencies depend on other providers in the continuum of care for patient referral. The majority of referrals to HHC are from hospitals, but referrals are also received from skilled nursing and rehabilitation facilities, physician offices, family members, or the patient (Anderson, Clarke, et al., 2005).

The growth of HHC as an industry is reflected in the growth in National Medicaid Long Term Care expenditures. From 1992 until 2002, National Medicaid Long

Term Care expenditures for HHC increased by 244%. In the same period, the proportion of HHC of the total National Medicaid Long Term Care grew from 15% in 1992 to 31% in 2002 (Kitchener, Ng, & Harrington, 2007). In 2006, Medicare paid \$14.1 billion in annual HHC benefits (Shafrin, 2009). Still, HHC's position in the continuum and its dependence upon other organizations in the continuum of care as well as size and location, make HHC an entity that is highly influenced by market forces and the general economy.

For most nurses, employment in a home care agency is far more complex than just the provision of clinical care (Tullai-McGuinness, 2008). HHC nursing staff has to be expert at not only the clinical facets of skilled nursing care in the home but also the organizational issues. They must assume a well-rounded, well-informed role of corporate citizenry. As opposed to nurses employed in hospitals, HHC nurses must be far more aware of corporate structures, processes, and outcomes as well. Because of the corporate structure of home care, the organizational resources that many hospital staff take for granted or are unaware of (i.e., the business office; Medicare/insurance issues, billing, and reimbursement; preauthorization by the physician's office or administration; case management policies), are fundamental for nurses employed in HHC. HHC nurses must first learn about these details and then assume responsibility for much of the process of ensuring that the care provided will actually be reimbursed (Cohen, 2007). Adequate and timely payment for care delivered by HHC professionals is crucial for agencies. This is made more complex by the fact that the billing and payment processes are not standardized between and across insurance providers. Moreover, those who pay for HHC services also hold providers accountable for patient outcomes more stringently than for hospitalized patients (Grabowski, 2007).

Hospital nurses have ready access to needed supplies in the rendering of patient care. HHC nurses have to plan ahead for contingencies and for cost. Supplies have to be taken along by the home care nurse or the planned-for care cannot be delivered. Inventory is expensive. Home health agencies have limits on what supplies they stock, and insurance carriers set limits on supplies for which home care providers will be paid. Thus, home care nurses must be aware of the both the vendors that the agency deals with and the payers' preferences.

Moreover, in a hospital, a nurse is delivering care in a setting that is controlled by the medical team. HHC nurses are providing care in a setting where they are "guests." Patients are often reluctant or suspicious about HHC nurses or staff coming to their homes. Putting patients and families at ease is a critical first step to home care delivery. Basic courtesies are probably more important in the home. For example, determining whether the patient prefers to be addressed by the first name or by the surname should be established. The HHC nurse must also observe simple positioning issues such as whether to sit or to stand during the visit. Sometimes simple courtesies make a big difference in the course of a home care visit, and the nurse must attend to these.

Perhaps the biggest difference in the practice of HHC nurses when compared to their hospital counterparts is in the timely, accurate completion of the OASIS, the Outcome and Assessment Information Set (Niewenhous, 2007). Precise, truthful scoring of the OASIS is essential for HHC reimbursement and requires training and a significant time commitment by nurses completing the assessment tool.

The OASIS is the acronym for the Outcome and Assessment Set, a data collection tool that home health agencies providing Medicare- and Medicaid-covered services must use during the course of a patient's home care service. The OASIS came about as the result of the Balanced Budget Act of 1997 as a means to provide data regarding patient outcomes and to determine a case mix weight for payment under the Prospective Payment System (PPS). The PPS is the method by which home care agencies receive payment for Medicare beneficiaries receiving skilled home care services during a 60-day certification period.

The OASIS contains three assessment criteria: clinical (C), functional (F), and services utilization (S). The assessment criteria take into consideration elements like the primary and secondary diagnoses, other medical conditions, functional status of activities of

daily living, the health care facility from where the patient was admitted, and the number of expected therapy visits. Each component is rated on a scale and awarded as points (n). The equation then reads: $CnFnSn$ (Grimaldi, 2001). Episode timing is another factor that impacts payment.

Various combinations of the assessment criteria ($CnFnSn$) place patients into groups according to severity called Home Health Resource Groups (HHRG's). Payment is based upon the HHRG. Each of the 153 HHRGs is cost weighted, indicating expected resource utilization. Discrepancies are closely monitored by payer sources, and inaccurate ratings may lead to increased audits or inadequate reimbursement (Teenier, 2008).

The HHRG may be altered with changes in the patient's condition and be reflected in the reimbursement. This is important since payment is received twice; 60% at the start of care, and 40% after the episode of care is complete. Adjustments in the final payment result from changes in the patient's HHRG and may be less or more than the anticipated cost, depending upon the number of therapy visits actually provided (Grimaldi, 2000; Teenier, 2008).

The conditions of participation require that a nurse complete the OASIS comprehensive assessment at the start of care when there are orders for skilled nursing. Physical and speech therapists may perform the start of care comprehensive assessment in therapy-only cases. Subsequent comprehensive assessments may be performed by any of the qualified disciplines (nursing, physical therapy, speech therapy, or occupational therapy) (Narayan, Salgado, & VanVoorhis, 2009).

The OASIS data that must be incorporated into a HHC agency's comprehensive assessment are collected at specific "time points" during a 60-day period of care. These time points include start of care, resumption of care after an inpatient facility admission, recertification, other follow-up, transfer to inpatient facility, and discharge. On January 1, 2008, the Centers for Medicare and Medicaid Services (CMS) (2009a) implemented the first changes to the OASIS data set; these changes related to episode timing and diagnosis coding. This version is termed OASIS-B1. The OASIS data set continues to undergo revision. The OASIS-C, currently in review, will have increased emphasis on wounds, chronic conditions, and preventive health care measures, such as immunizations (CMS, 2008). Home health industry input has influenced these changes to foster improving the accuracy of responses, outcomes, and quality (Visiting Nurses Association, 2008). These improvements

also are linked to the proposed implementation of a Pay for Performance (P4P) reimbursement system for HHC providers under the current PPS.

To date, most home health agencies use a case management model of care delivery. This means that a single HHC nurse delivers direct patient care and coordinates care provided by other disciplines for a “caseload” of patients, usually about 25 patients at one time (Anderson, Helms, & Kelly, 2005). Thus, all agency nurses and therapists must be equally expert with the administration and completion of the OASIS. There must be interrater reliability between two or more nurse/therapist OASIS scorers to ensure precision. To this end, all new hires generally have a rigorous orientation to OASIS by an experienced and seasoned instructor (Niewenhou, 2007) and significant time (which of course translates into increased cost) is devoted to the process. There are free Web-based training programs available from the CMS as well as those produced by private companies. Generally, a training session will involve much emphasis on the OASIS items that most directly impact cost and quality. For example, if a patient is ordered to receive enteral therapy and the item on the OASIS that addresses this is not completed correctly, significant loss of revenue will result to the agency. Furthermore, if a patient is incorrectly assessed concerning ambulation at the start of care, it may be impossible for the discharge OASIS to reflect real improvement in that patient’s ambulatory status. Basically, this is true with any of the OASIS items. If the admitting professional does not score the OASIS accurately at the start of care, the outcomes will be negatively impacted for that agency. Negative outcomes are assumed to reflect poor quality of care, which may affect future reimbursement. The P4P mandate will use these outcome-based quality measures to compensate “high” performing HHC agencies at a better rate than those HHC agencies deemed “low” performing. Continuing education concerning OASIS is ongoing for more seasoned employees (Niewenhou, 2007).

Changes and Challenges

Clearly, the OASIS is pervasive in HHC functioning. It touches almost every aspect of HHC. Payment for care delivered is dependent upon the score. The OASIS also may drive future referrals to a HHC agency, since an agency’s quality indicators are published on the Internet and may be used for comparison between various other competing home care agencies. The OASIS dominates clinical practice. It takes time to administer and outcome data must also be collected and reported. In

addition, the level of the actual assessment by the nurse or therapist has increased since the patient is expected to demonstrate functioning, not just verbally report it. For example, a patient would actually be asked to demonstrate the ability to get in and out of a bath tub/shower, if they can do so safely, so that the admitting HHC clinician can record with accuracy on the OASIS. It is best practice that the patient demonstrates the ability to perform tasks and functioning for accurate assessment. Obviously, this takes longer than a self-report.

The CMS promotes the benefits of the OASIS to patients, clinicians, and to HHC agencies. Patients get focused, individualized plans of care that may contribute to positive outcomes. Clinicians build and reinforce appropriate assessment skills by gathering clear and consistent data, which yield improved patient care planning, teamwork, and care coordination. HHC agencies have a massive data set that can be used for benchmarking, including evaluation and quality improvement, marketing, meeting various regulatory and accreditation requirements, and for planning and program development (CMS, 2003).

Still, in the 8 years since its inception, uncertainties concerning the scoring of the OASIS remain. The longer that the OASIS is used in various patient scenarios, the more questions arise. The CMS issues responses quarterly to the OASIS Certification and Competency Board (www.oasiscertificate.org) regarding queries that have been posed by HHC providers. One example is the change to the previously provided guidance regarding the healing status of a surgical wound. In July 2008, CMS retracted its statement that a surgical wound with scabs should be scored as a nonhealing surgical wound (CMS, 2009b).

The effectiveness of the OASIS (whether or not it has done the job it was designed to do) has really not been addressed in the literature. Perhaps more telling is the fact that a revised version of the OASIS (OASIS-C) will likely be implemented in 2010. Adaptations of this assessment tool may indicate that tool designers and the payers are trying to eliminate items in areas that could be ambiguous, or those that allow certain facets to be manipulated to maximize revenues. What is apparent in the literature is that the OASIS is simply a present and future reality in HHC; the OASIS in some form is here to stay. Focus has shifted from assessing the effectiveness of the OASIS to optimizing it for HHC, that is, making sure agencies get fully compensated for the care that they deliver and that a HHC agency maximizes the revenues it can rightfully collect. Perhaps most importantly,

the OASIS will also serve as the basis for a modified prospective payment system, or P4P.

An Alphabet Soup in Home Health Care: Pay for Performance, Evidence-Based Practice, and Home Telemonitoring. No discussion about the possible future changes and challenges in HHC would be complete without noting related concepts that repeatedly emerge in the current literature addressing this industry. These are Pay for Performance, evidence-based practice, and home telemonitoring.

Pay for Performance (P4P), or value-based purchasing, is a concept derived from business paradigms that advocate improved outcomes and lower cost (Bush, 2008; Grabowski, 2007). Patient outcomes are intimately tied to P4P in HHC. Basically, P4P is a carrot and stick system; it rewards those providers who have the optimal patient outcomes with higher reimbursement (the carrot). Those providers with less than optimal or even adverse patient outcomes receive less financial return on the care that was provided (the stick). Evidence-based practice guidelines are the starting point for successful P4P programs since they standardize care delivered (Poniatowski, 2007). One of the largest sources of rising health care costs is variation in care (Bush, 2008). Achieving superior patient outcomes is the key to agency survival in a P4P reimbursement system (Spitz et al., 2007). In essence, P4P is a movement toward buying outcomes (Milgate & Cheng, 2006). Some experts predict that eventually a P4P model will be implemented across the continuum of care (Remington Report, 2008).

Clearly, the HHC agencies that survive and perhaps thrive will be those that pay close attention to achieving positive patient outcomes, such as fewer hospital readmissions during home care service delivery (Anderson, Clarke, et al., 2005). Any debate regarding the pros and cons of P4P is moot; it will soon be a reality in HHC (Poniatowski, 2007). Those HHC agencies that provide the highest quality of patient care, as documented by OASIS scores at patient discharge, will be rewarded by a higher level of reimbursement. The current best guess is that about 1% to 2% of overall reimbursement to HHC will be redistributed into a three-tiered type system: the low producing HHCs will lose this reimbursement, the highest producers will be rewarded with this funding, and the HHC in the middle, those with average outcomes will continue to receive the usual and customary reimbursement (Schlenker, Powell, & Goodrich, 2004).

Not surprisingly, in order to improve outcomes and to standardize care, HHC is increasingly making use of

evidence-based practice (EBP). The implementation of EBP in HHC is a very formalized, prescriptive, and standardized procedure. The EBP tool kit is comprised of a laundry list of "best practices" for the clinician to select from, along with the definition of the practice and accompanying "helpful tips" for implementation. Once the HHC agency selects an outcome for improvement, the appropriate tool kit is obtained from government Web sites. Generally, a HHC agency selects only one or two outcomes to work on at a time, as it is a fairly intensive process that involves the entire organization.

CMS provides specific resources regarding best practices in HHC. Tool kits are available at QualityNet.org that can be used by HHC providers to improve outcomes through use of the Outcome Based Quality Improvement process. CMS established QualityNet (qualitynet.org) to supply various health care providers with data reporting tools, resources, and health care improvement news. An example is a toolkit for "Improvement in Ambulation," or as termed on the publicly reported outcomes at Home Health Compare, "Patients who get better at walking or moving around." This toolkit is available to any HHC agency wishing to use the information to improve their outcomes for this quality measure. Contents of the toolkit for Improvement in Ambulation include a range of motion necessary for ambulation assessment guide, a falls-risk assessment tool, the "TUG" (Timed Up and Go) assessment tool and the Tinetti Gait, Balance Assessment tool, and strengthening and balance exercises for teaching the patient (Esslinger et al., 2008).

Agency survival is increasingly dependent upon efficiencies in service delivery. Since in-home nurse visits are the largest cost to HHC agencies, methods to replace or reduce these costs are of significant interest (Livesay et al., 2003). Reducing a client's HHC visits by even one nursing visit per week could prove cost effective (Anderson, Clarke, et al., 2005). Home telemonitoring (HT) is being implemented and investigated as a possible way to meet the growing needs of the HHC industry. This is also important since experts predict that the nursing shortage will be most damaging to HHC as compared to other nursing employment sites (Tullai-McGuinness, 2008).

Health care organizations under capitated management are investigating the use of HT in HHC for management of chronic disease states such as diabetes, chronic obstructive pulmonary disease, and heart failure. Improvements in technology make the use of

HT a possible tool for reducing costs an option in a prospective payment system environment. Patient condition monitoring is required in chronic disease management to improve client outcomes; therefore, chronic disease management may prove to be more cost effective with the use of HT if the quantity of costly nursing visits in the home can be reduced (Averwater & Burchfield, 2005). Medicare currently does not reimburse for HT in patients' homes, except for patients of counties labeled as Health Professional Shortage Areas (HPSA) (Niewenhous, 2007). Utilization of HT affords the possibility to lower health care cost because more patients can be seen in the time it takes to provide health care in the home (Averwater & Burchfield, 2005; Dimmick et al., 2003).

HT lacks a clear definition in the literature. A general definition of telemedicine consists of anything that utilizes electronic technology and communications technology in the practice and support of health care when distance between provider and participant is an issue (Meystre, 2005). Specific HT activities in the literature range from calling patients using common telephone technology, to assessment utilizing an electronic stethoscope and electronic transfer of in-home patient electrocardiograms. Home telemonitoring of patients with heart failure has included the electronic transfer of physiological data such as body weight, heart rate, pulse oximetry data, and blood pressure (Averwater & Burchfield, 2005).

HT may lead to earlier detection and prompt effective care of chronic disease exacerbations and possibly decreased hospital admissions (Niewenhous, 2007). Physicians may be willing to discharge patients earlier from the hospital if home care HT monitoring is in place (Cleland et al., 2005). Thus, health care resource utilization could be further reduced. As the technology associated with HT continues to be improved, its use in the HHC environment will likely grow. Chronic disease management may prove to be more cost effective with the use of HT if the number of nursing visits in the home can be reduced (Remington Report, 2008). However, as with most of the future care delivery in HHC, EBP guidelines are needed for HT (Pare, Jaana, & Sicotte, 2007).

SUMMARY

The HHC industry is fluid as market forces push for the highest quality of care at the lowest cost. Those HHC agencies that survive will likely be those that hire and retain excellent nursing staff, attend to the staff's need

for continuing education concerning OASIS and other reporting mechanisms, and those who implement successful EBP guidelines to maximize the payment received for the performance of care in the patient's home. HHC agencies in the future will likely also make use of ever advancing technological applications, such as HT, as well as others still in development.

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Drugs are Too Cheap

TESS JUDGE-ELLIS ♦ BERNARD SOROFMAN

The debate rages over access and affordability of medications. Most argue that medications should be financially attainable; some argue that high prices are the unavoidable outcome of new product development for new miracle cures. Regardless of the opinion, there is controversy. This chapter focuses on the use of medications regarding the costs and implications of their use for patients, the health care system, and society.

A different perspective is that medications, the wonders that they are, are inherently dangerous: toxic if used too much and debilitating if used in a manner that does not address the physiological need. Individuals do not comprehend the power and problems of medication mismanagement. The easy accessibility of medication yields little respect for their power. Inattention to the knowledge required to maintain health results in further mismanagement and harm. So consider for a moment this radical notion: Drugs are too cheap; raise prices to improve health.

Dorothy Hanson is a 78-year-old woman. She was admitted to the hospital after falling and breaking her wrist. She underwent an open reduction internal fixation of her left wrist yesterday. Mrs. Hanson lives in a city of approximately 250,000 people. She has two children and six grandchildren. Her husband, Don, died 4 years ago of lung cancer, and she lives alone. She is a retired school teacher and spends most of her free time with her bridge club and traveling to visit family. Mrs. Hanson is comfortable financially with her teacher's retirement and she has little, if any, debt. Her insurance is Medicare, and she has a supplement that covers 60% of the cost of her medications. Her medical history is significant for hypertension and hypothyroidism for which she takes hydrochlorothiazide, lisinopril, and levothyroxine.

THE CLINICAL SITUATION

Medications are toxic substances that heal and harm (Manasse, 1989a, 1989b); a dynamic clinical dance occurs between the miracle of pharmacotherapy and the

dramatic problems that medications can cause. In 2006, medication use in the United States exceeded \$216.7 billion (Henry J. Kaiser Family Foundation, 2008). Almost one half of all U.S. citizens used prescription drugs last year (National Center for Health Statistics, 2009). With such high use rates, problems abound no matter whether the medication use is appropriate or a drug misadventure. Such easy and poorly controlled access to medications is a health hazard. The best way to manage this situation is to put a greater value on prescription drugs: raise the prices. Drugs are too cheap and that results in continued problems.

In fact, drug-induced disease is common. The latest estimates on drug-related morbidity and mortality are well over \$175 billion (Ernst & Grizzle, 2001; Manasse & Speedie, 2007). An estimate of the incidence of drug-related illness in older citizens ranges from 5% to 25% (Gandhi et al., 2003). Hospitalization and medical visits resulting from medication use are a daily phenomenon. Although the data are difficult to pin down, about 15% of all hospitalizations (Lazarou, Pomeranz, & Covey, 1998), with an estimated range of 2% to 25% (Einarson, 1993), are due to drug-induced disease; estimates of drug-related emergency room visits range from nearly 0% to more than 10% (Wintersetin et al., 2002). One report indicated that posthospitalization admissions resulting from drugs have been estimated at 19% (Foster et al., 2003), and 21% of the adverse drug events are preventable (Thomsen et al., 2007).

Awareness of the incidence of drug-induced disease is important for nurses. This knowledge informs clinical reasoning and guides how nurses ask and illicit information from patients. Not only may this help avoid a needless hospitalization in the future, but also it affects patient teaching and may provide useful information to other members of the health care team.

Mrs. Hanson says, "Yes, they just added that lisinopril to my blood pressure medication about 5 weeks ago." You note that her blood pressures have been running 105/68 to 110/74 since she has been hospitalized.

She says, “I took my blood pressure at the drug store, and it ran about 110 over 70. I thought that was pretty good.” Upon further questioning, Mrs. Hanson says that she is definitely more dizzy and unsteady when she first gets up from being seated. “I’m so used to just popping up and going! I guess I am a little impatient with having to make changes because of a little light-headedness.” She denies light-headedness currently. You review the importance of rising slowly, especially after being placed on new blood pressure medication. You also make a note to talk to the doctor and the home health nurse about your concerns about her light-headedness since she began taking the lisinopril. This very well could have contributed to her fall.

One reason why medications are problems in the health care world is the concept of patient adherence—the use of pharmaceuticals in a manner consistent with patient-provider communication. Nonadherence is common and ranges between 20% and 80%, depending on the patient, the clinical condition, and the pharmaceutical situation. The reasons for adherence or nonadherence vary. Provider-patient communication is complex and is made more difficult by provider insensitivity or ignorance of patient literacy, hearing problems, complex instructions that the patient cannot understand in a rushed visit, language barriers, and an inconsistent health/illness belief model, for example. Regardless of the reason, it follows that with improved adherence to the prescribed regimen, disease states would be easier to manage. Nonadherence because of expensive medications is low, less than 6% (Kennedy, Coyne, & Sclar, 2004), but cost is a factor in acquisition (National Center for Health Statistics, 2009). Patients place a higher value on medications that cost more; expensive medication means valuable therapy, and treatment adherence is improved. More expensive medication often is in a once per day dosing (versus 3 times daily or 4 times daily dosing on less expensive or generic medication), which also improves adherence.

Nurses must be aware of the wide variety of adherence issues and keep those in mind as they apply a nonjudgmental attitude when asking and receiving sensitive patient information. Patients need to know that the nurse is open and is willing to listen to their information.

Mrs. Hanson has been discharged from the hospital to home health care. You admitted her yesterday to your agency and established a plan. At the end of your visit the following week you again say, “What other concerns do you have today, Mrs. Hanson?” After several seconds she says, “Well, I guess I need to tell you that I have not

filled that Fosamax prescription.” You ask, “What kept you from filling that?” Mrs. Hanson says, “Well, the cost is really high, but that isn’t it entirely! What really is the problem is that I am scared to take it! My sister had medication coverage—her copay was \$9—and she went on this medication. She thought she was doing the right thing, but I don’t know. Now she has all sorts of stomach troubles. Did you know that she can’t even have a cup of coffee without having to take a handful of antacids!” Mrs. Hanson looks visibly upset and crosses her arms in front of her.

THE REALITY: EASY AND INEXPENSIVE ACCESS FOR CONSUMERS, PATIENTS, AND PROVIDERS

As drug prices go down, access increases (Kennedy & Erb, 2002), more persons purchase the medications, consumption increases, and drug-related morbidity expands. More medications in the environment mean more can be taken inappropriately, and this establishes the necessary situation to create drug-related harm (Parker-Pope, 2009). Drugs are cheap and are easily replaceable. This means they have little value and are not protected as a valuable resource.

Patients are insulated from the high cost of pharmaceuticals. Insurance pays; as one patient put it, “All my drugs cost ten dollars.” Most Americans have health insurance (Holahan & Cook, 2008). Insurance plans pay the primary costs of the medications, and in many cases, patients are not aware of the medication costs. Billing is direct to the insurer, and the patient only sees a copayment; the “distance” reduces responsibility and value for the medications. The low cost of drugs makes them easy to obtain and provides few incentives to decrease access to the pharmaceuticals.

To take a medication is a choice. Yet who makes that choice, and what are the driving forces for the choice? Providers also are influenced by a variety of cost-related issues such as choosing the least expensive medication and the availability of sample medications. Prescribing often is dictated by whether patients have insurance coverage for prescription medications and whether an insurance company formulary restricts certain medications (Kolchinsky, 2003). Although these factors are important ones to consider, the patient often can be left out of the discussion, and equivocal decision making on a clinical condition might well be determined by the extent of one’s insurance coverage.

Sample medications are often given out. Nearly 50% of elderly patients in one study of about 14,000 participants

received free samples from their physicians (Tjia et al., 2008). A second study showed that the more often that elderly patients visit the physician, the greater likelihood that they will receive samples. Overall, the study reported that 9% of Medicare recipients receive drug samples. Compliance was an issue with those patients who received drug samples. Of the 14% of patients who reported skipping medications or taking fewer medications than prescribed, 73% of these reported taking medication samples versus 53% who had no financial difficulties (Taira, Iwane, & Chung, 2003). The reason most often cited by physicians for dispensing sample medications is patient inability to afford a prescription. However, it is acknowledged that drug samples are provided by drug companies that desire to introduce new medications to the physician and consumer. One concern is that although drug samples initially may cost the patient nothing, eventually having to purchase this medication from a pharmacy actually may be costly.

More and more medications are being sold over the counter (e.g., loratadine [Claritin] and famotidine [Pepcid AC]). Patients are able to diagnose and treat many medical conditions without having to seek professional opinion. Patients may not recognize over-the-counter medications as medication and may fail to report these drugs when they are asked to give a medication history.

You are a little taken aback by Mrs. Hanson's strong reaction to her sister-in-law's stomach trouble. It seemed a little out of character. You offer to get her a glass of water, and when you return you ask, "Mrs. Hanson, how is your stomach doing for you? Do you have any trouble there?" Mrs. Hanson states that she does have some stomach trouble, but it isn't really a problem as long as she takes that "stomach medicine" she buys at the pharmacy, at which point she shows you the package for the over-the-counter lansoprazole (Prevacid). "Nancy can't even enjoy her chocolate anymore! That would be just horrible for me!"

Patients share medications. Although there is not much published on this, a recent study of medication sharing showed that 23% of participants loaned and 27% borrowed medication (Goldsworthy, Schwartz, & Mayhorn, 2008), and in an older study, teenagers shared and borrowed medications (Daniel, Honein, & Moore, 2003). This becomes an interesting phenomenon; medications are given away. Now medications are free of cost, and because it is outside the health professional sector, they may lose the knowledge that must travel with them to create healing and avoid harm. An expensive and valued commodity would not be given

away as freely and may retain more of its clinical knowledge properties.

Medications are available 24 hours a day on the Internet, and the convenience of home shopping cannot be ignored. One can sit at one's computer, and not only can one request that inexpensive medications be sent directly to one's home, but also some consumers can find online physicians to diagnose a condition and prescribe the medications. Regulatory control is weak for Internet medication shopping (Gallager & Colaizzi, 2000; Internet Drug Sales, 2004), and consumer interest is high (Picard et al., 2004). The Internet opens up a whole new level of economic consideration.

One can buy medications from many manufacturers from all over the globe, often avoiding the expensive costs of patent protection. Medications can be imported from many international sources. The current debate focuses on Canadian imports but the scope of the problem cannot be so limited. The importation of medicines allows the public to purchase their medications at discounted prices. Internet supply sources compete on a global scale, leading to reductions in price and increase in availability. Inexpensive sources of drugs create a concern about counterfeit medications from international sources (Food and Drug Administration Counterfeit Drug Task Force, 2006; U.S. Department of Health and Human Services, 2004). Drugs can be fabricated easily. The consumer does not have the ability to analyze the product for quality. In the United States, quality assurance is provided by a series of federal and state regulations. International sources often are not monitored, and one cannot assume that the medications received are safe and effective.

Generic drugs make medications more affordable (Anonymous, 2002; U.S. Department Health Human Services, 2007). A generic drug is by Food and Drug Administration definition one that is the same chemical entity as the brand name and patented drug. In general, generic drugs are sold at lower prices because they were developed without most of the research and development costs inherent in the development of new pharmaceuticals. In addition, generic drugs can be sold through contract agreements while a drug is still on patent or after patent restrictions are removed. However, in international settings some patent exclusivity is not respected, and the drugs are manufactured. Consumers do not realize that generic drugs in the United States are generally cheaper than brand drugs from Canada (Bren, 2004). Nor do they realize that the Internet market is changing and evolving rapidly. Many times the purchase is the same brand as the United

States, and many times the medications are the same generic versions available in the United States. Access is too easy. The patient gets ready access to medications at a reduced price.

Patients shop around for the best deal. Medications are a product in today's society, and patients are savvy consumers. More than \$200 billion in prescriptions were filled at pharmacies in 2007 (National Association of Chain Drug Stores, 2009). These stores entice consumers by price-matching and discount prescriptions. Value-added aspects range from the convenience of having one's prescription on a national data bank to being able to get all of one's grocery shopping done while one waits for the prescription. One should consider the value of the long-term relationship with one's family pharmacist when one considers the price of medications.

SOLUTION

An old adage is "The most expensive medication is the one that is not used appropriately." The costs of medications are an enormous burden on health care in the United States. Cost savings compete with health outcomes. A choice between medications and food or other basic needs is not uncommon. For Americans, travel to Canada or Mexico for prescription medications is now commonplace. Ordering discounted prescriptions from online pharmacies is commonplace. Medication costs makes up 10% of national health care spending, and it is the fastest growing component of health care spending compared to hospital care and physician services (Henry J. Kaiser Family Foundation, 2008). In 2006, the Medicare Part D drug benefit was implemented for Medicare beneficiaries. Approximately 90% of Medicare enrollees now have drug coverage. Emerging surveys of patients and providers relate general "confusion" with the number of benefit program choices and frustration and concern with the lack of coverage experienced with the "donut-hole" effect. There is a gap in coverage between the initial coverage limit and the catastrophic coverage threshold in Medicare Part D coverage. This gap has illuminated the need for a greater understanding of the funding of pharmaceuticals (Cummings, Rice, & Hanoch, 2009).

NURSING IMPLICATIONS

Nurses are sophisticated problem solvers. Nurses must continue to fine tune their curiosity and clinical reasoning skills, however, and direct consumers toward the area of medications and medication management. Medications must be viewed as potential or current

problems. Nurses must achieve a respect for the clinical problems that arise from medication use, keep medications on their clinical "radar screen," and learn to ask the right questions. A medication history that simply is a copy of the patient's medication list is not enough. Questions should be detailed enough to explore a patient's clinical puzzle thoroughly; for example, "When was the medication started?" "Have you recently had a dosage change, or is this the way that you have always taken your medications?" "How do you pay for your medications?" "What do you do when you miss a dose?" "How often does this occur?" and finally "Any concerns about your medication?" These questions and others like them transmit a respect for medications and their effects on patients.

As champion patient advocates, nurses must view this as a role that extends into the medication arena. For example, a patient may feel torn between the desire to not "go against" a doctor's order and yet feel extremely uncomfortable taking a medication. The nurse in the foregoing case example was able to validate the patient's concerns and give her space to talk about her medication and the choices that she is making. When nurses display sensitivity to the complexity of concerns surrounding medications, patients may feel more comfortable disclosing their concerns or medication misadventures. Nurses are then in a wonderful position to assist the patient.

Nurses are model team members. Drawing other members of the health care team, such as the pharmacist, into the clinical discussion is another wonderful way to empower the patient. Pharmacists can offer suggestions for different dosing strategies, other medications that might be appropriate, different formulations that may not cause discomfort, and many other helpful solutions. Increased knowledge in pharmacology will better inform the nurse and the patient.

Do medications cost too little? Should prices be increased? What safeguards for individuals and society should be put in place? Whatever one's position, one can be assured that the issue is complex; the principles are heavily woven into the fabric of society, and solutions are debatable from more than two perspectives. Nursing is at the forefront of the battle to ensure that medications heal.

ENDNOTE

This case study is written with a focused perspective to create thought; discussion; and, we hope, debate. Our personal positions on this topic diverge from this manuscript in many ways.

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SECTION 7

Professional Challenges, Collaboration, and Conflict

Challenges, Collaboration, and Conflict

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Health care is undergoing many changes, some welcome and some unwelcome, as demonstrated in the other sections of this book. A combination of increasing demands for resources and decreased time for communication can create a situation that leads to difficult and, at times, fractious interactions among colleagues. The 2004 Institute of Medicine report on transforming the work environment of nurses pays particular attention to collaboration among health professionals, listing conflict management as one of the key characteristics of such collaboration. The report also encourages health care organizations to institute human resource policies that include conflict management skills. In the health care environment, change has become a constant state of affairs in which old roles are evolving and new roles are emerging. These roles involve professional challenges, collaboration, and conflict, three topics that are addressed in chapters in this section.

The debate chapter for this section is about collaboration between nurses and physicians. Nurse leaders have long desired more collaborative roles and relationships with physicians. Karen Dunn Lopez and Gail Keenan examine and summarize 17 research studies published between 2005 and 2008 that focus on nurse-physician collaboration. Antecedents of collaboration were the focus of most of the research. The review of the research offers three promising trends related to methodologies that separate these findings from the earlier reviews. The focus of the research is beginning to shift away from professional outcomes toward measurable patient outcomes. There is a greater emphasis on physicians' roles, both as subjects and as investigators. Finally, there are new settings being examined in the research on nurse-physician collaboration. In their findings, Lopez and Keenan identify the major limitations of this research to date and offer suggestions for future work in this area. This chapter contains an excellent and comprehensive review of the literature on nurse-physician collaboration.

Joellen Edwards, Susan Grover, and Joy Wachs address collaboration between nursing and medicine in the delivery of services to the community. Community-based care requires a shift in power from the hospital and expert professionals to community members. A new collaborative approach to the education of medical and nursing students is necessary in order to embrace the new philosophy. Edwards, Grover, and Wachs identify the key collaboration factors as empowerment, emotional intelligence, principled negotiation, and teamwork. The chapter includes the societal, professional, and economic forces that work against collaboration between physicians and nurses. A few successes of effective collaboration are beginning to be documented. The chapter describes in detail the 15-year successful collaborative education model at East Tennessee State University designed to provide health care to the Blue Ridge mountain community. A large community need and a series of grants from the W.K. Kellogg Foundation have enabled community leaders and health professionals in the colleges of medicine, nursing, and public and allied health to work together to establish a successful multidisciplinary education and practice model. Although the setting and driving forces may not be the same as other parts of the country, the accomplishments of this group are clearly visionary and admirable. In this day of rapid change in health care and recognized need to refocus nursing education and services to the community, everyone should read this chapter.

In the next chapter, Elaine Scott discusses conflict and polarity in nursing. The nursing profession has endured chronic conflict and has been polarized as different groups within the profession take sides and become more and more radical in their position on issues. The results of this polarity are seen as internal by-products that create mistrust, disrespect, and strong factions in nursing. The history of polarity in nursing is overviewed by Scott and linked to oppression theory. Polarity is considered a contributing factor in the horizontal violence

seen in nursing, the lack of mutual valuing, and dissatisfaction within nursing practice. This polarity is discussed using issues such as entry into practice and graduate nursing education. Scott also discusses healthy conflict and its role in the profession. Healthy conflict can foster debate, help people feel represented, increase participation, and help nurses value differences. When conflict is well managed, it can lead to more active engagement by nurses, better problem solving for the organization, and sounder decision making for the issues nurses face. Any nurse who is experiencing conflict should read this chapter.

Todd Ingram discusses the current issues facing men in nursing in the next chapter. The number of men choosing nursing is still low, and today men in nursing represent less than 6% of registered nurses. The primary reason for the low percentage of men in nursing is historical in nature. A review of the history of men in nursing is included to demonstrate this trend. The current issues presented in this chapter are sexual stereotyping, sexual harassment, and gender discrimination. Ingram discusses ways of overcoming stereotypes of men in nursing. Important areas to address in nursing to increase men in the profession are current working conditions, issues of retention of men in nursing, and issues focused on recruiting men from a variety of cultural backgrounds into nursing. One strategy is to tap into populations of men and minorities to address the projected shortages in the future and to improve the cultural diversity of the nursing profession.

Thomas Clancy discusses the challenge faced by nursing leaders related to unionization in today's health care system in the next viewpoint chapter. Three themes were identified from the literature: professional autonomy, patient safety, and wages. Issues such as the nursing shortage, understaffing, mandatory overtime, and stagnant pay, added to a lack of professional autonomy, provided incentives for nurses to consider unionization. The chapter provides an overview of the basics of union campaigns and the process of preelection campaigning.

Clancy offers suggestions for nurse leaders faced with the possibility of unionization. He believes the key to preventing RNs from seeking union assistance is open communication and quick action to solve the problems as they arise. This chapter provides the key to remaining union free—a focus on prevention by nurse leaders and managers. This is an important chapter for nurses who are facing unionization in their workplace.

In the final chapter in this section, Sue Moorhead overviews generational issues in nursing practice. Currently, four generations of nurses are present in the nursing workforce for the first time in history. The author overviews each generation in terms of the timeframes of the births of each generation; the major historical events influencing their lives; and the attitudes, views, and values of each generation. Suggestions for working with each generation are included to help managers work more effectively with nurses from each generation. The chapter offers many questions for discussion and suggests that sharing values may help limit the conflicts seen among different generations in the nursing workforce. Learning to understand another generation's view of the world may also help to reduce conflict.

Collaborative practice for nurses is closer to reality than in the past because of the changes in society and in health care delivery. Collaboration requires certain skills, however, and a risk-taking attitude. Generational issues also increase the chances of conflict in the workplace. Different educational tracks currently separate the training of new professionals in medicine, pharmacy, physical therapy and nursing. Opportunities to work together as students need to be created to improve collaboration. In a sense, the opportunity for collaboration creates conflict among the different professional groups, and shared educational opportunities, when possible, could reduce this conflict. Today, when nurses choose collaboration, they choose conflict. This realization and knowledge of strategies to deal with conflict may move us closer to a preferred future.

Collaboration between Nurses and Physicians: The Need for a Broader View

KAREN DUNN LOPEZ ♦ GAIL KEENAN

A comprehensive review of the state of the science on nurse–physician collaboration was presented in the sixth edition of *Current Issues in Nursing* (Baggs, 2001) and was extended in the seventh edition (Keenan & Tschannen, 2006). This chapter builds on previous chapters to advance our understanding of nurse–physician work relationships and their potential to improve health care quality and the quality of work life for both nurses and physicians. In addition, the chapter presents the implications that more recent research has for practice.

OVERVIEW

In the sixth edition, Baggs identified the antecedents and outcomes of collaboration (Baggs, 2001). The antecedents included, time, availability, receptivity, assertiveness, and problem-solving skills of the nurse and physician, and supportive work group norms. The outcomes included quality of care, mortality rates, cost of care, patient satisfaction, and nurse job satisfaction and retention. In summary, Baggs (2001) asserted that evidence indicates that the two professions were moving toward stronger levels of collaboration between nurses and physicians. Nonetheless, the major challenge identified was that nurses and physicians do not agree on the meaning of interdisciplinary collaboration.

The review of literature in the seventh edition (Keenan & Tschannen, 2006) provided additional evidence to support Baggs's conclusions, as well as further delineating some of the factors and identifying new factors. Antecedents of collaboration identified included staffing levels; nurse experience and education; and specific environmental factors, including job autonomy, job control, and nurse manager participation in clinical and administrative decisions. A new factor, effective communication styles, also emerged as an antecedent

condition for collaboration. The findings of the seventh edition chapter supported the outcomes of patient satisfaction, nurse satisfaction, and nursing turnover that Baggs (2001) identified. New factors related to nurse satisfaction in work relationships were job stress, group cohesion, and nurse satisfaction with decision making. Findings related to patient outcomes (only patient length of stay was examined) were mixed. Keenan and Tschannen (2006) concurred with Baggs that the discrepant understanding of the meaning of *collaboration* between the professions continued to present major limitations in this area of research (Table 50-1).

RECENT RESEARCH

Through a variety of means, 17 related research studies were identified to evaluate changes in the state of the science on nurse–physician collaboration following the Keenan and Tschannen (2006) review. All of the studies reviewed were published from 2005 to 2008. The key study characteristics are presented in tables organized into research by predominant focus: antecedents (Table 50-2), antecedents and outcomes (Table 50-3), process (Table 50-4), process and outcomes (Table 50-5), and outcomes (Table 50-6) of nurse–physician collaboration.

Overview of Methodologies

Eight studies focused on the construct of collaboration, and the rest focused on related constructs, including communication, collegial relationships, joint practice, teamwork, teamwork culture, and multidisciplinary team planning. The research took place in a variety of in-patient settings, including intensive care ($n = 3$), operating rooms ($n = 3$), general medicine ($n = 3$), psychiatry ($n = 1$), neurology ($n = 1$), and procedure labs ($n = 1$). The remaining two studies were conducted at

TABLE 50-1 Definition of Key Terms

Collaboration	Nurses and physicians cooperatively working together, sharing responsibility for solving problems and decision making, to formulate and carry out plans for patient care. (Baggs & Schmitt, 1988, p. 145).
Cooperation	Working together to produce mutual benefit (Clemmer, Spuhler, Berwick, & Nolan, 1998, p. 1004).
Nurse–physician work relationship	Perceptions of the cumulative interaction between physicians and nurses that is related to the common goal of patient care (Dunn Lopez, 2008, p. 6).
Collegial relationship	Work relationships characterized by equal power, trust, and respect (Schmalenberg et al., 2005a, p. 451).
Adversarial relationship	Work relationships characterized by negativity in tone and action (Schmalenberg et al., 2005a, p. 451).
Student–teacher relationship	Work relationship in which both parties are willing to listen, teach, and learn (Schmalenberg et al., 2005a, p. 451).
Friendly–stranger relationship	Work relationship in which parties may be courteous but have little trust and acknowledgment toward the other (Schmalenberg et al., 2005a, p. 451).

the health system level ($n = 1$) and the statewide level ($n = 2$). Three studies were interventions studies, and the remaining 14 were cross-sectional or longitudinal designs. Six of the studies were conducted at a single hospital and of these, 4 included multiple units. Physicians were included with nurses as the subjects in a greater proportion of the reviewed studies in this time period than the previous two reviews ($n = 12$). Although the majority of the studies had nurse-only investigators ($n = 9$), physicians were coinvestigators or the principal investigators in 7 studies, with the remaining study led by investigators of other disciplines. Patient outcomes were assessed in 4 studies. Convenience sampling was used as the primary mode of accessing subjects, with only 1 study using a random sample (Manojlovich, 2005). Three studies used a quasi-experimental design, 2 of which used an intervention and a control group. Like earlier reviews, surveys were the primary source of data ($n = 9$), but a greater variety of data sources were used in this time period and included qualitative interview ($n = 4$), qualitative ethnographic observation ($n = 1$), and chart review ($n = 4$). None of the reviewed studies used administrative or other large databases.

Overview of results

Antecedents of collaboration continued to be a focus of research during this time period. Like the earlier reviews “supportive environmental conditions” were found to be associated with higher levels of nurse–physician collaboration (Manojlovich, 2005; Manojlovich

& DeCicco, 2007; Schmalenberg et al., 2005a). Specific environmental factors found to be important included: nurse manager’s support (Schmalenberg et al., 2005a), organizational culture (Schmalenberg et al., 2005a) and joint practice structures (Schmalenberg et al., 2005b). A new antecedent to collaboration, “agreement with priorities of care,” was examined during this time period (Evanoff et al., 2005). In this study, researchers found that full agreement on patient’s priorities of care between physicians and nurses occurred in only 17% of the cases (Evanoff et al., 2005). Unlike earlier reviews, “effective communication styles” and nurse staffing were not examined in the research reviewed for this chapter.

Two studies used the Jefferson Scale of Attitudes toward Physician–Nurse Collaboration (Hojat et al., 1999) to study attitudinal antecedents to collaboration. This survey measures overall beliefs about the importance and need for collaboration between physicians and nurses rather than perceptions about actual workplace collaboration (Sterchi, 2007; Thomson, 2007). Consistent with earlier reviews, both studies found that nurses and physicians have discrepant “attitudes toward collaboration,” with nurses perceiving a greater need for collaboration than physicians (Sterchi, 2007; Thomson, 2007). In addition, nurse and physician experience was explored as an antecedent in one of these studies. This study found that while physicians’ attitudes toward the need for collaboration increased with years of experience, the converse was true for nurses (Sterchi, 2007).

Studies of antecedents to collaboration also included outcomes that are presented in Table 50-3. Studies in

TABLE 50-2 Studies of Antecedents to Nurse–Physician Collaboration (2005-2008)

Study	Aim	Design/Methods	Sample/Setting	Selected Variables	Selected Findings
Evanoff et al. (2005)	To assess communication and consensus regarding patient care goals between physicians and nurses.	Qualitative using interviews	RNs Resident MDs One U.S. hospital Four general medical units Two neurology units	Communication Collaboration Perceived priority of care	RNs and resident MDs agreed on priorities of care in only 30% of cases.
Schmalenberg et al. (2005a and b)	To identify structures that foster collegial and collaborative RN–MD relationships.	Qualitative using interviews	RNs MDs Specialty units in five U.S. hospitals with demonstrated collegial and collaborative RN–MD relationships (144 interviews completed)	Collegial and collaborative relationships	Organizational culture and nurse manager support can enable collegial and collaborative RN–MD relationships.
Schmalenberg et al. (2005a and b)	To determine the extent that structures identified by the National Joint Practice Commission are operational.	Qualitative using interviews	Specialty units in five U.S. hospitals with demonstrated collegial and collaborative RN–MD relationships (144 interviews completed)	Joint practice committees Primary nursing Autonomous decision making by RNs Joint practice record review	Interdisciplinary rounds, which vary in intensity, have replaced joint practice committees and were present in all hospitals. All hospitals had autonomous decision making for nurses. Primary nursing not viewed to be essential to RN–MD relationships. None of the hospitals had joint practice record review.
Sterchi (2007)	To measure RNs and MDs attitudes toward collaboration in a surgical setting.	Descriptive using cross-sectional surveys	RNs (72 surveys completed) MDs (65 surveys completed) Operating room unit One U.S. hospital	Collaboration	RNs had a more positive view of collaboration than MDs ($p < .000$). The data suggests that with increasing years of MD experience, MD attitude toward collaboration with nurses more positive. Conversely, as RNs' years of experience increased, RNs' attitude toward collaboration decreased.
Thomson (2007)	To measure differences between RN and MD attitudes toward collaboration.	Descriptive using cross-sectional surveys	RNs (65 surveys completed) MDs (37 surveys completed) One U.S. hospital Multiunits	Collaboration	Trends in the data suggest that nurses have a more positive attitude toward collaboration than physicians.

ICU, intensive care unit; LOS, length of stay; MD, medical doctor; RN, registered nurse.

TABLE 50-3 Studies of Antecedents and Outcomes of Nurse–Physician Collaboration (2005-2008)

Study	Aim	Design	Sample/Setting	Selected Variables	Selected Findings
Manojlovich (2005)	To investigate relationships among practice environment, RN–MD communication and job satisfaction.	Descriptive Predictive Using cross-sectional surveys	RNs in one U.S. state (332 surveys completed)	Communication Practice environment Job satisfaction	Practice environments favorable to nursing were associated with improved perceptions of RN–MD communication. RN–MD ($R^2 = .2$) communication was predictive of RN job satisfaction ($R^2 = .61$)
Mohr et al. (2008)	To determine the influence of hospital level teamwork culture on RN and MD resignation rates.	Descriptive Predictive Using cross-sectional surveys	Hospitals in the U.S. Veteran's Administration health system (approximately 15,000 MDs and 40,000 nurses).	Teamwork culture Resignation rates	Results suggest that hospitals with a strong teamwork culture have lower resignation rates for RNs ($P = .02$) and MDs ($P = .02$).

ICU, intensive care unit; LOS, length of stay; MD, medical doctor; RN, registered nurse.

TABLE 50-4 Studies of Process of Nurse–Physician Collaboration (2005-2008)

Study	Aim	Design	Sample/Setting	Selected Variables	Selected Findings
Stein-Parbury & Liaschenko (2007)	To analyze breakdown in RN–MD collaboration in terms of types of knowledge (case, patient, and person)	Qualitative Ethnographic field study	One ICU unit Australia (12-bed unit, 320 hours observation, 12 nurse interviews)	Collaboration Knowledge	Collaboration broke down in caring for confused ICU patients over use of case (biomedical) knowledge versus patient knowledge.

ICU, intensive care unit; LOS, length of stay; MD, medical doctor; RN, registered nurse.

this group focused on professional job outcomes, such as job satisfaction and resignation rates, rather than patient outcomes. The influence of nurse–physician relationships on nursing job satisfaction was mixed. While Manojlovich (2005) found nurse–physician communication to be predictive of nurse job satisfaction, another study (refer to Table 50-5) found that nurses had high job satisfaction and enjoyment of their

workplace despite difficult and unpredictable relationships with physicians (Skei, 2008). Although job satisfaction is often used as a proxy for job retention or turnover in health service research, one health system–level study in this group examined resignation rates (Mohr, Burgess, & Young, 2008). The authors of this study found that hospitals with a strong teamwork culture had lower resignation rates for both professions.

TABLE 50-5 Studies of Process and Outcomes of Nurse–Physician Collaboration (2005-2008)

Study	Aim	Design	Sample/Setting	Selected Variables	Selected Findings
Boone et al. (2008)	To evaluate the impact of conflict management training.	Quasi-experimental using cross-sectional surveys Two groups	RNs Two cardiovascular procedure labs (experimental 9 survey series completed, control 18 surveys completed)	Collaboration and conflict resolution	Conflict resolution, as a single intervention did not change RNs' perceptions of collaboration with MDs.
Cowan et al. (2006)*	To assess the impact of how multidisciplinary team planning interventions influenced patient outcomes.	Quasi-experimental Two groups Retrospective and prospective chart review	General medical units U.S. hospital (experimental patients N = 581, control patients N = 626)	Multidisciplinary team planning LOS Mortality Readmission Hospital costs	Patients with multidisciplinary team planning experienced reduced length of stay ($p < .0001$) and reduced hospital costs. No differences in readmission or mortality rates.
Jain et al. (2006)	To assess the impact of a four-part multidisciplinary teamwork intervention on patient outcomes.	Quasi-experimental using cross-sectional surveys Retrospective and prospective chart review	One ICU (28 beds, 2-year data collection)	Teamwork Nosocomial infection rate Adverse events Length of stay Hospital costs	Multidisciplinary team meetings appeared to improved communication. The four-part intervention appeared to have improved ventilator-associated pneumonia ($p = .04$), sepsis ($p = .03$), adverse events and hospital costs (21% reduction per ICU discharge).
Nakanishi et al. (2006)	To examine the impact of RNs' collaboration with MDs in medication management on patient outcomes.	Descriptive Retrospective chart review	26 acute psychiatric units in Japan (N = 143 patient charts; 55 nurses)	Collaboration in medication management Social functioning	Patients whose RNs documented collaborating with MDs in managing medication had higher social functioning ($p < .05$). Collaboration did not appear to influence acceptance of medication.
Skei (2008)	To extract meaning from the lived experiences of nurses regarding collaboration with orthopedic surgeons.	Qualitative using interviews	Operating room RNs (N = 5) Two hospitals in Norway	Collaboration	Collaboration with orthopedic surgeons is difficult and unpredictable. RNs enjoyed workplace despite difficult relationships with orthopedic surgeons.
Vazirani et al. (2005)*	To assess the influence of multidisciplinary team planning interventions on communication and collaboration on a general medical unit.	Quasi-experimental Two groups Cross-sectional surveys	RNs and MDs of general medical units (123 RN, 111 house staff, and 45 attending physician surveys completed) One U.S. hospital	Multidisciplinary team planning Communication Collaboration	MDs in the intervention group reported greater collaboration with RNs ($p < .001$), with resident MDs having the largest effect. RNs in both groups reported similar levels of communication and collaboration ($p = .59$).

ICU, intensive care unit; LOS, length of stay; MD, medical doctor; RN, registered nurse.

*Part of same large study.

TABLE 50-6 Studies of Outcomes of Nurse–Physician Collaboration (2005-2008)

Study	Aim	Design	Sample/Setting	Selected Variables	Selected Findings
Hamric & Blackhall (2007)	To explore RNs' and attending MDs' perspectives on collaboration in caring for dying patients in the ICU.	Descriptive Cross-sectional survey design	RNs (29 surveys completed) Attending MDs (196 surveys completed) Two U.S. hospitals 14 ICUs	Collaboration Perception of quality of care	RNs experienced lower collaboration than MDs ($p < .001$). Both RNs and MDs ($p < .001$) perceived that higher collaboration was associated with higher quality of care.
Makary et al. (2006)	To describe nurse and physician perceptions of collaboration.	Descriptive Cross-sectional survey design	RNs (1058 surveys completed) MDs (surgeons & anesthesiologists, 392 surveys completed) 60 U.S. hospitals within a multistate health system	Teamwork	MDs perceived higher teamwork than RNs.
Manojlovich et al. (2007)	To examine relationships between RNs' perception of their practice environment, RN–MD communication, and patient outcomes.	Descriptive Predictive Using cross-sectional surveys	RNs (462 surveys completed) 25 ICUs within one U.S. state region	RN–MD communication Practice environment RN-assessed patient outcomes	Positive RN–MD communication was associated with lower nurse-assessed rates of medication errors ($p < .001$), ventilator-associated pneumonia ($p < .05$), and catheter associated sepsis ($p < .05$).

ICU, intensive care unit; LOS, length of stay; MD, medical doctor; RN, registered nurse.

Only one study reviewed focused solely on the process of collaboration. In this ethnographic study presented in Table 50-4, investigators examined how types of knowledge influence the breakdown of collaboration (Stein-Parbury & Liaschenko, 2007). The authors found that the types of knowledge physicians and nurses used most often differed. The physicians most often relied on biomedical knowledge, even when it was not applicable to the clinical problem of the patient, whereas nurses most often relied on knowledge of the patient (for example, a nurse's observation that a patient became acutely confused after dressing changes). Unfortunately, the nurses' knowledge of the patient was often dismissed even when applicable, creating a barrier to collaboration (Stein-Parbury & Liaschenko, 2007). This study of work processes provides new knowledge of professional differences and the role this plays in barriers to collaboration.

Studies that focused on both process and outcomes of nurse-physician collaboration are presented in Table 50-5. Unlike the studies of outcomes in Table 50-3, some in this group of studies included patient outcomes. Three studies (Cowan et al. and Vazirani et al. were part of one larger study) had quasi-experimental designs that tested multidisciplinary interventions designed to promote interaction between physicians and nurses (Cowan et al., 2006; Jain, Miller, Belt, King, & Berwick, 2006; Vazirani, Hays, Shapiro, & Cowan, 2005). Multiple interventions, including multidisciplinary rounds, were tested in each study, making it difficult to understand the relationships among individual interventions in the outcomes. In addition, the interventions were not adequately described, making it difficult for others to replicate the studies. In two of these studies, positive patient outcomes were reported: reduced length of stay, hospital costs, ventilator associated pneumonia, sepsis, and adverse events (Cowan et al., 2006; Jain et al., 2006). The third study had mixed results related to professional outcomes, with physicians perceiving greater collaboration in the intervention group and the nurses perceiving no difference (Vazirani et al., 2005). One quasi-experimental study included a rich description of the intervention (Boone, King, Gresham, Wahl, & Suh, 2008). This study found that conflict training did not change the nurses' perceptions of collaboration (Boone et al., 2008). Another study used retrospective chart reviews. These researchers found higher social functioning for acute-care psychiatric patients whose nurses collaborated with physicians about medication management (Nakanishi, Koyama, Ito, Kurita, & Higuchi, 2006). Finally, as stated earlier, Skei (2008) found through

analysis of interviews with nurses that collaboration with surgeons was difficult, but contrary to results of earlier chapter reviews, noncollaborative work relationships did not adversely affect nurses' job satisfaction (Skei, 2008).

Three studies listed in Table 50-6 focused primarily on outcomes of collaboration. Two studies concurred with findings from the earlier reviews that nurses perceive less collaboration than physicians (Hamric & Blackhall, 2007; Makary et al., 2006). The third study supported earlier studies in this review (Cowan et al., 2006; Jain et al., 2006; Nakanishi et al., 2006) that positive communication is associated with improved patient outcomes, including decreased ventilator-associated pneumonia, sepsis, and medication errors (Manojlovich & DeCicco, 2007).

Summary of Recent Research

Three promising trends related to methodologies were revealed in this more recent literature that separate it from earlier reviews. First, the focus of the research is beginning to shift away from professional outcomes toward measurable patient outcomes. This focus on patient outcomes is critical in order to link professional relationships to quality of care. Second, there is a greater emphasis on the role of physicians, both as subjects and as investigators, in this recent body of research. The prior nurse-centric focus on collaboration presented an incomplete view of the relationship. The inclusion of physicians is of key importance and holds greater potential for a deeper understanding of this complex two-profession relationship. Third, there is increasing movement of the setting of this research to settings other than specialty and intensive-care settings. This shift is very important, as one considers that the majority of hospital beds in the United States are in non-intensive-care beds (Halpern, Pastores, & Greenstein, 2004), and that research conducted in intensive settings that provide a positive context for relationship development cannot be generalized to general medical settings (Baggs & Schmitt, 1997).

One troubling trend continues from the earlier reviews. During this time period, studies of nurse-physician work relationships included six overlapping and sometimes poorly defined constructs to collaboration. While it is likely that many of these constructs (e.g., collegial relations, teamwork, and cooperation) represent effective work relationships, they are not necessarily collaborative. This lack of clarity and consistent meaning limits comparison across studies.

In terms of overall results, the studies reviewed in this chapter support and extend some of the previous

findings related to the antecedents, processes, and outcomes of nurse–physician work relations. Antecedents identified were nurse manager support, organizational culture, and multidisciplinary practice structures. Professional differences in type of knowledge used represent a barrier to the collaboration process. Results related to professional outcomes for nurses were mixed, suggesting a lessening influence of positive physician relations as a source of job satisfaction for nurses. Several studies provide increased evidence that effective interactions between physicians and nurses appear to positively influence patient outcomes.

The discrepant attitudes between the professions continued during this time period. Nurses continue to perceive the level of collaboration less than physicians do. This suggests that the two professions do not agree on the meaning of collaboration. This lack of shared meaning continues to present a major stumbling block to using a balanced perspective from both professions' perspectives in research.

DEBATE FRAMEWORK

This review underscores the complexity of effective working relationships involving nurses and physicians. Although the major focus of these studies was collaboration, this new literature revealed that many of the work relationships described were not exclusively collaborative as defined by Baggs and Schmidt (1988). Rather, much of this literature suggests that multiple types of interaction, ranging from collaborative, cooperative, teamwork, collegial, friendly–stranger, student–teacher, and adversarial, exist between the nurses and physicians throughout their workdays (Boone et al., 2008; Evanoff et al., 2005; Hamric & Blackhall, 2007; Makary et al., 2006; Nakanishi et al., 2006; Schmalenberg et al., 2005a; Skei, 2008; Stein-Parbury & Liaschenko, 2007). Although, the different types of interaction within these relationships is currently not well understood, there is some empirical support for multiple interaction types on a given unit within a day (Schmalenberg et al., 2005a) and that interaction types are related to the clinical situation and professional expertise (Patel, Cytryn, Shortliffe, & Safran, 2000). The existence of a range of interaction types within a workday underscores the need to look beyond a solitary focus on collaboration in order to better understand nurse–physician work relationships and their relationship to care coordination, quality of care, and quality of work life. In the following debate, we outline our rationale for looking beyond the construct of collaboration with the goal of creating a

specific typology of interaction types to permit a broader view and deeper understanding of nurse–physician work relationships.

A Broader View of Work Relationships for Future Research

Collaboration has been defined as “nurses and physicians cooperatively working together, sharing responsibility for problem solving and decision making, to formulate and carry out plans for patient care” (Baggs & Schmitt, 1988, p. 145). While collaboration among health care workers is an admirable goal, a strict focus on collaboration limits our understanding of nurse–physician work relationships in several ways. First, hospitals are complex, highly technical, and fast-paced work environments (Burns, 2001; Sexton, Thomas, & Helmreich, 2000) that do not often lend themselves to the process of true collaboration. In 2001, Baggs acknowledged that collaboration is an idealized type of interaction that is not the usual mode of practice. Over the last several years, there has been continuous change in the provision of acute care in the United States (Aiken, Clarke, & Sloane, 2000; Porter-O’Grady, 2003; Scott, Ruef, Mendel, & Caronna, 2000). Some of these changes, such as restrictions on resident physician work hours, further reduce time for interdisciplinary interaction needed for potential collaboration (Dawson & Zee, 2005; Fletcher et al., 2005). Many of the studies in this review provide support for the idea that collaboration is not widely practiced (Boone et al., 2008; Evanoff et al., 2005; Makary et al., 2006; Nakanishi et al., 2006; Skei, 2008; Stein-Parbury & Liaschenko, 2007; Sterchi, 2007; Thomson, 2007). Therefore, a truncated focus on a type of idealized interaction shifts our attention from other interaction types that are prevalent in today’s acute-care environment.

Second, like both earlier reviews (Baggs, 2001; Keenan & Tschannen, 2006), this review found that nurses and physicians have disparate perceptions about what collaboration is (Hamric & Blackhall, 2007; Makary et al., 2006; Sterchi, 2007; Thomson, 2007; Vazirani et al., 2005). Nurse researchers typically describe it as a balanced or equal sharing of professional knowledge, decision making, and responsibility for patient care. Physicians, conversely, tend to describe nurse–physician collaboration as excellent communication with nurse members of a health care team headed by the physician leader and primary decision maker. In studies that include both nurse and physician perceptions of their work relationships, physicians typically feel that more collaboration occurs than the nurses (Cadogan, Franzi,

Osterweil, & Hill, 1999; Greenfield, 1999; Hojat et al., 2001; Larson, 1999; Prescott & Bowen, 1985; Sexton et al., 2000; Thomas, Sexton, & Helmreich, 2003). These disparate perceptions create a major impediment to measuring and understanding collaboration, as each profession will interpret a single episode of communication differently. The seriousness of this problem has become more apparent, given that none of the studies included in this more recent review have addressed this problem.

Third, compounding the discrepancy in the disciplinary meanings of nurse-physician collaboration is the wide variation in how collaboration is conceptualized in these studies. For example, patient rounds were used as a proxy for nurse-physician collaboration in several studies without specifying the type, amount, and format of what constituted collaboration in the study (Cowan et al., 2006; Jain et al., 2006; Vazirani et al., 2005). It is unlikely that all forms of patient rounds produce collaboration. One could gain a better understanding if the rounding process were well described, with a particular focus on the extent, if at all, that nurse-physician collaboration actually takes place. In addition to the use of proxies, nurse-physician collaboration also has been conceptualized as a conflict management strategy (Boone et al., 2008), collegiality (Schmalenberg et al., 2005a), and in terms of teamwork (Mohr et al., 2008). Lack of consistent meaning and measurement of nurse-physician collaboration continues to make it difficult to know just what the findings mean for clinical practice and how to apply them. Moreover, though it appears that these researchers are evaluating some form of effective or desirable communication in these studies, the communication mode does not seem to be what Baggs and Schmitt (1988) and others have agreed constitutes "true collaboration."

Finally, studies to date have avoided consideration of situations when collaborative problem solving is not appropriate. Clearly, collaborative communication is not always the most effective form of interaction between two parties. For example, a physician may have no expertise in "the promotion of patient self-care" and thus is not in a position to collaborate with the nurse on this issue. So too, if a physician orders routine vital signs, with rare exception, it is probably a waste of time for the nurse to insist on collaborating about this order. Thus, research that focuses strictly on collaboration ignores and may cast a negative perception on the many instances when effective and desirable communication between physicians and nurses is not collaborative in nature.

Debate Summary

From our perspective, the major weaknesses of this body of literature are (1) the practice of true collaboration is not the primary mode of interaction between physicians and nurses, (2) nurses and physicians do not share a common meaning for nurse-physician collaboration, and (3) nurse-physician collaboration has been conceptualized differently across studies. These gaps seriously limit our understanding of the role that nurse-physician work relationships have in health care quality and quality of work life. Additionally, there is a lack of attention to delineating clinical circumstances when collaboration is needed. This finite focus on collaboration may inadvertently be fostering an inappropriate notion that for nurse-physician work relationships to be effective, collaboration is universally needed.

In line with these limitations, we suggest that future research move beyond the finite view of collaboration to a broader view to include multiple types of communication. Toward that end, a focus on a better understanding of the different modes of nurse-physician communication that are prevalent in today's hospitals and are applicable to multidisciplinary interaction is needed. With a better understanding of actual interactions, a typology and measurement tools can be developed and used in subsequent research to isolate the best match between an interdisciplinary issue and the most effective communication mode.

IMPLICATIONS FOR PRACTICE

This review and debate highlight the limitations in the body of research in the area of nurse-physician collaboration that make it difficult to interpret and apply findings to clinical practice. Nonetheless, the case for effective communication patterns and relationships between physicians and nurses has been made stronger in recent years, with several studies finding links between nurse-physician "collaboration" and improved patient outcomes (Cowan et al., 2006; Jain et al., 2006; Manojlovich & DeCicco, 2007; Nakanishi et al., 2006). Given this important link to health care quality, this section is dedicated to suggesting ways one might apply what has been learned from this research despite its limitations.

One condition that appears to be integral to promoting positive nurse-physician interaction is having a structure for information exchange. Although, these structures have differing names in the literature, such as joint practice structures, multidisciplinary rounds, and multidisciplinary team planning (Cowan et al., 2006;

Jain et al., 2006; Schmalenberg et al., 2005a; Vazirani et al., 2005), all seem to focus on having a regular planned time of patient-centered communication between the two professions. While the format for group and individual interaction was not well described in these studies, other studies included in this review offer some suggestions for factors to consider when planning for multidisciplinary information exchange. A starting point may be to discuss the priorities of care for individual patients so both professions are working toward common goals (Evanoff et al., 2005). Findings from another study suggest that nurses and physicians need to be cognizant of the value of different domains of knowledge brought by both professions during these multidisciplinary forums. This awareness and respect for the other profession's knowledge base may limit communication breakdowns (Stein-Parbury & Liaschenko, 2007).

In addition to having dedicated time for information exchange, nurse manager support or participation in information exchange continues to play a role in promoting positive nurse-physician communication (Schmalenberg et al., 2005a). Although clinical situations that specifically require collaboration have yet to be studied, it is recommended that nurse and physician managers attempt to informally identify the types of problems amenable to collaboration and how and when these manifest in day-to-day practice. Having this information in hand, the managers then can design conditions to support desired levels of interaction more effectively in day-to-day practice in their workplace.

Before recent times, nursing knowledge has not been represented in ways that support clear articulation of the nursing component of health care. Consequently, this has fostered the belief by others that nursing has no unique body of knowledge and has limited the nurse's ability to articulate confidently the value and worth of nursing work in multidisciplinary forums. To address this problem, researchers have been developing and refining standardized terminologies as a means of enhancing nursing communication by providing the language to clarify and make nursing practice more visible. Keenan and Yakel (2005) have been involved in this effort and specifically focusing on integrating standardized nursing terminologies into practice. As part of their mission, the Hands-on Automated Nursing Data System research team is dedicated to refining a technology-supported care planning methodology that facilitates the continuous and accurate communication of nursing care information to nurses and other members of the health care team. We encourage nurses to get involved in learning and integrating standardized

terminologies into practice as a means of enhancing the effectiveness of disciplinary and interdisciplinary communication.

SUMMARY AND FUTURE DIRECTIONS

Scholarly interest in the area of nurse-physician work relationships has been ongoing among nursing scholars for several decades. However, an overreliance on the nursing perspective, as well as the belief that only interactions that are collaborative are effective, impedes a deeper understanding of these complex relationships and their role in health care quality. Studies reviewed in this recent review show a much greater interest in constructs related to collaboration by physician researchers. With this new interest, moving forward to find a broader, common understanding of types of effective interaction between the professions is both possible and timely. In addition, the link between nurse-physician work relations and quality has been made stronger by research conducted over the last three years. Therefore, it is critically important that the scholars in nursing and medicine move forward together to explore the full potential that this work relationship has for improving health care quality.

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Health Professions Education in Community-Based Settings: A Collaborative Journey

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The delivery of health care in the United States has undergone unprecedented change in recent years. Increasingly, the U.S. “system” of health care delivery is recognized as not being a system at all; rather, uncoordinated sectors of care delivery operate within narrow spans of interest and expertise. Little communication occurs among professional disciplines caring for the same clients or among professionals practicing in various levels of care delivery such as acute care, home care, primary care, long-term care, and others (Greiner & Knebel, 2003). Systematized interdisciplinary care is not readily available to individuals coping with chronic illness in community settings. Even in acute care hospitals where health professionals from many disciplines practice daily, lack of interdisciplinary communication can lead to mistakes that can inconvenience or harm clients (Alvarez & Coiera, 2006). An unacceptably high number of health care errors occur; the resultant dire consequences to individuals are a call to health professionals to improve quality, accountability, and effectiveness in health care processes. A key factor in the nation’s potential for success in transforming health care delivery processes into a safer, more cohesive, and seamless system is the ability of health care professionals to collaborate in interdisciplinary teams and across health care delivery settings (Institute of Medicine, 2001). This concept, so simple in vision yet so difficult to achieve, is one that must be operationalized if safe, effective care is to be achieved.

The purposes of this chapter are to explore collaboration within the context of health professions education and to describe the evolution of long-term collaborative relationships at East Tennessee State University among health professions faculty and students and with regional communities. East Tennessee State University is a doctoral/research-intensive regional institution with a specific mission to educate health professionals. East

Tennessee State University is one institution that has attempted to improve collaborative skills through the education of its health professions students in community-based settings and in interdisciplinary learning activities for nearly two decades.

NURSING AND MEDICAL EDUCATION

The evolution of education in nursing and medicine—the health professions that contribute most directly to client care—has a profound impact on the ability of all health professionals to collaborate effectively. Nursing and medicine arose from the tradition of caring for the health and illness needs of individuals, but as the disciplines became formally recognized, distinct differences in their educational patterns and patient care roles became institutionalized. Early in the twentieth century, the medical profession organized schools at the graduate level in university settings, creating a single path to the legal right to practice medicine. Nursing remained closely aligned with service and gender-based subservience in hospital training schools. Thus, autonomy and societal acceptance of medicine as a profession were established readily, while recognition of nursing as a profession was delayed. As medical schools developed, they fostered professional autonomy and the idea that the physician was the sole decision maker and ultimate authority in all client care, an idea that continues to compromise client safety and the multidisciplinary practice environment today. Nursing schools, however, fostered subservience to physicians that paralleled women’s gender role expectations, a historical occurrence that still shadows the profession (Group & Roberts, 2004).

Nursing and medicine maintain different philosophical approaches to the education of students and to their professional practice. Historically, medicine

has been found to value content, rationality, data, and assimilation of scientific information in the educational strategy over attention to the social and relational aspects of health care (Bloom, 1988; Greenlick, 1992), while nursing has been shown to value and teach a more holistic and relational approach to care for both well and ill individuals (Lindeman, 1995). Evidence exists, however, that professional values for nursing and medicine are beginning to converge as each profession copes with changing societal expectations and with the vast changes in the health care delivery system. Both professions embrace patient dignity, welfare, and autonomy; value professional integrity; and are placing increasing emphasis on social justice in health care (ABIM Foundation, 2002; Campbell et al., 2007; Fahrenwald et al., 2005). These values are transmitted to students from faculty and are continually reinforced through educational processes.

One similarity between nursing and medical education is that for many years the focus of educational experiences for groups has been centered in hospitals. Hospital care has made significant contributions to the preservation of human life and offers an unparalleled opportunity for health professions students to care for acutely ill patients with highly complex conditions. Yet, today's students also must gain the competencies needed to prevent illness, promote health, provide primary care, address environmental issues, and assist individuals and families to cope with the effects of chronic illness in their own life setting. Health professions students need the opportunity to find their place outside hospital walls as participants and leaders in improving the health of the community (Greiner & Knebel, 2003). Community-based interdisciplinary approaches to learning can make a significant difference in graduates' expectations for practice (Florence, Goodrow, Wachs, Grover, & Olive, 2007).

COMMUNITY-BASED EDUCATION AND PRACTICE

Community-based education and practice tend to be perceived and defined differently by medicine and nursing, with each perception consistent with the implicit and explicit values of the profession. Nurses tend to view "community-based" as the incorporation of the entire community—homes, schools, homeless shelters, stores, day care centers, public housing units, primary care practices, and others—into the education of nursing students and as sites for professional practice (Carter,

Fournier, Grover, Kiehl, & Sims, 2005). Medicine more often views "community-based" as the incorporation of primary care experiences with a community preceptor into the medical school or residency curriculum and community-based practice as a physician enterprise outside the acute-care setting. However, this is beginning to change as medical schools promote and adopt more interprofessional education courses and experiences (Ho et al., 2008).

However, if the voices of national health policy leaders are heard, community-based education and practice will become more than the site of clinical learning. Community-based education will become a method for shifting power from institutions and professionals to a shared relationship with communities and clients creating a system of safe, effective, and culturally appropriate health care. Community residents, in partnership with health care professionals, will define their health needs and maintain control of the strategies for meeting those needs. This hoped-for pattern is in direct opposition to the current system of education and practice, in which health care organizations and expert professionals decide what the community needs and maintain control of the services offered.

If students are to emerge from health professions education programs ready to participate fully in a delivery system that meets the health needs of populations, significant changes in the approach to medical, nursing, and allied health education must be made. True collaboration among the disciplines and health professionals will be the key to success.

COLLABORATION

To meet the diverse and complex health care needs of communities, the entire health care team must work in concert with clients, families, and community groups to identify appropriate processes to reach the health-related goals set by all participants. No one profession can dictate the priority need and essential intervention or ignore the input of the individual or community receiving care. Rather, respectful, trusting relationships among health care professionals and clients must be established to generate the multifaceted, effective solutions to health problems that challenge communities today. Effective collaboration is essential to meet the health needs of the community by improving communication and enabling a variety of "practitioners to address complex clinical (issues) from different perspectives" (Shi & Singh, 2008, p. 584).

Collaboration involves two individuals, an individual and a group, or two groups. In health care, a collaborative relationship might evolve between a nurse and a physical therapist in a home health care agency, a public health nurse and the members of the hospital medical staff, or the emergency department staff and the community rescue squad. The key to collaboration is the flat, rather than hierarchical, structure of mutual respect and shared power that allows collaborators to gain a comprehensive view of situations, identify priority needs, and develop an integrated response.

Collaboration between Medicine and Nursing

The diverse perspectives of medicine and nursing exemplify the opportunities and challenges of collaboration in today's health care settings. Modern medicine has been male-dominated and focused on cure, treatment, and technology. Modern nursing has been female-dominated and focused on care, comfort, and relationships. It would seem that these two disciplines would fit together perfectly, and yet the professional dyad has experienced conflict that is not easily overcome.

Power relationships between the two disciplines have been a significant barrier to true collaboration because the clear balance of traditional societal, economic, and professional power lies with the physician (Group & Roberts, 2004). These historical patterns of interaction must be replaced with collaborative and team-oriented approaches so the expertise and knowledge of all professions are equally available to clients and the coordination of care for the improvement of patient safety can occur effectively (Greiner & Knebel, 2003). Health professions educators and practitioners increasingly recognize that collaboration between medicine and nursing is not only advisable but critical to the quality and safety of health care in the nation (IOM, 2001).

Collaboration among Health Professionals and the Community

Relationships between community members and health professionals can also be challenging. Health professionals maintain their own language that sometimes excludes those who do not understand the terminology. Professional jargon or conversely colloquial terminology can lead to misinterpretation among potential collaborators. The perceived power of health professionals over community members is real and can disrupt the opportunity for true collaboration. Health professionals and community members often have differing values, beliefs, and priorities. Difficulty in valuing and

appreciating the contributions of community members and professionals can arise. Collaboration with communities, like collaboration among professionals, is a shared process.

Health professionals can begin the collaborative sharing process by becoming part of the community's process rather than being in control of community health-related decisions. This "becoming part of the community" must begin during the educational process so as students graduate and enter practice, they understand and value collaboration to achieve community health goals, promote wellness, and create positive behavioral change (Hayward, Kochniuk, Powell, & Peterson, 2005).

When the East Tennessee State University program started, university representatives began meeting with community members and deciding on community interventions. Faculty and students, at their best, worked "for" the community and, at their worst, "did to" the community. This stage was analogous to the parallel play of toddlers; both the community and the university worked on similar goals, sometimes in the same space, but not together as one entity. Health fairs that students plan and present "to" the community are an example of this stage.

As the program matured, faculty and students began to work "with" community members. In this stage, university personnel began to see the strengths of the community and its members and their ability to take care of themselves, given resources. When students realized the desires and needs of the community, they were able to use their creativity to develop innovative approaches to meet community needs. For instance, health programs were presented in schools based on topics requested by teachers and administrators.

After several years and a constant commitment to the community, faculty and students "became part of" the community, volunteering, assuming leadership positions, and becoming a focal point for social justice and community change. Slowly, the university voices became integrated with, and were often overshadowed by, community voices. Community members began to realize their own power. Collaborations emerged that strengthened the relationships among community members, students, and faculty, and yielded positive results that could not have otherwise occurred. For example, primary care and behavioral health services were integrated into a rural health clinic owned by the College of Nursing, and the university hired a community member to improve the behavioral health care system through grassroots organizing.

Actions such as these moved the collaborative process to the stage of “empowerment,” where the community now takes steps to meet its own needs in ways that reach far beyond what was ever conceived by the health professions faculty and students. The community believes that anything worthwhile can be accomplished, given commitment, time, resources, and collaborative partners. For instance, one rural community that has been a collaborative partner with East Tennessee State University for many years has developed a variety of initiatives targeting drug and alcohol abuse. An anti-drug coalition has formed and employs six staff members to oversee a variety of successful federal, state, and foundation grants. This group has also pooled their political capital to impact state and local legislation focused on underage alcohol use, smoking in public places, and the manufacture of methamphetamine. This final phase of collaboration—the ability of the community to form nonprofit organizations, integrate support from the university where needed, secure grant funding, and educate local, state, and federal officials regarding community needs—is the ultimate outcome of collaborative community–university partnerships.

STRATEGIES TO ENHANCE COLLABORATION

Collaboration takes time, energy, and commitment, and it is best when the parties involved come from a variety of diverse perspectives. However, the strength of diversity also creates challenges. Diverse individuals and groups see the world from a variety of perspectives and may have difficulty setting aside their own views to appreciate the perspectives of others. To improve the potential for successful collaboration, health professionals must develop new and more complex skills, including collaborative problem solving and decision making, conflict management, and teamwork.

Collaborative Problem Solving and Decision Making

One approach to improving collaborative problem solving and decision making is found in the concept of emotional intelligence. Emotional intelligence is best understood as how people “handle themselves and their relationships” (Goleman, Boyatzis, & McKee, 2002, p. 6). People with high levels of emotional intelligence effectively manage themselves and their emotions. They know their personal strengths and limitations, are positive about their own abilities, and can identify how they are feeling and the impact of those

emotions on themselves and others. Because they know themselves so well, they can control the impact of their emotions and be transparent, adaptable, and optimistic. They are the people who take the initiative to move a project forward and reach the agreed-upon goal; they are also able to form teams and manage conflict (Goleman et al., 2002). Emotionally intelligent people also possess social competence and are able to display empathy toward individuals and organizations. They are the servant leaders first described by Greenleaf (1996). Emotional intelligence fosters collaboration through positive communication and the expression of mutual concern.

The concept of emotional intelligence as a basis for problem solving and decision making has been used in interdisciplinary faculty development within community-based learning initiatives and as new groups of students struggle to establish productive and respectful relationships with one another and with community members. The concept of emotional intelligence is used by some faculty as a guide to the self-awareness and social awareness (i.e., empathy) that increases the potential for effective collaboration.

Conflict Management

Conflicts are inevitable among groups of individuals, yet effective collaboration requires that conflicts be managed in a positive, productive way (Dixon, 2007). Principled negotiation, as described by Fischer and Ury (1981), is a method to manage conflict by deciding issues on their merits rather than through bargaining over positions. Negotiators look for mutual gains, but when interests conflict, negotiators insist on basing the outcome on fair standards rather than the will of either side. Principled negotiation should be efficient, produce a wise agreement, and improve the relationship between the two sides. For the process to be effective, negotiators must “separate the people from the problem, focus on issues rather than positions, invent options for mutual gain, and insist on using objective criteria” (p. 15). If an agreement cannot be reached, negotiators select the best alternative, which is usually better for one side than the other and may result in another negotiation effort to move the group further toward a mutual goal.

Conflict at the beginning of the East Tennessee State University community-based interdisciplinary efforts was frequent and required a trial-and-error approach to learning how to manage disagreements. As in every academic endeavor, conflicts continue to arise over course content, schedules, projects, and personalities.

As faculty, students, and community members enter and exit the program, the collaborators strive to stay focused on the vision of community-based, interdisciplinary education and to remain principled in their negotiations.

Teamwork

Teamwork is another part of the collaborative process that assists participants in understanding different perspectives and strengthens relationships. Effective teamwork can be fostered through shared commitment and vision, strength in leadership, and good communication (LaFasto & Larson, 2001; Mattessich, Murray-Close, & Monsey, 2001; Wachs, 2005). A successful team cannot be created in one meeting but rather takes time to evolve. During this time, team members must fully understand their purpose and the team goal, as well as learn to trust one another and the team leader.

In the East Tennessee State University collaborative health professions education initiatives, team building has been fostered consciously. Faculty development activities, retreats, external facilitators, student orientation to the communities, and classroom activities have been used to strengthen team relationships. An interdisciplinary curriculum committee brings team members together regularly to monitor courses and student outcomes, plan future initiatives, and connect the interdisciplinary activities directly to established curriculum structures within the university. Team-building experiences such as problem solving, fine arts, and adventure leadership activities have been used in various parts of the program. Numerous resources include books, equipment, and vendors to assist in the work of team building that will ultimately influence the effectiveness of collaboration (Wachs, 2005). Like management of conflict, team building must receive continuous attention as faculty, students, and community members change as partners in the collaboration.

LONG-TERM COLLABORATION AMONG HEALTH PROFESSIONS FACULTY, STUDENTS, AND COMMUNITIES: AN EVOLUTION

The East Tennessee State University collaborative journey began in 1990 when the Colleges of Nursing and Medicine were approached by business and governmental leaders from a rural county for assistance in rebuilding their shattered health care system. The work produced in this beginning partnership led to the award of three W.K. Kellogg Foundation grants between 1991

and 1998, all aimed at integrating the university with communities and improving the lives and health of people in the region. These early efforts provided the basis for an interdisciplinary community-based health professions education effort that has evolved over almost 20 years.

In this continuing educational effort, selected medical, nursing, public health, and other health professions students share specific learning experiences by participating in long- or short-term partnerships with communities in the region. Faculty members teach and practice in partner communities and are deeply involved in activities that contribute to the community and create learning opportunities for students. Community members identify health-related issues and participate in student learning focused on these issues. Together, the collaborators have made a significant impact on rural, Appalachian communities, the health professions colleges, and the university itself. Box 51-1 provides a time line of the activities of the interdisciplinary community-based effort.

Undergraduate Health Professions Education

In 1991 the goal of the effort was to educate multidisciplinary health professions students in rural primary care settings and communities. The goal was founded on the belief that students who studied and practiced together in communities would be more likely to value the contributions of all professions to patient care and would choose to locate their practices in underserved communities. Undergraduate medical, nursing, and public and allied health students entered the program and stayed together as a cohort for six semesters. As they studied and practiced in partner communities over time, they were expected to collaborate with one another and with community members. As a result of this working relationship, students have promoted health in partner communities (Goodrow et al., 2001).

A recent study of the outcomes of early graduates confirmed the value of this collaborative educational program. The findings of the 10-year cohort follow-up study demonstrated that graduates of the program had significantly greater interest in rural practice, primary care, community health, providing care for underserved clients, and interdisciplinary group collaboration compared to traditional students. In a comparison of "partnership" students' and traditional students' employment locations, there was a statistically significant difference ($\chi^2 = 4.397$; $df = 1$; $p < .05$), with more partnership students currently working in a rural settings. Work in primary care or community health was significantly

BOX 51-1 Major Events in Collaboration, 1990-2009

1990	Community requests collaboration Primary care clinics established in rural community
1991	Community-university formal governance structure established W.K. Kellogg Foundation grant, "Community Partnerships for Health Professions Education" awarded to undergraduate health professions students
1992	Community input into interdisciplinary curriculum revised Rural partnership cohort of nursing, medicine, and public health students enters first site
1993	Primary care clinic establishes second rural community rural partnership
1996	Undergraduate interdisciplinary curriculum revised "Graduate Health Professions Education" grant awarded for graduate health professions students
1998	Two additional communities added "Expanding Community Partnerships" grant awarded for all disciplines on campus
1999	Interdisciplinary health communication course required for all health professions undergraduate students
2000	University mission statement revised to focus on community-based, interdisciplinary collaboration Undergraduate interdisciplinary curriculum revised
2001	Graduate interdisciplinary experience revised
2003	Additional interdisciplinary, community-based grants received (Centers for Disease Control and Prevention, National Institutes of Health, BHP) Interdisciplinary health care ethics course and course on collaboration included in the doctor of science in nursing program
2004	Undergraduate interdisciplinary curriculum revised to include applied community-based research and project
2005	Revised interdisciplinary undergraduate curriculum implemented
2006	Three additional communities added
2008	Two additional departments added to participate in undergraduate courses
2009	Community assessment course added to undergraduate interdisciplinary curriculum

more important ($\chi^2 = 11.58$; $df = 1$; $p < .001$) to community partnership students as compared to traditional students (Florence et al., 2007). These outcomes reflect the successful achievement of objectives in the original iteration of the interdisciplinary, community-based health professions program.

These successes spurred the development and approval of an interdisciplinary collaborative course in health communications. Beginning medical, nursing, and public health students, as well as pharmacy, social work, and psychology students, participate in a course together in small interactive groups. In this course, students learn and practice communication skills among the disciplines and with standardized clients who enact the role of a "real" patient. Communication is approached as a skill, and an emphasis is placed on developing quality relationships whether between client and clinician or among students from nursing, medicine, and pharmacy. This continuing course sets the expectation for collaboration, allows interdisciplinary professors to role-model expected patterns of behavior, and breaks down traditional professional stereotypes that

often are barriers to effective working relationships and can compromise client safety.

Curriculum is never static, and the program initiated in 1991 has evolved with the ever-changing health care and educational environment. The community-based approach to education begun in the partnership program gradually was integrated into medical and nursing curricula for all students. To meet the current needs of students and communities, the program continues to serve as a test site for curricular innovation that calls students to action in partnership with rural communities. For instance, in January 2005, a planned series of three collaborative, interdisciplinary courses for senior nursing, first-year medical, and graduate public health students in three partner communities comprised an innovation. The first course is an orientation to rural community health that occurs in the community with faculty and community members serving as leaders and facilitators. Participation in team-building skills and immersion in the cultural, social, political, and economic aspects of the community provides an introduction to the community. This course is followed by a

rural health research and practice course where students participate in experiential, community-based, participatory research. The focus on research methodology and process culminates in a plan for a community-guided interdisciplinary research and service project that is implemented in a subsequent semester. This version of interdisciplinary community-based education fits with an increased emphasis on translational research within the university and coincides with rising community awareness of the importance of research. The effectiveness of this newest undergraduate initiative will be monitored for effectiveness over time.

In January 2009, the curriculum underwent another iteration that embraces two community-based courses. In the first course, students learn extensively about the community and its culture. In this course, interprofessional students use the process of community-based participatory research (CBPR) (Minkler, Blackwell, Thompson, & Tamir, 2003) wherein research participants are part of the design and implementation of a project and engage in an assessment process with community members to identify key issues that need to be addressed. Students and their community partners identify a project and then implement and evaluate the project the following semester. Throughout this entire process, the focus is on interacting with and learning from one another, the disciplines involved, and the community—ultimately meeting health needs as they are perceived by the community.

Graduate Health Professions Education

Graduate students have been included in the community-based collaborative education efforts as well. In 1996 a plan to bring together family medicine residents, graduate family nurse practitioner students, and graduate public health students was implemented—again funded by the W.K. Kellogg Foundation (Edwards & Smith, 1998). The focus of this iteration was on joint seminars, student-faculty groups focused on specific topics with projects in partnership with community groups, and clinical assignment in sites that modeled exemplary interdisciplinary care. After graduate-level funding was completed, interdisciplinary seminars continued to be offered and assignments were made to interdisciplinary clinical sites by medical and nursing program faculty. Graduate experiences evolved to include students in the doctor of science in nursing program initiated in 2003 and currently provides interdisciplinary learning opportunities for all doctoral-level students in the health professions. These collaborative ventures have opened the door for other joint projects in teaching, service,

and research. For example, a team of researchers from nursing and medicine explored the placement outcomes of family medicine residency and nurse practitioner graduates (Edwards et al., 2006); an interprofessional faculty and graduate student team make an annual trip to Ecuador to engage in service learning with international partners; and an interdisciplinary bioethics course is now available to all health professions graduate students.

Collaborative Education across the University

The success of these collaborative and interdisciplinary community-based efforts affected the entire university. In 1998 an additional project, the Expanding Community Partnership Program, was funded by the Kellogg Foundation. This project provided an opportunity for every academic unit on campus to participate in community-based, interdisciplinary education (Behringer et al., 2004). This project moved the initiative beyond the health professions to other academic disciplines and added more rural counties into the partnership.

In this effort, community members partnered with faculty and students to implement a wide array of projects that would benefit all participants. Examples of partnership projects included the development of a leadership program for rural youth, the production of an award-winning original historical drama about a rural Tennessee town, the initiation and continuation of a Hispanic newspaper, widespread participation in collecting the memories of World War II veterans, and fitness activities and nutrition education for rural schoolchildren. These accomplishments laid the foundation for widespread service-learning experiences that are now integrated into curricula across the university and include continuing community partnerships across the region involving faculty and students from many disciplines.

SUMMARY

The task of transitioning from a traditional model of health professions education to a collaborative, interdisciplinary, community-based one involves changes in organizational culture, including faculty expectations and knowledge (Reece, Mawn, & Scollin, 2003). Although this transition can be daunting, the challenge and synergy that result from collaboration can positively affect students, faculty members, communities, and the fabric of institutions. As a direct result of these projects, interdisciplinary faculty members have taught together, conducted research and practice projects, published, and presented collaboratively, and have

become personally acquainted as human beings. Interpersonal conflict still occurs, and turf battles still occasionally arise, but when a conflict occurs, it is most often based on individual differences rather than a professional stereotype or bias, and it is usually negotiated in a principled manner.

The impact of the institutional change cannot be overstated. The university mission statement was revised to focus on community-based, interdisciplinary collaboration. Curricula within the health professions colleges have undergone significant changes that now include community-based service, education, and projects across the curriculum. The number of spontaneous interdisciplinary projects within the university and with community partners has grown, crossing lines that were not imagined in the past. The challenge of interdisciplinary work entails sustained, committed efforts and hard work (Long, 2000). The journey toward collaboration described in this chapter has been arduous, but the positive outcomes for students, faculty members, and communities have been well worth the effort.

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Overcoming Polarity in Nursing

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Nursing is a polarized profession that is engaged in an ongoing civil war that has rendered nurses relatively powerless despite being the largest and most trusted member of the health care team (Murray, 2007). We have wasted time and energy fighting among ourselves rather than uniting to address emergent concerns put forth by medicine, insurance providers, and health care policy makers and administrators. The inability to advocate for essential rights in the workplace; autonomous advanced practice that improves access to health care; and political, regulatory, and legislative lameness is only one external by-product of this protracted professional quarreling. But far more severe are the internal by-products: mistrust, disrespect, and terrible factions in nursing. This chronic conflict has polarized the profession as different groups take sides and become more and more radical in their position on issues.

HISTORY OF POLARITY IN NURSING

Nursing's history reveals many obstacles that have precluded unification around a common purpose, including representation by competing professional organizations, a lack of political and legislative sophistication, and fundamental disagreement on core essentials for education, regulation, and practice (Grindel, 2006). This culture of conflict in the profession has been linked to oppression theory and considered a contributing factor in the horizontal violence, lack of mutual valuing, and dissatisfaction within nursing, and it has led many to ask if unity is an unachievable goal (Allen, 2004; Thupayagale-Tshweneagae & Dithole, 2007).

Entry-level education for nursing practice has been the most notable, ongoing war in nursing, leaving many wounded and weary, some disengaged professionally, and others hostile and angry (Scott & Cleary, 2007). New battlefields in the profession are developing in the arena of graduate education as proposals and programs

for the Doctor of Nursing Practice (DNP) and the Clinical Nurse Leader (CNL) emerge. Allen and Allison (2006, p. E-123) note that "the history of nursing education is tied to nursing's quest for a professional identity," and this is true because the status of a discipline is often related to the amount of education required for practice (Joel, 2006). Perhaps it is for this reason that nursing's most ardent conflicts are grounded in education requirements for practice. A brief review of oppositional perspectives related to entry to practice and the more contemporary issues concerning graduate nursing education follows.

ENTRY TO PRACTICE

Nurses enter the workplace through many educational programs. This includes diploma schools of nursing, associate degree options in community colleges, and baccalaureate degree programs in universities. Table 52-1 provides information on the current distribution of registered nurses (RNs) in the United States by original and current degrees (Health Resource and Service Administration, 2006). As pressure for an increased supply of nurses has risen, additional options for entry have emerged, including alternate entry programs that allow students with non-nursing baccalaureate degrees to fast track and achieve a baccalaureate or master's in nursing (Raines & Taglaireni, 2008).

Prior to 1940 and the development of the National League for Nursing (NLN), most nurses were trained using an apprenticeship model in hospital affiliated diploma schools. By the mid 1900s, nursing education moved to educational institutions and all states began licensing RNs to assure practice quality (Donahue, 1996; Ruby, 1999). According to Haase (1990), World Wars I and II ushered in new technology, changing roles for women and creating a critical shortage of RNs. Nurse educators and leaders were working to assist the movement of curriculum to the university. Under their

TABLE 52-1 Initial and Current Educational Levels of RNs

Type of Education	Initial Number of RNs with this Degree	Initial % of RNs with this Degree	Current Number of RNs with this Degree	Current % of RNs with this Degree
Diploma	733,377	25.21%	510,209	17.54%
Associate Degree	1,227,256	42.18%	981,238	33.73%
Baccalaureate Nursing Degree	887,114	30.49%	922,696	31.71%
Baccalaureate Other Degree			71,580	2.46%
Masters Nursing Degree	14,979	0.51%	256,415	8.81%
Masters Other Degree			94,386	3.24%
Nursing Doctorate	532	0.02%	11,548	0.40%
Other Doctorate			14,552	0.50%
Unreported	46,098	1.58%	46,733	1.61%

Health Resource and Service Administration (HRSA). (2006). *The registered nurse population: Findings from the March 2004 national sample survey of registered nurses*. Washington, DC: Author.

tutelage, Mildred Montag, a doctoral student at Teachers College, designed a two-year, technical program to rapidly educate nurses and meet the demands of the shortage (Haase, 1990). Soon diploma schools were declining, and community college and university programs were multiplying.

By 1965 proliferation of educational programs stimulated the American Nurses Association (ANA) to convene the Committee on Education, which made a recommendation that educational entry to practice in nursing should consist of two levels: technical, associate degree nurses (ADNs) and professional, baccalaureate degree nurses (BSNs). According to Donley and Flaherty (2008), the ANA “envisioned an orderly transition” to this model because this was the tenet on which two- and four-year programs had been designed; but this did not occur. By now, ADNs were successfully passing the same licensure exam that BSNs were required to take. Nurses and educators from the ADN programs were incensed that the ANA deemed an associate degree nurse technical and a baccalaureate nurse professional when there was no evidence to support this differentiation in practice (Mahaffey, 2002). Debate ensued, and it continues today.

Anthony and Barkell (2008) reviewed letters to the editor in the *American Journal of Nursing (AJN)* from 1900 to 2005. They identified five major themes of concern for nurses during that period, one of which was nursing education. “The theme of nurses’ reluctance to embrace educational reform is reflected in letters to the editor throughout the period studied” (Anthony & Barkell, 2008, p. 102). Even the NLN waited 17 years, until 1982, before affirming the recommendation of the ANA to require a baccalaureate

degree as the minimum degree for professional nursing practice. In 1986, feeling “disenfranchised with the two leading nursing organizations,” associate degree nurses and educators formed the National Organization for the Advancement of Associate Degree Nursing (N-OADN) (Mahaffey, 2002). Thus, the polarity moved from the individual level of staff nurse, educator, and leader to nursing organizations.

Additional assaults on ADN entry to practice occurred as more nursing organizations adopted the baccalaureate degree as the preferred entry to practice initiative. Various State Boards of Nursing also exerted pressure to implement mandated timelines for ADN nurses to achieve BSN education. From 1980 to 1990, nursing research attempted to differentiate practice between graduates of the two-degree programs. Originally minimal differences were found, but new research shows a strong association between higher levels of RN education and positive patient outcomes (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Tourangeau et al., 2007). This conflict has led to the development of two nursing groups with radically different perspectives: those who support multiple pathways into nursing practice and those who support a single, BSN-entry pathway. Over time, these positions have become more radical, intractable, and embedded in the identity of the respective nursing groups.

GRADUATE NURSE EDUCATION

The history of graduate education in nursing, although less dramatic, also lacks unified direction and shared vision within the profession. As university education

became a common path for nurses, so did the progression of nurses into master's and doctoral programs. Master's programs in education, administration, and clinical specialty areas emerged with four areas of advanced clinical education: the nurse midwife, nurse anesthetist, clinical nurse specialist, and nurse practitioner (Hamric, Spross, & Hanson, 2005). Unlike other clinical fields, nursing opted for a master's degree as the highest level of education for clinicians. Carter (2006) could find no clear reason why nursing chose this educational pathway when all of the other health professions moved toward a clinical doctorate. Nurse educators and researchers were encouraged to enter PhD programs, while an advanced clinician's terminal degree became a master's degree. In 1979 Case Western University made an attempt to alter this pattern by instituting a Doctor of Nursing Science (DNSc). The DNSc degree prepared advanced clinical practitioners at a doctoral level in contrast to the PhD that prepared researchers (Carter, 2006). Three other universities followed suit, but for the majority of advanced nursing practitioners, the master's degree met certification requirements and became the more common educational choice.

Then in 2004, despite research demonstrating high-quality outcomes by clinical practitioners with a master's degree (Lenz, Mundinger, Hopkins, & Lin, 2004), the American Association of Colleges of Nursing (AACN) (2004) issued a position statement that introduced a new degree, the practice doctorate in nursing (DNP), and a plan for making this the new terminal degree for advanced practice nursing specialties. Donley and Flaherty (2008) summarize the AACN's justifications for the change as the need to include new nursing knowledge, preparation requirements for working with interdisciplinary teams to collaborate about increasingly complex patients, and the additional content required to learn patient safety, quality care, and avenues for working with informed consumers. The AACN (2006) also wanted to define a single clinical doctorate for nursing and to credential advanced-practice nurses at the level of other comparable health professionals, thus raising nurses to an equivalent status. In response to this declaration, college deans and leaders in health care organizations gathered to discuss the implications for practice and education. The topic became a major subject at national conferences and faculty meetings. Deans argued that scarce faculty resources, limited clinical preceptors, inadequate credentialing for tenure, and competition for PhD students would be critical deterrents to DNP programs (Donley & Flaherty, 2008). Yet,

the AACN (2008) reports that 42 programs currently exist in the United States, and 50 more are under consideration.

The response from advanced-practice nurses and the organizations representing them was more considered and constrained. Organizational leaders met and held forums to discuss with members the ramifications of the proposed educational changes. While all four of the major advanced-practice nursing clinical groups have acknowledged the relevance of gaining equal educational stature with other health professionals and have issued statements on the DNP, they have not fully embraced the ideas enumerated in the AACN proposal (American Association of Nurse Anesthetists, 2006; American College of Nurse-Midwives, 2007; National Association of Clinical Nurse Specialists, 2005; Nurse Practitioner Roundtable, 2008). Additionally, the groups united as the Advanced Practice Registered Nurse Joint Dialogue Group to meet with the National Council of State Boards of Nursing (NCSBN) APRN Advisory Committee and issued a *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education* (2008). In this conflict, the two opposing groups are educators, and practice leaders and regulators in nursing. While the entry to practice conflict has a long history and has become intractable and polarized, this controversy remains healthy, open for debate, and filled with dialogue and collaboration among the groups.

HEALTHY CONFLICT VERSUS POLARIZATION

In the context of this discussion, *conflict* is "the experience between or among parties that their goals or interests are incompatible or in opposition" (Korsgaard, Jeong, Mahony, & Pitariu, 2008, p. 1224). This definition views conflict as a process involving more than one person or group with differing purposes, ideals, or intentions (DeDreu & Gelfand, 2007). Conflict exists on a continuum—from those that are simple and readily reconciled to those that are complex and multifaceted. Some conflicts are short-lived, while others span generations.

Healthy Conflict

The word *conflict* often carries a negative connotation, but it can benefit professions and organizations. Conflict signals that more than one perspective needs to be considered and offers groups the opportunity to consider a broad range of viewpoints when addressing complex issues. Constructive disagreement is a sign of

maturity, well-developed ideation, and ego strength among groups. When healthy debate is fostered, people feel represented, participation increases, and difference is valued. Well-managed conflict can lead to more active engagement, better problem solving, and sounder decision making (Porter O'Grady, 2003).

While conflict is evident in both of the preceding entry to practice and graduate education examples, there are distinct differences between the two. Nursing has only recently begun to hold significantly divergent perspectives on graduate education and the path that it should take to benefit the profession. In this example, healthy conflict has occurred stimulating dialogue, reflection, and reconsideration by practice, regulation, and education of the pros and cons that need to be considered prior to moving forward with the DNP. If managed well, this will lead to a stronger, shared view about the preferred future for advanced practice nurses. It will also connect education and practice in a partnership with a common goal and generate better plans, implementation, and outcomes than could have been created by any one group alone.

In contrast, the entry to practice controversy has persisted over time and resisted multiple attempts at resolution, making it more characteristic of an intractable conflict (Burgess & Burgess, 2006). Intractable conflicts, according to Burgess and Burgess, were originally resolvable, but failure to intervene effectively in the early stages of the controversy and continued development of distrust and disrespect have led to a stalemate with little hope of a positive outcome. In many cases intractable conflicts involve power struggles or instances where one group intentionally or unintentionally attempts to quash the identity of another group (Burgess & Burgess, 2006; Fiol, Pratt, & O'Connor, 2009). As time and events continue, the two groups begin to develop an identity around the conflict and to take sides based on beliefs and perspectives about the outcome that most benefits that group or individual. Burgess and Burgess (2006) also suggest that the losses required by one or both parties to end the conflict begin to be viewed as having greater benefit than what would be gained by resolving it. Eventually, the participants become so polarized that resolution seems impossible.

Polarization

Polarization is a by-product of intractable conflict and is defined as "the process that causes neutral parties to take sides in a conflict. It also causes individuals on either side of the conflict to take increasingly extreme positions that are more and more opposed to each

other" (Maiese & Norlen, 2003). As the groups become more entrenched in their positions, they see each other as enemies, and two poles are created that represent extremes in thinking on the issue.

In nursing, the debate between ADN and BSN education exhibits all of the signs of polarized conflict. The controversy has a 50-year history, with the two opposing groups defining themselves by their position on the issue and seeing each other as adversaries. There is a great deal of distrust among ADN nurses, educators, and leaders and those holding a BSN or higher degree. The two groups have developed organizational exclusivity, refusing to collaborate with the other. These positions can only be described as radical, with little tolerance for respective opinions or shared discussions that consider both groups and options as a solution.

Polarity Management

Polarity management is a concept for dealing with situations where the best of a pair of opposite perspectives are balanced to create a both/and solution rather than an either/or compromise (Johnson, 1992). This method assumes a world full of polarities that are actually interdependent, requiring consideration of both viewpoints for maximum results. Examples we face in nursing and health care today include balancing the needs of the individual profession with the goals of the interdisciplinary team; juggling cost and quality of care; and managing nurse autonomy against compliance standards and regulations. Polarity management looks at the merits of these opposing aspects, while acknowledging that the downsides must also be considered. If the right tension is created between the two poles, the best options emerge.

Overview of Polarity Management Model

How do you determine if something is a problem that can be solved or a polarity that needs to be managed? Johnson (1992) has two main criteria for screening situations and answering that question. First, consider if the difficulty has existed over a long period of time and is ongoing. If a situation involves a polarity, it never seems to end despite a continuing series of interventions and solutions. Next, determine if there are two poles that are more optimal if viewed as interdependent. If circumstances present as polarities, they are intertwined, with neither option being adequate to address the situation alone. Furthermore, if advancing one aspect nets less than the most favorable of outcomes or if failing to have the identified benefits of

both options prevents maximum goal attainment, then a polarity exists (Johnson, 1992).

The first step in managing a polarity is to evaluate the dimensions of the two poles using a structure that Johnson (1992) calls a polarity map. To get an idea of how this works, look at Figure 52-1, a simple map evaluating the polarities of activity and rest. On the left-hand side, the two boxes relate to activity, and on the right-hand side, they relate to the opposite: rest. In box L+, the positive dimensions of activity are identified, and in box R+ are those related to rest. In box L-, the effects of too much activity are noted, while in box R-, those from too much rest are referenced. The polarity map also reveals the higher purpose for balancing the two polarities: the achievement of optimal health and the greatest fear from imbalance: poor health. Viewing the different dimensions within the four boxes makes clear what is gained and lost from focusing on each of the poles. Optimal health requires just the right amount of activity and rest, balancing the benefits and risks from both and seeing them as equally important for consideration.

Polarity Management Applied to Entry to Practice

Historically, nursing entry to practice has been viewed as a problem to be solved rather than a polarity to be managed; the evidence is clear, however, that this issue meets all of Johnson's criteria for a polarity. The debate has existed over an extended period of time, and, despite continued attempts at resolution, the BSN advocates still believe that if we restructure the ADN as a point of entry, we advance the profession's legitimacy, stature, and competence, while the ADN advocates argue that the nursing shortage will never be addressed by supporting BSN-only education. Second, it is clear that the two poles are interdependent. We cannot

address the nursing shortage without every kind of nurse being considered, valued, and encouraged (Raines & Tagliaireni, 2008). And we optimize our solution for ensuring positive patient outcomes, lowering mortality, and improving quality when we increase the educational level of nurses in practice (Scott & Cleary, 2007). These two seemingly opposite poles, when held in balance by promoting the best elements of both while minimizing the limitations inherent in each, offer a solution to the 2008 goals defined by the National Advisory Council on Nurse Education and Practice (NACNEP, 2008): "Thus, it should be the objective of policy makers to: produce greater numbers of nurses to meet growing demand; and build a nurse workforce with the skills and abilities required to work competently in a changing and increasingly complex and diverse health care environment" (p. 2).

Unifying Nursing through Polarity Management

In his book *Solving Tough Problems*, Adam Kahane (2004) opens by saying, "Tough problems usually don't get solved peacefully. They either don't get solved at all—they get stuck—or they get solved by force" (p. 1). Johnson (1992) would add that this might be because those tough problems are actually polarities that require management rather than problems that can be solved. Such is the case with nursing's entry to practice dilemma. Forced methods may mandate that ADN-prepared nurses must gain a BSN by a certain date, but they will never unite the profession and empower it so nurses can become advocates for one another and for patients. Instead, a class system will continue to exist within the profession, and horizontal violence will proliferate.

Johnson (1992) stresses that when polarities are tackled by only one pole, plans and outcomes will be ineffective and result in "sitting on energy." This describes the state of the entry to practice debate in nursing. No effective resolution has been generated because historically the planning and action cycles have not included all affected parties at all impacted levels in nursing. The debate has been housed primarily in the upper echelon of nursing, while practicing nurses struggle daily to work together and get the business of nursing accomplished.

Elicit the Acknowledgment of Interconnectedness

While identifying the entry to practice opposing groups is relatively easy, getting them to acknowledge positive interconnectedness will be more challenging. Clearly,

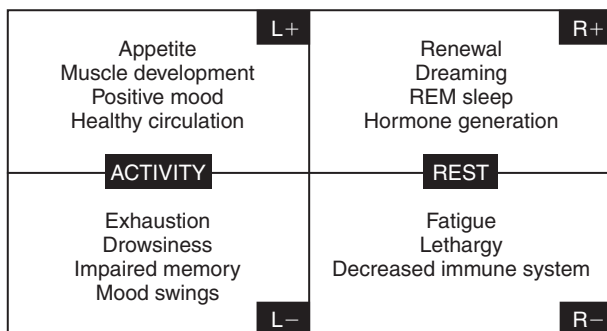


FIGURE 52-1 Activity/Rest Polarity Map.

the requirements for a future nursing workforce, in terms of both numbers and competencies, demonstrates a need to collaborate and honor every entry pathway available for nurses (Buerhaus, Staiger, & Auerbach, 2009). Additionally, NACNEP in its sixth report to the secretary of the U.S. Department of Health and Human Services has noted that ADN programs must continue, especially those that develop affiliated relationships with BSN programs and encourage articulation and continued education of graduates. Recognition that we can reduce our professional pain and promote gains for our discipline through collaboration also increases the likelihood of our working together successfully (Coleman, Hacking, Stover, Fisher-Yoshida, & Nowak, 2008).

Engage the Poles

Once interconnectedness is seen as a required element for the future of nursing, the next step is to engage members at all levels of the opposing poles. This would be a massive undertaking and would require a number of critical steps. First, a nursing association would need to take on the mission of serving as a third-party negotiator for professional dialogue at both national and organizational levels (Scott & Cleary, 2007). One possible organization that could assume that role would be the Nursing Organizations Alliance (The Alliance), which currently has 70 nursing organization members, including associations whose opinions on entry to practice are oppositional. One of the purposes this organization has posted on its Web site is to “provide a forum for identification, education, and collaboration building on issues of common interest so Alliance members can advance the nursing profession in a cohesive way” (Nursing Organizations Alliance, 2005).

Second, creating engagement would need to be both a top-down and a bottom-up process (Coleman et al., 2008). A grassroots group of nurses, focused on promoting unity, could use journal articles, graduate education classes, and public engagement opportunities to stimulate nurses to take action on the entry to practice initiative (Coleman et al., 2008). Small community-based groups could explore the issue; specialty practice associations could hold forums at local, regional, and national meetings to generate white papers stating their positions; regional ADN and BSN educators could collaborate with practice leaders to design models that envision nurses’ preferred future. By publishing and sharing these endeavors, a consensus of ideas from individual nurses, local communities of educators and leaders, and specialty organizations could be developed,

forming national engagement of nurses at all levels around the issue.

Examine the Polarity

Figure 52-2 maps the tensions that must be balanced between the sponsors of a single-path entry into nursing and those that support multiple paths for entry into practice. Above the midline are the positive assumptions about each disparate argument, and below the line are the risks and negatives of the opposing perspectives. Outside the left upper box are actions that will help achieve the positive results from the single-path option, and on the outside right upper box are those actions that advance the positive dimensions of the multiple-path choice. Outside the lower left box are warning signs that too much emphasis is being placed on the elements of the single-path proponents’ ideas, and outside the lower right box that too much importance is being given to the beliefs of the multiple-path advocates. These represent only a few of the possible items that could be placed on the map. If nurses choose polarity management as a conceptual model, one of the first exercises would be creating a polarity map from their viewpoints.

Enter into Dialogue

Dialogue is “a living experience of inquiry within and between people” (Isaacs, 1999, p. 9). It involves thinking together, confronting assumptions, addressing fears, and admitting our animosities. Isaacs stresses that dialogue requires listening to one another with renewed interest by suspending preconceived ideas of what the other is up to or predicting what they will say. It is listening without judging or preparing a defense, respecting differences, and accepting that a more potent solution can be found through collaboration and sharing of ideas than can be achieved through unilateral thinking.

In nursing this means ADN-entry supporters must accept the growing evidence that advancing one’s education is critical for implementing evidence-based care, building the profession’s research and science base, and ensuring improved patient safety and clinical outcomes. It is also imperative for advancement of the profession’s stature among other health care professionals. And the BSN-entry supporters must affirm that without the ADN workforce, nursing’s backbone is weakened and delivery of fundamental patient care is compromised. Additionally, increasing the diversity in nursing requires accessible and affordable avenues for education. Dialoguing will require that everyone listen to and

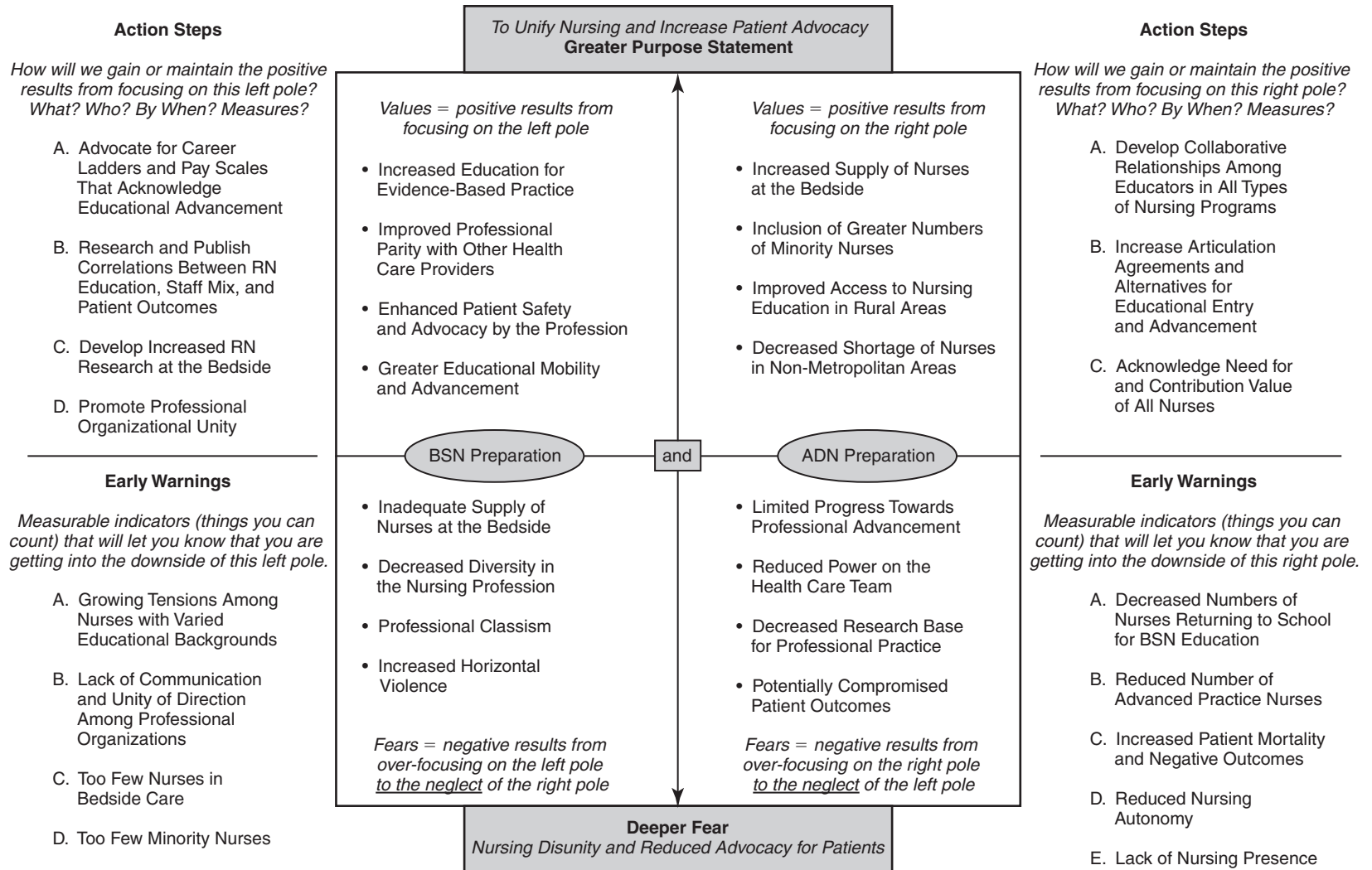


FIGURE 52-2 Polarity Management Map.

honor one another's perspectives and admit the limits that exist with either/or responses to the issue (Scott & Cleary, 2007).

Embrace and Create a Shared Vision for the Future

One of the most powerful extensions of the definition of dialogue is "the art of seeing together" (Scharmer, 2009, p. 135). Scharmer shares that when he worked with groups who were not facing realities around them, conflict and failure inevitably followed. In contrast, groups who excelled stayed in touch with reality no matter how distressing that picture was. Seeing reality requires leaders who listen to followers' perspectives rather than believing that only they can map a vision for followers to embrace. This is antithetical to historical theories of administration that promote the leader as the only guru who knows the future. In today's ever changing world, we need everyone's eyes (Scharmer, 2009). Nurse leaders quickly lose touch with what is going on in the real world of nursing when they become so separated from the places where care is delivered that they have no insight into what is meaningful to the majority members of the discipline. Scharmer (2009) tells us that today the main work of leadership is to work with people to discover "the power of seeing and seeing together" (p. 136). This then is the charge to nursing: Let us look at our needs together, as one profession regardless of our educational level, not separated by our theoretical frameworks and opinions but rather connected and informed by them. It is in this "seeing together" that we can transform our discipline, for our varied views will strengthen our vision rather than weaken it.

SUMMARY

The problem of entry to practice is a critical issue that must be addressed if professional unity is to be gained and the strength of nursing is to be rallied to ensure best practices and the safety of patients under our care. As Fagin and Lynaugh (2005) have noted, "Any group that promises to serve the larger society must be sure of its collective identity and be able to project that identity in a convincing way" (p. 13). A new model for dealing with nursing's collective identity must be considered, and polarity management holds great possibility for forging a more united view of the profession (Scott & Cleary, 2007). Focusing exclusively on either of the poles compromises our ability to meet our dual mission of professional unity and patient advocacy. The nursing

profession must embrace the wisdom inherent in each of the positions on entry to practice and carefully hold the tension between the two so we can access the strength of these interdependent perspectives. Should we do that, not only could we prepare an adequate, competent supply of nurses, but we would also create a synergistic and unified force never before mobilized in the history of our profession.

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Expanding into the Twenty-First Century: Men in Nursing

TODD N. INGRAM

As the first decade of the twenty-first century comes to a close, nursing in the United States continues to be an attractive career with many diverse job opportunities and career trajectories. Recent government figures indicate that there are more than 2.9 million registered nurses in the United States, and 83.2% of them are working as nurses (Health Resources and Service Administration, 2006). This makes nursing one of the largest segments in the U.S. workforce and the largest single group of professionals employed in health care. Yet the percentage of men in nursing remains below 6%—where it has been for decades (McMillan, Morgan, & Ament, 2006).

Nursing salaries continue to grow. The average salary for a registered nurse (RN) working in a hospital today is over \$65,130. The U.S. Bureau of Labor Statistics (2006) predicts that nursing will be one of the top job growth professions in the near future, with over a half million new RN jobs created by 2017. Despite this, analysts predict the nursing shortage will grow to more than 800,000 unfilled positions in the same time period due to increased demand for health care services.

These figures have apparently had a positive impact on both men and women who are looking for a stable career at a decent salary. The American Association of Colleges of Nursing (AACN) (2005) reported that enrollment in entry-level BSN programs has increased by nearly 10% since 2000. Higher-degree programs have seen growth rates just over 6%. Nursing programs have struggled to keep up with these increases. Large numbers of qualified applicants are not admitted due to faculty shortages and clinical resource limitations. In 2005, men represented 9.7% of BSN students, 9.4% of master's students, and 7.2% of doctoral students (AACN, 2005). These percentages may predict higher numbers of men in nursing in the future, but the overall figures indicate that growth will be incremental.

While nursing in the United States remains overwhelmingly female, it is also predominately white. As the United States continues to transition into a more diversified and multicultural nation, there is mounting evidence for the increasing need for a culturally representative health care workforce, particularly in the field of nursing. The U.S. Census currently estimates that there are 35.5 million Hispanics in the United States, and many more that are undocumented (U.S. Census Bureau, 2000). By the year 2050, it is estimated that 25% of the U.S. population will be of Hispanic heritage (Gilchrist & Rector, 2007). Unfortunately, less than 10% of the nursing workforce consists of minority groups, and the percentage of minority men in nursing is only a fraction of that.

The preceding figures are alarming, and they show there are formidable challenges ahead for nursing and health care in the United States. Tapping into populations of men and minorities can be a way to address the projected shortages and cultural issues. However, men and minorities face their own individual challenges as they attempt to enter nursing programs, make their way through basic nursing education, and start their professional careers. New strategies are needed to attract men and minorities into nursing careers and identify the barriers to this career choice for minorities.

It is interesting to note that men in nursing face many of the same obstacles that women faced as they made inroads into traditionally male-dominated occupational areas such as medicine, science, professional athletics, and management positions in business and academic institutions. Although women still face formidable barriers, the increased female presence in these areas is obvious. The growth of men in nursing in the United States has proceeded at a much slower rate compared to some other countries. The United Kingdom, the Netherlands, and Australia have significantly higher percentages of men in nursing (Whitlock & Leonard, 2003). Whether

it's a change in attitude or a focused change in nursing education and the practice environment, nursing in these countries has experienced a more rapid growth in the percentage of men in the workforce.

HISTORICAL BACKGROUND

The primary reason for the low percentage and slow growth of men in nursing is historical. Nursing leaders from the mid-19th to the mid-20th centuries envisioned nursing as a female profession that was not suitable for men (Donahue, 1996; Kalisch & Kalisch, 1986). Consequently, most nursing schools and training programs were closed to men, and even the military refused to commission men into their nurse corps (Bullough, 2006; Westphal, 2003). These institutional and government barriers are gone today, but the age-old expectation that nurses should be female, coupled with modern-day gender issues and social attitudes, continues to keep men away from choosing nursing as a career.

Nursing in the Middle Ages

While the traditions of the last 150 years have maintained the female dominance in nursing, it wasn't always that way. Men have worked in nursing since its beginnings. An early training school for nurses was founded in about 275 BC in India (Donahue, 1996), where men served as surgeons' assistants and provided 24-hour care to patients in a hospital. Men became prominent in nursing during the middle ages when religious orders were established for men and women. Orders such as the Sisters of Charity for women and the Alexin Brothers for men focused on caring for the sick and infirm. The Knights Hospitallers were founded during the Crusades to care for military personnel who became sick or wounded during pilgrimages to the Holy Lands of the Middle East (Anthony, 2006; Mackintosh, 1997). Hospitals soon opened throughout Europe, supported by the religious orders, and providing care to patients segregated by gender. Male patients often received nursing care provided by males under the supervision of a male director of nursing—usually a member of the religious order. Care was based on traditions and sometimes the folklore of the region (Evans, 2004; Mackintosh, 1997).

Nursing in the United States and Europe in the 19th Century

The religious orders were gradually dissolved during the 16th century, and there is little record of organized nursing until later in the 17th century, when large

government-sponsored hospitals began to appear (Evans, 2004; Mackintosh, 1997). However, government funding for these institutions was inconsistent, and as a result, care was often second-rate—sometimes provided by patients who were only slightly less ill than others. Later in the century, nursing training schools were established in the hospitals. Students were educated by physicians, lived at the hospital, and staffed the wards (Donahue, 1996). Men assumed attendant roles, providing custodial care in the large hospitals for segregated patients like lepers and the mentally ill (Evans, 2004).

By the beginning of the 19th century, women had become the most prominent nursing care providers, and men had all but disappeared from nursing (Evans, 2004). With the advent of the Industrial Revolution, more job and career prospects were available for men. The female members of a family took care of all the cooking, cleaning, and child care at home, as well as cared for sick and infirm family members. The males worked the land or had an occupation outside the home to provide for the family. If a woman had no family or wasn't needed at home, hospital nursing was a viable option—whether by entering a religious order or a government hospital training program. Nursing had come to be viewed as a natural calling for a female, and men either drifted away from it or were denied access to it. One exception was psychiatric nursing care, where men were seen as better suited to deal with the agitated and violent patients in the asylums. Many psychiatric hospital training programs either admitted men or established training for men only (Evans, 2004).

The Victorian view of the time saw women as second-class citizens. Social and economic policies and legal opinions kept men in power. A wife was viewed as her husband's property, and single women had limited career options—usually nursing, teaching, or social work (Bullough, 2006; Kalisch & Kalisch, 1986). Women from poor families were often uneducated and illiterate. Economic rights and personal autonomy for women were very limited in this time period. Florence Nightingale, one of the founders of modern nursing, was able to break through these restrictions. She was well educated and, as a member of a wealthy family, well connected politically. It is common knowledge in nursing that she took the first big steps to increase the importance and prominence of nursing in Europe and the United States by reducing the casualties in the Crimean War through better hygiene when caring for the wounded and improved environmental cleanliness in

the hospital wards. This was a significant step in the advent of modern nursing care (Donahue, 1996; Evans, 2004; Mackintosh, 1997).

Nightingale advocated for specialized nursing education and autonomy of practice. This view was adopted by prominent nursing leaders in the United States, and it was the precursor for moving nursing education away from the hospitals and into the colleges and universities. However, she also proposed that nursing was best suited for educated women. Nightingale wrote that females had the best touch and temperament for caring. This implied that uneducated women and men did not possess these skills to the degree needed to be a nurse. Nightingale's U.S. followers founded schools of nursing based on this philosophy, and they restricted admission to female students only (Donahue, 1996; O'Lynn, 2004).

Even the U.S. military services did not recognize men in nursing for officer commissions until the mid-1950s (Bullough, 2006). Male nurses served as enlisted corpsmen but were denied officer status. Sex discrimination, common for women throughout history, has eased due to civil rights and affirmative action legislation. However, men did not qualify for most of these affirmative action mandates. The result was a furthering of the feminization of nursing in hospitals and schools throughout the United States (O'Lynn, 2004). From the late 19th to the mid-20th centuries, men in this country were effectively shut out of nursing. Most men lacked any knowledge of the role of men in the history of nursing and had no basis to consider nursing as a legitimate career.

CURRENT ISSUES FACING MEN IN NURSING

A large survey conducted by the Bernard Hodes Group (2005) revealed that men enter nursing for many of the same reasons women do. Nearly 500 men in nursing listed the following as their top five reasons for entering a career in nursing:

1. A desire to help people
2. A profession with many career paths
3. A stable career
4. Many geographic choices for practice
5. Solid salary and benefits (p. 14)

The same group listed the following as the primary challenges for men in nursing:

1. Stereotyping
2. Being a male in a female-dominated profession
3. Questions about whether other professions would be more appropriate

4. Lack of male role models and mentors

5. Lack of career guidance toward nursing in high school (p. 18)

So as the world enters the 21st century, men in nursing continue to face issues that are rooted in the past. Sexual stereotyping and gender discrimination are still primary issues for men in nursing education and clinical practice. These two issues have several subissues for men, including problems with intergender communication, assumptions regarding sexualization of touch in care settings, questions about masculinity, lack of mentors in the profession, and insufficient knowledge of the history of men in nursing. For some men in nursing, these issues are alive and significant. Others see them as issues but not as significant in their professional lives.

Sexual Stereotyping

A primary issue listed by the majority of men in nursing is a lingering societal view that most men in nursing are gay (Harding, 2007). While most men and women in nursing consider this a nonissue, there are still attitudes among some health care consumers that stigmatize gay men as sexual predators (Crigger, Lukman, & Galusha, 2007; Evans, 2002). This attitude not only stigmatizes gay men in nursing, but it causes many heterosexual men who work in nursing to feel that they must defend their sexual orientation (Harding, 2007; Tillman & Machtmes, 2008). This is often at odds with the traditional notion that a nurse must be a gentle and caring person. Both men who are nurses and male nursing students report a heightened consciousness and carefulness when touching patients, fearing that routine care situations might be interpreted as sexual aggression (Evans, 2002; Harding, 2007; Madoka, Chapman, & Wynaden, 2006). Ultimately, this inhibits men while performing the caring work they list as their primary reason for entering nursing.

Sexual Harassment

An additional issue is sexual harassment of nurses and nursing students in clinical settings. Studies show that both male and female students are harassed by patients and other professionals. Men are more likely than women to experience ridicule for choosing a nursing career (Bartfay & Bartfay, 2007). Despite acceptance of men in other previously female-dominated professions, like teaching, library science, and social work, men who enter nursing are often seen as unmanly or as potential sexual predators. Both men and women in nursing practice report frequent sexual harassment ranging from mild, teasing remarks to overt, aggressive gestures

from patients and other professionals (Bronner, Peretz, & Ehrenfeld, 2003). While the majority of the harassment was mild to moderate, about one-quarter of female nurses and one-third of male nurses experienced severe harassment. The study noted that men were less likely to respond assertively to the more severe harassment. Organizations today in the United States have policies in place to address sexual harassment in the workplace, but these policies are more difficult to apply if the source of the harassment comes from patients.

Gender Discrimination

Men identity gender discrimination at all levels—from their basic nursing education to clinical practice. In nursing education, there is little or no presentation of the history of men in nursing in classes or textbooks. Many nursing textbooks also use feminine pronouns instead of gender-neutral language. Men also note they are often assigned as the only man in a clinical or project group, which magnifies their minority status (Bartfay & Bartfay, 2007). In addition, there seems to be few male mentors or advisors available in many programs. Finally, men report being seen by female peers as being primarily suited for tasks requiring physical strength and lacking in empathy and a gentle touch (Crigger et al., 2007).

In the clinical practice areas, the issues are much the same. Male and female nurses report assumptions by other disciplines that men are more decisive and possess more technical knowledge but are less likely to be empathetic or to have the same gentle touch with patients (Pastorius, 2007). Men in nursing are also more likely to be rejected as caregivers for their patients (Bronner et al., 2003).

Overcoming the Stereotypes

Despite the presence of these issues, new evidence shows that men and women in nursing are working to overcome the common attitudes and stereotypes. A large study commissioned by American Mobile Healthcare (2006) surveyed nearly 1600 men in nursing on gender differences in the workplace. Nearly three-quarters of the respondents reported that nursing as a female-dominated profession had either no effect or a positive effect on their choice to enter nursing. The same percentage said they never or only occasionally experienced gender discrimination in the workplace, and over 90% reported that they never or only occasionally felt belittled by co-workers, friends, or patients because of their occupation. Another study (McMillian et al., 2006) found that females in nursing became more accepting of male colleagues the longer

they worked together. And a comparative study done in 1992 and 2002 (Jinks & Bradley, 2004) revealed that nursing students' attitudes are more accepting of men in nursing, and the traditional gender stereotyping is gradually diminishing.

There are also reports that nursing is moving more to a culture that values gender-balanced care teams, with leadership characterized by genderless communication and individual qualities rather than gender stereotypes (Doucette, 2006; Grossman, 2008; Mansfield, 2006). This may indicate that nursing is gradually moving toward overcoming many of the traditional attitudes and resultant discrimination that has delayed more gender balance in the profession.

TRENDS AND A LOOK TO THE FUTURE FOR MEN IN NURSING

The history of nursing in the United States is actually the history of *women* in nursing. This excludes nearly half of the available population that could become nurses. There is no doubt that numerous women have brought nursing into prominence in the American health care system. There is also little doubt that nursing must extend its efforts to increase the numbers of men and minorities entering the profession. One of the *Healthy People 2010* goals emphasizes developing health-promotion and disease-prevention programs and initiatives to decrease and eliminate health care disparities that affect the well-being of Americans, especially those who are underprivileged and underserved in the current health care system. Many of these disparities take place along racial and ethnic lines, as well as social and economic levels (Byrd & Clayton, 2002; Smedley, Stith, & Nelson, 2003).

Positive effects of more men and minorities in nursing could help alleviate the current and future nursing shortage, meet the coming health care demands of the aging baby-boomer generation, address the goals of the *Healthy People 2010* initiatives, and add to the gender balance of a changing profession. There are three general areas of concentration to meet the challenge of increasing the numbers of men in nursing: improving the current nursing workplace conditions, finding new ways to reward and retain nurses in practice, and implementing creative ways to recruit men into nursing.

Improving Current Working Conditions

Working conditions may be changing, but there is still a need to improve the work environment for all nurses. Sexual harassment simply cannot be tolerated. All

nurses need to follow zero tolerance policies, whether it's with co-workers or the public—patients and families. Education programs that teach nurses about various forms of harassment should be implemented, as well as assertive communication skills to use with co-workers and the public. Techniques promoting genderless communication can be coupled with these. Mansfield (2006) writes that too often the focus is on gender differences when problems arise instead of following simple keys to communication. Covey's (2005) keys to effective communication include seeking understanding, displaying honesty and openness, being kind and courteous, and forgiving others. Following these basics can only improve working conditions for nurses and other health care disciplines.

Men and women in nursing also need to educate the public about their roles and responsibilities. Nurses need to speak with a "voice of agency" (Buresh & Gordon, 2006, p. 28) to describe the unique and important work that nurses do. This will put nursing in a more professional context and help to reduce some of the stereotyping that occurs for both men and women in nursing. Men in nursing surveyed by the Bernard Hodes Group (2005) strongly objected to the term *male* preceding *nurse* in their occupation description. This only accentuates the minority status of men in nursing. The term *female doctor* is rarely heard. Finding a genderless way to describe nurses will only improve the image of nursing for the public and in the workplace.

Retention Issues

Several common methods can be used to increase retention for all nurses in active practice: increasing pay and benefits, offering time and compensation for continuing and higher education, and encouraging selected nurses to move into leadership roles. Men in nursing or as students in nursing schools need more men as mentors and advisors. Attempts to have at least two men in clinical or work groups will decrease the sense of isolation that comes with being the only man in the group. Nursing education needs to integrate more historical material about men in nursing and use materials that are gender neutral and that portray diversity in nursing.

Another important way to retain men in nursing—whether as students or practicing nurses—is for schools and agencies to promote professional organizations whose main focus is serving men in nursing. One such organization, founded in the 1970s, is the American Assembly for Men in Nursing (AAMN). The AAMN provides a framework for encouraging, supporting, and advocating for men in nursing. Membership for men in

AAMN or similar organizations offers students and practicing RNs greater exposure to mentoring opportunities and collegial relationships.

Recruitment Issues

Kleinman (2004) suggests that although men are a minority in nursing, they bring their traditional gender privilege with them to the profession. This seems to give men an inherent advantage in moving into leadership roles. She writes that men are also disproportionately represented in the specialized areas that are seen as more action-oriented, and therefore more masculine, such as critical care, peri-operative, and emergency nursing. Many recruitment campaigns focusing on men emphasize these action-oriented roles. However, some men in nursing disagree with this slant, saying it only increases the gender stereotype of the male as the technical expert who is physically superior but lack empathy and sensitivity.

Sherrod, Sherrod, and Rasch (2005) have proposed several suggestions for schools and agencies that want to increase their numbers of men and minorities in nursing. They recommend that recruiters reevaluate their brochures, advertisements, and other media to make sure they are gender neutral. In addition, it is important to make careful choices for gender and minority balance in all pictures and visual media used for recruitment. Taking men and minority men along to career fairs and other recruitment events may increase interest among males in the audience.

Regardless of the exact approach, most recruiters agree that introducing more men to nursing as a viable and attractive career must start when they are young (Burnett, 2007; Hoke, 2006; Sherrod et al., 2005). Most authors recommend starting when prospective students are in middle school. One program offered a summer camp (Stilson, 2007) with shadowing experiences, while others suggest working with organizations for boys such as the Boy Scouts (Burnett, 2007). Most emphasize a focus on variety and interesting experiences for young recruits. Focusing on pay, job stability, technical skills, and travel opportunities is a better approach for the high school or early college student. Another area with potential to increase the numbers of men and minorities in nursing is the increase of second-degree nursing education programs in the United States (AACN, 2005). Many men entered nursing after trying a different career. These programs are attractive because they offer a compressed curriculum that takes less time to complete. Students finish with an entry-level nursing education in about a year. Some programs offer more course work over a longer time and grant a master's degree.

The American Mobile Healthcare survey (2006) of men in nursing noted that job satisfaction was high among their respondents, and 82% of them would recommend nursing as a career to other men. Another clear advantage to increasing the numbers of men in nursing is that men tend to stay in nursing. Over 90% of the respondents said they will stay in nursing, although 40% said they planned to make a change within the profession. Most of these planned on pursuing an advanced nursing degree or working as a travel nurse.

SUMMARY

Although the number of men in nursing is slowly increasing, it is evident that more men are needed in the profession. The opportunity to help others and make an impact on society, and the advantage of job stability are important factors for all nurses. These factors need to be emphasized to young men before they reach college. Schools, hospitals, and other health care agencies need to implement programs to recruit young men, minority men, and men looking for a second career to nursing. Nursing also needs to encourage counselors at the middle school and high school levels to offer information to male students on nursing as a viable career choice. As more men and minorities realize the attractive options of a nursing career, nursing can better serve the expanding, diverse population and help to reduce the shortage of nurses in the United States. Now is the time to make a more diverse nursing profession a reality. As the United States enters an era of change, health care reform becomes a priority. This is a great time for nursing to address the diverse needs of the patients we care for with a workforce that reflects its diversity.

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Nursing Employment Issues: Increasing Unionization in Nursing

THOMAS CLANCY

The severest test of a nurse administrator's leadership abilities occurs when staff nurses self-organize to form a union. As the term implies, *self-organization* reflects groundswell support for better representation of nurses' collective interests. The act of nurses self-organizing to negotiate the terms of their employment is the furthestmost extension of the employee–employer relationship. However, the seeds of discontent are not planted by unions. It is usually an underlying atmosphere of mistrust, miscommunication and feelings of helplessness that create a unionization climate (Forman & Davis, 2002b). Unions simply take advantage of it. Why do nurses join unions? Although the literature is exhaustive (New Jersey Hospital Association, 2003), three common themes have emerged: autonomy, patient safety (understaffing), and wages (Forman & Davis, 2002a; Schraeder & Friedman, 2002).

PROFESSIONAL AUTONOMY

Nurses represent the greatest proportion of staff in virtually any health care setting (hospital, nursing home, physician's office, and so forth). The latest estimates regarding the number of employed registered nurses in the United States is 2,505,000 (U.S. Department of Labor, Bureau of Labor Statistics, 2007). Historically nurses have not been afforded a voice in decisions that affect their wages, benefits, and working environment (Forman & Davis, 2002a). Decades of low pay, poor working conditions, and inflexible hospital management have prompted nurses to explore unionization as a means to gain professional autonomy.

The decision to bring health care under protection from the National Labor Relations Act (NLRA) in 1974 dramatically increased RN union-organizing activity. Nonsupervisory registered nurses were now received

legal protection from the National Labor Relations Board (NLRB) when seeking a collective bargaining agent (Forman & Davis, 2002a). As a result, the combined efforts of national and state nursing organizations (American Nurses Association and California Nurses Association, for example) and existing labor organizations (Service Employees International Union, Teamsters, United Auto Workers, American Federation of Teachers, and so forth) have increased RN union membership to 19.6% of the total RN workforce (United American Nurses, 2005).

Although unions provide another avenue for nurses to influence decisions regarding their work environment, controversy persists over whether unions actually improve professional autonomy (Forman & Powell, 2002). The NLRA stipulates that during the collective bargaining process, the parties must confer in good faith with respect to wages, hours, and other terms or conditions of employment (Chatilovicz, Darch, Miller, & Kenwood, 2001). However, health care organizations are not required to discuss such professional items as clinical practice, staffing levels, education benefits, clinical ladder programs, or tuition reimbursement as part of the collective bargaining process. And in fact, many health care organizations refuse to discuss these issues during contract negotiations.

PATIENT SAFETY

Unsafe staffing levels, mandatory overtime, floating, and emotional exhaustion have been cited as major factors influencing the recent growth in RN union membership (Aiken, 2002; Schraeder & Friedman, 2002). From 1995 to 1999, RN union membership in the United States grew by 77.66% (American Federation of Teachers Healthcare, 2003). During the same period, American health care organizations began experiencing

one of the severest nursing shortages in history (U.S. Department of Health & Human Services, 2002). The effects of cost-cutting, reengineering, and downsizing by health care organizations in response to increased managed care and lowered reimbursement over the last decade have significantly impacted the work environment of nurses. Understaffing and mandatory overtime issues have contributed to a drop in the proportion of registered nurses employed by hospitals from 66.5% in 1992 to 59% in 2000 (Buerhaus, Staiger, & Auerbach, 2000). The typical RN works eight and a half weeks of overtime per year, and mandatory overtime has become a major issue in strikes by nurses (Service Employees International Union Alliance, 2001).

The emotional stress associated with understaffing, floating, and higher patient acuity levels has led to frequent turnover as nurses seek a more stable environment. A study compiled by Aiken (2002) showed that 43% of surveyed nurses reported job burnout and intended to leave their current position within the next 12 months. Hart and Associates (2001) found that 50% of nurses surveyed had considered leaving the field within the past two years for reasons other than retirement. It is not surprising, in light of these factors, that nurses have turned to unions for help.

WAGES

Over time, nurses' salaries have fluctuated significantly. For example, from 1992 to 1997, the average weekly wage for RNs declined by 6.2%, while wages for the total labor market dropped by only 1.2% (U.S. Department of Labor, Bureau of Labor Statistics, 2007). However, from 1999 to 2007, the average RN weekly wages increased annually by 4.5% (U.S. Department of Labor, Bureau of Labor Statistics, 2007). Again, given the cyclic nature of RN wages, it is not surprising that RNs have turned to unionization as a means to increase compensation. Section 8(d) of the NLRA requires an employer to confer in good faith with respect to wages, hours, and other terms of employment. Unionization has paid off for nurses, at least in the area of wages, where the collective bargaining process has resulted in unionized nurses earning 11% more than nonunionized nurses in 2002 (National Labor Relations Board, 2005).

THE UNION CAMPAIGN

The combined effects of the nursing shortage, understaffing, mandatory overtime, and stagnant pay coupled with a lack of professional autonomy have provided

fertile ground for registered nurses' unionization. A union campaign generally starts with a group of nurses approaching a union representative to seek help. Often a single event, such as a layoff or salary freeze, acts as a "lightning rod" to ignite a long-standing period of discontent among the staff. After assessing their chances of success, unions then assist nurses by providing a structured road map for conducting a union campaign.

The foundation of a union campaign is the employee committee that steers the campaign from its inception. Early in the process, union organizers assist nurses to organize their strongest supporters into a formal committee by providing education and direction on how to run a campaign. The initial strategy in a unionization effort consists of rapidly building support among the incumbent nursing staff. Methods include phone calls from committee members to employees, flyers, and educational meetings held outside of the health care organization, often in a supporter's home or in a hotel conference room (Forman & Davis, 2002b).

Union campaigns run on emotion, and building momentum quickly and quietly is a key strategy. If successful, administration may be unaware a union effort is even underway until it is too late to stop it. Union representatives know this and make every effort to work behind the scenes until they are sure adequate support is present. Once organizing activity is discovered, administration generally reacts quickly to reverse initial campaign momentum.

The NRLA specifically outlines how a bargaining representative can be selected. The most common method employees select is through a secret ballot conducted by the NLRB. However, the NLRB cannot conduct such a ballot until a petition is filed requesting one. The NLRB recognizes interest in representation when 30% or more of a "unit of employees" sign a petition or authorization card. A "unit" of employees is defined as a group of two or more employees who share a community of interest and may therefore reasonably be grouped together for purposes of collective bargaining. Nonsupervisory RNs make up such a group (Chatilovicz et al., 2001).

Conducting a union campaign is expensive. Often union representatives publish extensive education material, rent meeting rooms, provide speakers, and develop video messages and Web sites. That is why most petitions are not filed until at least 65% to 70% of eligible voters have signed either a petition or authorizing card. Once a petition is filed, the NLRB will issue it and

then set a date for a secret ballot, usually within 42 days (Forman & Davis, 2002b).

PREELECTION CAMPAIGNING

When a petition is filed, employers and employees must adhere to strict rules outlined by the NLRB in regards to preelection activities. From an employer's perspective, violation of preelection rules may result in charges of unfair labor practices. If such charges are found to be valid, the NLRB may rerun the election or, in a worst-case scenario, impose a bargaining order. Such an order may require the employer to recognize and bargain with the union even though the union may have lost the election. Examples of prohibited preelection employer activities include the following (Chatilovicz et al., 2001):

- ◆ *Threats*: Remarks directly or indirectly threatening the employee with discharge, layoff, loss of pay, loss of benefits, or loss of promotional opportunities if the employee signs a union authorization card, attends union organizational meetings, wears union insignia, and/or speaks in favor of the union or votes for the union.
- ◆ *Interrogation*: Supervisors asking employees how many people attended a union meeting, whether they signed union cards, or how they intend to vote in the election.
- ◆ *Promises*: Suggestions that an employee will receive better wages, benefits, or working conditions if the employee does not sign a union card, votes against the union, or talks against the union.
- ◆ *Spying*: Supervisors stationing themselves near union meetings and observing and identifying employees attending the meeting, following union supporters to determine where they go after work, or requesting employees to report on the union activities of co-workers.

Prior to the election, the employer will be required to file with the NLRB Regional Director a voter eligibility list (also known as an Excelsior list). This is a list of all eligible voters, and it must be filed within seven days of the NLRB's approval of a voluntary election agreement. The Excelsior list outlines the collective bargaining unit and may require a hearing with the NLRB, union representatives, and the employer to build consensus on the final list. Often these hearings can be contentious as the composition of the bargaining unit plays a significant role in the election results.

At the conclusion of the 42-day period, a secret ballot is held at the workplace. Strict instructions are provided by the NLRB in regards to who may be present in the

polling room and how the ballots are to be handled. Once the polling booths are closed, a representative from the NLRB counts the votes in the presence of the employer and the employees. A final count of 50% plus one vote wins the election.

LEADERSHIP DURING A UNION CAMPAIGN

Prevention is the best strategy for remaining union-free. A long-standing atmosphere of helplessness, feeling unappreciated, and poor communication drives nurses to seek union representation. Recognizing the telltale signs of nurse dissatisfaction early and then dealing with them quickly are the keys to preventing unionization. Early warning signs include disruptive staff meetings; requests by groups of nurses to meet with the nurse executive or chief executive officer to discuss pay, benefits, and other issues; and signed petitions. Even a change in the atmosphere on nursing units is a cause for concern. Observing nurses meeting in hallways and quickly disbanding when a manager approaches or sudden changes in attitude among the staff are telltale signs of a problem.

Often the nurse executive is unaware that union representatives have been contacted until after the steering committee has been formed. By then, a structured drive to contact nurses and gain union support is already under way. That is why it is essential that the nurse executive intervene and deal with the underlying problem *before* union representatives are contacted. Interventions include a formal process for identifying the root problems. This may include a hospital-wide employee survey or a series of meetings involving the nursing staff, nurse executives, and the chief executive officer. The use of outside consultants who specialize in labor relations should be considered. The availability of an objective third party may prompt nurses to feel less threatened and provide an opportunity to solve problems.

The key to preventing RNs from seeking union assistance is open communication and then taking quick action to solve the problem. Credibility is gained when nurses see that management is serious about addressing issues. It is important to understand, however, that once a steering committee has been formed and union representatives have become involved, new issues will arise. A union will attempt to drive a wedge between management and employees. Common tactics include discrediting facts presented by the employer or taking credit for any positive changes the employer may implement. The union will try to create a perception

that employees are the union and that collectively they can solve all of the problems (pay, benefits, overtime, staffing, patient care, and so forth).

It is important that nurse administrators realize there is a measured response from unions as the employer reacts to organizing activity. In effect, the harder the employer pushes, the harder the union pushes back. Once organizing activity is acknowledged, the health care organization should seek legal counsel in labor relations. Union representatives are professional organizers, and attempting to navigate without legal counsel through the unfamiliar rules enforced by the NLRB is dangerous. Unfair labor practices early in the campaign, especially during the union card-signing phase, can result in an NLRB imposed reelection or bargaining order.

The discovery of union activity within a health care organization is a wake-up call. The administrative staff, from the chief executive officer to the shift supervisor, must acknowledge that there is a serious problem in the organization. This means removing as many distractions as possible and concentrating fully on the issues. Once a petition has been issued by the NLRB, there is only a 42-day window of opportunity to reverse momentum. In effect, large projects should be placed on hold to allow managers time to listen and educate staff regarding unionization.

The tactics used by unions to influence staff are many and varied. As the campaign progresses toward the election, any of the following activities may occur: visits by organizing staff at employees' homes; telephone surveys; regular meetings with speakers from other unionized health care facilities; multiple flyers and brochures, including union contracts from other institutions; professionally made videos; and extensive Web site information. Union supporters will begin wearing union buttons and other paraphernalia at the workplace. Expect nursing staff who have not revealed their voting intentions to be constantly approached by phone, in their homes, and at the health care organization by union supporters. Some campaigns utilize the local press as a tactic. Frequent editorials and feature articles by union supporters are not unusual.

Health care organizations should consider several tactics during a union campaign. Taking a position of silence is not one of them. Silence can be interpreted as "not caring" and may lend support to what union organizers have been alleging. The NLRB rules during a campaign are specific in regards to employee threats, interrogation, promises, and spying. However, this does not mean managers cannot speak with their staff about

unions. In fact, the most important figure in winning employee confidence is their first-line manager. One-to-one communication by the unit manager to answer questions and educate staff is the most effective tactic in preventing unionization.

Although frank discussions between the unit manager and his or her staff are important, they should not be contentious. Campaigns run on emotion, and employees will take a strong position on whether to support or oppose a union. Often it is the nurse manager who is caught in the line of fire. A union campaign can drag on for months if there is an extended card-signing phase or if the NLRB delays the vote because of bargaining unit issues and multiple hearings. Dealing with ongoing conflict on the nursing unit can be exhausting, and nurse executives need to be keenly aware of this. Problems arise when managers start avoiding conflict and stop communicating with their staff. When this happens, the nurse executive must step in and find ways to support the manager. In extreme cases the nurse executive must make a hard decision and replace the manager midcampaign.

CONTROL OF NURSING PRACTICE

Nurses unionize, in part, when they perceive that there has been a loss of professional autonomy. Nurse autonomy and control of nursing practice have been identified as essential to a productive and satisfying work environment (Krugman et al., 2008). Control of nursing practice is defined as the ability to access information, provide input, exchange ideas, and assist in making decisions on nursing practices, standards, policies, equipment, and the quality of patient care.

Developing and maintaining professional autonomy require a shift in centralized management models where there is a clear division of labor, a hierarchical reporting structure, and unity of command to a decentralized model. Studies have shown that decentralization and control of nursing practice can be enabled through nursing-shared governance models. Shared governance legitimizes nurses' control of nursing practice and decision making while extending influence to administrative areas that are historically under management's control. Five components or attributes of successful shared governance programs are access to power, participation, recognition, accomplishments, and evidence-based practice initiatives (Krugman et al., 2008).

The opportunity for collaborating with physicians and seeking out or being sought out by peers, managers, and other professionals are sources of informal

power. Shared governance models can enable this source of power. Under both scenarios, staff nurses perceive power as emanating from the shared governance structure, from nurse managers and leaders, but also from peers and relationships.

Nurses who are council chairs or are very active in shared governance rate the presence of control of nursing practice in their hospital as high. Thus, a key success factor is the degree of participation in council and practice activities. For viable shared governance structures to positively affect nurses' control of nursing practices, nurses must *want* to participate. Strategies designed to increase participation while still recognizing individuals included financial compensation or compensatory time off to attend council meetings. Increasing the quantity, quality, and scope of evidence-based practice initiatives was also viewed as a way to secure the interest and participation of the more clinically focused nurses in council activities.

SUMMARY

In the last decade, RN union membership has increased nearly 80% (American Federation of Teachers Healthcare, 2003). Reasons for this dramatic increase are complex but generally follow a common theme: Professional autonomy, patient safety, job security, staffing, mandatory overtime, wages, and benefits have all been cited as major factors. Underlying the rise in RN unionization are the economic and demographic variables fueling growth in membership: declining reimbursement, increasing managed care, and an aging RN workforce. Being a leader in today's health care environment requires an in-depth understanding of these many forces that are driving nurses to seek unionization.

The key to remaining union-free is prevention. Acknowledging that a problem exists is the first step in winning back the trust and confidence of RN staff in any organization. Acknowledgment is synonymous with taking action. This means meeting with staff nurses and piecing together the often disparate issues into a unified strategy. But identifying the issues and crafting a strategy must be followed up with quick and decisive action. Maintaining a culture where nurses perceive they have autonomy and control of their practice is important in preventing unionization. Shared governance models have been found to increase nurses' perception of control of nursing practice and to improve satisfaction.

In the event that union activity is discovered within an organization, legal counsel on labor relations is

essential. The rules enforced by the NLRB are specific and require that management be educated on potential violations of the NLR. It is also important for nurse administrators to recognize that union representatives are professional organizers and that there is a measured response to any actions the organization may take to reverse the momentum gained in a campaign.

The discovery of union activity within an organization is disheartening to nurse administrators. However, how the administrator responds is the key to effective leadership. Reversing the momentum in a union campaign can be the greatest challenge nurse administrators and their management staff will ever face, but if successful, an even stronger, more committed organization can emerge.

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Managing Generational Issues in Nursing: Preserving the Future of the Profession

SUE MOORHEAD

Our profession is facing challenging times as we strive to cope with the significant shifts in the work environments of nurses. Health care reform is increasingly seen as a major initiative of the Obama administration. Change is definitely here to stay as economy shifts threaten many of the long-established institutions of our country. It is clear that these trends will impact the current nursing shortage as we begin to see job vacancies disappear in some regions of the country. The shortage of nursing faculty is real and will have an impact on the number of nurses that can be educated for the future generations of nurses in our health care system. The aging of America also impacts the health care environment as more resources and different services are needed to care for the elderly. Nurses need to play an important role in creating the health care system of the future. We are also facing, for the first time in history, a nursing workforce that spans four generations (Gerke, 2001; Hart, 2006; Kupperschmidt, 2001; Mensik, 2007; Sherman, 2006; Wieck, 2007). This fact alone brings potential conflict to the work environment as four generations, all with different viewpoints, work together in health care organizations. How well we handle this situation will be a strong determinant of how nursing as a profession survives and whether the profession can address the health care needs of Americans in the future.

WHAT IS A GENERATION?

Karl Mannheim (1952), a German sociologist, wrote about generations in his essay "The Problem of Generations." From his perspective, a generational cohort was related to socioeconomic "classes" found within a

society. His view was that individuals were born into a class and developed a view of the world from this perspective based on the lens through which they experienced life. In his view of generations, it was possible to move from one class to another and develop a different perspective. This movement to another class could be voluntary or involuntary. These experiences created a view of the world that had a strong impact on the individual's life experiences.

Today, generational cohorts are groups of individuals who share birth years, a common set of historical events, and a collective personality based on these events (Kupperschmidt, 2001; Zemke, Raines, & Filipczak, 2000). In other words, individuals are born into a generation with no potential to change groups. Profiles of generations are commonly used to help us understand how significant life experiences impact a generation at a formative stage in their lives and lead to personal core values (Sherman, 2006). Weston (2001) described a "generational cohort" as individuals born during the same time period who share key life experiences, such as historical events, public heroes, entertainment and pastimes, and early work experiences. These experiences unite them as a cohort with similar views. Profiles of generalizations tend to hold true for the cohort but are not infallible, and variations can be seen due to life experiences. The profiles are useful because they help us to understand the perspective of another generation, outside our own. The generations tend to span 15 to 20 years. In general, the historical, political, and social events of their time define and mold their personal values, view of work, attitude toward authority figures, and career aspirations (Duchscher & Cowin, 2004).

FOUR GENERATIONS CURRENTLY IN THE NURSING WORKFORCE

Gerke (2001) describes the four generations in the workforce as a matrix of generations creating a rich and diverse workforce:

A matrix is something within which something else originates. This word is exactly what is occurring in the workplace, one generation building on the knowledge of the previous generation, evolving into a rich tapestry. (p. 173)

Each generation is marked by common birth years and life experiences that unite their values. The four generations in the current workforce are known by a variety of names. The oldest generation is often labeled veterans, builders, traditionalists, silent, mature, or the GI generation. The next generation is almost always referred to as baby boomers and sometimes the sandwich generation. The third generation is generation X, Xers, twentysomethings, baby busters, or postboomers. This group is the first wave of children born to the baby boomers. The final and youngest generation in the workforce is generation Y, also known as millennials, bridgers, the Net generation, the Nintendo generation, the Internet generation, the .com generation, generation "why," or Nexters and is the second wave of baby boomer children (Gaylor, 2002; Gerke, 2001).

Veterans or Traditionalists

This generation shares common birth dates between 1922 and 1943-1945, depending on the source (Blythe et al., 2008; Carver & Candela, 2008; Gerke, 2001; Strauss & Howe, 1991), and is now between 65 and 88 years of age. Many have retired, but economic conditions are keeping the younger veterans in the workforce. Veterans were born into traditional families where men provided the support for the family and were dedicated workers. The parents of this generation tended to be authoritarian, overprotective, and expected "proper" behavior (Weston, 2001). Women cared for the children and the home. This generation believes in hard work, saving their money, and commitment and loyalty to the organization and managers in the workplace (Hu, Herrick, & Hodgins, 2004; Kupperschmidt, 2000, 2006; Strauss & Howe, 1991). Seniority is considered important to career advancement (Carlson, 2005; Ulrich, 2001). They hold traditional values, and their early life experiences included the Great Depression, prohibition, and World War II (Carver & Candela, 2008; Zemke et al., 2000). These experiences required them to make sacrifices for the greater good of others (Lancaster & Stillman, 2002).

In their childhood they experienced economic hardship and struggle, but the early adulthood period of their lives occurred as our country experienced unprecedented growth and prosperity (Weston, 2001). This generation was the first to give women the right to vote (Carver & Candela, 2008). Veterans, in general, tend to be conservative and low risk takers (Gerke, 2001). As a group they look to the past for insight into current situations and value the lessons of history (Weston, 2001). Radio was their main source of news when they were growing up (Gaylor, 2002).

Weston (2001) provides an overview of this generation's world:

During this time, the economy was based on an industrial model. Math was done by hand, letters were typewritten, copies were mimeographed, and long-distance phone calls were only made in emergencies. The workplace was largely a world of factories and business. Organizations were hierarchical, with clear divisions of labor where conformity, consistency, and uniformity were valued. Most members of the Silent Generation intended to work in big corporations that offered longevity and job security. (p. 11)

Later in their work life, the information age arrived and this work environment began to disappear. Experience and seniority were no longer as important as competence, customer service, and teamwork replaced these values in the workplace. In their later years, women entered the workforce, and for the first time women and minorities rose to management positions (Weston, 2001). Some of the strengths that veterans bring to the workplace are their ability to relate to the older patients we see in health care, a desire to work in part-time positions as they phase into retirement, and their extensive experience (Zemke et al., 2000).

Baby Boomers

Baby boomers were born between 1946 and 1964, according to most sources (Blythe et al., 2008; Hart, 2006; Santos & Cox, 2000; Smith, 2008; Weston, 2001; Zemke et al., 2000), but some authors include individuals born from 1941 to 1943 (Apostolidis & Polifroni, 2006; Carver & Candela, 2008; Gerke, 2001). This generation was born in the post-World War II population growth era. The size of this generation is illustrated by the fact that when they were children, they made up 40% of the population (Dunn-Cane, Gonzales, & Stewart, 1999). This generation in numbers alone has influenced all aspects of American society and required a shift in resources to meet the needs of this cohort (Carver & Candela, 2008).

Baby boomers today are between the ages of 46 and 64, and this generation is expected to dominate the workforce until 2015 (Weston, 2001). Boomers place a heavy value on work and climbing the corporate ladder. Smith (2008) describes work as the “anchor in their lives” (p. 7). Hart (2006) states that they “live, sleep, and eat work” (p. 11). Work has served as a mechanism to define who they are and to evaluate others (Sherman, 2005), and they equate work with self-worth (Weston, 2001). Careers are a central focus of both men and women of this generation (Gaylor, 2002), and they share a strong work ethic with the previous generation (Carver & Candela, 2008). It is not unusual for members of the baby-boomer generation to work a 50- to 60-hour workweek (Zemke et al., 2000). Many members of this generation chose their profession with the intent to make the world a better place—not based on economic prospects or earnings (Weston, 2001). This generation is the largest cohort in the current nursing workforce and occupies many nursing leadership positions (Buerhaus, Staiger, & Auerbach, 2000; Thrall, 2005).

Baby boomers grew up watching television (although there were only three channels), using calculators and rotary phones, eating TV dinners, and, for the first time in history, enjoying the convenience of fast-food restaurants. They lived through the Cold War and saw the Vietnam War in their living room on the nightly news. They grew up in a time of national wealth, and their parents expected them to live “a better life” than the veterans did (Carver & Candela, 2008). Their parents thrust them into the spotlight as symbols of the rewards of victory and the hope for the future that the veterans of WWII fought for. America at that time seemed to have an unlimited potential for growth and expansion (Ansoorian, Good, & Samuelson, 2003). It was also a time of educational growth (Gerke, 2001). Baby boomers were involved in many protest issues such as the civil rights movement, the peace movement, and women’s liberation (Hart, 2006) and witnessed a time of assassinations (President John F. Kennedy and Martin Luther King), Watergate, and the space race (Gaylor, 2002). During their youth, they challenged the status quo and promoted equity, and many were teenagers during the hippy culture associated with the 1960s (Weston, 2001). In the music world, rock and roll was born. Baby boomers have changed the structure of the traditional family to include single parents (due to increased divorce rates) and couples who choose not to have children (Blythe et al., 2008) as methods of birth control became more widely available.

Today many baby boomers are at a time in their lives when they are raising young children and caring for aging parents—the sandwich generation. Weston (2001) says the following:

More than any other generation, they are dealing with a time squeeze. Demands of work, expectations of parenting, goals for healthy living, and a strong sense of idealism keep most people in this age range running from morning to night. (p. 13)

This generation has a strong drive to be successful in their careers but also wants to meet the needs of their children and parents, all the while maintaining a healthy lifestyle. This produces, for many, role overload and conflicting demands and loyalties (Weston, 2001). Only 30% of baby boomers exercise routinely (Gerke, 2001). This lifestyle greatly influenced the generation that followed.

Strategies for managing this generation include finding out how they want to be managed, providing opportunities to succeed, and motivating them through both public recognition and perks and providing mentors. They also welcome opportunities for participative management and consensus building. Managers should ask questions to identify the issues in the workplace (Zemke et al., 2000).

Generation X

Like the previous generations, a variety of time frames are used when discussing generation X. Birth years for this generation usually start around 1960 to 1965, but the time span of this generation varies according to authors and sources. Some set the years at 1960 to 1980 (Ansoorian et al., 2003; Formella & Rovin, 2004; Gerke, 2001; Zemke et al., 2000); 1961 to 1981 (Carver & Candela, 2008; Mensik, 2007); 1963 to 1980 (Sherman, 2006); 1963 to 1981 (Tulgan, 1995); 1965 to 1981 (Santos & Cox, 2000); 1965 to 1975 (Bradford & Raines, 1992; Dunn-Cane et al., 1999); 1965 to 1976 (Hornblower, 1997); 1965 to 1980 (Walker, 2007); and 1965 to 1981 (Santos & Cox, 2000). There is a great range of different years used to define this generational cohort across the articles focused on this generation. It is the smallest generational cohort currently in the workforce after the veterans (Carver & Candela, 2008). Some authors believe it will be the first generation to have a standard of living below that of their parents, although 60% have some college education (Ansoorian et al., 2003).

Boomers have a unique perspective of their jobs and their children. Members of generation X desire a balance between work and home life (Carver & Candela, 2008). Watching their dual-career baby-boomer parents

work long hours each week accounts for part of this generation's search for balance. Members of this generation "work to live." Many grew up as latchkey kids at a rate three times greater than their baby-boomer parents (Ansoorian et al., 2003). Generation X children were the least protected generational cohort of children and were expected to be self-reliant and pragmatic thinkers at an early age (Carver & Candela, 2008). As the divorce rate increased to 40%, many Xer kids lived in single-parent or blended families (Apostolidis & Polifroni, 2006). In their teenage years, they formed strong bonds with their friends when family members were not available (Weston, 2001). Their friends were ethnically diverse, and they learned to be tolerant of alternative lifestyles (Weston, 2001).

Video games such as Atari and Nintendo prepared them for a computer world that included laptops, cellphones, and beepers. They were the first children of the information age and are very comfortable with technology. Television was a form of entertainment as they grew up, and they had over 30 channels to choose from (Gaylor, 2002), with a remote control to search for available options. Microwaves and ATMs were taken for granted.

In addition, generation Xers have been touched deeply by disappointments, disasters, and diminished expectations of the post-Vietnam era (Zemke et al., 2000). Weston (2001) clearly depicts their world:

The economic prosperity of the United States was usurped by Japan in the world market. Even the technical prowess of the country was called into question when members of this generation watched the *Challenger* space shuttle explode on TV screens in their classroom. Exposure to violence and adult themes on television forced teenagers to deal with adult subjects, often before they were ready. (p. 13)

It is not surprising that this generation has a very different "life view" than their parents and bring different expectations to the workforce and the organizations that hire them. Strategies for managing Xers include working closely with them to create a vision of the project; breaking the task into tangible, results-producing steps; offering celebrations when milestones are reached; providing positive feedback to individuals and the team; and validating their ideas and accomplishments as you work toward results (Zemke et al., 2000).

Generation Y (Millennial)

This generation is usually considered to span the birth years from 1980 to 2000, born in the last 20 years of the 20th century, although some authors state that the

birth years for this generation are from 1977 to 1995 (Piper, 2008). They were the later children of boomer parents and the early children of generation X (Zemke et al., 2000) and are now starting to enter their thirties. This is the youngest generation in the workforce. They are self-sufficient problem solvers and like to multitask. Most have grown up with computers, are computer literate beyond their parents, and are very technologically savvy. The Internet and cellphones are the social lifelines of this youngest generation in the workforce (Arhin & Johnson-Mallard, 2003), and they expect and need immediate feedback and answers. In general the parents of this generation have attended to every detail of parenting in an attempt to have well-adjusted, well-educated children. It seems that this generation is much like the veterans: seeking a stricter moral code with parents instilling more manners into their upbringing (Zemke et al., 2000). They see technology as a means to strengthen the global community and are interested in civic good. Experts predict they will bring back a trust in authority figures (Gerke, 2001).

This generation of workers has been described as the ideal workforce. They have a strong work ethic like the baby boomers, a "can-do attitude" like the veterans, and the technological experience of the generation Xers. In addition, they value participation and collaboration and want a supportive rather than a competitive work environment (Zemke et al., 2000). As employees they tend to be outspoken and confident, but they expect constant feedback, frequent praise for their work, and consistent rewards (Hill, 2002). It is predicted that people in this generation will be interested in careers in the helping professions, be open to job stability and working in organizations, and be intolerant of co-workers and leaders who are not technically competent (Kupperschmidt, 2001). Diversity is a hallmark of this generation, as it surrounds them in every aspect of their lives. This generation embraces opportunities with excitement and adventure. Change is expected and is considered just a part of their lives (Gerke, 2001). This is the second largest workforce of the four generations.

Several events have influenced the generation Y cohort in their early years. Attacks on the World Trade Center and the Pentagon and the Oklahoma bombing are key events in their lives. Violence moved to their turf, with kids shooting kids in the schools making national news. The world became a smaller place as information from around the globe is shared on the Internet in record time. Voting discrepancies and problems with "chads" during President George W. Bush's second election greatly affected their views about politics (Gaylor, 2002).

Some authors have provided a list of traits characterizing this generation in a negative tone, such as having a sense of entitlement, being self-absorbed and demanding, being overly optimistic, having no sense of loyalty to their jobs, engaging in body piercing and tattoos, and acting unimpressed by mission statements, to name a few. Lower (2007) suggests that we should brace ourselves for this generation in the workplace. She believes the main issue is whether older nurses can make the adjustments needed to retain generation Ys. Others believe that leaders will need to find ways to deal with this high-maintenance group of workers (Hira, 2007). How will these traits affect the work environment? Are leaders now facing workers with the same issues as their children?

Lavoie-Tremblay, Wright, and colleagues (2008) have suggested, based on their research, that it is crucial to understand the relationship between the work environment and health experienced by this new generation of nurses to create interventions that will successfully recruit and retain these young nurses in our profession. In another study, Lavoie-Tremblay, O'Brien-Pallas, Gelinas, Desforges, and Marchionni (2008) concluded that nurses who intended to quit their positions lacked a balance between the level of effort expended and the rewards they received. This means that managers must offer meaningful work and a supportive environment to this new generation of nurses.

Zemke and colleagues (2000) offer several suggestions for managers working with employees of this generation. First, provide plenty of time for orientation and create a clear picture of the work environment. Second, realize that traditional gender roles will not be useful as this generation redefines them through their choices of careers and division of tasks to be accomplished. Third, expand the use of teams in your organization where you have many individuals from this generation, and appoint a strong leader. Fourth, expect potential conflict between this generation and generation Xers as they try to work together. Fifth, develop your own training department, as this generation will want to continue their education and increase their skills. Finally, establish mentoring programs with experienced employees.

STRATEGIES FOR LEADING A MULTIGENERATIONAL WORKFORCE

Zemke and colleagues (2000) have identified two keys to successful intergenerational work. The first is "aggressive communication" that focuses on dialoguing with

the different generations in the workplace to discover their needs and preferences. The second key is "difference deployment," which involves placing employees in positions and jobs that best fit with the generational characteristics of the employees in the organization. They also advocate that organizations use the acronym ACORN: Accommodate employee differences; Create workplace choices; Operate from a sophisticated management style; Respect competence and initiative; and Nourish retention. Kupperschmidt (2000; 2001) also recommended this model in nursing. She believes that nurse administrators must maximize the strengths of this multigenerational workforce by building on a sound understanding and appreciation of the differences among these cohorts of employees. This includes effective coaching strategies based on specific work values of each generation. This is especially important when developing mentoring programs, choosing rewards and incentives, and structuring evaluation programs.

Apostolidis and Polifroni (2006) suggest it is essential that nurse leaders identify the individual needs of employees to enhance personal growth opportunities, increase retention, and promote work satisfaction. They believe that a foundational need of this work environment is open communication to decrease conflict based on generational issues. DeLellis and Sauer (2004) suggest that respectful communication has many faces, including respect as active listening, respect as assertive speech, respect as avoidance of passive-aggressive communication patterns, and respect during conflict. In a study of various work settings in the United States, they found that 79% of those who responded to the survey felt workplace respect was lacking and a serious problem. Kupperschmidt (2006) believes that mutual respect can reduce multigenerational conflict in the workplace. Nurse leaders must acknowledge the difference in work values and the needs of different generations of nurse to create a culture that is built on respect and to minimize conflict among the generations in the workforce (Carver & Candela, 2008). Nurse leaders and nurse executives must set the tone for this multigenerational work environment and help others to look beyond the values and ideals of their own generation. This involves thinking about the impact of generational issues, not just for our patients but also to better understand the colleagues we work with in providing nursing care. Hart (2006) suggests that generational diversity is an important issue in designing work environments for nurses. These environments must attract a new generation of nurses and retain the

present generations of nurses. This is necessary to meet the challenges of a nursing shortage that may only become greater and more serious in the next decade.

Research in nursing supports the premise that conflict in the workplace is associated with nurse retention (Kupperschmidt, 2006). Lancaster and Stillman (2002) call these conflicts "clash points." The content summarizing generations in the workplace suggests that conflicts are anticipated between baby boomers and generation Xers and between generations X and Y. Environments in which co-workers are negative, unsupportive, uncooperative, and unpleasant are major factors in explaining why nurses are not finding satisfaction in their work (Manion, 2003). Manion (2005) has suggested that conflict in nursing can foster loss of production time, errors, frequent staff turnover, and decreased patient satisfaction. Blythe and colleagues (2008) identified "that nurses have different needs at different ages and stages of their careers" (p. 152). These needs must be clearly identified and strategies targeted to enhance recruitment and retention in settings where nurses are employed. Nurse leaders must understand generational experiences, values, and perspectives and learn to more effectively coach members of each generation (Weston, 2001). This is an essential management skill of the nurse leader today. Gerke (2001) believes that the current health care system must undergo a "huge overhaul" to successfully use the strengths of the nurses from these four generations in the workforce.

SUMMARY

The presence of four generations in the nursing workforce is a new page in the history of the nursing profession. Gerke (2001) states, "This workforce is the collision of four generations of values, views, and work ethics" (p. 180). Are nurses willing to learn about and from other generations in the workforce? Will this multigenerational environment lead to more conflict among nurses? Will nurse managers and nurse leaders provide strategies to reduce these differences in values, views, and work ethics? Will our commitment to our patients and our communities as a shared value across the four generations of nurses in the workforce help nurses to override these differences? Will nursing remain a desired professional choice of the next generation on the horizon and continue to strive to enhance the organizations in which we deliver care? What do you think?

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SECTION 8

Cultural Inclusiveness

Diversity in Nursing: A Challenge for the United States

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Diversity has always been a key component of American society. Although the United States remains a nation built primarily through immigration, factors such as socioeconomic status and discrimination have influenced the benefits that a diversified population can bring to society. In reality the “melting pot” did not happen. Cultural diversity has become a major goal of many universities in the last few years as a way of enriching the community of scholars and providing experiences for students that are not part of a diverse environment. International experiences are increasingly mandated as part of the collegiate experience in many programs. Technology has made it possible to communicate easily worldwide, increasing the opportunities for students to learn from students from around the world. Web classes have also provided an opportunity for students to share experiences from around the globe or at least beyond their college campus. In spite of these diversity goals in educational experiences, nursing continues to struggle with attracting potential students from diverse cultural groups. This remains a tough challenge for nursing and an important priority if nursing is to meet the health care needs of Americans.

Throughout history, nursing has been a pathway for social mobility, especially for women. With relatively few career options outside of the home, not too long ago acceptable career choices for women were in the fields of teaching, nursing, and secretarial work. White women, first from rural backgrounds, found nursing an acceptable and safe field in which they might advance economically. Ironically, this has not been the case for women from minority groups. Women from underrepresented groups have been relegated primarily to roles of servitude within the health care system as nursing aides or as practical nurses. Entrance into the system in these roles has limited

severely the ability of minorities to advance within the mainstream of nursing.

Since the 1960s, considerable advances have been made in the ability of women in previously underrepresented groups to participate in all levels of society. But in nursing, the situation has remained static, with little advancement on the part of nurses of color. For a profession that prides itself on being an advocate for the rights of patients of all creeds, colors, or national origins, the lack of diversification of the nursing workforce has received only minimal attention. As nurses move into the twenty-first century, the diversity of the population of the United States is increasing significantly. Although the percentage of minorities within the general population continues to increase, nursing continues to lag substantially behind with only about 10% minority representation within the profession. This problem is compounded by the fact that the most minorities entering the profession are educated through associate’s degree nursing programs. Advancement to higher education, particularly to the doctoral level, is difficult to achieve for minorities, and this creates a lack of diversity among nurses prepared at the doctoral level.

Why does this situation remain unchanged? All of the usual reasons can be offered, and they are the focus of this section: the image of nursing; difficulty recruiting students into the profession; difficulty in retaining them through the educational programs; and once in practice, difficulty in encouraging their career development. Although these are all valid observations, why is there not more of a concern for the future of the profession if this situation is not reversed dramatically? How can nurses continue to be advocates for patients, when the majority of nurses are white and middle class and the populations they serve are increasingly people of color? Diversity in nursing is not just an ideal but a necessity for the profession to flourish.

In the opening debate chapter, G. Rumay Alexander addresses the question of global competency as a need in society and an important skill set for the future. Predictions are that racial minorities will be a majority by mid-century in the United States. According to Alexander, diversity is more than an ideal and is played out in the relationships we have with each other. Cultural competence is viewed as both an outcome and a process. This chapter highlights the role of minority status and unequal health care services in the United States. It also provides an overview of the statistics that show the nursing profession falling far behind in diversity to match that of the general population and addresses the implications of these data related to the appropriateness of care for patients. One of the major persistent problems is that most students from underrepresented groups enter nursing at the lowest end of the career hierarchy, as practical nurses or through associate's degree programs. Barriers to education are discussed in the chapter as well as retention strategies. Educational progression is difficult, and the percentage of nurses from underrepresented groups becomes even sparser in leadership roles within the profession. The few minority faculty members and nurses in visible leadership positions do not offer enough role models for potential students wanting to advance in the profession. Without a concerted effort on the part of the nursing profession as a whole, the prospects for change are limited. The factors affecting diversity are many and involve complex personal, academic, and environmental/cultural factors. The continued lack of diversity in nursing requires the immediate attention of many groups: educators, researchers, practitioners, and students of all races and ethnic groups.

In the first viewpoint chapter, Patricia Castiglia focuses on the issues of racial diversity in academic programs and stresses the importance of including content on cultural competence in the preparation of nurses. She argues that the delivery of culturally competent care requires that the nurse understand the culture of the patient. If there are no nurses representative of the culture of the patient, this understanding is severely limited. Legislation related to diversity is discussed in the chapter from a historical viewpoint. Castiglia addresses issues related to racism in nursing including recruitment, retention, and progression of minority students and makes suggestions about the support systems necessary to address these inequities. Castiglia suggests that multiple strategies are required, along with financial assistance. Pressure is increasing for all systems to be accountable to achieve diversity and

cultural competence. Strategic planning for minority recruitment and retention is essential because students and faculty need formal and informal support services to be successful.

In another viewpoint chapter, Betty Pierce Dennis addresses issues related to blacks in nursing. The history of blacks in America parallels the history of black nurses in America. Both histories influenced the course of black health within a cultural context that often has clashed with the dominant white culture. The history of black nurses in America is over-viewed in the chapter. Inclusion of the worldview of the black patient and tailoring nursing actions appropriately are essential in providing good care. Dennis describes particular cultural beliefs and values of blacks and presents health disparities between blacks and whites. Because of the history of exploitation and experimentation, blacks understandably are suspicious of health care providers. If health care for blacks is to improve and if the patterns of disease and mortality are to be ameliorated, increased numbers of black nurses providing culturally competent care are an important part of the solution. This chapter highlights the common health problems of blacks in the United States.

In another viewpoint chapter, Hyejin Park and Jillian Inouye state that Asians and Pacific Islanders represent 5% of the total U.S. population or 15.2 million people. The five largest groups within this population, in descending order, are the Chinese, Filipinos, Asian Indians, Vietnamese, and Koreans. These five groups make up about 80% of the Asian/Pacific Islander population. Noting that this categorization masks wide differences among groups, Park and Inouye discuss the differences in incidence of disease of particular groups in these populations. In general, Asian distrust of Western medical care stems from their long history of herbalist or shamanistic healing. Nurses providing care to Asians and Pacific Islanders need to be sensitive to the other cultural values, such as the importance of the family and their reverence for elders. The 10 leading causes of death for this group are discussed. The chapter highlights barriers to reducing the health disparities gap for these groups such as lack of data, communication barriers and cultural attitudes, beliefs and values as potential causes of barriers, social capital, and differences in health seeking behaviors. The authors use proverbs and sayings of these peoples to illustrate health beliefs in an effective way.

In a chapter focused on Hispanics, Sara Torres and Helen Castillo address the challenge of the growing

demographic changes occurring within this country. The largest numbers of Hispanics/Latinos in the United States are Mexican Americans, followed by Central or South Americans, Puerto Ricans, and Cubans. When combined, California and Texas are home to more than half of the nation's Hispanics. Because of the economic plight of this population, most Hispanic nurses in the profession enter largely through the associate's degree programs. Many more are needed to address the health care issues of this population. The number of nurses that advance to graduate education and to doctoral preparation in particular are even fewer, and they have no ethnic role models. A comprehensive program of recruitment, retention, support systems, and mentoring are recommended as a way to begin to redress the complex problems of increasing the numbers of Hispanics/Latinos in the nursing profession. This is an important challenge for nursing to meet the cultural needs of a growing cultural group in America.

In the final chapter in this section, Bette Keltner Jacobs, Debra Smith, and Mechem Slim address the issue of bridging of cultures with Native-American communities and nursing. American Indians face lower life expectancy and higher age-adjusted mortality rates. These realities define many aspects associated with individual, family, and social life. History validates that American Indians have been isolated by poverty, inadequate services, and lack of coordination through interdisciplinary approaches to complex problems. The communities themselves have been exploited, and a general disregard of traditions essential to health behavior and health service use has occurred. The authors caution

nurses to build a framework for building bridges rather than a blueprint and believe that cultural competence has three key components: sensitivity, specificity, and synergy. The authors believe that the major fault line in achieving cultural competence is the inability to appreciate the different experience and perspective of other people's lives. The natural characteristics of American Indians include their strength and resilience as a people, strong family bonds, and religion as a key foundation of life. The health needs of this group are clearly identified by the authors. When the nurse provides care, the authors suggest that the nurse reinforce these values rather than undermine them. Any treatment needs to focus on the whole person. An increase in the numbers of American-Indian nurses would do much to bridge cultures and produce culturally relevant care. To work well, the bridging of cultures requires true partnerships rather than the more traditional paternalistic approach of health care professionals, including nurses.

This section highlights the slow process of building diversity in nursing. Much remains to be done to reach this goal. The chapters in this section highlight the accomplishments to date, but nursing must be committed to diversity for the future. Diversity can increase the professional status of nursing, enhance patient outcomes through culturally relevant care, and foster more diverse and interesting work environments for nurses. Regardless of the cultural group discussed in this section, progress is slow at addressing nursing's need for a diverse workforce. Many of the health concerns prevalent in these cultural groups need nurses to advocate for the care of minorities within the health care system.

Should Nursing Be More Diversified?

G. RUMAY ALEXANDER

According to a recent report prepared by the National Intelligence Council (2008), the next 15 years will bring significant global change, including the transformation of the international political system built after World War II; an unprecedented transfer of wealth from the West to the East; enormous pressure on natural resources, resulting from continuing economic growth; and increased potential for global conflict, particularly in the Middle East. Given the growing interdependence among nations as a result of trade, increased communications, and migratory flows, it will be crucial for people to develop the skills to understand and help solve such urgent challenges.

Global competency has three interdependent dimensions. The first is a positive approach toward cultural differences and a willingness to engage those differences. This requires empathy for people with other cultural identities; an interest and understanding of various civilizations and their histories; and the ability to see differences as opportunities for constructive, respectful, and peaceful transactions. This ethical dimension of global competency also includes a commitment to basic equality and the rights of all persons and a disposition to act to uphold these rights. The second dimension focuses on the ability to speak, understand and think in several languages. The third dimension includes knowledge of world history, geography, global health issues, climate change and international relations. Academic institutions are well situated to do their part in supporting these key dimensions of global education. They can achieve an increased state of global competency for their students, staff, and faculty by placing these objectives squarely in the middle of their mission. With the economic and security challenges that our nation faces, the need for such solidarity and public service is heightened (Reimers, 2009).

THE CURRENT SITUATION

To say we are living in unprecedented times is an understatement. The current global financial crisis baffles even the most knowledgeable of financial experts. The greed of Wall Street is negatively impacting Main Street, with individuals finding themselves without a job and losing their homes, pensions, and dreams. For the first time in U.S. history, African Americans occupy the offices of president and attorney general, forcing us to examine our racial biases. The prospect of attending college is not promising for the working poor, many in the middle class, and those on the margins of society. The U.S. health care system continues to be in crisis, and for many, the cost of medical care far exceeds their ability to pay for it (Box 56-1).

The vast majority of Americans rely on some form of third party insurance coverage to mitigate out-of-pocket expenses. In 2007, for example, insurance premiums reached \$10,800/year for the first time, exceeding the gross annual income of a full-time minimum wage worker. In any given year, 70% to 80% of the money in the health care system is spent providing care to those with chronic conditions such as diabetes, coronary artery disease, congestive heart failure, asthma, and depression. Furthermore 1% of the population accounts for over one third of the health care resource consumption in this country (Box 56-2).

We are also approaching a profound demographic and social tipping point: every 31 seconds someone from another country immigrates to the United States (Felton, 2006). The Census Bureau (2008) further projects that by 2050 nearly one in every two Americans will be a member of a racial or ethnic minority. In an August 2008 report by the same agency, groups currently categorized as racial minorities—black and Hispanics, East Asians, and South Asians—will account for a majority of the U.S. population by the year 2012.

BOX 56-1 Factors Influencing Health Status

- Individual behavior/ lifestyle choices
- Genetics
- Social factors (housing, education, job)
- U.S. health care system engagement

From Kitzhaber, J. A. (2008). The unfinished business of the baby boom generation: Health care for the 21st century [speech]. Nashville, TN: Institute for Health Care Improvement. <http://www.ihc.org/IHI/Topics/Improvement/ImprovementMethods/ImprovementStories/ProfilesinImprovement/JohnKitzhaberoftheEstesParkInstitute>

BOX 56-2 Health Care Resources Consumption

Dollars (%)	Population (%)
35%	1%
60%	5%
70%	10%

From Warda, M. R. (2006). Why isn't nursing more diversified? In P. Cowen & S. Moorhead (Eds.), *Current issues in nursing*, (7th ed.). St. Louis: Elsevier.

Among Americans under the age of 18, this shift is projected to take place in 2023, which means that every child born in the United States from here on out will belong to the first post-White generation (Hsu, 2009). Of the nearly 300 million people in the United States, 217 million speak English only, 23 million speak English less than very well, and 52 million speak a language other than English (Purnell, 2008). There are ascending rates of same sex parent households and what some call “the beiging of America,” in reference to the increasing number of children of mixed race or ethnicity because of interracial dating and marriage. Now more than ever, race is just one of a seemingly infinite number of possible self-identifications.

Within the walls of all of our institutions, four generations are working side-by-side and not necessarily harmoniously. Experts tell us that in January 2011, the leading edge of the baby boom generation (those born between 1946 and 1964) will become eligible for Medicare. There are 78 million people, 30% of the U.S. population, in this generation. The projected unfunded liability in the Medicare program when they fully reach the age of 65 is well in excess of \$60 trillion (Kitzhaber, 2008). By the year 2030, more than 25% of the elderly population will consist of racial and ethnic minorities (Green, 2006).

As the diversity of our nation continues to grow, the veneer of inclusion that exists in all of our systems, including health care, is being stripped away exposing hypocrisy, insincerity, and arbitrarily assigned superiority. Discussions abound about the formulation of social policy that calls upon us to revisit questions related to sensitivity, knowledge, and skills needed for constructive relations among people who are different, and the principles that underlie a just and democratic society. The call to be good stewards of finite resources is bringing increasing pressure on all systems. This means that we can ill afford the cost of ignorance, arrogance, or conformity at the expense of individuality, creativity, and innovation. These realities are not only transformative but also fraught with a sense of desperation. Out of this desperation comes the fight-or-flight response, a reactive posture. There also comes a mandate to be different, act different, and to embrace difference. The message to be heeded is that relationships are not separate from our identity, our fears, and our hopes. We must recognize them as mirrors of our souls. Not having diversity defies logic and poses a clear and present danger to our nation.

Diversity is not just an ideal. It is about the relationships between us. The term *diversity* typically refers to differences in characteristics such as gender, race, ethnicity, social class, religion, sexual orientation, socioeconomic status, age, body size, physical ability, or physical body alterations such as tattoos or body piercings. Recently, generational differences are also being included in characterizing diversity. Generational differences capture diversity of thought because we are influenced by the times in which we are born as well as cultural diversity, “ways of viewing the world or approaching the world.” Evidence suggests that ignoring differences among us is a mistake and may do more harm than good. Yet, by and large, downplaying differences continues to be widespread in schools, places of employment, and in health care.

In 2003, the Institute of Medicine warned of the “unequal treatment” minorities face when encountering the health system. The data in that report are compelling and alarming. Cultural differences, a lack of access to health care, combined with high rates of poverty and unemployment contribute to the substantial ethnic and racial disparities in health status and health outcomes (Box 56-3).

Growing evidence indicates that treatment efficacy varies among different cultural populations and that we must integrate these variations into quality measurements if we are to provide the best possible

BOX 56-3 The Wealthier, the Healthier?***A Look at the Relationship between Household Income and Health Status***

Household Income	Percentage with Poor or Fair Health Status
Less than \$15,000	20.6%
\$15,000 to \$24,999	15.1%
\$25,000 to \$34,999	8.1%
\$35,000 to \$49,999	5.9%
\$50,000 and greater	2.7%

From the U.S. Department of Health and Human Services. (2005). *Healthy People 2010*. Rockville, MD: Author.

treatment to all. Health services research has shown that minority health providers are more likely to serve minority and medically underserved populations, and patients are more likely to select professionals from their own backgrounds.

Cultural competency, which is both an outcome (a synthesis of different perspectives) and a process (series of events), is being proposed not as a panacea to cultural biases in health care but rather as an approach to ensuring that all patients receive the best care. Culture, like genetics, has a collective definition but individual expression. It is an individual concept, a group phenomenon, and an organizational reality. It is shared, learned, dynamic, and evolutionary. Experts have argued that the delivery of culturally competent care requires health care providers to be knowledgeable of the patient's culture and its influences on health practices and status. For nursing this is a "clarion call." We must deliver nursing care with true understanding of those with whom we have an implicit and explicit societal contract. No one spends more time with the patient than a nurse, so it stands to reason that if the patient's main surveillance system is not up to date, the safety of the patient is at risk. If the presence of nurses representative of the culture and demographic composition of patients at all levels in the system is insufficient, decisions, policy development, and discussions regarding culturally relevant care delivery will be severely limited, and quite possibly, patients will be harmed. The results are not mitigated by intent and the shameful occurrence of health disparities will continue. Harm is harm, whether intentional or unintentional. Yet, despite the evidence pointing to better outcomes for patients and their families, providing equitable health care for all remains a complex and formidable challenge for nursing.

Diversity invites us to ask hard questions that illuminate the scope of the issues and provide us with the opportunity to learn as we pursue answers. All institutions are defined by the questions they are willing to ask and those they avoid. For nursing, it is time to ask, are we in the business of health care or health caring? This is not just semantics. The inability to clarify the distinction between the two is the root cause of our failure to provide effective, affordable, and compassionate medical care for everyone (Duffy, 2008).

Why is there a lack of racial, ethnic, and gender diversity in nursing? Why does genderism cause nursing so much angst? How serious are we about providing access and opportunities for education in schools and universities? What are the implications for teaching a diverse cadre of students with diverse needs and learning styles? Why does this situation remain unchanged when many nursing schools are addressing issues of inclusion, justice, and diversity in a world that increasingly is without borders? If nursing is to be at its best, should nursing be diverse? Addressing these questions requires examining not only individual acts but also the system that permits cultural mismatches between patients and providers.

PUTTING THINGS IN PERSPECTIVE

From its beginnings, the United States has struggled with deciding who establishes the norms and values of society, given that we are a nation built primarily through immigration. Our egalitarian ideals limited written expression of the dissonance between such ideals and our true views toward diversity. The United States historically has called for a "color-blind" society in which racial or ethnic group membership was supposed to be irrelevant on the premise that "all men are created equal with certain inalienable rights." On the other hand, a plethora of evidence, which can be traced from the time of establishment of the Thirteen Colonies, proves national policies were based on supremacist ideologies and practices. Educational institutions were used as tools for shaping and preserving cultural homogeneity, or the Anglo-Saxon conception of righteousness (Bessent, 1997).

Furthermore, the support of legalized discrimination remained until the mid-twentieth century with laws that denied people of color equal access and participation in education and employment. In fact, the U.S. health care delivery system was conceived within a Eurocentric model that originally excluded nonwhite patients and providers. Some of the builders of the system viewed anyone nonwhite as less than human and

more similar to animals, thereby justifying the exclusion. Once you dehumanize somebody, everything else is possible. The remnants of this thinking are interwoven in the architecture of this great nation. When combined with our unrelenting fear of difference and change coupled with factors such as systemic and individually mediated racism, stereotypes, discrimination, our proclivity to judge, and the perpetuation of myths, the influence and benefits that a diversified population can bring to society are suffocated. According to the National League for Nursing and others, this is also nursing's heritage, and until recently, has resulted in a predominately white female provider base that delivered and promoted "color-blind" care and "color-blind" nursing education (Evans et al., 2003).

Together, African Americans, Hispanics, Asian Americans, and American Indians make up more than 30% of the U.S. population. Their total representation in the nursing profession is slightly more than 12% (Smedley, Butler, & Bristow, 2004). To put the situation in perspective, consider the largest minority group of nurses, African Americans. Nurses make up the majority of health providers, 2.9 million nationally; only 122,000 are African American, and only 106,644 are employed in the health care arena (Sullivan Commission, 2004). Considering there are 35 million African Americans in the nation, this yields a ratio of one African American Registered Nurse to every 328 African-American patients. Moreover, minorities make up less than 10% of baccalaureate nursing faculty. Interestingly, men account for about 10% of the nurse population in general. Thus the proportion of ethnic minorities or men in the nursing profession and those entering the profession still falls short of the proportion when compared to these groups' occurrences in the total U.S. population.

When it comes to the demographic makeup of the student body, systemic cultural insensitivity contributes to the lack of diversity and the domestic achievement gap. The factors are many and involve complex personal, academic, and environmental/cultural factors (Box 56-4). These include role stereotypes, the image of nursing, the ever-present vestiges of genderism, economic barriers, inadequate primary and secondary school preparation and counseling, and a lack of mentors. In addition, misunderstandings about the practice of nursing; incivility (both horizontal and laterally) experienced and told by nurses; and increased career opportunities with better pay, particularly for faculty; and better hours for nurses working at the patient level in hospitals, clinics, nursing homes, and extended care facilities are at play.

BOX 56-4 Barriers to College Education for Minorities

- Negative perceptions of nursing
- Inadequate secondary school preparation and counseling
- Cultural/environmental barriers
- Fewer successful role models
- Cost of higher education
- Limited access to higher education information
- Lack of familiarity with college admission process
- Restrictive admission criteria
- Perceived and actual racial biases

From Warda, M. R. (2006). Why isn't nursing more diversified? In P. Cowen & S. Moorhead (Eds.), *Current issues in nursing* (7th ed.). St. Louis: Elsevier.

In the United States, there is an overreliance on standardized testing, which has become associated with educational merit and is used to validate grades, curricula, teaching, and student accomplishments. Many students of color perform poorly on these tests, which may not be free of bias, and this hampers their ability to get into the system. Grade point averages are also a determining factor in college admission, but because academic standards often vary, this reliance can lead to false assumptions about a student's capabilities to succeed. We would do well to remember that not everything that counts can be counted. Admissions committees often use volunteerism as an indication of caring; this practice may make assumptions about a student's character without any empirical evidence. Nontraditional students who are often older, those who have decided to embark on a second career, and those who must work while attending school may have very little discretionary time for volunteer work. Such practices coupled with traditional and narrow definitions of a "legitimate volunteer activity" lead to another discriminatory practice and one more superficial barrier to diversifying the nursing profession.

Academic performance can also be adversely affected by other interrelated factors such as age, family obligations, finances, transportation, distance from classes, clinical experiences, and hours worked. Older students may find it difficult to meet in the evenings for study groups or to complete team-based assignments. For many of these students, family comes first and students may even sacrifice their own personal resources for the good of the family (Evans, 2003). What is good for the group is more valued in these instances than individual achievement, which is the antithesis of how academia

operates; consequently, this value can impact both students and faculty in regard to the presence and success of students of color.

An in-depth examination of the root causes can be found in the report *Missing Persons: Minority in the Health Professions* (Sullivan Commission, 2004). The report offers detailed recommendations based on three principles: (1) in order to increase diversity in the health professions, the culture of health professions schools must change; (2) new and nontraditional paths to the health professions should be explored; and (3) commitments must be at the highest levels of government and in the private sector. The current faculty composition in most schools, unless the school is one of a handful of historically black colleges or universities, is still predominantly white and female, with an average age of 56 years. Though devoted to the profession and the work of preparing nurses for the future, many matriculated through nursing programs that typically focused on disease prevalence from a racial or ethnic perspective. Such programs did not provide intentional efforts to address the effects of racism, stigma, bias, and discrimination on patient outcomes or working relationships with other providers. Their experiences of teaching and functioning biculturally were often limited or, at best, carefully constructed, leaving them ill prepared for caring or teaching those who differ from them culturally. Students are not insulated one bit from the worldview promoted by their teachers, textbooks, and entertainment (Wood, 2008). To this day, issues related to the composition of the nursing workforce as it relates to gender, sexuality, and racial/ethnic diversity seldom get honest and open dialogue.

New folks in the system bring new issues that the majority of nurses have neither had to confront nor work through. The incompatibility of current demographics with nursing in its present form is clear. The most cited barriers to retention are faculty attitudes and inadequacies in meeting minority student needs; lack of minority faculty to serve as role models and mentors; and a failure of nursing education programs to integrate diverse cultural values, attributes, and orientations in their curricula. The nature of academia is to reward individual achievement. European-American values of individualism, self-confidence, and straightforwardness are powerful influences in the development of nursing school curricula and grading criteria. Ethnically diverse students are likely to espouse values related to mutual interdependence and a group versus individual focus, along with a preference for smooth interpersonal relations, cooperation, tolerance, and

accommodations of others. This disconnect in the embedded structure of beliefs, values, attitudes, and symbols point out the degree of institutionalized racism in nursing education (Box 56-5).

Faculty desperately need a safe place to unpack concerns and acquire assistance with considerations when developing lectures, making clinical assignments, conducting research, and identifying bias in instructional materials, including written tests; ways to approach sensitive topics; how to address their deficit of knowledge in this area; and how to provide culturally sensitive counseling (Byrne et al., 2003). Students also need a safe place to deal with daily issues such as power inequities, isolation, and unwritten rules about how to be successful in their learning. Prior minority students, particularly men and those from different racial or ethnic groups, may be able to offer different strategies, approaches, and coping strategies to address such issues. In addition, few schools have diversity programs or specialists that actually reside in the school of nursing to address faculty and student questions and concerns about diversity and inclusion. In a 2003 survey of

BOX 56-5 Major Factors Related to Retention Among Minority Students in Schools of Nursing

PERSONAL

- Self-efficacy
- Determination
- Study skills
- Grade point average
- Language proficiency
- Pre-college education

ACADEMIC

- Lack of faculty support
- Unavailability of mentors
- Lack of program flexibility
- Inadequate academic services
- Lack of financial aid
- Devalued cultural perspective
- Lack of peer support
- Pressures to conform

CULTURAL / ENVIRONMENTAL

- Family support
- Family responsibilities
- Hours of employment
- Disconnect between attributes, values, and orientation of students and nursing profession

From Warda, M. R. (2006). Why isn't nursing more diversified? In P. Cowen & S. Moorhead (Eds.), *Current issues in nursing* (7th ed.). St. Louis: Elsevier.

50 schools, only 13 included a diversity program, and several others were unsure about what that entailed. Out of the remaining 30 programs without a cultural specialist, only 5 had any future plans to implement such a program (Tracey, 2003). Organizational assessments such as the one developed by the Partnership for Recruitment, Diversity and Excellence in Nursing grant team at the University of North Carolina can help a school of nursing understand how the way things are done contributes to the lack of diversity in nursing (Foster et al., 2007). It can open the doors to discuss institutional racism and the development of tailored approaches to addressing the consequences. Appendix 56-A provides a modified example of the assessment tool.

Research indicates a serious disconnect between the attributes, values, goals and orientation of students and those who are of the majority by age, generation, gender, and race in the nursing profession. Tomorrow's potential workforce holds the following values and orientation: (1) immediacy (managing and moving multiple pieces of information quickly using high technology), (2) independence (autonomy and latitude to feel productive and fulfilled), (3) work-life balance, (4) social responsibility (at the community and individual levels), (5) flexibility (regarding time at work translating to

job sharing and telecommuting), and (6) diversity (Ernst, 2000). The need for faculty development in this milieu of change has never been greater. Faculty and students unduly suffer because of the lack of foresight by a whole host of academic and practice leaders to prepare for current conditions. Without concerted and intentional efforts on the part of nurses and the nursing profession, the prospects for change are limited. Racism and racial wrongs can be perpetrated by individuals, institutions, professions, entire nations, and societies. All policies and procedures including those related to the hiring and recruitment of faculty and staff should be closely examined. It is quite possible that hidden factors work against the best of efforts to become diverse.

THE PROS AND CONS

As noted, the positive side of diversity falls into four major categories: (1) advancing the cultural competency of all nurses, (2) increasing access to health care for the underserved and addressing health disparities, (3) broadening the research agenda, and (4) ensuring that health care administrators and policy makers are adequately informed about the special needs and expectations of minority populations (Cohen, 2006). However, diversifying the profession also brings a high

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School of Nursing Climate Survey
For Faculty and Staff

This survey is designed to help the School of Nursing learn more about the perceptions of faculty and staff concerning climate with respect to issues of diversity.

For the purposes of this survey, diversity is defined as *holding multiple perspectives*. The dimensions of diversity are *the variety of physical or social characteristics that can be used to describe people, including age, race, gender, disability, ethnicity, nationality, religious beliefs, sexual orientation, political beliefs, economic status, power status, geographical background, and culture*.

Please answer questions from your perspective as a faculty or staff member in the School of Nursing. It will be most helpful if you are candid, honest, and straightforward. Please indicate your level of agreement with the following statements.

APPENDIX 56-A A Modified Example of the Assessment Tool

A. VISION AND COMMITMENT: *How does the School of Nursing publicly embrace and express its commitment to diversity? Please indicate your level of agreement with the following statements.*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. The school publicly embraces diversity in the student body.	☐	☐	☐	☐	☐	☐
2. The school is committed to creating an environment that welcomes many different perspectives.	☐	☐	☐	☐	☐	☐
3. The school adequately addresses issues/ incidents that might involve:	☐	☐	☐	☐	☐	☐
a. Classism	☐	☐	☐	☐	☐	☐
b. Homophobia	☐	☐	☐	☐	☐	☐
c. Abuse of unequal power dynamics between faculty, staff, and students ¹	☐	☐	☐	☐	☐	☐

¹Taking advantage or controlling an outcome to the personal preference of the one with more power

B. DIVERSITY OF PRESENCE: *What does the School of Nursing do to recruit and retain a diverse faculty, staff, and student body? Please indicate your level of agreement with the following statements.*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. Recruitment efforts in the school reflect a commitment to achieving a diverse faculty and staff.	☐	☐	☐	☐	☐	☐
2. Tenure and promotion processes in my school/department are free from bias based on personal characteristics.	☐	☐	☐	☐	☐	☐
3. In our school, elitism is a substitute for carefully weighing information in our decision making (i.e., search committees, promotion, and tenure committee work, etc.)	☐	☐	☐	☐	☐	☐

C. EDUCATIONAL BENEFITS OF DIVERSITY: *To what extent has the School of Nursing ensured that students are exposed to content, learning environments, and activities that foster an appreciation for diversity?*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. The curriculum in my program adequately represents the academic and social contributions of a variety of people.	☐	☐	☐	☐	☐	☐
2. The school encourages faculty to include diversity issues in their course content.	☐	☐	☐	☐	☐	☐
3. The school provides faculty development opportunities to integrate diversity concepts into the curriculum.	☐	☐	☐	☐	☐	☐

D. SUPPORTIVE CLIMATE: How does the School of Nursing ensure that its climate is welcoming, inclusive, and supportive of all faculty, staff, and students?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. I have experienced situations in which the environment caused me to feel unimportant or alienated.	☐	☐	☐	☐	☐	☐
2. Faculty are able to manage diversity issues related to students.	☐	☐	☐	☐	☐	☐
3. Senior administrators are able to manage diversity issues related to students.	☐	☐	☐	☐	☐	☐

E. PERSONAL BELIEFS ABOUT DIVERSITY ISSUES: How do you perceive the nature of diversity issues?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. I believe that diversity is crucial to our success as an organization	☐	☐	☐	☐	☐	☐
2. I am accountable for the results I produce, even if a situation is unfair.	☐	☐	☐	☐	☐	☐

F. The School of Nursing is a comfortable and secure place for faculty and staff with the following characteristics:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know/ Not Applicable
1. Male	☐	☐	☐	☐	☐	☐
2. Racial/ethnic minority	☐	☐	☐	☐	☐	☐
3. Gay, lesbian, bisexual, transgender	☐	☐	☐	☐	☐	☐
4. Visible body modifications (e.g., tattoos and body piercings)	☐	☐	☐	☐	☐	☐
5. Appearance (clothing and hairstyle choices)	☐	☐	☐	☐	☐	☐

DEMOGRAPHICS

Please note that this information will only be used in the analysis of the results.

Gender:

- ☐ Male
☐ Female
☐ Transgender

Race/Ethnicity: _____

Faculty Rank

- ☐ Instructor/Lecturer
☐ Assistant Professor
☐ Associate Professor
☐ Full professor

Length of Service: _____ year(s)

Employment Status:

- ☐ Staff
- ☐ Tenured/Tenure Faculty
- ☐ Fixed term Faculty
- ☐ Other: (Specify) _____

Faculty Rank

- ☐ Instructor/Lecturer
- ☐ Assistant Professor

Age: _____ years**Do you have a documented disability?**

- ☐ Yes ☐ No

Are you gay, lesbian, bisexual, or transgender?**Do you consider yourself to be overweight?****Do you have visible tattoos or body piercing?****Do you have regular contact with students?****Do you have regular contact with faculty?****Do you have regular contact with staff?**☐ Associate Professor☐ Full professor☐ Yes ☐ No☐ Yes ☐ No☐ Yes ☐ No☐ Yes ☐ No☐ Yes ☐ No☐ Yes ☐ No

Thank you very much for your time and effort in providing us with your views on these important issues. In collaboration with the UNC-CH School of Nursing, this survey was developed by Evaluation, Assessment and Policy Connections (EvAP) at UNC-CH and adapted from UNC-CH's Chancellor's Task Force on Diversity. The survey was sponsored jointly by the Offices of Minority Affairs and Academic Affairs in UNC-CH's School of Nursing. This survey is supported by grant number D19HPO2643 from the Health Resources and Services Administration, U.S. Department of Health and Human Services. Contact Rumay Alexander at rumay@email.unc.edu for additional information on the climate assessment.

APPENDIX 56-A—cont'd

drag coefficient. Change brings a disturbance to the predictability and comfort of sameness, which breeds resistance that can bring diversity efforts to a complete halt. Leaders need to be persistent to get buy in; no one likes the notion of more work to change what is viewed as a system that works just fine for the majority group.

Financial, educational, and organizational time costs are associated with implementing diversity initiatives. An organization must be prepared for potential cultural clashes among patients and providers as well as between providers. Recruitment efforts, whether of faculty or students, will require revamping both methodology and logistics. We must find ways to eliminate the fear that perpetuates deeply held beliefs and automatically presumes that a diversified profession can happen only if we “let in those who are less prepared and less competent” thereby “sacrificing quality and safety.” Sometimes claims of reverse discrimination surface because tokenism, playing a numbers game, becomes an organization’s smokescreen to demonstrate that everyone is being given a chance to enter the arenas of work or education. When this does occur, persons of color have the added burden

of doing more just to be considered as good as anyone of the majority. This has the potential to lead to added stress, resentment, anger, and serious conflicts that can affect teamwork and productivity. Recently, a Harvard political scientist, Robert Putnam (Jonas, 2007), conducted a massive new study on this very issue, based on the detailed interviews of nearly 30,000 people across America. He found that the greater the diversity in a community, the fewer people vote, the less they volunteer, and the less they give to charity and work on community projects. He also found that in communities of greater diversity, neighbors trust one another about half as much as they do in the most homogenous settings. In summary, he found that virtually all measures of civic health were lower. It is believed that this occurs because of the discomfort that differences bring.

SUMMARY

Opinions vary, but whether we are talking about a financial portfolio, the stunning display of Mother Nature’s handiwork, or the health care workforce, we can agree

that diversity is a good thing. Having a more diverse workforce is a patient safety issue—a quality of care issue. An obvious advantage of a diversified workforce is that individuals from minority backgrounds can bring their own experiences and values to bear on the policies of health care institutions and on the norms of behavior characterizing the provider-patient relationship. Feeling safe is important to all of us. Once personal safety is assured, barriers come down, and conversations revealing information that might not have been shared in an unsafe environment begin. Since all encounters are cultural encounters, creating welcoming environments in practice and academic settings; providing continuing education about culturally relevant care; designing culturally relevant and sensitive curricula in nursing programs; and holding courageous dialogue, whereby pretense gives way to substantive questions and conversations will go a long way in reducing disconnects between patients and providers. Perception is reality; therefore, what is perceived dictates what one will or will not do, including getting or delaying treatment. The more patients and providers have in common (i.e., race, gender, and ethnicity) the more forthcoming vital information and health seeking behaviors seems to increase and potentially deadly delays are avoided.

Although commendable efforts are underway to change the fact that nursing currently has a predominantly white, female provider base, this plays a factor in perpetuating a deficient pedagogy that continues to teach future nurses about diverse populations and the implications of culture as an add-on or afterthought rather than a pragmatic and prudent facet to providing quality nursing care. Empowering patients requires paying attention to nonverbal cues, being aware of preconceived notions about those who are different from the provider, and paying attention to other disconnects with the patient such as language or communication. Cross-cultural communication in all its forms (race, ethnicity, gender, sexual orientation, disabilities, class, etc.) can vex even the most well-intentioned nurse. The research arena could stand to review its rules also. For example, currently training grants (T32) from the National Institute of Health prohibit international doctoral students from receiving financial support. In some nursing schools, there are too few qualified students to take advantage of the support, while multiple qualified international students are left with no recourse. A change is due so that international students may be supported by T32 funds in exchange for mandatory service in U.S. universities for a certain number of years before returning to their countries. Upon return to

their country of origin, if they desire to do so, nurses would be better equipped to advance nursing science in both countries and global collaboration could continue. This would simultaneously offset a nursing faculty shortage; increase the diversification of the profession; and ultimately, enhance recruitment efforts by presenting a global and competitive profile of the profession to the world place.

Unless there is diversity among nurse educators to conduct and partner with the majority in conducting research about diverse populations, the translation and transmission of information to assault the ravages of health disparities will be around much longer than any of us would like to see. Few studies have evaluated race as a potential predictor of adverse events. I cannot encourage enough that such studies be embraced by nurse researchers in the future. Such research would help the majority provider group understand that failure to rescue and the ability to recognize adverse or deteriorating patient conditions are operating, and timely interventions can occur.

It takes courage, particularly in an economically driven workplace, to create the caring society that is the spirit of nursing. The opposite of nursing is negligence. If nothing else, nurses must invest in self-awareness and be willing to reflect on their own actions. Self awareness is at the root of most other human capacities. We can choose either to expand or to restrict our consciousness. The more you know about yourself, the better care you will provide. Comprehensive programs of recruitment, curriculum reform, pedagogical technique variations, support systems, and mentoring are recommended as a way to begin to address this dilemma. We must treat diversity like other strategic priorities. Such processes, characterized by inclusion and justice and appreciating diverse individual knowledge, can support changes in the environment necessary for the ultimate success of all. If nursing is to be at its best, nursing should be diverse.

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Minority Representation in Nursing: Diversity, Cultural Competency, and Racism—The Challenge Persists

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Questions concerning the achievability of cultural competency persist despite various attempts to educate and incorporate this construct into the nursing profession. How do nurses not only encourage cultural diversity but also actually achieve it in a profession that continues to exhibit homogeneity? In all the health care professions, but especially in nursing, the demographics do not reflect the demographics of the general population of the United States. Should they reflect this? Is this a real and necessary objective? If so, how do nurses encourage and retain minority people in nursing? What is the impact of the projection that by 2030, 40% of all Americans will be members of minority groups? Would a more accurate interpretation of minority representation be based on local and regional population statistics? For example, is it more reasonable to expect a greater number of Hispanic nurses in the Southwest than in the Midwest? Might there be other minority groups in those regions who are not being represented and who are the real minority? In other words, if a minority group becomes the majority group, who then becomes the minority, and how do nurses address their needs?

Where minority representation is small, can educated, culturally competent nurses be successful in administering holistic health care by virtue of their knowledge regardless of their individual culture, race, or ethnicity? If one geographical area has a small minority representation, will nurses in this area be able to give culturally competent nursing care when they do encounter persons of minority status? What about the issue of racism in nursing education and practice? It is widely acknowledged that racism exists in American society, yet most people are afraid to use that term.

Could it be that if it is not named, it doesn't exist? The International Council of Nurses (2006) names race within its statements, but the Code of Ethics of the American Nurses Association (2001) does not.

These same questions have been asked and addressed in the literature since the 1980s. Many individual nursing programs have instituted measures to try to address the recruitment of minorities, the retention of those students, and the education of all students in developing competency in nursing. Competency must include the constructs of culture and diversity. The Sullivan Commission (2004) identified three characteristics for racial and ethnic diversity in the workforce. First, all racial and ethnic groups from the community must be represented. Second, incorporation of varied skills, talent, and ideas from those groups must be system wide. Third, at all levels of an organization (institution) a sharing of professional development opportunities, resources, responsibilities, and power must take place.

Clearly, some improvements have been made over the last 40 years, but not enough. A review of the literature indicates few recent publications dealing with cultural diversity in nursing but many addressing the nursing shortage. Is the nursing shortage the only reason one should consider minority representation in nursing? Definitely not, but the shortage at least, has made nursing administrators in practice and academia recognize the importance of diversity. It is an important factor for nurses to achieve quality nursing care. That minorities are better represented in nursing today than they were 10 years ago is true, but minority representation is not at the level it should be.

Nursing education programs are challenged by these facts as they strive to prepare graduates for a comprehensive health care system. Graduates must master core

competencies for practice, including developing effective interpersonal relationships. Language and cultural barriers are well recognized as factors that have the potential to create misunderstandings that may result in ineffective health care practice and treatment. Despite this recognition, the impact of culture has not always been incorporated into practice by nursing education programs as reflected in recruitment and retention strategies. Since 1990, affirmative action programs, many of which began in the 1960s, have been a subject of considerable continuous and escalating debate. Civil rights protests, including marches on Washington, D.C., in the 1960s, did much to formulate more proactive policies to assist members of minority groups into schools and positions formerly closed to them. Once again, nurses are addressing these issues with the optimistic belief that things will change in relation to the representation of persons of minority status in nursing. Why is this important? In writing this chapter, now for the fifth consecutive edition of this book, I find minority representation in nursing to be important. Not only must nurses address this issue, but also nurses must find workable solutions so that future nurses can provide quality, competent nursing care designed to consider and meet the needs of the diverse population. Just as the Declaration of Independence recognizes diversity, “We hold these truths to be self-evident, that all men are created equal,” it is the nurses’ responsibility to ensure that diversity is valued.

DIVERSITY IN THE GENERAL POPULATION

The U.S. Census 2000 report indicates a total population of 281.4 million. Of that number, 77.1% reported themselves to be white; 13%, black; 13.3%, Hispanic; 4.4%, Asians and Pacific Islanders; 1.5%, American Indian and Alaska Native; and 0.43%, Arab (de la Cruz & Brittingham, 2003; Greico, 2001; McKinnon, 2003; Ogunwole, 2002; Ramirez & de la Cruz, 2003; Reeves & Bennett, 2003). Although data on race have been collected since 1790, the 2000 census was the first to offer persons the opportunity to identify themselves as belonging to more than one race if they desired to do so.

The 2000 census is also the first time that the U.S. Census Bureau has reported on the Arab population. This is also historically important because it legitimizes the people of Arab descent as a recognized minority group. The designation of Arab includes persons with ancestries originating from Arabic-speaking countries or areas of the world usually categorized as Arab. Data

on ancestry was collected first in the decennial census in 1980 but not disseminated in a special report. The U.S. Arab population increased from 0.27% in 1980 to 0.42% in 2000. Of those persons reporting, the greatest increase was in the number of individuals of Egyptian ancestry (de la Cruz & Brittingham, 2003, p. 1).

Other interesting factors emerged from the 2000 census. Persons found to be under 18 years of age were identified as follows: 34.4% Hispanic, 33% black, 26% Asian and Pacific Islander, and 23% non-Hispanic white. Approximately one third of the major minority groups are under 18 years of age compared with almost one fourth of the non-Hispanic white population. In addition, the white population has increased more slowly than the minority populations from 1990 to 2000. The minimum-maximum range for whites (race alone–race combined) of 5.9% to 8.6% is in contrast to a total population growth of 13.2%. Clearly, this effects and will have an escalating effect on educational systems, professions, health care, and political governance in the future.

DIVERSITY ISSUES AND LEGISLATION

The original purpose of affirmative action was to attempt to remedy wrongs done to black/African-American people. The fiftieth anniversary of the Supreme Court decision *Brown v. Board of Education* was marked in 2004. This decision ruled that segregation in public schools was illegal. Fifty years ago, the question was whether or not schools would be required to integrate. Today it would appear that the question is whether schools are permitted to integrate voluntarily (Ryan, 2006). In the 1960s, colleges and universities reacted to civil unrest by adopting affirmative action programs. The 1970s saw an increase in minority enrollment, especially in elite colleges and universities. For the last 15 years, major debate in academia, as in the workplace, has centered on the concept of reverse discrimination; that is, that qualified whites are being denied access to academic programs because they do not have a recognized minority status. The Bakke decision in 1978 (*Regents of the University of California v. Bakke*) endorsed the use of race as one factor in admissions decisions. Race, however, could not be so decisive that nonwhite applicants did not compete with others. Quotas were not allowed as this action would not promote the case-by-case review of applicants. Quotas would also promote a dual system of application for whites and nonwhites (Moran, 2006). Colleges were legally justified in giving some consideration to race in the admissions process

as long as the motivation was to obtain the educational benefits of diversity (Schmidt, 2008a).

Opponents feel that pursuing diversity for educational purposes is not the same as pursuing diversity for racial equality and justice. In the case of Podberesky, a Hispanic student, the U.S. Court of Appeals for the Fourth District ruled that the University of Maryland at College Park had failed to meet the legal tests for offering a minority scholarship. This suit challenged a scholarship for black students at the university, and that decision is the only one at the appellate level that deals with a minority challenge. The ruling stated that past discrimination was not sufficient cause for a race-based remedy and that such discrimination must exert some present effect (Jaschik, 1993).

The Adarand decision in June 1995 held that race could be used only for preferential treatment if it can withstand "strict scrutiny" by the federal courts (Michaelson, 1995). As it is interpreted, this decision affects higher education because all colleges and universities are to some extent governed by state and federal civil rights laws in order to receive federal and state money. Therefore, strict scrutiny would have a far-reaching effect. In 1996 the Adarand decision was used when the federal Fifth Circuit Court ruled on a suit brought by law students at the University of Texas at Austin regarding preferential treatment given to minority applicants. The ruling on the case, *Hopwood v. U.T. Austin Law School*, stipulated that universities in the Fifth Circuit jurisdiction could not use race or ethnicity as factors in determining admission to the university, to special programs, or for scholarships or financial aid (Kauffman, 1996). Race could not be used to remedy past discrimination. Admissions could be made, for example, based on economic disadvantage, bilingual ability, or regional or geographical needs. This legislation meant that educational institutions in Texas had to find new or additional ways to continue to improve diversity in their student bodies. University of Texas Austin adopted class-rank admissions guarantee, that is, the top 10% of graduates from each Texas high school were guaranteed admission (Schmidt, 2008b). The obvious flaw was that this system nearly filled the freshman seats available based on high school class rank and highly qualified applicants were turned away or asked to enroll in sister University of Texas campuses until there was room on the Austin campus.

In the case of *Smith v. University of Washington Law School* (2000), the Supreme Court in the process of review discussed five hallmarks of a narrowly tailored affirmative action plan. These hallmarks are (1) the

absence of quotas; (2) individualized consideration of applicants; (3) serious, good-faith consideration of race-neutral alternatives to the affirmative action program; (4) that no member of any racial group was unduly harmed; and (5) that the program had a sunset provision or some other end point. Two important recent cases involving the University of Michigan were decided in 2003. In *Grutter v. Bollinger* (2003) the decision was made that the University of Michigan law school did not violate the equal protection clause of the Fourteenth Amendment to the Constitution and that student body diversity justified the use of race in university admissions. The use of race by the law school was not the only criterion used, and the admissions policy of the law school was in accord with the stated goal of the school. Applicants were evaluated individually in relation to stated criteria for admission. These criteria included looking beyond grades and scores to "soft variables." It required serious, good faith consideration of race-neutral alternatives. Bonilla-Silva (2003) maintains that Justice O'Connor's opinion in *Grutter v. Bollinger* uses color blindness to perpetuate racial inequality without sounding racist. Color-blind racism is founded on the belief that race no longer matters. Only the most limited use of race in admissions will withstand legal close scrutiny. A review of Bonilla-Silva's book by Walsh (2004, p. 3) concludes that "adherence to color-blind racism in America's highest court may already be stunting the growth of racial progress in the U.S. at a time when racial equality is still an unrealized dream."

The second case, often called the companion case to *Grutter v. Bollinger*, is that of *Gratz v. Bollinger* (2003). This case was filed by an applicant denied admission to the University of Michigan, College of Literature, Science, and the Arts. In this case, the college's policy of admitting by a point system that automatically awarded 20 points to African Americans, Hispanics, and Native Americans was challenged. The court found that this policy violated the equal protection clause of the Fourteenth Amendment because the policy was not tailored narrowly to achieve educational diversity. The decision also stated that the admissions policy did not provide individualized assessment of each characteristic of applicants.

The University of Michigan cases raise the question of whether or not racial diversity leads to positive outcomes for students. Numeric diversity should lead to increased numbers of diversity experiences, which then should lead to positive outcomes (Pidot, 2006). Is success for a minority member due to the education received or to the diversity afforded by an admissions

policy, or both? Bollinger maintains that the admissions process is not about rewarding past academic performance as much as it is about building a community of diverse learners prepared to know about their world and to be more competitive in a global environment (Bollinger, 2007).

Alexander and Swartzschild (2004) state that the two racial preference admission policies of the University of Michigan were the perfect basis for Justice O'Connor's decision that rejected transparent racial goals—that is, quotas—and endorsed disingenuous ones. The remaining question was whether affirmative action is a “good” thing. Alexander and Swartzschild believe it is not. One reason given is that race and ethnicity are arbitrary terms. They further stress that racialism is not the same as racism. *Racialism* means paying close attention to race and to thinking in racial terms. *Racism* means thinking some people are less worthy; that is, they deserve less concern or respect solely on the basis of race. These authors state that this presents a danger by diluting admissions, which results in grade inflation and the creation of bogus departments and majors in universities (p. 4). In their opinion, universities are interested in race but not in a diversity of views or backgrounds (p. 6). Their recommendation is that Americans should seek to promote people's common humanity, not their superficial differences (p. 7).

Another case of interest is that of *Smith v. University of Washington Law School* (2004). This case was submitted by the same plaintiffs as in 2000 to appeal the previous judgment of the district court. Three white plaintiffs claimed that they were denied admission to the University of Washington Law School because of the unconstitutional consideration of race and ethnicity for admissions to the law school. Under consideration at this same time was a voter initiative, Initiative 200, which was approved by Washington voters in 1998. Initiative 200 prohibited race-based affirmative action plans; however, the plaintiffs were filing on actions taken in 1994, 1995, and 1996 before the passage of the initiative in 1998. The judgment of the district court in favor of the Law School was upheld. No racial quotas, targets, or goals for admission or enrollment had been established. No damages were awarded.

In California, Proposition 209 was passed and prohibits race-conscious admissions. As a result, black student enrollment at the University of California in 2000 and 2001 was about 20% below the level before this legislation (Walsh, 2004). This differs from the Texas experience after the Hopwood case in which the percentage of minority students was almost the

same after 3 years as it had been when the state ended affirmative action programs in 1996. This was purported to be attributable to stronger recruiting efforts and new financial aid programs (Carnevale, 1999). The admission of minority students in Texas was addressed through legislation that offered admission to students in the top 10% of their high school graduating class regardless of their grade point average or results of standardized tests. This resulted in minority and disadvantaged students in the state having guaranteed admission if, in their school, they were in the top 10% of the graduating class (Schmidt, 2008b).

CULTURAL COMPETENCY IN A RACIST SOCIETY

Many terms have evolved in attempts to recognize and deal with members of a divergent American society. Recognition of these terms as evidence of the struggle to come to grips with “how to manage minorities” is important. This phrasing is deliberate because it almost has seemed that simply by naming it, one can put parameters around it and devise ways to manage it. Terms used over the past 20 years have evolved from cultural awareness to cultural sensitivity to cultural competence. The Sullivan Commission (2004) stated that it was understood for their deliberations that cultural competence is the set of behaviors, attitudes, customs, policies, and resources that come together among professionals that enable them “to work effectively in cross-cultural situations” (p. 16). Other terms include diversity, racial equality, multiculturalism, transculturalism (Leininger, 1994), and racial pluralism. All of these terms are meant to raise awareness of the experiences of minorities and to decide and act on measures to rectify inequalities. Leininger has been among the most prolific authors in nursing, urging culturally congruent care as one of the highest priorities in nursing. Lancellotti (2008) views Leininger's Culture Care Theory as a relevant framework for both cultural competence and diversity. Leininger (2006) identifies the international focus of transcultural nursing as valuing nursing knowledge from other countries and cultures. The issues of social justice and appropriate advocacy strategies would evolve from the process. One positive result is seen in Medicare contracts that mandate the ability to offer linguistically and culturally appropriate care as a condition of awards made to managed care institutions (Salimbene, 1999).

The construct of cultural competence has developed because awareness, sensitivity, and cultural knowledge

have proved to be insufficient. One must ask why. The answer is that the task is fraught with many issues that people do not like to discuss or even acknowledge exist. Most “enlightened” Americans blanch at the words discrimination, prejudice, and racism. Yet members of minority groups frequently use these terms when relating to life experiences. Hence, an understanding of the meaning of each term is important. Discrimination occurs when there is unfair treatment of an individual because of some class or categorization without considering the individual’s merits. Discrimination often is based on prejudice, which is formed by thoughts, attitudes, insensitivity, and ignorance. A negative form of prejudice is called racism (American Nurses Association, 1998). In an earlier white paper, the American Nurses Association (1991, p. 2) established the impact of culture on “perceptions, interpretations, and behaviors of persons in a specific cultural group.” Terhune (2004) stated that perceptions, minds, and attitudes must change if diversity is to exist at the sociocultural level. Increased diversity offers increased opportunities to reach this goal and to expand changing realities in the real world to academic settings.

Salimbene (1999) made an important distinction when she emphasized that equal care does not mean the same care in a multicultural society. Salimbene further emphasized that providers need to acquire enough cultural information that they will be able to anticipate possible barriers that would affect access to health care and compliance. She identified 10 competencies as essential for cultural competence, including awareness, sensitivity, tolerance, understanding, knowledge, and skills that are culturally relevant. The final criterion is “confidence in one’s ability to offer care to patients of other cultures” (p. 31). The 10 competencies developed by Salimbene apply to nursing education and practice. The final criterion for faculty would be “confidence in one’s ability to teach nursing students of various cultures the knowledge and skills necessary for nursing competence.”

Does racism exist in nursing? Barbee and Gibson (2001) conclude that a culture of racism indeed exists in nursing education. By this they mean that an embedded structure of beliefs, values, attitudes, and symbols about nonwhites is passed on to future generations. Most white people would think this is not true and that any racism is an individual characteristic, not a collective attitude. Overt racism has almost completely disappeared. Signs prohibiting people of color from places and hangings of blacks are no longer common occurrences. Racism today is indeed more subtle but nonetheless effective. Racism is masked in words, references,

and the perpetuation of myths. Yet nursing calls itself the caring profession, which makes it all the more difficult to acknowledge the racism. Dreher and MacNaughton (2002) emphasize that the clinical setting is where the expectation of cultural competency is most crucial. They further maintain that cultural competency is really nursing competency.

Projections of population growth illustrate the growth of minorities in the general population. In fact, many futurists postulate a reversal in minority-majority status for at least certain areas of the country. With this growth in mind, development of an infrastructure for the future that builds upon minority strengths and develops well-educated minority members of communities is important. Nowhere is this truer than in the health care professions.

MINORITY REPRESENTATION IN NURSING AND NURSING EDUCATION

Positions in nursing are increasing at a rate that cannot be met unless some changes occur. The changes necessary include many factors related to professionalism, status, education, and diversity. Interwoven with the issues related to minorities in nursing are a number of issues that reflect societal views toward women, subcultures in society, and demographic changes that have occurred over time. Nursing can no longer sustain itself without incorporating, to a greater extent, diverse minority groups into the profession. Although the number of men in nursing has increased, the profession remains predominantly female, approximately 94.6% in 2000 (Spratley et al., 2000, p. 8) and 94.2% in 2004, (Health Resources Service Administration [HRSA], 2006). Therefore, gender socialization across cultures has played and continues to play a major role in the continuation and development of nursing. Stereotypes related to gender and ethnicity cannot be separated artificially when examining the past, present, and future considerations of minorities in nursing.

Basic influences when selecting a career relate to one’s beliefs about oneself. Where do I belong or fit? What is an acceptable career from the viewpoint of my family and my social group? Where can I find personal fulfillment? Financial reward? Advancement? Security? Mobility, yet permanence in a career?

The 2004 National Sample Survey of Registered Nurses reported that there were 2,909,357 registered nurses in the United States (HRSA, 2006). Since 2000, the registered nurse (RN) population increased just under 2% per year. Because two questions regarding

race/ethnicity were asked in the 2004 survey and because respondents were asked to identify all races ascribed to them, there is some ambiguity in interpreting responses in terms of race/ethnicity. In 2004, 10.7% (63,240) of RNs identified a combined nonwhite background. While this is a decrease from 2000, it is still triple the representation in 1980. Of those who identified themselves as nonwhite Hispanics/Latinos, there was an increase of 5% from 1980 with 12.2% of nurses in 2004 self-identified in this category. The presence of Hispanic/Latino nurses in the RN population is masked by the fact that even small percentage changes involve a larger volume of nurses masking their growing presence. Adjusting for nonresponses to race questions, only 2.2% are Hispanic/Latino, while representation in the general population is 14.1%.

Those of American Indian or Alaska Native background are reported as 9,453 in 2004, an increase of 122.5% from 1980. Black/African American nurses increased 101.3% from 1980 with 122,495 reported in 2004. Despite the rather impressive growth noted, the actual numbers of minorities remains small (U.S. Department of Health and Human Services, 2004). In the general U.S. population, 32.6% identified themselves as nonwhite or Latino. This group remains the most underrepresented when compared to the general population.

The National League for Nursing (NLN, 2003) survey of registered nurse programs identified the total number of basic registered nurse preparation programs in 2003 as 1444. Of these, 529 were baccalaureate programs; 846, associate's degree programs; and 69 diploma programs. The racial composition in baccalaureate programs was as follows: black, 12.9%; Hispanic, 4.7%; Asian, 4.9%; and American Indian, 0.2%. The racial composition in associate degree programs was almost the same: black, 12.6%; Hispanic, 5.9%; Asian, 4.2%; and American Indian, 1.1%. Diploma programs had fewer minorities in all categories: black, 11.6%; Hispanic, 3.7%; Asian, 4.0%; and American Indian, 0.2%. The NLN Data Review, Academic Year 2005-2006 (NLN, 2008) reported an additional 150 prelicensure RN programs between 2005 and 2006. It was also reported that minority graduates from U.S. nursing programs increased from 20% in the three previous years to 24.5% in 2006. This increase was distributed across all racial/ethnic categories with Asians, African Americans, and Hispanics gaining about 1% and American Indians gaining 0.3%. Diploma programs have experienced the greatest loss of applicants. This may have some relationship to the location of diploma schools or may indicate that potential minority students interested in nursing prefer associate's degree or baccalaureate programs for

entrance into the profession. Actually, the figures reported by the NLN for blacks and Hispanics do mirror closely the figures reported for the general population. For all types of nursing programs, minorities, with the exception of Asians and Pacific Islanders, are represented less than in the general population.

The 2007-2008 Enrollment and Graduations Programs in Baccalaureate and Graduate Programs in Nursing report (Fang, Htut, & Bednash, 2008) revealed the following data in relation to race/ethnicity: in 2007, 74% of baccalaureate students enrolled were white, 11.8% were black/African American, 5.8% were Hispanic/Latino, 7.6% were American Indian/Alaskan Native, and 4.6% were Asian/Native Hawaiian/Other Pacific Islander. Whites remain the majority in all types of doctoral programs, but a large number of black/African-American nurses are enrolled in clinical-focused doctoral programs. Enrollments for all minority groups increased for the 10-year period of 1993 to 2003 with a total minority increase of 7.2% in baccalaureate programs and 10.4% for master's programs (NLN, 2003). From 2003 to 2007, minority enrollment at the baccalaureate level was 2.5% and at the master's level, it was 1.8%. At the doctoral level the increase for 1993 to 2003 was 6.4% and from 2003 to 2007, it was 3.8% (Fang, Htut, & Bednash, 2008).

Faculty and academic administrative positions in schools of nursing do not reflect the general population: 91% of all deans are white, 5.7% are black, 1.4% are Hispanic, 1.1% are Asian, and 0.2% are Native Hawaiian/Other Pacific Islander (American Association of Colleges of Nursing, 2008, p. 3). This is almost the same as the 2004 reports by Berlin, Stennett, and Bednash. It should be noted, however, that the Asian dean representation increased from 0.2% in the 2004 report to 1.1% in the 2008 report. Faculty racial configuration is almost the same, with 88.5% white in the 2008 report compared to 91.1% in the 2004 report, 6.5% from 5.4% black, 1.8% Hispanic in both reports, 0.3% from 0.4% American Indian, 2.1% from 1.6% Asian, and 0.4% from 0.3% Native Hawaiian/Other Pacific Islander (Berlin, Stennett, & Bednash, 2004b, p. 3; American Association of Colleges of Nursing, 2008, p. 7).

In this chapter in previous editions, the following questions were posed, and three have been answered. "Are members of minority groups attracted to nursing?" It would appear that the numbers are rising. "Do they successfully complete programs of study?" American Association of Colleges of Nursing data suggest a high completion rate. "Do they remain in the profession?" Yes, they compose the largest number of full-time nurses. The last two questions posed, "Why should we be concerned about the representation, or rather the lack of

representation, of significant numbers of minorities in nursing?" and "What directions should we pursue?" have been explored; strategies tested; and new, more effective strategies remain to be developed.

Shireman (2003) suggests that the following six questions be asked when evaluating recruitment and retention strategies for minorities:

1. Is race alone a factor in nonsuccess, or is it really race combined with another factor such as socioeconomic status, or is socioeconomic status the real factor across all student groups?
2. When concentrating on recruitment strategies, do we concentrate on the high schools with the racial, economic, and cultural profiles where we want to recruit in order to promote diversity? Are we recruiting in the best arenas to achieve our goals?
3. When we analyze our graduates, how many go on to graduate school? Are racial minorities concentrated in certain types of work specialties? Why?
4. What does the curriculum include in relation to diversity, and how explicit is that content? Does the curriculum help students to examine and incorporate their own heritage and traditions into the learning experience? How are students treated? Are they treated in accord with what is taught? Do students indicate that the atmosphere in the classroom is culturally sensitive?
5. Does the faculty reflect diversity? Does it reflect the student population? The student population could be different from the community population. What efforts are being made for faculty recruitment of qualified individuals from minority backgrounds?
6. What is the relationship of the school of nursing with the university community, the professional community, and the general community concerning creating a diverse student body? Do minority residents of the community feel welcome to enroll in the school? Do the faculty members visit the local schools, act as resources for them, and work on projects with them?

A final question to add to Shireman's list is, "How is mentoring used?" Is mentoring being confused with advisement programs or, in the case of faculty, with orientation programs? How are mentors selected, and how long do most mentors serve in that capacity?

FACTORS AFFECTING CHANGE IN MINORITY REPRESENTATION

A persistent decline in the number of young persons eligible for college admission has been documented nationwide. Concurrently, the number of older students

(those over 25 years of age) who are interested in pursuing college careers, including nursing, has increased. The NLN reports that 43% of all prelicensure nursing graduates were over the age of 30 in 2006 and 16% were over the age of 40 (NLN, 2008). This means that the overall length of time in the profession is shortened and recruitment of younger applicants, especially those of minority backgrounds, is essential. It is imperative that nursing schools strengthen efforts to attract more minority students, including men. "Considering the fact that females comprise about 51% of the population and minority group representation is rapidly approaching 33%, today's nursing students do not mirror the nation's population" (American Association of Colleges of Nursing, 2001, p. 1).

Applications to nursing programs recovered from the slump of the 1980s as a result of the compounded impact of the nursing shortage; a lack of access to health care for many Americans; an aging population; a shift in emphasis to primary community health care; cost-containment efforts by hospitals, including the use of diagnostic-related groups; and a movement to break down barriers between the health professions through expanded reimbursement by Medicaid, Medicare, and third-party insurers for specifically prepared nurses. These factors have forced the health care system to upgrade salaries and benefits for nurses. When adequate financial reimbursement occurs in a profession, members of that profession develop an increased sense of self-esteem, and colleagues in other professions develop an increased respect.

As health care moved to a managed care system, the number of beds and nursing staff in hospitals were downsized. Unfortunately, adequate remuneration has not extended to areas of need beyond hospital settings. Public health nurse salaries, school nurse salaries, and salaries of nurses in extended care facilities still lag. This is a serious manifestation of the blatant lack of provision for quality health care to the poor; to rural and urban underserved and underinsured citizens; to minority populations; and particularly, a diminished commitment to health promotion and disease prevention activities.

The question of quality in nursing practice continues to be a factor that must be considered carefully. In the past, nursing schools were tempted to make exceptions to admissions requirements to maintain programs through sustained enrollments. Now the pendulum may swing toward admitting only the most highly qualified applicants in relation to quantitative measures such as American College Test (ACT) scores,

Scholastic Aptitude Test (SAT) scores, or grade point average. Because of the increased applicant pool, admissions committees may be tempted to fill classes with only the best students as measured by traditional criteria. If efforts are not made on elementary, middle, and high school levels to prepare minority students better, nurses may find that equal opportunity access has been thwarted and that minority students may suffer because they will not be afforded the opportunity to attempt to succeed.

The recruitment of minorities is being enhanced by various strategies. Professional nursing organizations have developed media campaigns to stimulate interest in nursing. The Johnson & Johnson Company has supported television spots on nursing as a profession. Cues including race and gender are integrated into most of these efforts. Individual nursing schools have developed projects, many of which have been funded. One such project is the Wisconsin Youth in Nursing program designed to introduce middle and high school students of color to college and nursing opportunities. This program is one of the precollege programs at the University of Wisconsin, Oshkosh. Students are brought to the campus for a 2-week campus experience. Parents visit to see the facility, and students have the opportunity to participate in general education classes and special interest nursing classes (Stewart & Cleveland, 2003).

Traditionally, minority students have been classified as high-risk students because they often experience higher attrition rates than white students. The most frequently used criteria on which admission to nursing is based include grade point average, high school rank, interviews, health data, college grade point average, ACT scores, SAT scores, and autobiographical essays. A number of conflicting studies have been done regarding the usefulness of these criteria for the prediction of success in a nursing program. Those studies were from the 1970s and 1980s and varied in their recommendations but generally favored some quantifiable measure, be it high ACT scores, high SAT scores, or high final high school grade point average. An interesting note, however, is that almost 30 years ago, Schwirian (1977) maintained that less than 50% of attrition really is related to academic difficulty and that attrition rather may be due to greater social and economic disadvantages.

Women have been attracted in increasing numbers to professions other than the traditional occupations of nursing and teaching. The attractiveness of the nursing profession has been enhanced during the past 40 years, however, by the development of new and expanded roles in nursing. These new roles are characterized by

increased autonomy and by increased appreciation and recognition from the public and from professional colleagues. Efforts have increased by Sigma Theta Tau International Honor Society and the National Student Nurses' Association to raise the consciousness of the general public, and particularly junior high school students, to nursing as a profession (Fitzgerald, 2000). Many of these expanded roles require advanced education, often at the master's level and more recently at the doctoral level. Because many of these roles (nurse practitioner, nurse-midwife, nurse anesthetist, and nurse administrator) do require a graduate degree, many nursing schools have developed "fast track" and "second degree" programs. The intent of these programs is to assist students in achieving their personal goals in as efficacious a manner as possible.

Other strategies nursing schools use include more visibility of men in advertisements, especially in settings perceived as macho (the University of Texas Health Science Center at Houston); marketing diverse opportunities in nursing as represented by ethnically diverse nurses (University of Maryland); reaching potential minority students in areas where they live, such as geographical marketing (Intercollegiate College of Nursing/Washington State University); and providing incentives for bilingual students to pursue nursing and to stay in their own communities (Washington State University). Other efforts center on recruitment beginning at the elementary and middle school levels. Mentoring has proved useful in recruitment and retention. Some schools include sensitivity training for faculty as an integral part of efforts to provide prepared mentors. As always, however, the one-on-one interface determines success. Specialized individualized learning programs such as the Success in Learning: Individualized Pathways Program at Loma Linda University in Southern California has been successful in recruitment and retention.

The Sullivan Commission report (2004), conducted by the Institute of Medicine of the National Academies and funded by the Kellogg Foundation, suggests that medical lobbies and universities actually are discouraging minority enrollment in many health care fields. Medical, nursing, dental, and other health professions schools were reported as being "chilly" toward minority students and disinterested in diversity. This report focuses on institutional strategies through which students are trained and on policy arenas after they are trained. Schools are directed to look beyond standardized testing for admission and to consider commitment to service, community orientation, leadership,

and experience with diverse populations among their criteria for admission. A second commission recommendation is to provide more funding to poorer students and suggests that private funds be used to increase the number of health care professionals in underserved, disadvantaged areas. The third recommendation is an admonition to use more individualized approaches to admissions, and the fourth is to provide money to Latino nursing students in the form of scholarships, loans, and payback programs. The remainder of the report recommendations are (1) focus on retention; (2) use community benefit (the legal term applied to nonprofit hospitals) by actually giving something tangible back to the community; (3) involve accreditation organizations by taking diversity into consideration for accreditation; and (4) aim to produce better doctors not tractable students; that is, students who are easy to teach. The Sullivan Commission report does not ask for new legislation; rather it appeals to the health care professions to apply strategies to further cultural diversity (Stern, 2004).

HISPANIC REPRESENTATION IN HIGHER EDUCATION AND NURSING

In 2002, persons of Hispanic origin could report their origin for the U.S. Census as Mexican, Puerto Rican, Cuban, Central and South American, or some other Latino origin. Hispanics, of course, may be of any race. In 2002, 37.4 million Latinos were in the United States, representing 33% of the total population. Of these, 66.9% indicated that they were of Mexican heritage, 14.3% were Central or South American, 8.6% were Cuban, and 6.5% were of other Hispanic origin (Ramirez & de la Cruz, 2002).

As might be expected, Hispanics were found to live in the West (44.2%) and in the South (34.8%). Nearly half of all Hispanics live within a metropolitan area (45.6%) (Ramirez & de la Cruz, 2002). Mexicans accounted for the smallest number (23.6%) of those workers employed year-round earning \$35,000 annually. Hispanics are more likely to live in poverty and to have larger families and are less likely to graduate from high school. In fact, Hispanics represented 17.7% of all children in the United States but represented 30.4% of all children living at the poverty level (p. 6). Those Hispanics achieving a bachelor's degree were found to be 18.6% Cuban, 17.3% Central and South American, 19.7% other Hispanics, and 7.6% Mexican (p. 5).

Why are Mexican Americans highest in poverty and least well-educated of all Hispanic groups while having

the greatest numbers? The answers are compound but not complex: immigration status, discrimination, lack of social and financial support, and an inability to access available resources. Culture certainly may be a factor, especially for women. Family cohesion is an important characteristic of Mexicans. Women (Chicanas) in Mexican society are encouraged to marry and have children. This presents a conflict for Chicanas, many of whom view education as a means to socioeconomic mobility and independence. Dissonance occurs for many of these young women in terms of their expected role in Mexican society as wife, mother, and subservient mate to the man. All of these factors exert an influence to diminish professional career expectations.

In addition, Mexican-American students often are steered into taking noncollege preparatory courses in high school. This may be promulgated by the family as a means of keeping women in less demanding work, which in turn, is perceived as having a less negative impact on the woman's traditional role. Such advice from family members may be reinforced by educators who often stereotype Mexican-American students as unable to prepare for more challenging careers. Most of these students need financial assistance and generally rely heavily on scholarships and work-study programs and, to a lesser extent, on loans. Because of the difference in cultures and the difficulty in acculturation, many of these minority students feel more comfortable in smaller colleges or community colleges. Support systems such as associations and organizations that can recognize, promote, and reinforce cultural values are important for student adjustment regardless of the size of the educational setting. Because emotional support is as important as financial support, it is important to get parents involved and supportive of the student's college experience. Parents need to view college not as a way to "tear apart" the family but as a way to maintain the family for the future. Supporting the student's academic goals and including the student in family and community activities are ways to strengthen and maintain family bonds. Few schools adequately address this aspect of support.

In 2000, 22% of all 18- to 24-year-old Hispanics were enrolled in colleges and universities; up from 16% in 1980. They comprised 10% of total college/university enrollment in contrast to 4% in 1980. Fourteen percent were enrolled in 2-year colleges, and 7% in 4-year colleges or universities (U.S. Department of Education, 2005).

Hispanic Serving Institutions are degree-granting public or private institutions of higher education

eligible for Title IV funding because they have a documented Hispanic enrollment of 25% or more full-time undergraduate students. In 1999, one half of all Hispanic student college enrollments (45%) were at Hispanic Serving Institutions compared with 29% in 1990 (U.S. Department of Education, 2005). It would appear that Hispanic Serving Institutions have established infrastructures that positively influence the enrollment and graduation of Hispanic students.

In relation to nursing students in colleges and universities, the American Association of Colleges of Nursing reported a Hispanic enrollment of 5.4% in 552 registered nurse programs in fall 2003 and a 4.6% graduation rate for 552 undergraduate programs from August 1, 2002, to July 31, 2003, with an increase in Hispanic enrollment of 3.1% from 1993 to 2003 (Berlin et al., 2004a, p. 21). At the master's level a modest increase in Hispanic enrollment occurred from 2002 to 2003, 3.7% to 4.2%, but doctoral enrollment remained almost the same in research-focused doctoral programs (2.1% to 2.7%), and a drop occurred in clinically focused doctoral enrollment from 2.9% to 0% (pp. 34-35). A small graduate enrollment for Hispanics may result because when the graduates begin earning money, they have familial expectations for that money or because the graduates "fall back" into the traditional female role once they have completed the baccalaureate.

It would appear self-evident that Hispanic students, like other students, would tend to persist in their education when their parents have higher levels of education and when parental occupations result in higher incomes. Low family income, for many students, results in dropping out of school. Because Mexican-American families generally have lower incomes and larger or extended family to absorb those incomes, their children are at risk for attrition. Efforts must persist, therefore, to obtain scholarships and grants to attempt to alleviate some of this financial pressure.

Perhaps a program similar to that of the U.S. Public Health Service in which the graduate pays back through service could be initiated on a federal or state level. A number of hospitals already have instituted such programs for all nurses, not just Hispanic nurses. In 1991, the Department of Health and Human Services instituted a scholarship program called Scholarships for Disadvantaged Students. These scholarships recognize that the concept of being disadvantaged is not necessarily tied to ethnicity alone but rather is tied to socioeconomic factors including deficits in the ability of a

particular school district to offer enriched programs for students.

BLACK REPRESENTATION IN HIGHER EDUCATION AND NURSING

The term black has been selected for this edition rather than African American because it is the term used more often in current literature. In 2002, 13% (36 million persons) of the U.S. population identified themselves as black, with most of those reporting living in the South (33%). More than half of all blacks (52%) lived in a central city within a metropolitan area (McKinnon, 2003, pp. 1-2). More blacks are under 18 years old than the other designated population groups, and most of these are females (30%). At the other end of the age spectrum, however, only 7% of black males and 9% of black females were found to be 65 years of age or older (p. 2). Clearly, the black population is a young group with a shorter life expectancy than non-Hispanic whites. Contrary to a commonly held belief that blacks do not marry, the 2002 Population Survey indicated that nearly half (48%) of all black families were married couple families (p. 3). The poverty rate for the nation was 12% overall, but 23% of those in poverty were black (p. 6).

In 2000, 31% of 18- to 24-year-old blacks were enrolled in colleges and universities. This was an increase from 19% in 1980. Blacks account for 12% of the student enrollment in 2-year institutions and two thirds of the black enrollment is female (Hoffman, Llagas, & Snyder, 2003). Only 17% of blacks earned at least a bachelor's degree, with black females earning more than black males. In terms of nursing at the baccalaureate level, the American Association of Colleges of Nursing (Fang, Htut, & Bednash, 2008) reported that 11.8% of the total enrollment of 552 nursing programs was black in fall 2007, almost the same percentage as in 1998.

From August 1, 2002, to July 31, 2003, 10.7% of the graduates of 555 nursing programs were black. At the master's level, black enrollment almost doubled from 1992 to 2003, from 5.8% to 10.5%. The graduation rate for 2002 to 2003 was 9.1% (Berlin, Stennett, & Bednash, 2004a, p. 21-22). This increased enrollment and graduation is significant because blacks, in terms of general health, tend to be sicker than the general population, and the low number of black nurses presents a barrier to treatment because of the lack of integration of their cultural beliefs, values, and practices. Compliance to treatment has been shown to be affected by cultural values, and there are few

black nurses to positively affect the integration of black cultural values.

Nursing education historically has provided one of the few avenues for black women to acquire a respected profession. For many years, however, that education primarily was obtained in black hospitals and colleges. New graduates worked only with black patients. As the nursing profession evolved, an elitist system developed in which most white schools had racial quotas. An early effort to recruit black nursing students was stimulated during World War II by the Cadet Nurse Corps program. Today the emphasis is on attracting black and other minority students, not to fill quotas but to develop a cohort of professional nurses who better represent the general population. Historically, problems with the admission and retention of black nurses have occurred. Between 1976 and 1982 the National Advisory Committee on Black Higher Education and Black Colleges and Universities studied the policies and practices at seven predominantly white universities. Although this committee no longer exists, the problems persist.

Black students, like other minority students, often receive a poor secondary education. Their self-esteem has been low and the university setting generally has been perceived as hostile to them. Not only have high school counselors failed in encouraging black students to pursue higher education, but university counselors have not been able to effectively thwart the feelings of loneliness and alienation that black students frequently experience. As with Hispanic students, the lack of financial resources has proved to be a barrier to a large number of potential black nurses. In addition, blacks are still less likely to complete college than whites but are more likely to graduate than Hispanics (Hoffman, Llagas, & Snyder, 2003, p. 106).

GRADUATE NURSING EDUCATION AND THE MINORITY STUDENT

Minority enrollment in graduate nursing programs consistently has been a small segment of the total enrollment regardless of geographical or population-specific considerations. In 1980 the highest educational level for most nurses was the diploma. Enrollment in diploma programs has declined steadily over the last 25+ years. In 2004, 33.7% of all nurses reported that the associate's degree was their highest level of education, and 34.2% indicated that the bachelor's degree was the highest level. Bachelor's degrees for nurses increased at a higher rate than associate's degrees. This was the complete reverse of the pattern evidenced 20 years ago. The

impact of increased numbers of nurses with bachelor's degrees has resulted in the increase of nurses with master's or doctoral degrees. In 1980, 5% of the registered nurse population had graduate degrees; in 2004 that percentage rose to 13% (HRSA, 2006).

Gains in minority enrollment occurred from 1993 to 2003. Blacks continue to be the largest majority-minority group in nursing. Black enrollment rose from 5.8% to 10.5% in that 10-year period. Hispanic enrollment more than doubled from 1.8% to 4.3%, as did Asian/Native Hawaiian/Other Pacific Islander enrollment (3.1% to 6.2%). American Indian/Alaska Native enrollment remained the same at 0.5%. As these figures indicate, the total minority enrollment from 1993 to 2003 rose from 11.2% to 21.6% (Berlin, Stennett, & Bednash, 2004a, p. 22).

Doctoral education also witnessed increases in minority representation in the same time period from a 10.8% enrollment in 1993 to 17.2% enrollment in 2003. Blacks increased from 6.1% to 9.7%, Hispanics from 1.6% to 3.0%, Asians/Native Hawaiians/Other Pacific Islanders from 2.6% to 3.8%, and American Indians/Alaska Natives from 0.6% to 0.7%, remaining almost the same (Berlin, Stennett, & Bednash, 2004a, p. 22). An interesting note is that within the types of doctoral programs available in nursing (research-focused, clinical-focused, or doctor of nursing professional degree), most blacks selected clinical-focused doctoral programs (7.1% in 2002 and 12.9% in 2003). American Indians/Alaska Natives enrolled only in research-focused doctoral programs in 2002 and 2003 (p. 35). Interpretation of program choice must be approached cautiously because the selection of programs is influenced by many factors, including geographical location, availability of financial aid, program flexibility, and personal goals. From 2002 to 2003, graduation rates for master's programs indicate an increase in black graduations (7.7% to 9.0%) and a decrease in white graduations (81.8% to 70.6%). Increased graduation rates occurred for blacks and Asians in research-focused doctoral programs, decreased for clinical-focused programs, and increased for blacks and whites in doctor of nursing programs (p. 37). Because actual numbers are small, interpretation is limited. Variations in time for doctoral degree completion are common, so data for any 1- or 2-year period may be an artifact of delayed program completion.

The expansion of advanced educational preparation in nursing is related to increased specialization in the practice arena, necessitating increased preparation in terms of the complexity and competency required to

administer quality nursing care and to pursue relevant research. Funding for students to attend graduate programs is always subject to the legislators' awareness of the importance of and need for such funding. Federal monies distributed as a result of the Nursing Education Act primarily are allocated for nurses pursuing advanced preparation as nurse practitioners, nurse-midwives, nurse anesthetists, and advanced clinical nurse specialists. Students seeking preparation as nurse administrators had been barred in the past but were included again in recent years.

Universities and colleges have struggled to find ways to increase diversity in the graduate and professional programs and at the baccalaureate level. One such effort was that of the Bethune-Cookman College (a historic black college) and the University of Florida. The goal of this program was to initiate a collaborative relationship that would result in improving access to graduate education for Bethune-Cookman College graduates and increasing graduate student diversity at the University of Florida. The collaboration included career planning, financial planning, mentoring, program flexibility, and continued support in the graduate program. A 3% increase in the enrollment of minority students resulted, and all the initial participants (10) graduated (McWhirter, Courage, & Yearwood-Dixon, 2003). Obviously the numbers of minority students seeking higher education in nursing are not representative of the general population, especially in the case of Hispanics. Therefore, these nurses are not able to move within the profession to positions of leadership and power. Why does this happen? Once again a variety of factors interact. The following interpretation is a premise for those of Hispanic origin. Because of the low economic status of most Mexican-American families, when students complete the basic nursing program, they are expected to go to work immediately, often the day after graduation, to contribute to the family's finances. In more than one instance, the graduate is expected to put the next child through college. In addition, at this stage in their lives, marriage and child rearing become a focus. The Mexican-American family culture frowns on leaving children at day care centers or in the care of nonfamily caregivers. In addition, the basic cultural value of the dominant male figure often overrides a career drive. In other words, the nurse resumes life in a culture that generally does not encourage advanced preparation. Survival of the family unit is the primary motivator. This is not to judge that value but rather to acknowledge that it

exists and that it may be a factor that discourages minority nurses from pursuing graduate education.

STRATEGIES TO IMPROVE THE ETHNIC MIX IN NURSING

Racial discrimination is a persistent problem in America. The civil rights legislation in the 1960s helped with overt discrimination, but the legacy remains (Brown et al., 2003, p. 227). Fifty years later, Americans still are struggling with the effects of generations of discrimination. People of color have not been able to accumulate wealth in the same ways that whites have. Even after World War II, blacks did not have the same opportunities to further their education that whites had. Although many white middle-class people were able to take advantage of the educational opportunity afforded by the GI bill and raise their socioeconomic status by obtaining managerial and professional positions, black veterans were not able to progress and build as deep an economic foundation. That is not to say that blacks did not prosper in many ways after the war. There were more jobs, but those open to them were low-paying jobs with few opportunities to advance. Discrimination in jobs and housing have contributed to keeping minorities in settings that foster poverty, crowding with resultant high crime rates, and the erosion of the family as a unit. Racism persists, although there is a facade of a nonracist American society.

Bonilla-Silva (2003) has coined the phrase "color-blind racism." This type of racism ostracizes blacks in more subtle ways through speech, writings, and casual everyday references. For example, interracial marriage is viewed in terms of a concern for problems that the children of such unions may have in the future, or minorities do not achieve because they are lazy, not because of their race. Whites purport that Americans are all equal and yet know full well the economic and educational disadvantages that minorities suffer because of their living situations, the ghettos of urban America. Everyone acknowledges that a college degree provides a path to wealth and subsequently to power. Considering race in admissions is necessary to achieve diversity, not through quotas but rather through the recognition of other factors that may ensure the desirability of admission and the probability of success. It must be understood that diversity benefits not only minority students and minority communities but also the white majority by challenging them to identify and consider their values and beliefs. This is especially important in nursing,

where quality care and competency must extend to all in need.

As minority populations grow, there will be an increased need for nurses who can relate to, understand, and be accepted by the community. Two important roles in health care have evolved: (1) assisting persons who have been deprived of access to health care to participate in the existing health care system and (2) molding the future health care system to be responsive to their needs. To accomplish these goals, federal, state, and local financial support must be available. Inequities in public education must be addressed. Local public school boards must direct resources toward the goal of quality educational opportunities for all children. Poor school tax districts must receive assistance from the state. At the postsecondary level, institutions must provide counseling and tutorial services and financial aid. Retention of minority students may be affected negatively by "stereotype vulnerability." In this situation, minority students disengage themselves from the anxiety of performance; that is, they accept the view that they lack the ability to succeed (Davidhizar, Dowd, & Giger, 1998).

Factors inhibiting minority members from attaining a career in nursing include feelings of powerlessness and inadequate academic preparation, especially in the sciences; financial costs and the actual and projected decrease in financial aid; inadequate career counseling; and more and better recruitment strategies by other disciplines. In 2003, the U.S. Health and Human Services Department awarded 16 grants totaling nearly \$3.5 million to support opportunities for persons from disadvantaged backgrounds to enter nursing (U.S. Newswire, 2003). The grants funded scholarships, stipends, and/or preparatory and retention activities for disadvantaged students including those from racial and ethnic minority groups. The schools receiving the grants had a minority enrollment of 38%, which was double the national average of 19%. In 2005 the University of Massachusetts, Amherst, received almost a million dollars in a grant for Nursing Workforce Diversity from the Department of Health and Human Services to connect students interested in nursing at the middle and high school levels to four nursing programs in the area. The program focus is on mentoring and tutoring in math and science, nursing clubs for middle school students, and social and information sessions for high school students (University of Massachusetts, 2005).

A major problem in nursing education is the few members of minority nursing faculty. The American Association of Colleges of Nursing Report 2003-2004

Salaries of Instructional and Administrative Nursing Faculty in Baccalaureate and Graduate Programs in Nursing (Berlin, Stennett, & Bednash, 2004c) indicated that 9% of the faculty members of 554 schools reporting were minorities. In another American Association of Colleges of Nursing report (Berlin, Stennett, & Bednash, 2004b), 5.4% of the faculty members were black; 1.8%, Hispanic; 0.4%, American Indian/Alaska Native; 1.6%, Asian; and 0.3%, Native Hawaiian/Other Pacific Islander. By 2008, the number of faculty minority representation increased to 11.1%. The increase for blacks is notable with 6.5% reported. Hispanics remained almost the same at 1.8%, while American Indian/Alaska Native was 0.3%; Asian was 2.1%, and Native Hawaiian/Other Pacific Islander was 0.4% (American Association of Colleges of Nursing, 2008). Figures for deans of nursing programs in 2008 were almost the same as in 2004: 5.4% black, 2.0% Hispanic, 2.0% American Indian/Alaska Native, 0.2% Asian, and 1.2% Native Hawaiian/Other Pacific Islander. The composition of nursing faculties must reflect an ethnic and racial mix, not token representations or the reflection of a specific community. Nursing faculties should strive to become living models of diversity in collaboration that stresses competence, academic ability, caring, and true equality. Potential minority faculty members must be identified as early as possible in their academic careers and must be supported in their efforts to obtain graduate degrees. In one possible scenario, the graduates could pay back the financial support of the institution through a committed service period. These young faculty members must be nurtured through a mentoring program. They have the potential to serve as role models for minority students, and in time, can serve as mentors themselves. Unfortunately, research by minority faculty members often not only is unappreciated but also is denigrated. For example, colleagues in nursing may look disparagingly upon research concerning American Indian rites related to health or black nutritional practices. If culturally based research is not valued, minority faculty members may not be tenured. No tenure usually means no career advancement or limited opportunities to contribute to the academic nursing profession.

Philosophical discussions about whether there should be organizations for minorities in nursing, such as the National Association of Hispanic Nurses or the National Black Nurses Association continue. It would appear that these organizations provide support and networking for minority nurses who may not be able to take advantage of opportunities in the major

nursing organizations because of their small numbers. Therefore, until the minority nurses themselves feel that a need no longer exists, local chapters of these organizations should be encouraged. Professional nursing success that is necessary to advance in the profession can be interpreted as psychological success whereby an internalized goal includes ego involvement. Psychological success increases self-esteem and strengthens a commitment (Hall, 1976). A supportive social network is a means of minimizing the threat to one's sense of self-worth and fostering career enhancement.

SUMMARY

Nursing education has a direct responsibility to educate practitioners for the future. U.S. demographics are evolving as they have since its founding. Spanish has become a second language in many parts of the country, and nurses must educate their own to meet these changes.

Health care reform issues mandate minority representation in all health professions. Will the United States move toward universal health care coverage? Surely the health care system is almost there with the Children's Health Insurance Program and Medicare and Medicaid for older and disabled adults. The evolving U.S. health care system must reflect our communities, because as health care increasingly moves into the community, health care provider-community partnerships must be formed. Ethnically and racially diverse minority health care providers have been found to be more likely than nonethnic minority health care providers to practice in culturally diverse settings after graduation. "Despite their small numbers, minority nurses are significant contributors to the provision of health care services in this country and leaders in the development of models of care that address the unique needs of minority populations" (American Association of Colleges of Nursing, 2001, p. 1).

The literature on recruiting and maintaining minority representation in nursing is considerable, although much of it is becoming "old" and new contributions in the literature are needed. Some educational institutions recruit heavily from minority institutions. They offer excellent financial assistance to students and woo faculty members with high salaries. The fact that many of these programs experience difficulty in retaining minority students and faculty members should send a message to everyone. Although acknowledging linguistic and cultural differences, nurses have failed dismally in attempts to meet the needs of minorities adequately. Boshier (2003) analyzed multiple-choice nursing course

examinations for linguistic and cultural bias. She found 28 types of flaws occurred at least 10 times. Item bias occurs at two levels: linguistic (overly complex items), structural (long, unclear, or awkward phrases), and cultural (content not equally available to all culture groups).

Multiple strategies are required, and financial assistance, although important, is not solely sufficient. All systems must hold themselves accountable and are held accountable to achieve diversity and cultural competence (The Sullivan Commission, 2004, p. 102). Siantz (2008) maintains that a corporate environment must be developed that integrates diversity and cultural competence with the strategic plan of the school's chief nursing officer. An interesting component of the proposal is the development of a business plan that would provide a measurable guide for goal attainment. Unless strategic planning for minority recruitment and retention is implemented, all efforts will be doomed. For example, hiring minority faculty members, without mentoring and assistance in the assumption of leadership roles, will not be successful as a long-term strategy. For students and faculty, formal and informal support services can assist in resolving cultural dissonance. Such strategies must be incorporated throughout the curriculum. Content areas such as interpersonal skills, communication skills, leadership ability, and professionalism must be blended. Leadership in forwarding diversity and true accountability are essential if nurses are to make progress. Finally, nurses must admit to racial color blindness and seek to open their eyes to subtle and covert discrimination and bias so that in the next 50 years they will not be asking the same questions about diversity in nursing that they have been asking for the last 50 years.

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Bridging Cultures: Blacks and Nursing

BETTY PIERCE DENNIS

More than 300 years after arriving in America, blacks are a population that despite underrepresentation in important political, social, and economic spheres of society, have demonstrated an impressive chronology of achievements and shortfalls. Striking within this chronology is the picture of blacks and health care in America.

Today, at 12.2% of the U.S. population, blacks annually account for about 84,000 excess deaths (Satcher et al., 2005). At each stage of the life span, mortality for blacks is higher than for American Indians, whites, Latinos, and Asian/Pacific Islanders. Major causes of death at all ages are cancer, heart disease, and diabetes. In contrast human immunodeficiency virus/acquired immunodeficiency syndrome among African Americans leads mortality causes for all groups aged 25 to 44 years (U.S. Department of Health and Human Services [USDHHS], 2006). To understand how African Americans arrived at this juncture requires consideration of a complex of factors; important among these is the intersection of black history, health, and culture. While the federal mandate to eliminate social and ethnic health disparities and rectify the shortage of health care providers of color is long-standing, its status today is best understood from the perspective of the peculiar social history of America.

The histories of blacks in America and of black nurses are interwoven and both have influenced the course of black health within a cultural context that is often at variance with the dominant white culture. Although the history of nursing in the United States has been extensively recorded and documented, most accounts are not complete. The contributions of black nurses are missing. It is, therefore, essential to revisit that history, to write it fully and completely, such that the struggles, perspectives, and contributions of black nurses are recognized for their essential role in

the history of all nursing. Noted historian, John Hope Franklin, says that each generation

... has the opportunity to write its own history, and indeed is obligated to do so. Only in that way can it provide its contemporaries with the materials vital to understanding the present and to planning strategies for coping with the future. Only in that way can it fulfill its obligation to pass on to posterity the accumulated knowledge and wisdom of the past, which after all, give substance and direction for the continuity of civilization (1986, p. 13).

The purpose of this discourse is to open dialogue on (1) how black nurses came to be and what that means to health care, (2) the imprint on black culture by black nurses, and (3) the role of both phenomena on the state of black health. Historical commentaries of nursing rarely examine the role of race and racism. Both were strong determinants of past events and continue to effect events today. With malice towards none, examining the role of race and racism reveals some of the causes and consequences of conflict that overtly characterized past relations and typifies them today in a more nuanced and subtle way.

After the end of the Civil War in 1865, a 10-year period of reconstruction followed. During this brief span of time, blacks started schools, opened clinics, and established churches. They also entered politics and purchased land. This surge of progress was abruptly ended and followed by the passing of laws that legalized racial subordination through a separate and unequal system, popularly referred to as "Jim Crow" laws (Litwack, 1998; Perlaman, 2001).

Health care, also governed by these Jim Crow laws, showed the ill effects. Black patients were refused admission to many hospitals. Those that did accept black patients housed them in "colored" wards, out-buildings, basements, or attics and limited the number admitted. Often the linen, gowns, thermometers, and

the like were labeled “colored” so as not to be mixed with those used by white patients (Sullivan Commission Report, 2004). The de-valuing of black life also typified the approach of whites to health care research.

The horrific and inhumane practices used with black study participants in the distant and recent past, affects the ability of researchers to enroll blacks into clinical trials and other research initiatives today (Hussain-Gambles, 2003; Williams & Corbie-Smith, 2006). The mistreatment of black patients as health care consumers in this and countless other instances has spawned mistrust of the health care system that persists as an unresolved and problematic issue feeding into negative health care outcomes for blacks in America.

Under the Jim Crow laws, blacks were effectively prevented from receiving education as practitioners in nursing, medicine, or dentistry. In the south, they simply could not enter these training schools, while the north achieved similar results through the use of quotas (Hine, 1989). Segregation laws were also used to exclude blacks from membership in professional nursing organizations and societies.

ANSWERS TO EXCLUSION

One of the answers of the black community to the imposition of inequitable health care through segregation laws was to establish their own hospitals to care for black patients and to serve as a training resource for nurses, doctors, and dentists. Beginning in the 1890s, African Americans established about 200 hospitals. Here, nurse training schools in many of the hospitals produced black nurses to care for black patients. Over 90 hospital schools for black nurse training were established. Few black nurse graduates were hired by white hospitals, and those who were received a lower salary than white nurses (Hine, 1989). Here too, in these black hospitals, black doctors were afforded admitting privileges and opportunities for internships and residencies, experiences they were denied in white institutions. Funding was a constant problem. Each hospital had to generate its own fiscal support. Although white philanthropic groups and philanthropists were often supportive through influence and money, these institutions grew out of the unmet needs of the black community and its determination to make a “way out of no way.” In so doing, it took on the responsibility of ongoing support and maintenance of these valuable resources.

For example, in 1896 the Phillis Wheatley Club, a women’s group, established the Phillis Wheatley

Sanitarium and Nursing Training School in New Orleans. It was a precursor to the Flint-Goodridge Hospital and Nurse Training School. Once established, the schools and their parent hospitals waged a relentless struggle to survive. Student nurse labor was used extensively in this regard. Some white hospitals hired out students, but all black hospitals did this to survive. Students were hired out to black and white families and fees for their labor were collected by the hospital. The hired-out student was on the front line of attack on illnesses resulting from unsanitary food, water, or living conditions. In addition to working outside of the hospital and caring for patients in the hospital, the student also cooked, cleaned, and washed to maintain the patient care environment. She might also have a vegetable garden or poultry farm to tend (Hine, 1989). Although wanting, these hospitals and nursing schools were the creators of a health care culture that became the bedrock for the growth of black health care professionals.

By the middle of the twentieth century, black hospitals and their nurse training schools began to close. The thrust of nursing education moved to the university. Baccalaureate nursing programs in historically black colleges and universities (HBCUs) were begun in 1936 and now number over 25. The fact that white programs eventually opened their doors to black nurses is less important than the fact that today, the nursing programs in HBCUs remain and continue to meet a need for student nurse education. Education among blacks is prized as a major way to achieve success in the face of inequity. Data show that nurses of color are more likely to hold baccalaureate and graduate degrees in nursing. According to the Health Resources and Services Administration (HRSA, 2006), 41.8% of white nurses have degrees versus 48.1% of black nurses.

THE ROLE OF THE BLACK NURSE IN HISTORY

Black nurses have both health care and cultural significance, perhaps because the two are so close as to be inseparable. Before the Civil War, nursing was considered a low-status job fit for laboring-class women. By the turn of the century, white nurse leaders heralded nursing as ideal work for middle class women (James, 1979). This change was not reflected in the black community because from the outset, black nurses were held in high regard and their work was greatly respected. Poverty and marginal and seasonal jobs for black men required black women to work in and out of the home.

Staying at home was not an option for black women as it was for whites. White nurses waged their protests of unequal treatment based on gender. Black nurses, however, emerged from a tradition of ministering to blacks and whites and first had to fight for acceptance as a black person and only secondly as a woman. Many examples of black nurses with unusual capacity and great courage have come down through history, and their lives illustrate the complex nature of the peculiar social institutions in America.

Florence Nightingale was not alone in recognizing the role for nurses in the Crimean War. Mary Grant Seacole traveled from Jamaica to England at her own expense to care for British soldiers and other casualties of the war. Although she brought letters of support from British army doctors with whom she had practiced in Jamaica, Florence Nightingale twice refused to offer her a position as an army nurse. Denied but not defeated, Seacole built and operated a lodging house that provided the troops a restaurant on the first floor and a health care ward on the second floor. Concocting many of her own medicines, she saved countless soldiers from conditions such as cholera, yellow fever, malaria, and diarrhea and is considered by many to be the first nurse practitioner (Messmer & Parchment, 1998). Although never formally accepted, each evening after working all day in her canteen-cum clinic, she volunteered at the hospital that cared for the sick and wounded of the Crimean War along with Nightingale (Carnegie, 1995). Posthumous awards to Seacole have been numerous. In February 2004, a poll conducted by the British Broadcasting Company named her one of the "Greatest Black Britons."

Sojourner Truth, best known as an abolitionist and women's rights advocate, although born into slavery, used her talents in other ways as well. She was a nurse to the wounded during the Civil War. As a counselor for the Freedman's Relief Association during Reconstruction in the Washington, DC area, she organized a corps of women to clean Freedman's Hospital because, "the sick can never be made well in dirty surroundings" (Carnegie, 1995, p. 8). She visited Congress to urge that funds be provided to train nurses and doctors. Many of her actions were known to and admired by President Lincoln whom she met in 1864 (Carnegie, 1995).

Harriett Tubman is widely regarded for her role as an exemplary and fearless humanitarian who led more than 300 enslaved blacks to freedom on the Underground Railroad. Only five feet tall and unable to read or write, she supported the cause of freedom by becoming a spy and a scout for the Union Army during the

Civil War and is reported to have led troops into battle. Her work as a tireless and compassionate nurse for Union soldiers and others off the Sea Islands of South Carolina was outstanding. When she retired to her home in Auburn, New York, she took in other elderly persons and cared for them, a precursor to the nursing homes of today. In 1990, the U.S. House of Representatives passed S.J. Resolution 257 recognizing her inspired achievements (Carnegie, 1995). The deeds of black women like these and thousands more, enrich history, culture, and health care but they are missed when history is not inclusive and representative.

Mabel Staupers' story illustrates the commitment and tenacity that opened professional opportunities to black nurses. Staupers was one of the early members of the National Association of Colored Graduate Nurses (NACGN), which was founded in 1908. The NACGN gave black nurses their first opportunities for professional development and peer interaction. Staupers was the leader of a successful campaign to include black nurses in the military. Her opponents were powerful and resourceful. She, however, was resolute and skillful. She also fought to include black nurses in the American Nurses Association (ANA). She began petitioning the ANA House of Delegates in 1934, and in 1948, the ANA approved individual membership. This circumvented the requirement to join the ANA through the state associations who still denied membership to black nurses (Staupers, 1961). Having fought successfully to bring black nurses into the mainstream of nursing organizations, she and other colleagues believed that the NACGN was no longer necessary and voted to dissolve it in 1951. The validity of that decision soon came into question because less than 20 years after the NACGN was dissolved, the National Black Nurses Association was formed in December 1971. Through the founders' collective vision, persistence, and commitment, all black nurses now had an organization whose primary reason for being was to improve the health status of black people in the United States (Hunter, 2000). This move was soon followed by the formation of the Association of Black Nursing Faculty. Chi Eta Phi, a nursing sorority, was begun in 1936 to provide opportunities in leadership development for black nurses and has grown to be an international and interracial organization (Miller, 1968). Responding to the growing inequities in health, in 1998, the National Black Nurses Association was instrumental in establishing the National Coalition of Ethnic Minority Nurses, which consists of Asian, Alaska Native, Native American, and Hispanic nurse organizations. These organizations give voice to a

segment of the population whose health care access and improvement lags behind the larger population (Hunter, 2000).

Throughout our history, opportunities for different racial/ethnic and majority groups to bring their full strength to common causes have been missed. This brief discussion illustrates how experiences and historical events, though simultaneous in occurrence, hone and shape individuals and groups differently. Thus today, black and white nurses may find themselves at similar places, but they have arrived by traveling different roads and, as the poet Robert Frost says, "... that has made all the difference" (Frost, 1971). I believe that, as a profession, this history has curtailed our inherent ability to be the change agents we wish to be. President Abraham Lincoln reminds us of the frailty of a divided house. Perhaps our colleagues in medicine had this in mind when they apologized to black physicians for decades of discriminatory treatment. In 2005, the American Medical Association convened a panel of experts to study the history of the racial divide in organized medicine. The culmination of this work prompted the apology and opened a healthy dialogue about shared concerns (American Medical Association, 2008).

THE CULTURAL CONTEXT OF HEALTH

At its most basic level, culture is an expression of the "lifeways" of individuals in a group or community. Black and white nurses practice not only from a defined knowledge base, but also from their respective "lifeways," experiences, and perspectives. Culture is an intergenerational phenomenon enmeshed in a social system that allows humans to meet their most basic needs. Through a consideration of history and culture, it is possible to identify the generative layer responsible for the attitudes, beliefs, and values about health held by blacks. The case of Arnella L. shows how the conflict of cultures that are operative in health care affects health outcomes.

Arnella L., age 64, woke up one morning unable to see or use her right arm. An ambulance was called and she was taken to the emergency room. Her problem was diagnosed as a "light stroke," and, as the hospital was overcrowded, she was sent home in the care of relatives. The attending clinician gave her a bottle of pills, medication, she was told, that she would have to take for the rest of her life. She, however, felt that "that don't make sense" and discarded the medication. She believed that her blood had "boiled up" in her brains—her own fault for eating too much rich food. She then embarked on her own combination of

healing strategies. The first of these was to sleep propped up on pillows, as postural change to allow some of the excess blood to drain back into the body. She then began a course of vinegar and honey in hot water (taken daily for nine days) to bring the excess blood down to a safe level. Finally, she brought in her minister to pray for her; she later reported that she "felt the stroke leave" her body when he laid his hand on her head. In any case, a niece stated bitterly, "The doctors didn't do nothin' for her and that's for sure" (Snow, 1980, p. 52).

In this case, "lifeways" are salient factors in health and health care, none of which was acknowledged in this case. However, their effects on treatment and patient outcomes are clear. It also illustrates the reliance of some blacks on self-care or folk medicine (Bushy, 1992; Wilson-Ford, 1992). It is estimated that 70% to 90% of recognized illnesses in blacks are managed outside the formal health care system (Kleinman, Eisenberg, & Good, 1978; Phillips, Mayer, & Aday, 2000). Caregivers could have begun a dialogue with Arnella L. by asking a few brief, open-ended questions to learn about her and her illness. This information would then be used to collaborate with her in devising a plan of care that she would follow.

Several cultural assessment tools have been developed to capture relevant data. However, most such tools, though comprehensive, are lengthy, prescriptive, and time consuming (Giger & Davidhizer, 1999; Purnell, 2003). Importantly, most tools fail to capture the heterogeneity within a cultural group. For example, many blacks can identify with Arnella L., many others cannot. Between those two extremes are a multitude of variations, all subscribed to by blacks at varying levels of income, education, social position, and experience. One promising approach to establishing a cross-cultural interaction is the use of the client's own explanatory system. Included as a fundamental part of the nursing process, the client's cultural parameters can be assessed quickly through the use of open-ended questions, such as those as suggested by Kleinman, Eisenberg, and Good (1978, p. 256): What do you think caused this illness? What concerns you most about this illness? Why do you think it started when it did? How do you feel about it? What did you do about treating it before coming to the clinic/hospital? What do you think your sickness does to you? How serious is this illness? What kind of treatment do you think you should receive? These questions are amenable to time and circumstance. They may be asked early or late in a client's contact with the health care system. They are also easily postponed until after the acute phase of an illness.

The case of Arnella L. also raises another issue. Do clients feel that their self-care approaches will be seriously considered or respected? Does the health care system acknowledge that there are nontraditional ways of care and healing? Many blacks are reticent about sharing culturally derived treatment methods. Instead, they may use a technique called "impression management" (Whitehead, 1992) to project conforming behavior as was played out in the Arnella L. scenario. Using impression management, the client responds as expected and avoids appearing self-destructive or unconcerned. Until the health care system is able to be inclusive and open, patients may resort to techniques like impression management to navigate through a health care system that alienates them.

Health as a nonlinear, developmental process is usually described in broad and general terms. This makes it difficult to see the prismatic patterns in which health is one element interacting within the larger cultural and historical context. Even after working closely with black clients, many nurses fail to recognize how history has shaped their perceptions of health and the behaviors that relate to health. Accepted and acknowledged by health care providers is the role played by lifestyle choices like smoking, exercise, and diet. Often unseen is the parallel role of poor housing, discrimination, poverty, substandard education, and the day-to-day stress created by racism. Therefore, cultural consonance and dissonance relative to the ill health of blacks explains only part of the issue. The structural constraints of society in the form of institutional racism have left their mark on the bodies of African Americans and have shortened their lives. The continuing disparate health status of African Americans attests to this fact.

THE ELEPHANT IN THE ROOM

Why people of color fare so poorly in America's health care system is the elephant in the room. It has huge implications (no pun intended) but usually receives cursory consideration. Black health in America has never been good health. For example, over the years, the number of black and white infant deaths has declined, but the ratio of black to white infant deaths is almost identical to that recorded in the early part of the twentieth century (Hine, 1989; USDHHS, 2006). Diabetes is 70% higher among African Americans. Asthma is now the most common chronic disease among American children. Age-adjusted deaths from asthma are three times higher for blacks than for whites (USDHHS, 2006). A recent study of mortality data by Woolf and

colleagues (2004) suggests that reducing the mortality rate of blacks to that of whites could save five times more lives than could be saved by improvements in medical technology. The authors estimate that 886,202 deaths from 1991 to 2000 could have been averted. They also calculated that medical advances averted only 176,633 deaths during that period. Such findings have both health and economic significance.

The sense of self of all blacks begins as an intra-group attitude but is finely and finally shaped by how the world sees them. The term "*Black or African American*" is a cognitive construct with uncertain scientific merit. In other words, African Americans are African Americans because they are recognized and treated as such. Variation characterizes all racial and ethnic groups, is thought to move on a continuum, and cannot be captured in neat racial boxes (Biological anthropologist, 1995). However, the nature-nurture or genetics-environment concept of disease causation persists as an explanatory model (Anonymous, 1983; Cooper & David, 1986; Langford, 1981; Thomas, 1992).

Race is heavily weighted in perceived meanings of "African American." Race is almost always an antecedent of diseases that are defined by genetics or environmental factors (Freeman, 2004). Variations such as income and education are combined with health measures to form comparative relationships. On the face of it, African Americans do exhibit differences in some morbid conditions. They have a low incidence of multiple sclerosis, cystic fibrosis, and skin cancer (biological anthropologist, 1995) and a high incidence of hypertension, diabetes, and cancer (USDHHS, 2006). However, validation of genetic variation requires more than a counting of cases. When the aperture is widened to include nontraditional measures, a more complete picture appears. Genes, environment, and culture must be synergized to see how they affect health.

Over one third of black families have incomes below the poverty level, but blacks with higher incomes may have similar health problems. In other words, income is not a protective factor for blacks. Thomas and colleagues (1985) and Thomas, Semenya, Neser, Thomas, and Gillum (1990) studied precursors of hypertension in a cohort of black physicians for over 25 years. The mortality of these physicians matched the mortality of low-income blacks rather than that of their white peers. Similarly, hypertension in men in low occupational classes increased when they remained in that status. Although blacks and whites in the study experienced elevated blood pressures, increases in hypertension were greatest for blacks (Waitzman & Smith, 1994). Among

blacks, hypertension develops earlier and with greater severity. Sixty-six percent of all cases of end-stage renal disease due to hypertension occur among African Americans (Epstein et al., 2000). Heurtin-Roberts and Reisin (1992) found that among hypertensive blacks, the patient's cultural beliefs about hypertension influenced their acceptance of treatment, and in turn, the control of their blood pressure.

Further, when health data are partitioned according to factors like urban density, outcomes change. Used as a surrogate measure of socioeconomic status, urban density reduces differences in cancer risks between blacks and whites. High-population areas have higher incidences of cancer regardless of race. This may begin to explain why some conditions that have the highest prevalence in blacks are not correlated with either income or education (Kressin & Petersen, 2001).

The periodic appearance of reports that indicate a strong association between the race of the patient and the quality of the care received feeds a deep sense of mistrust and skepticism. Examples include reports like "Mississippi appendectomies" or eugenic hysterectomies performed on black women (Chase, 1980; Weisbord, 1975), testing of women for sickle cell anemia without consent (Farfel & Holtzman, 1986), court-ordered surgical interventions (Kolder, Gallagher, & Parsons, 1987), and the Tuskegee Syphilis Study (Jones, 1992; Reverby, 2000). Racial differences in drug response were recorded as early as 1929. However, recent studies show that while African Americans differ in drug response and disposition, they continue to be underrepresented in clinical trials of new drugs (Shavers, Lynch, & Burmeister, 2002). In 1994, Congress passed the National Institutes of Health Revitalization Act mandating greater representation of minorities and women in research. Gilbert (2004) found that today, these groups continue to be underrepresented in clinical trials. This mistrust is, in part, the legacy of unethical treatment of poor, racial, and ethnic minorities by researchers and physicians (Corbie-Smith, Thomas, & St. George, 2002; Dennis, 1999).

Heart disease is the number one cause of death in blacks, but whites use significantly more of the available treatments options for heart disease, such as coronary angioplasty and coronary artery bypass grafting (Wenneker & Epstein, 1989). The Wenneker and Epstein study along with 99 others were examined in an investigation by the Institute of Medicine (IOM, 2003) that left little doubt about the inequities of the health care system for the black patient. The committee was "struck by the consistency" of the

research studies. The conclusions of this seminal study are summarized below:

- ◆ Racial and ethnic disparities in health care exist and, because they are associated with worse outcomes in most cases, are unacceptable.
- ◆ Racial and ethnic disparities in health care occur in the context of broader historic and contemporary social and economic inequality and evidence of persistent racial and ethnic discrimination in many sectors of American life.
- ◆ Many sources—including health systems, health care providers, patients, and utilization managers—may contribute to racial and ethnic disparities in health care.
- ◆ Bias, stereotyping, prejudice, and clinical uncertainty on the part of health care providers may contribute to racial and ethnic disparities in health care. While indirect evidence from several lines of research supports this statement, a greater understanding of the prevalence and influence of these processes is needed and should be sought through research. A small number of studies suggest that racial and ethnic minority patients are more likely than white patients to refuse treatment. These studies find that differences in refusal rates are generally small and that minority patient refusal does not fully explain health care disparities (p. 19).

These findings on health disparities are rooted in history as is the underrepresentation of blacks in health care professions, especially nursing. Today, black nurses are only about 4.2% of the registered nurse population, while blacks are 12.2% of the U.S. population. An additional 20,000 nurses would be needed to raise the figure by one percentage point (HRSA, 2006). The Sullivan Commission Report (2004) found that overarching themes of history, systemic exclusion, and inequality continue to work against the realization of diversity in health care professions.

NURSING MATTERS

At this juncture, nursing is moving to an evidence-based practice model that has the potential to improve patient outcomes and provide more cost-effective care. Evidence-based practice usually includes three components: research-based information, clinical competence, and patient preferences (Ingersoll, 2000; Schmidt & Brown, 2009; Youngblut & Brooten, 2001). Using this model can assist nurses to be less reliant on evidentiary sources such as personal experience, personal bias, and tradition. In the identification of their

own attitudes, beliefs, and values, as well as examining ways in which heritage affects professional behavior, lies an opportunity for the nursing profession to be more inclusive and culturally aware.

Since the 1960s, the nursing profession has encouraged the incorporation of culture into care. Achieving this, however, has been slow in coming. In 1992, the American Academy of Nursing Expert Panel on Culturally Competent Nursing Care concluded that, "there are no excuses for continuing to provide care that is insensitive and [culturally] incompetent" (p. 277). A Eurocentric model of nursing care is continuously used to devise a commonly defined and utilized nursing language for all patients, but its adequacy is questionable. Standardized nursing languages such as, The NANDA International, Nursing Outcomes Classification, and Nursing Interventions Classification, may require modification to meet needs relative to cultural variance (Geissler, 1991; Kelley & Frisch, 1992).

Data from the IOM (2004) strongly suggest that many well-intentioned health promotion campaigns are culturally inappropriate. For example, black women in abusive relationships, states Campbell (1993), have concepts of independence and female strength that run counter to accepted ways of help seeking and resource utilization. These women are more likely to remain in their relationships and prefer assistance in working through the abuse problem. This is at odds with the Eurocentric model, which places emphasis on leaving the relationship. The IOM and others encourage the capture of relevant cultural content, if real change is to occur (Camphina-Bacote, 2002; IOM, 2004). Cultural and historical influences are basic to nurse-client relationships and, whether acknowledged or ignored, they frame the interaction. They are part of the "elephant in the room."

SUMMARY

I believe that when encouraged to acknowledge cultural patterns, the relevance of history and social context to care will become more apparent. As nursing students are being transformed into professional nurses, culture must also be integrated as part of the nursing process with a permanent and prominent venue. Nurses are pivotal members of the health care team. They personify one culture (their own), convey another (nursing and health care), and arbitrate a third (the client's). They can be instrumental in achieving much needed cultural pluralism in health care delivery.

We may argue as to whether health care is a right or a privilege, but there is no disagreement that it is a choice.

Blacks make that choice based on their perceptions of what the health care system offers. Health behaviors are retained because they are functional, but they do not stand alone. Health behaviors are embedded in cultural and historical realities (Dennis & Small, 2003). When black clients are validated by the health care system in all their sociocultural dimensions, a reciprocal, productive relationship can develop that is built on mutual understanding and respect; this possibility encourages all of nursing to work together with the heightened prospect of finally eliminating health disparities.

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Asian Americans and Pacific Islanders and Nursing: Narrowing the Health Disparities Gap

HYEJIN PARK ◆ JILLIAN INOUYE

The Asian-American population is generally understood to be a heterogeneous group with over 100 different languages, diverse cultures and religions, and residency from non-Asian groups in the United States. Modern Asian immigration began in the 1800s and has increased steadily since then (McCracken et al., 2007). Asians represented about 5% of the total population in 2007, or 15.2 million persons, and are the second fastest-growing minority group, increasing about 2.9 percentage points between 2006 and 2007. The expected Asian-American population in 2050 is 33.4 million, which would comprise 8% of the total population. The five largest groups in descending order are the Chinese (3.6 million), Filipinos (3.0 million), Asian Indians (2.7 million), Vietnamese (1.6 million), and Koreans (1.5 million), which together make up about 80% of the Asian-American population, and a large portion (48%) of them live in the West compared with whites (18%) and blacks (7%) (U.S. Census Bureau, 2008d).

Contrary to the popular belief of longevity in Asians, they have a lower median age than the total U.S. population; 9.3% of Asians and Pacific Islanders were aged 65 and over compared with 12.6% of the total population in 2007 (U.S. Department of Health and Human Services[USDHHS], 2008a). Compared with the other Asian-Americans, the Japanese adult population has a higher percentage of individuals aged 65 and over (31%) (Barnes, Adams, & Powell-Briner, 2008). More than 70% of Asian Americans are married compared with 54% of the total population, with an average household of three members (U.S. Census Bureau, 2008c).

Two thirds of all Asian Americans are foreign born compared with 6% of whites and blacks (Agency for Healthcare Research and Quality [AHRQ], 2008). About 30% of Asian Americans who were foreign born came to the United States less than 10 years ago. This may

explain why almost 79% of Asian Americans over 5 years of age speak a language other than English at home, and about 48.9% speak English less than “very well.” In the 48.9% who speak English, 73.4% are in the 65 and over age group. Japanese and Filipinos are more likely to speak English “very well” or only speak English at home (McCracken et al., 2007).

Although the percentage of those holding a high school education is roughly the same for Asian Americans and all other people, a higher proportion of Asian Americans (49%) versus the total population (27%) earned at least a bachelor’s degree. Asian Indians have the highest percentage (69%) with a bachelor’s degree or higher, and 36% have a professional degree while Vietnamese adults had the lowest percentages (26% and 7%, respectively) for the same levels of education in 2006 (U.S. Census Bureau, 2008a).

Participation in the labor force for Asian Americans is 67.8% compared with the total labor force (66%). For Asian-American men the rate is 75.3% and for women 59.4% (Bureau of Labor Statistics, 2009). Filipino women have the highest labor force participation rate at approximately 65%, which is more than 2% higher than the next highest rate (Thai); whereas Pakistani women, followed by the Hmong and Japanese, have the lowest participation rate in the labor force. For men, Asian Indian and Pakistani men had the highest labor force participation rates (79% and 77%, respectively) in 2000 (Reeves & Bennett, 2004).

According to the U.S. Census Bureau, real median household income in the United States increased 1.3% between 2006 and 2007. Among the minority groups, Asian Americans have the highest median income compared to other minorities, while blacks have the lowest. Meanwhile, the nation’s official rate was 12.5%, not significantly different from 2006 to 2007. The poverty

rate for non-Hispanic whites (8.2%) was lower than the rate for blacks (24.5%) and Asians (10.2%) (U.S. Census Bureau, 2008b). Between 2006 and 2007, the real median income of native-born households rose by 1% compared with foreign-born households whose median income dropped by 7.3% (U.S. Census Bureau, 2008c). The health care uninsured rate for Asians was 16.8% in 2007, higher than the 15.5% in 2006, while uninsured rates for non-Hispanic whites decreased to 10.4% (U.S. Census Bureau, 2008b).

The estimated number of Native Hawaiians and other Pacific Islanders in 2006 was 1 million and made up 0.3% of the total population. Hawaii had the largest population of Pacific Islanders, followed by California and Washington. There was a 1.7% growth in the number of Pacific Islanders between 2005 and 2006, the highest of any racial group except for Asians. Fourteen percent have at least a bachelor's degree compared with 27% for the total population. Four percent obtained a graduate or professional degree compared with 10% for the total population. The poverty rate for Native Hawaiians and other Pacific Islanders is 11.4%, and 21.7% did not have health insurance coverage in 2006 (U.S. Census Bureau, 2008a).

ASIAN AMERICAN NURSING WORKFORCE

Although underrepresented minorities compose 33% of the nation's population in 2004, they compose only 10.7% of all health care professionals. Among the minority groups, Asian Americans/Pacific Islanders compose 3.1% of the registered nurse (RN) workforce compared with 4.2% for African Americans, 1.7% for Hispanics, and 0.3% for American Indians. RNs in minority groups are more likely than their white counterparts to obtain baccalaureate and higher degrees. Asian nurses (72.6%) have significantly higher education levels than white nurses (46.5%) (Health Resources and Service Administration, 2004). Although these figures reflect an "overrepresentation" of Asian Americans among health care professions, because of the heterogeneous nature of each Asian and Pacific Islander subgroup, they do not truly represent the disparities in the workforce.

The data for Asian Americans illustrate the disparities in demographics and cultural variants. How do health care providers address these issues and avoid the tendency to aggregate, stereotype, and stigmatize? This chapter briefly discusses the major identified health disparities, possible reasons for their continuation, and suggested approaches to narrow the gap.

HEALTH DISPARITIES OF ASIAN AMERICANS/PACIFIC ISLANDERS

Despite the efforts of organizations such as The Institute of Medicine, the AHRQ, and National Quality Forum to improve quality of care, health quality has worsened or remained due to the continuing rapid growth of minority groups and disparities in health care (Troutman, 2005). The Institute of Medicine's *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* documents widespread disparities in health and use of health care services among racial and ethnic minority groups in the United States. The report points to causes that are multi-factorial and include patient, physician, and system-level factors such as trust, cultural competency and bias, health insurance coverage, and knowledge (Smedley, Stith, & Nelson, 2002). The Commonwealth Fund 2001 Health Care Quality Survey, sampling 669 Asian Americans, found that they reported poorer quality of health care than the overall population. Specifically, they had greater communication difficulties with their physicians, fewer preventive services, less chronic disease care, and less satisfaction with the quality of their health care (Collins et al., 2002).

According to the National Health Interview Survey 2006, about 19% of Asian Americans/Pacific Islanders lack health insurance compared with about 14.2% of the general population. Korean American and Native Hawaiians/Pacific Islanders are about twice as likely to be uninsured. Among Asian Americans, the percentage of nonelderly who lack health insurance varies widely, ranging from 31% of Koreans to only 12% of Japanese Americans and Asian Indians in 2006 (Kaiser Family Foundation, 2008). Recent information suggests that blacks risk for contracting acquired immunodeficiency syndrome (AIDS) is 10 times higher than whites, and Hispanics rate of new AIDS cases is over 3.5 times higher than that of non-Hispanic Whites. Asian adults over age 65 are 50% more likely than whites not to receive immunization against pneumonia. American Indians and Alaska Natives are twice as likely not to receive prenatal care in the first trimester as whites (AHRQ, 2008).

Asian Americans represent both extremes of the socioeconomic and health indexes, although more than a million Asian Americans live at or below the federal poverty level. Asian-American women have the highest life expectancy of any other group. For the total U.S. population, the age-adjusted death rate for Asian/Pacific Islander is 451 per 100,000 compared with

812 per 100,000 for the general population from 2003 to 2005 (USDHHS, 2008b). During 2004 to 2006, approximately 9% of Asian adults reported being in fair or poor health, compared with higher rates among blacks (20%), American Indian/Alaska Natives (18%), Hispanics (17%), and whites (11%). Among Asian subpopulations, the percentage reporting fair or poor health ranged from 5% among Japanese adults to 19% among Vietnamese adults (Barnes et al., 2008).

According to the Centers for Disease Control and Prevention (2008), the 10 leading causes of death in the United States in 2005 for Asian Americans/Pacific Islanders were cancer, heart disease, stroke, unintentional injuries, diabetes mellitus, influenza/pneumonia, chronic lower respiratory disease, nephritis/nephrotic syndrome/neoplasms, suicide, and Alzheimer's disease. Furthermore, Asian Americans have a disproportionately high prevalence of the following conditions and risk factors: chronic obstructive pulmonary diseases, hepatitis B, human immunodeficiency virus, AIDS, tobacco use, and tuberculosis (Centers for Disease Control and Prevention, 2008).

Although cancer rates for Asian Americans are lower than other U.S. ethnic groups, Asian Americans have the highest incidence rates of liver and stomach cancer compared with Hispanic, non-Hispanic white, and non-Hispanic black populations (National Cancer Institute, 2005). Health disparities also exist among Asian-Americans subgroup. For example, age-adjusted mortality rates for liver cancer for 100,000 males in California were 28.3 and varied from Vietnamese men (54.3%) and Japanese men (9.3%) (McCracken et al., 2007). Information about the relationship of hepatitis B to liver cancer in Asians is lacking. More screening is needed for hepatitis B in this ethnic group (Nguyen et al., 2007). Some Asian subgroups are disproportionately at risk for chronic obstructive pulmonary disease, diabetes, chronic hepatitis B, and tuberculosis, compared with other Asian subgroups as well as other race and ethnic groups (Office of Minority Health and Health Disparities, 2007). In addition, some Asian subgroups have high rates of cigarette smoking and low rates for cancer screening, mental health service use, leisure time physical activity, and knowledge of blood cholesterol and blood pressure status (Abe-Kim et al., 2007; Kandula, & Lauderdale, 2005; Maxwell et al., 2005). For example, although Asian Americans as a group have relatively low smoking rates (18%), among Asian subgroups, smoking rates are highest among those who are Laotian, Vietnamese, or Cambodian (Esperat et al., 2004).

Factors potentially contributing to prolonging these disparities for Asian Americans include lack of adequate data and research, language and cultural barriers, lack of mentoring for health care professionals, stigma associated with certain conditions, and beginning efforts on the part of federal agencies to develop strategic plans to address the needs.

BARRIERS TO NARROWING THE HEALTH DISPARITIES GAP

Lack of Data

In 1997, five standard racial groups were identified: American Indian or Alaskan Native, Asian, black or African American, Native Hawaiian or Pacific Islander, and white (U.S. Census Bureau, 2009). Most literature on health disparities compares black with white populations (Sarto, 2005). The 2000 census provided needed information in disaggregating the Asian Americans and Pacific Islanders as two distinct groups, which allows distinguishing disparities for Asian Americans/Pacific Islanders and Pacific Islanders as separate groups. However, Asian American and Pacific Islanders have poor data, references, and information because little research and data exist on specific health problems in the other ethnic groups. For example, little research has been done with Filipino Americans across the social strata, across generations, and across genders, despite their large numbers in the population and in the workforce. Because of this, explanations or causes for the disparities and measures to address them are difficult to identify. Nor can the relationships between health disparities and demographics be explained. Because data drive almost all programs and services, without research and the resulting data, many Asian Americans may be excluded from participating in federal programs (President's Advisory Commission on Asian Americans and Pacific Islanders, 2001) and having culturally tailored interventions as a result of evidence-based research.

Communication Barriers

Asian American subgroups have communication barriers since they speak more than 100 different dialects and languages. A thorough literature review by Yeo (2004) examined how language barriers may contribute to health disparities. She found consequences of language barriers ranging from miscommunication to inefficient use of health care services such as understanding the side effects of medication, satisfaction with medical care, and number of health care visits.

Communication problems between the patient and providers also can be barriers to adherence to medication and a factor in medical decision-making (AHRQ, 2008). According to the AHRQ, blacks (11.3%) and Asians (14.3%) were more likely than whites (9%) to report they had poor communication with their health providers (AHRQ, 2008). Despite minority groups experiencing more communication barriers than whites, minority providers are less likely than whites to practice in minority communities. For example, 39% of Asian Americans have an Asian-American physician compared with 82% of whites who have a white doctor (Collins et al., 2002). Furthermore, 81% of RNs in the United States are white compared with 3.3% for Asian/Pacific Islanders (Health Resources and Service Administration, 2006).

Twenty-seven percent of Asian Americans reported one or more of the following problems: their doctor did not listen to everything they said, they did not understand their doctor fully, or they had questions but did not ask them during their visits (Collins et al., 2002). Chinese Americans (37%) were less likely to feel welcome at their doctor's office, with the Chinese, Koreans, and Vietnamese the least likely among minorities to be satisfied with their health care services and insurance plans (Collins et al., 2002; Hawks, 1996).

In relation to disparities resulting from clinical encounters and interactions between a doctor and a patient, Balsa and McGuire (2003) proposed a unified conceptual model to show three possible mechanisms resulting in disparities: prejudice in the form of physicians being less willing to interact with members of minority groups, clinical uncertainty associated with differential interpretation of symptoms from minority patients, or distinct prior notions and stereotypes held about health-related behaviors of minority patients. Because race is always observable, group categorizations may result in miscommunication regardless of benevolence on the part of the health care provider (in this case, physicians).

Cultural Beliefs, Values, and Attitudes as Possible Barriers

Unique cultural health beliefs affect how people perceive illness, explain pain, and define quality of care (Wong-Kim, Sun, & DeMattos, 2003). Under this concept, Asian Americans, particularly Chinese, Vietnamese, and Filipinos, are more likely to agree that it is better to take care of one's own health and that staying healthy is a matter of luck (Hughes, 2002). This may explain why 52% of Asian Americans versus 39% of white, 40% of

blacks, and 34% of Hispanics reported that they did not follow their doctor's advice. The reason was that they disagreed with the advice. Furthermore, 32% of Asian Americans and 25% of Hispanics said they did not follow their doctor's advice because it went against personal beliefs, compared with 19% of whites and 13% of blacks. Asian Americans are slightly more likely than the general population to use herbal medicine (20% vs. 23%). They are twice as likely to use acupuncture (6%) and services of traditional healers (6%). Thirty-eight percent of Vietnamese and 36% of Japanese use herbal medicine, 24% of Koreans use acupuncture, and 14% of Chinese consult with traditional healers (Hughes, 2002). Patient preference and health-seeking behaviors, including ignoring the doctor's advice and recommended health care interventions, are considered reasons for health disparities (Padela, & Punekar, 2009).

Asian Americans are also less likely to report leaving it up to their doctor to make the right decisions for their health. They believe that their doctors are less likely to understand their background and values and feel that they are looked down upon by their physicians. About 45% of Asian Americans reported that family and friends were the most frequently reported source of health information. Twice as many (11%) believe they would get better care if they were not of a different race or ethnicity than the overall population (5%) (Hughes, 2002). This lack of trust and understanding is a huge barrier to seeking and adhering to health care regimens for Asian Americans/Pacific Islanders. Enhancing cultural awareness and understanding diverse patients' values is required to offer better interventions based on their culture (Padela & Punekar, 2009).

Native Hawaiians, regardless of how distantly persons were related, still are considered brothers and sisters. This relationship stems from their roots from the *`oha*, or the *taro corm*, and is defined as *`ohana*. The *`ohana* includes parents, grandparents, children, ties of blood, and nonrelated persons, and the *`aumakua*, or family god (Lindo, 2004). Affection and warmth are the values of the *`ohana*. This includes *hanai*, or those adopted into different families and who are treated equally as family members. A recent controversial case involved an adopted young white boy who applied to a school reserved for those with Hawaiian blood. The child was considered "Hawaiian" by his family because of his status in the Hawaiian family. Unfortunately, not everyone shared these views. In the *`ohana*, there is a sense of shared involvement, mutual responsibility, interdependence, and helpfulness. The belief that life is interconnected relates to dependence on others for

survival and open sharing of food and resources (Lindo, 2004). To this day, the Hawaiian culture is known worldwide for its *aloha* spirit of sharing, graciousness, and love.

A culture also can be understood by its proverbs and sayings. Although many proverbs are universal, the following Japanese and Hawaiian proverbs illustrate some of the specific values and beliefs of each of these cultures. The Japanese proverb *Deru kui wa utareu* means “A protruding post is hammered down,” referring to individuals who stand out or are notable. A Hawaiian proverb states, *Enoho iho i ke opu wewewu, mai ho`oki`eki`e*, or “Remain among the clumps of grass and do not elevate yourself,” which has been further interpreted as “Don’t show off. Don’t get puffed up and big-headed,” but rather be *ha`aha`a* (humble), which does not mean timid, submissive, and spineless. These sayings reflect a value of inner self-confidence that gives rise to quiet strength and self-reliance, which is seen as far more admirable than self-importance, arrogance, and egotism. Another Hawaiian saying, *Ike aku, `ike mai, kokua aku kokua mai; pela iho la ka nohana`ohana* (Pukui, 1983), translates to “Recognize others, be recognized, help others, be helped; such is a family relationship.” The explanation given for this is that many native Hawaiians live with their extended family and family is the most important part of life for them. This saying teaches why they should put family first. In the *`ohana*, or family, you know others and they know you; you help others and know you will be helped if there is anything you need (Lindo, 2004).

These proverbs exemplify the value placed on humility, not elevating oneself, and deep family ties, in contrast to the Western values of independence, assertiveness, self-reliance, and self-promotion. In general, values and beliefs in the Asian American/Pacific Islander culture promote focusing on the welfare of the family, culture, and the individual before the outer world. This value is illustrated in the expectation to meet family obligations before allowing time for social events with colleagues and acquaintances. In addition, traditionally each member of an Asian family has a clear role and position in the family hierarchy that is determined by age and gender. The father, who has great responsibility for the family, makes all major decisions, including those related to health (Kramer et al., 2002).

Another Hawaiian saying is, *Nana ka maka; ho`olobe ka pepeiao; pa`a ka waha*, or “Observe with the eyes; listen with the ears; shut the mouth.” Thus, one learns (Pukui, 1983). The Japanese also have similar sayings: “Silence surpasses speech,” and “The inarticulate speak

longest” (Takashima, 1981). This may explain the silence and lack of questioning of health care providers on the part of Asian Americans/Pacific Islanders, and their silence may be misconstrued as acceptance and/or understanding.

Beliefs, values, and attitudes regarding the importance of family, not standing out, and difficulty with trust, respect, and communication with health care providers tend to pull this group inward to those close to them for support and care. This can be a double-edged sword because more traditional Western forms of care may be rejected to the detriment of their health. Other Asian-American beliefs, such as a strong sense of self-care and personal beliefs, may be additional reasons for noncompliance with health care.

Social Capital

Closely related to cultural values for Asian Americans/Pacific Islanders is the notion of social capital. Coleman (1990) referred to social capital as the networks of community relationships that facilitate trust and motivate purposeful action. The concept of social capital is defined by attributes such as mutual trust and reciprocity drawing on the work of Putnam (1993) and by its evidence of relationships among persons in a community, shared norms, and shared activities that advance shared norms (Mechanic, 2000). Because social capital is multifaceted, it has been operationalized with measures of social participation and interaction or trust (Bolin et al., 2003). Social capital, intangible assets including trust, personal networks, and social norms of reciprocity, is created by a unit (an individual, a family, or a race), and a unit can benefit from increasing its social capital by improving health, a living environment, and peace of mind (Hsieh, 2008). For that reason, interest in the effect of social capital on health and health care has been growing recently.

Two key elements related to Asian American/Pacific Islander culture and values are general community trust and generalized reciprocity. Ahern and Hendryx (2003) refer to reciprocity as norms of cooperative behavior by which persons are inclined to support and help each other. They describe trust in relation to the physician’s or health care practitioner’s ability to make accurate diagnoses and provide appropriate treatment while acting in the best interest of the patient. They found that social capital seemed to mediate how health care is perceived and is delivered in communities, or that the level of trust, engagement, and reciprocity influences the levels of trust individuals perceive in their health care providers. Bolin and colleagues (2003)

have developed a theoretical model of the family as producer of health and social capital. However, their operational definition of social capital was having a close friend outside the family and is more similar to the social support concept than what is generally defined as social capital.

How does social capital relate to culture, ethnicity, and barriers? A Chinese-Hawaiian attorney explained, "We owe our first obligation to our family and our second to our high school classmates. After that, we make choices" (Markrich, 2004, p. B1). The high school classmates are childhood friends. Figure 59-1 illustrates the concentric circles of social capital with the family being in the center surrounded by friends. This construct may explain why although there is significant social capital in Asian American/Pacific Islander groups, there is low trust in regard to physicians.

Help-Seeking Behaviors

Among the ethnic groups that comprise Asian Americans/Pacific Islanders are a multitude of important differences in patterns of seeking help for health services and attitudes toward and beliefs about health and illness (Chang, 2008). In Asian Americans, strong family ties discourage one from going outside the group culture to seek help from others. A brief review of the literature of Asian-American help-seeking behaviors was reported by Esperat and colleagues (2004). They found that Asian Americans resolved problems on their own; sought and received help in the family, sought help more from informal sources (family and friend) versus formal sources (health care professionals), sought help from formal sources only when there was conflict within the family or when symptoms

were severe; and sought help depending on differences in acculturation and availability of family networks. In addition, Asian Americans in general reported the lowest utilization for mental health services and are more likely to present with severe mental health diagnoses such as psychoses at health care facilities (Huang et al., 2007; Kung, 2003).

Lack of Mentoring

The literature on faculty and nurse mentoring highlights how the mentoring relationship stimulates growth in research and scholarship, promotes socialization and adjustment, increases networking, provides emotional support, and assists with the reappointment process (Jacelon et al., 2003; Mundt, 2001; Snelson et al., 2002; Washington, Erickson, & Ditomassi, 2004). In addition, some of the literature shows the importance of mentoring, the lack of mentoring in research in minority groups (Shavers et al., 2005), and lack of diversity in faculty and in administrative positions in nursing education (Wilson, Andrews, & Leners, 2006). These studies suggest that minority groups need mentoring to decrease health disparities and improve retention of minority students in the discipline of nursing. However, the literature contains little regarding benefits specific to cross-cultural/ethnic or ethnic/cultural matches. Although there is the belief that mentoring with a similar minority as a role model yields more success, no studies support this belief. A few (Griffiths & Tagliareni, 1999) conclude that the important variables are personality style and compatibility.

Do Asian Americans/Pacific Islanders mentor and accept mentoring from members of their same group? In the case of nursing, nothing has been reported in the literature. Many reasons exist for this, from the small numbers of senior-level Asian Americans/Pacific Islanders in the nation to the smaller number of nurses who are of senior capacity in academia and administrative positions. In attempting to identify a minority match for their students, Griffiths and Tagliareni (1999) found too few were available, and their project had to rely on expertise offered by majority mentors.

However, other reasons may also be at play. These historically collectivistic groups should fall naturally into mentoring relationships, but could collectivistic groups relate specifically to family relations and not include mentoring or accepting mentoring from too far outside the circle? The literature on help-seeking behaviors suggests that help may not be readily accepted by members of the same group because of the value placed on independence by outsiders. Does this reflect a need

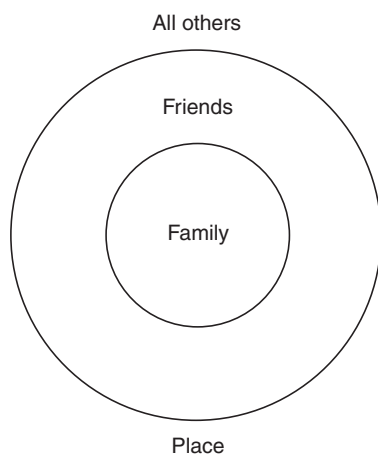


FIGURE 59-1 Social capital illustration of Asian Americans/Pacific Islanders.

for self-reliance, a value of not being “a burden,” or a natural inclination of non-help-seeking behaviors?

Nevertheless, many Asian American/Pacific Islander nurses have been mentored by senior white faculty or administrators. They are encouraged, supported, and pushed by others outside their ethnic/cultural groups. Some of this may be cultural, as noted in the discussion of culture in the previous section. One may not stick out in one’s own group but may in others.

Lack of Strategic Plans

The President’s Advisory Commission on Asian Americans and Pacific Islanders (2001) found that less than half of the federal agencies had conducted a needs assessment or study to identify, quantify, or evaluate Asian Americans/Pacific Islanders’ needs or had grant programs for which Asian American/Pacific Islander were a funding priority. However, recently the National Institutes of Health has developed its Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities as a first step in implementing Public Law 106-525, the Minority Health and Health Disparities Research and Education Act of 2000. The report states that “because of concerns about current definitions, we are unable to provide the Congress with valid and reliable data on minority health disparities research” (USDHHS, 2002, p. 32). The National Institute for Nursing Research, with a long history of supporting research on minority health developed its strategic plan, “National Institute of Nursing Research: Five-Year Strategic Plan for Reducing Health Disparities” with research, infrastructure, and outreach goals and activities (Phillips & Grady, 2002). The entire plan is available at http://www.ncmhd.nih.gov/strategicmock/our_programs/strategic/pubs/NINR-Rev.pdf.

It is noteworthy that the National Institute for Nursing Research specifically targets minority nurses interested in pursuing research careers. Furthermore, the institute has partnered with the National Coalition of Ethnic Minority Nursing Associations to develop initiatives and disseminate research opportunities. The coalition has taken a step in including all five minority organizations—the Asian American/Pacific Islanders Nurses Association, the National Alaska Native American Indian Nurses Association, the National Association of Hispanic Nurses, the National Black Nurses Association, and the Philippine Nurses Association of America—as equal partners to identify future directions for improving the health of racial and ethnic minority populations and increasing the number of minority nurse investigators.

FUTURE DIRECTIONS/RECOMMENDATIONS

Healthy People 2010 established the elimination of health disparities as a national priority (USDHHS, 2000). Unfortunately, disseminating and implementing interventions for reducing health disparities has been slow to progress (Schlotthauer et al., 2008). The following directions offer guidance for individuals, health care professionals, and policy makers to disseminate interventions. Changes in the ethnic backgrounds of the population and the increased understanding of disparities shape nurses’ approaches to Asian Americans/Pacific Islanders. Research, practice, and education can focus on the points of intervention in Table 59-1. At the disease level, the focus should be clinical intervention research to specify the epidemiology of diseases and the Asian American/Pacific Islander’s unique responses to diseases and interventions. These then can be tailored specifically for the different subgroups within the larger Asian American/Pacific Islander group. At the individual level, strategies should be investigated to decrease barriers and increase access such as providing services in nearby neighborhoods at churches, markets, or other convenient and safe places; providing help with transportation; and possibly matching health care providers with Asian Americans/Pacific Islanders. Research on the results of these interventions also should be done to determine efficacy of outcomes.

For health care professionals, the government now is providing support to increase the number of minority

TABLE 59-1 Targets and Points of Intervention

Points of Intervention	Target
Hospital, clinic, public health, government, universities	Disease
Decrease barriers, increase access	Individual
Mentoring, training, coaching	Health care provider
Cohesion/social support/family	Group support
Social capital, neighborhoods, clubs, gatekeepers	Community
Culturally specific interventions, cultural brokers, interpreters	Culture/ethnic group
Information interventions	Policy makers

From Balsa, A. I., & McGuire, T. G. (2003). Prejudice, clinical uncertainty and stereotyping as sources of health disparities. *Journal of Health Economics*, 22(2), 89-116.

nurses for those who feel more comfortable accepting help from their own. Mentoring programs and support for research careers for Asian Americans/Pacific Islanders could lead to more focused research specific to this group. Because of the importance of family, at the group level, providers should include family members in decision making for health care and learn more about the family's specific health care practices and behaviors. Including family or significant others along with the participants in research studies may increase minority participation in clinical trials and increase adherence to medical and nursing interventions.

For Native Hawaiians, a sense of place or being one with the community is at the nexus of their well-being and health. Place takes on spiritual connections with health and healing. Similar to social capital but more expansive, place is about relationships or connections to natural elements, the self, and others and belongingness (Oneha, 2000). The implications for practice are to take a broader ecological and spiritual perspective when working with Native Hawaiians. Sensitivity to inclusion and respect for history are crucial to practice and research. With Asian Americans, trust and reciprocity are important concepts for practice and research.

At the cultural level, inclusive, descriptive research on specific complementary health care practices of all the different subgroups should be conducted. The use of native healers or elders from the specific groups is consistent with health care practices of some Pacific Islander cultures and should be accepted and included in treatment plans. Esperat and colleagues (2004) suggest the use of cultural brokers as informal levels of support to navigate the barriers to health care. At the policy level, Balsa and McGuire (2003) suggest information-based policies may be one step in countering decisions health care providers make based on uncertainty, and rules-based actions may be more effective when stereotyping or prejudice is an issue related to treatment.

SUMMARY

Disparities in quality of and access to health care for minority groups have not been reduced. Disparities in services may result from poorly matched services to needs. To have an impact on these inequalities, more research on the specific causes for them is needed, as is culturally specific responses to interventions and interventions that include not only the individual but also family and friends and attention to environmental sensitivity.

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Bridging Cultures: Hispanics/Latinos and Nursing

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Hispanics/Latinos and the nursing profession are faced with a tremendous challenge in the coming decade: to increase the representation of Hispanics/Latinos in the nursing profession at all levels. The growing demographic multiculturalism of America is viewed in a positive light, yet it poses a challenge and a dilemma; that is, meeting the health care needs of an ethnically diverse population in an infrastructure that is philosophically and economically unprepared to do so. Statistics indicate that 88% of all nurses are non-Hispanic whites from middle- and working-class backgrounds and yet, only 67% of the total U.S. population is of the non-Hispanic white group (Health Resources and Service Administration [HRSA], 2006). The underrepresentation of racial and ethnic minorities in nursing and in other health professions has been found to be due to multiple reasons, including the continued disparities in health care outcomes for these populations (Smedley, Stith, & Nelson, 2002). The only way for the nursing profession to increase the number of Hispanics needed to meet existing nursing service demands is to become more culturally diverse. In this context, *cultural diversity* refers to the variety of ethnicities and cultures within the nursing profession that needs to reflect the societal makeup of the country and nursing patients/clients.

Cultural diversity, however, is not occurring in nursing for several reasons. One is that undergraduate and graduate degree nursing programs are especially challenged to increase the number of new student admissions and to facilitate the admission process for Hispanics. This challenge includes providing flexibility and allowing course credits for registered nurses (RNs) with an associate's degree in nursing (ADN) who wish to pursue bachelor's or master's degrees. The highest education credential of most Hispanic nurses is the ADN, with a significantly lower number of Hispanic nurses

attaining master's degrees and even fewer obtaining doctoral degrees than the rest of the RN population in the United States. The number of white, non-Hispanic nurses with a master's or doctorate level nursing degree is 13.2%; for black or African-American nurses, 14.2%; and for Hispanic nurses, 10.3%. Those holding a bachelor of science in nursing (BSN) degree for white, non-Hispanic nurses is 33.3%; for black or African-American nurses, 37.8%; and for Hispanic nurses, 36.1%. The percentage of white, non-Hispanic nurses holding ADNs is about 34.2%; black or African-American nurses with ADNs are about 35.8%; and Hispanic nurses about 42.2%. Those who hold a diploma in nursing as their highest degree are white, non-Hispanic nurses, 18.9%; black or African-American nurses, 11.2%, and Hispanic nurses, 10.1% (HRSA, 2006).

Financial hardship is cited as the principal reason many Latinos discontinue their education, as well as lack of experience with college application and financial aid processes (Hispanic Scholarship Fund, 2008). Other barriers potential Latino nurses report as reasons for not pursuing a nursing degree are lack of time to study due to family obligations and difficulty getting admitted to nursing school because of limited seating. (Vogt & Taningco, 2008). Given the financial limitations of Hispanics in this country, most are educated in 2-year ADN programs and in the few remaining 3-year hospital-based diploma schools of nursing. These programs attract students primarily because they provide earning power earlier than the 4-year BSN programs and have less stringent entrance criteria requirements. Thus the majority of Hispanics continue to enroll in 2-year programs, limiting their long-term mobility in the nursing profession, unless they continue into baccalaureate education and beyond.

Hispanic nurses who attend 2- and 3-year nursing programs usually are not appointed to positions of

nursing leadership and responsibility because of the lack of advanced preparation offered by these programs. Additionally lacking are Hispanic mentors in higher education and nursing leadership positions who can encourage other Hispanics. Hispanics who do hold leadership positions are deluged with requests to participate in activities that demonstrate cultural diversity and visibility of the agency by including an academically prepared Hispanic nurse. Together, selective discrimination and family and financial responsibilities make it more difficult for Hispanics to continue their studies, often precluding them from attaining master's and doctoral degrees.

Few Hispanics have been employed at the level of director or dean in the history of nursing in the United States. The minimal number of Hispanics visible in leadership positions further limits opportunities for students to view Hispanics as role models in nursing. In their study, Villaruel and Peragallo (2004) discussed the importance of leadership development among Hispanic nurses and the barriers and supports to that development.

Role modeling is the product of a complex set of social, economic, and educational factors. High dropout rates, poor academic preparation, and inadequate facilities and equipment in underserved communities, together with the low expectations of Hispanic students by teachers, contribute to the small pool of Hispanics who ultimately achieve professional careers and serve as role models for others. More significantly, these low numbers reflect an educational system that remains ill-prepared to develop Hispanic students to achieve their fullest potential. Why are Hispanics/Latinos not entering nursing in correlation to the growing population of Hispanics? According to the National Sample Survey of Registered Nurses conducted between 2000 and 2004, RNs in the United States numbered 2.9 million (HRSA, 2006). After adjusting for those Hispanic or Latino RNs who provided no response to the question on race/ethnicity, only 2.2% of the RN population were Hispanic or Latino, although Hispanics or Latinos comprise 14.1% of the general population. Note however, that of the 7.5% of respondents who did not specify one or both of race and ethnicity, 6.4% of respondents were of unknown ethnicity in 2004 (HRSA, 2006).

These are dismal statistics, considering that the number of Hispanic communities and their populations are increasing rapidly, but the numbers of Hispanic nurses are not growing proportionately.

From a nursing leadership perspective, two major questions arise. First, how aware are nursing leaders of this critical issue? Second, what steps are being taken to resolve this issue? Data from national and state levels validate the underrepresentation of Hispanics in nursing education and practice and underlie the concern expressed at graduate levels where most nursing leaders are developed.

Nursing faculty and administrators in health care and government agencies must address the recruitment, retention, and attrition problems in nursing programs from a Hispanic/Latino perspective. The U.S. workforce is expected to be more diverse and complex, and nursing leaders must anticipate these effects and long-term implications in order to prepare graduates accordingly. Recruitment and retention efforts need to be improved dramatically to reflect the cultural diversity of society within the nursing profession. Although not consciously intended, health care agency recruiters often select nurses who appear similar to themselves instead of considering as the first priority their patient population preferences and psychosocial needs. Thoughtful consideration of patients' needs must be brought to the awareness level of nursing staff members, recruiters, and administrators who are ultimately responsible for effecting change.

USE OF THE TERM HISPANIC/LATINO

The terms *Hispanic* and *Latino* are used interchangeably with preferences seeming to be geographical; that is, divided by locale. For example, in the United States, the term *Hispanic* often is used in the Midwest and on the East Coast, whereas *Latino* is preferred on the West Coast. Yet Hispanics living along the 2000-mile U.S.-Mexico border prefer to self-report as Mexican American, Chicano, or Hispanic. It is important to note that these terms have a historical base from which negative or positive images and connotations arise. Because of long-standing differences in cultural values and military conflicts such as the historic Battle of the Alamo between Mexico and the United States, the terms *Hispanic* and *Latino* remain controversial and generate strong feelings and emotions. These terms are distinctive and arise partly from the period of history in which ethno-cultural labels were applied. Perhaps the terms are a function of the age of the "labeled" and the stage of their acculturation. Throughout this chapter, Hispanic and Latino are used interchangeably.

OVERVIEW OF THE HISPANIC/LATINO POPULATION IN THE UNITED STATES

The demographic profile of the Hispanic/Latino population is changing in the United States. According to the U.S. Census Bureau (2008), the Hispanic population more than doubled from 1980 to 2000. In 1980, there were 14.6 million Hispanics in the United States. From 1980 to 1990, the population grew by 7.7 million to 22.4 million. During the 1990s, the Hispanic population increased by 13 million, reaching a population of 35.3 million persons, or 12.5% of the total population. By the year 2010, Hispanics are projected to make up 15.5% of the U.S. population, 20.1% by 2030, and 24.4% by 2050 (U.S. Census Bureau, 2008). In 1990, about 1 of every 10 Americans was Hispanic, and this number is expected to rise to 1 of every 4 by 2050. Since 1970, this tremendous Hispanic population increase has been attributed to several factors. Among them are a higher birth rate than the rest of the population, substantial ongoing immigration, and improvements in census-reporting procedures (U.S. Census Bureau, 2007).

The largest group of Hispanics/Latinos in the United States are Mexican Americans (64%), followed by Puerto Ricans (9.6%), other (7.6%), Central American (7.2%), South American (5.5%), Cubans (3.6%), and Dominicans (2.6%). Although found in every state, nearly 9 of every 10 Hispanics/Latinos live in just 10 states. Of the total population of California and Texas, 32.4% and 32%, respectively, are of Hispanic origin. Combined, California and Texas are home to more than half of the nation's Hispanics. Eight additional states: New York, New Jersey, Florida, Illinois, Arizona, New Mexico, Colorado, and Nevada round out the top 10 states with the largest Hispanic populations (U.S. Census Bureau, 2008).

Hispanic Americans are more likely than non-Hispanics to live in metropolitan areas and central cities. Approximately 90% of Hispanics lived in metropolitan areas in 1990 compared with about 76% of non-Hispanics (U.S. Census Bureau, 1995). In 2003, about 22% of Hispanic families lived below the poverty level compared with about 9% of non-Hispanic white families (U.S. Census Bureau, 2007). In 2004, 78% of Hispanics in the United States reported speaking a language other than English at home with 39% of those admitting that they spoke English very well; the other 39% reported that they spoke English "less than" very well (U.S. Census Bureau, 2007).

HISPANIC/LATINO WOMEN IN LEADERSHIP ROLES

The question arises: Why do so few Hispanic/Latino women aspire to leadership roles? In the Hispanic culture, few women are in leadership roles because leadership traditionally has been viewed as a competitive male attribute, especially in business and health care circles. Consider the traditional physician-nurse dyad in which the physician typically has been male and the nurse has been female. Today, these roles are changing as more women enter male-dominated health care and other disciplines such as law, engineering, and business. Conversely, more men also are entering nursing and other health care-related professions. In the past, Hispanic/Latino women were relegated to "ama de casa," which translates to "housewife." Until recently, the independent, well-educated, entrepreneurial woman had not been accepted readily in the traditional Hispanic family because a man was expected to provide financial and other supports for his wife and family, while the wife remained at home. In the past, Hispanic males were considered poor providers if they were unable to fulfill this role. As Hispanic women have initiated stronger leadership efforts and sought opportunities for higher education, their numbers are increasing. Far from representative of the Hispanic population, this group must grow significantly. Mentoring by peers and other female leaders is sorely needed, regardless of their ethnicity or culture and especially by Hispanic/Latino women. The new leadership role of the Hispanic/Latino woman is emerging and needs to be addressed fully.

PROBLEMS FACING HISPANICS/LATINOS IN NURSING

The deteriorating health status of the growing Hispanic population in the United States is disturbing. Hispanics disproportionately are affected by cardiovascular disease, obesity, hypertension, diabetes, certain cancers, alcoholism, and drug abuse, in addition to dental diseases, and human immunodeficiency virus/acquired immunodeficiency syndrome. More Hispanic nurses are needed to care for the specific health and cultural needs of Hispanic patients in a culturally competent manner that includes language comprehension in a culturally accepting environment.

Despite long-standing research documenting disparities in health care, the overall disparities in quality and access for minority groups and poor populations

have not been reduced. For example, comparisons of 2000/2001 data with 2004/2005 data from the 2006 National Healthcare Disparities Report show that many health care measures have gotten significantly worse or have remained unchanged for African Americans, Hispanics, American Indians and Alaska natives, Asians, and poor populations (Agency for Healthcare Research and Quality, 2007).

Few if any data are available on the career mobility of Hispanics in nursing. The term *career mobility* implies that an individual moves from one career level to another, either laterally or to a higher level. The problems of career development and mobility are applicable to the whole of nursing and not to Hispanic nurses alone. Historically, however, career advancement in nursing has been difficult and limited for Hispanics primarily because of their lack of advanced educational preparation in nursing and related disciplines such as management. However, with the promotion of the BSN, master's, and doctoral degrees in nursing, along with the major restructuring taking place in health care facilities today, an ever-increasing number of nurses are moving beyond basic ADN and BSN preparation. A study by Villaruel, Canales, and Torres (2001) contributed to the discussion by identifying bridges and barriers to educational mobility as perceived and experienced by Hispanic nurses. Six focus groups were conducted throughout the country with separate groups of ADN nurses who had completed their BSN and BSN nurses who had completed their MSN. The bridges to completing degree requirements included support from family, peers, and faculty. The barriers encountered and identified by participants included financial burdens, institutional barriers, perceived discrimination by faculty and peers, and cultural values such as the importance of the family obligations and prescribed gender roles.

The mobility of Hispanics in nursing has been limited for two basic reasons. First, although the proportion of Hispanics enrolled in nursing programs has increased during the past decade, the increase has been well below the Hispanic population parity. Second, Hispanics continue to enroll in ADN programs, limiting their future mobility and leadership opportunities in the profession. Certainly, although the many options in nursing do allow lateral career moves more easily, mobility into leadership positions clearly is restricted by a "glass ceiling" effect (Parsons & Reiss, 2004).

The problem of career mobility for Hispanic nurses is intensified by cultural, social, and educational differences. In addition, because Hispanic/Latino nurses lack

contact with important professional role models, their opportunities to be socialized in the dynamics of self-advancement are fewer than for their non-Hispanic counterparts. New Hispanic nurses often do not look beyond the prospect of their first position. Instead, they view their "job" as a satisfying career of helping others rather than a first step in the progression of a lifetime professional career. If nurse educators are to promote career mobility within the existing ranks of Hispanic nurses, they must initiate career development programs that include leadership and management skills development and provide a variety of resources to guide Hispanics through the educational process. Because many Hispanics are often first-time college students in their families, their educational efforts need to begin as early as middle school and high school and continue through higher education in colleges and universities guided by counselors.

Hispanic nurses must also prepare themselves academically and acquire the necessary experience, skills, and expertise in clinical areas of specialization. Additionally, Hispanic nurses must develop leadership competencies and other relevant formal and informal skills to increase their competitive edge to succeed in attaining leadership posts. They need to learn the unwritten rules of success and find out how they "fit" into the culture of the organization. These skills are essential to command positions of responsibility and prestige in nursing. Institutions that espouse support need to assist Hispanic/Latino nurses in their career development and mobility by providing opportunities for career planning, addressing professional issues, rewarding nurses for direct patient care and other contributions, and facilitating their educational opportunities. Additionally, the nurse should prepare short-term and long-term personal goals for career development that define the benefits for the nurse and the employing agency.

Models of career mobility and professional advancement for Hispanic/Latino nurses also need to be developed by professional organizations such as the American Nurses Association, the National League for Nursing, and the American Association of Colleges of Nursing. Models need to promote and support the advancement of underrepresented Hispanics/Latinos at all levels of nursing practice within the scope of the mission of the agency. Needed are strategies that will develop well-prepared and effective leaders at state, national, and international levels.

Role socialization is the process by which an individual comes to internalize certain knowledge, skills, behaviors, values, and attitudes that are integral to

one's chosen profession. Role modeling is the method of teaching professional attitudes and behaviors by being the person students emulate; modeling becomes the process by which a person takes on the values and behaviors of another through identification. For Hispanics/Latinos, the dearth of visible role models is a major contributing factor to a lack of career orientation that exists among the Hispanic nursing population. Attrition from nursing because of dissatisfaction and limited career commitment has been linked to inadequate socialization into nursing for the long term. Insufficient exposure to appropriate role models and lack of collegial support and resources are also contributing factors (Sullivan Commission, 2004).

What potential currently exists for career development among Hispanic/Latino nurses in the United States? Hispanics/Latinos must be educated and socialized into professional nursing and their leadership potential must be encouraged through leadership opportunities and mentoring. The supply of Hispanic/Latino nurses graduating from nursing programs continues to be disproportionately low compared with the representation of Hispanics in the general population. In 2004, only 2.2% of all RNs were Hispanic/Latino—too few to respond to the ever-increasing need for Hispanic/Latino professionals as this population grows. Although increasing numbers of Hispanics/Latinos graduate from these programs every year, retention of students in these programs is critical to maintain the number of qualified students eligible to progress into graduate studies. Options need to be made available to Hispanic/Latino nurses. The same factors that influence career development and mobility of Hispanics, such as culture, family support, diplomacy, bilingualism, risk taking, and personal goals, also restrict their leadership opportunities if these factors are lacking.

With the known available pool of young Hispanics/Latinos in the nation, it is time to capitalize on their abilities by facilitating financial aid and providing new opportunities for higher education. Innovative measures are needed to encourage Hispanic/Latino nurses to pursue graduate education and leadership opportunities that will promote career mobility and develop them as future role models. Some states are ahead of others in establishing programs to tap into this group. Hospital Corporation of America (HCA) has provided grants to several of its Texas hospitals to fund "diversity" programs to bridge nurses from Mexico into its hospitals; they prepare nurses to work in U.S. hospitals by helping them to navigate the system and helping

them to settle in with their new environment (McGuire, 2008). Universities in Texas and Virginia have come up with innovative programs to encourage Hispanic/Latino nurses to pursue a baccalaureate degree in nursing. These programs include weekend classes, grants for funding, and mentor exposure to encourage further education in nursing (Marquand, 2007).

FUTURE DIRECTIONS

The factors that will promote successful career development and mobility among Hispanic nurses include career counseling, career development models, mentoring, networking systems among peers, and role modeling. Taxis (2002) advocates active, targeted recruitment of Hispanic/Latino nursing students at every level of education. Career development for Hispanic/Latino nurses should include incentives and recognition for practice, development of clinical and management ladders, and institutional support for their education and professional advancement. Additional incentives should include financial support for nursing faculty such as academic leaves of absence, paid sabbatical opportunities for further study and research, and release time to utilize new knowledge and gain clinical expertise. Institutions need to support the professional development of their members, including attendance at conferences and participation in professional organizational activities. Career development requires further support for participation in focused programs of personal development, personal financial management, and policy development. Career development also means the inclusion of Hispanic/Latino nurses serving on agency committees and policy development boards at various levels.

The need to increase the number of Hispanics entering the profession of nursing remains high. Educators must provide flexibility in class schedules to allow students to succeed in their basic preparation and must provide information and incentives to encourage Hispanic/Latino nurses to pursue higher education. Accelerated tracks, including RN options for licensed vocational nurses, BSN options for nurses with ADN's, and master's options (including specialty completion programs), will increase the opportunity for more Hispanic/Latino nurses and nurses in general to achieve doctoral degrees. The retention of Hispanic/Latino nurses in generic nursing programs is also critical. The voice of Hispanic/Latino nurses in the political arena needs to be heard to secure substantial grants for educational programs, stipends for students, faculty

development funds, and curricular change in this time of economic cutbacks. State and federal governments need to develop databases that provide tracking information about Hispanic students to appropriate agencies.

Strategies must be developed that inform the public at every level about the comprehensive needs of Hispanic/Latino nursing students in this country. Together, educators can develop short-term and long-term strategies that open pathways of opportunities for the success of Hispanic/Latino nursing students. Participative and cooperative endeavors between the private business sector and nursing programs must be fostered for the recruitment, retention, and graduation of Hispanic/Latino nursing students, especially in higher education. Additionally, networking systems among peers continue to be a priority for the development of information databases and centralized key group efforts.

Education has always been an important indicator of success in American society. Studies indicate that Hispanics have not attained an educational level sufficient to compete aggressively in the labor market, especially at the upper end of the health care professions, although the tide is finally turning. The latest Census Bureau figures indicate that the number of Hispanic students enrolled full-time in college has increased from 10% in 2006 to 12% in 2007; this is closer to the 15% makeup of Hispanics in the nation's total population (Bernstein, 2009). It has also been noted that Hispanic women tend to be less educated than non-Hispanic women. Approximately 36% of Hispanic women have less than a high school education versus 10% of non-Hispanic women. Additionally, immigrant Hispanic women have a high percentage (49%) reporting not having at least a high school education, but 46% of native-born Hispanic women report having at least some college (Gonzales, 2008). Encouraging them to continue their education is not only beneficial for the women individually but also for the entire country. "Doubling the rate of Hispanics with a college degree (to only 18 percent) by 2010 would yield a \$7.6 billion increase in tax revenue over the lifetime of these college graduates, and would generate at least \$14 billion in disposable income for savings, investment and economic stimulus" (Hispanic Scholarship Fund, 2008, ¶4).

Hispanics/Latinos and the nursing profession are faced with a tremendous challenge in the coming decade to increase the representation of Hispanics at all levels of nursing and to provide true opportunities for leaders whose cultural sensitivity will affect the quality

of health care delivered by culturally competent responsive health care service providers. In that process, the continuing education of professional nursing staff members will be enhanced and awareness levels will be raised.

Issues relating to the supply and demand of nursing professionals in the United States, continue to change dramatically as major shifts in financial and human resources continue to unfold. Nursing resources have been reallocated from hospitals to community-based facilities and to new structures such as mini-hospitals, elderly care centers, community nursing organizations, and health screening stations in malls and other centers of commerce. Additionally, the critical need is to respond to the growing underserved bilingual and culturally diverse Hispanic population—a need that has not yet been met and continues to be an elusive goal.

The dilemma of poor health care for Hispanics and underrepresentation of Hispanics in nursing is demonstrated by the following issues:

1. A disproportionate number of Hispanics are socioeconomically and educationally disadvantaged. As a result, a high attrition rate of Hispanics exists and continues to rise throughout the educational pipeline.
2. The present and future enrollment of Hispanic secondary education students will continue to represent a large prospective applicant pool for nursing. However, the pool is concentrated in school districts that traditionally have limited educational resources, give little attention to engendering goal-oriented students toward nursing careers, and lack culturally appropriate recruitment models for Hispanics.
3. Hispanic college enrollment is concentrated in community colleges. According to the October 2002 Current Population Survey (U.S. Census Bureau, 2002), 45% of all Hispanic college students were enrolled in community colleges versus 26% of white non-Hispanic college students and 33% of black college students. Nursing enrollment data also indicate that most Hispanics continue to enroll in ADN programs instead of baccalaureate programs (HRSA, 2006).
4. Hispanic nurse professions employment data in 2004 illustrate the substantial underrepresentation and general lack of progress in increasing employment numbers for Hispanics. More than 14% of the total U.S. population is Hispanic, whereas just over 2% of the RN population is Hispanic (HRSA, 2006). Hispanic nurse enrollment and program completion trends also suggest the lack of significant progress in the representation of Hispanic nurses in the health

professions. This continuing disparity is widening between Hispanic enrollments in nursing and degree completion and is not anticipated to increase given the school-age Hispanic student populations reported.

5. The literature is sparse, and documented program interventions to increase opportunities for Hispanics in nursing are few. Nursing representatives have demonstrated inadequate leadership in addressing these important issues in public and private educational institutions.

Three central recommendations address these issues:

- ◆ Recruitment: Increase the applicant pool of Hispanics/Latinos in higher education programs for prenursing and nursing students.
- ◆ Retention and graduation: Retain Hispanics/Latinos in nursing education programs for prenursing and nursing students through graduation and further into graduate study.
- ◆ Career mobility: Promote the career mobility and leadership of Hispanic/Latino nurses in collaborative and creative opportunities funded jointly by private and community-based funding agencies.

Within the profession is a lack of understanding about cultural perspectives and needs that often leads to conflict. Workforce and workplace conflicts are often disruptive. Anger that may be present may be difficult to verbalize and is exhibited in other ways, often increasing the intensity of individual and group conflicts. Discussions about cultural differences and similarities are needed to encourage nurses to work together effectively, constructively, and productively.

Communication patterns are learned and are culturally based. With Hispanics/Latinos, verbalization may be limited as a result of fear of conflict, reprisal, deference, or feelings of intimidation and violence. Communication and language barriers in health care settings must be recognized and discussed. With the insufficient number of bilingually prepared nurses, the few who are bilingual become overburdened with requests not only to serve as “translators” for an entire institution but also to assist in other greater responsibilities. Language differences that should be viewed as assets often become barriers that serve to further isolate Hispanics/Latinos in the work environment.

A natural affinity and commonality between groups of Hispanic/Latino nurses draws them together. Within these groups they find support, collegiality, and guidance that they may not receive from society as a whole. Additionally, insufficient emphasis is placed on the significant differences among various Hispanic/Latino cultural groups. The tendency is to place all cultural

groups together and label them broadly as Hispanic/Latinos without allowing for these differences, especially socioeconomic differences.

Institutional ethnocentrism exists. If nurses are to deliver culturally competent and appropriate care, the unique differences among cultures, such as health care beliefs, sick role responses, and the meaning of illness, need to be addressed openly and in a nonjudgmental manner. The institutional racism and discrimination that may exist need to be reassessed and eliminated by working together in collaborative environments that foster positive care and nursing outcomes.

Economic, familial, and many other societal factors interfere with the advancement of many Hispanic/Latino nurses. These and other barriers also prevent them from entering the nursing profession or preclude advancement in the profession. For the majority of Hispanic nurses attaining at least an ADN or BSN, this accomplishment is momentous. Many are the first college or university graduates in their families. This accomplishment is equally important for those who have faced and overcome obstacles during the completion of their degrees. Because of these constraints, many Hispanic/Latino nurses complete degree requirements as part-time students and frequently extend the time to graduation.

Hispanics quickly are becoming the largest culturally and linguistically different group in the United States based on acculturation and socioeconomic stages. Hispanic cultural values and family experiences provide the foundation for research and for many positive, culturally based intervention models that can be integrated into efforts for increasing Hispanic student enrollment, retention, career mobility, and leadership in nursing.

The major strides expected of Hispanics were not achieved during this decade, partly because systems informally have inhibited such progress with “glass ceilings.” This obstacle is clearly evident in the lack of educationally prepared Hispanics in nursing and the absence of Hispanics in health care leadership positions regardless of their capabilities. However, qualified Hispanics may choose not to enter the subtle second-class status afforded them in acquired leadership roles assigned by non-Hispanics. Some critics condescendingly assume that Hispanics/Latinos achieved these positions for reasons of ethnicity alone.

Stronger links between academic and service settings must be established, such as the development of career ladders between hospitals and local colleges or universities. Hospitals and other health care agencies need to build mutually beneficial partnerships with schools, colleges, and universities with nursing programs to

provide paid preceptorships, adjunct faculty roles, and other creative alternatives used to provide financial and other incentives to students for academic studies. The new generation of professional nurses and educators has the tremendous responsibility of opening doors that will secure professional growth, development, and mobility for Hispanic/Latino nurses in education, practice, and research. The process of advocating for access to health care for Hispanics in the United States must continue, and the time for planning has passed. The time for strategic action is now.

SUMMARY

The latest surveys of the U.S. population indicate a rapidly growing Hispanic/Latino population, but only a small percentage of our registered nurses are of this cultural background. It has been additionally noted that there are far fewer Hispanic/Latino nurses obtaining graduate degrees and serving in the higher administrative roles at universities and large health care institutions. There are a variety of barriers to this population making strides in these areas and ways to overcome those barriers have been identified. It is the responsibility of all citizens to support measures that will help to promote the growth of this growing element of our population in order to enhance the true diverse nature of our nation and provide excellence in health care.

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Bridging Cultures: American Indians and Nursing

BETTE KELTNER JACOBS ◆ DEBRA SMITH ◆ MECHEM SLIM

Health disparities in America divide the nation in unusual ways. Issues of equity and human capital play into discussion that profiles fundamental hurdles posed in the lives of ethnic minorities in the United States. For American Indians, lower life expectancy and higher age-adjusted mortality rates exist and define many aspects associated with individual, family, and social life course (Andersen, Belcourt, & Langwell, 2005). The incidence and prevalence of diseases such as diabetes, sudden infant death syndrome, and alcoholism coexist with high rates of injury and suicide. Data show that morbidity, mortality, and the burden of disease are magnified in these communities. Although disorder-specific prevalence rates far exceed expectations, the most resonating approach to resolving disparities calls for a holistic approach to resolving these issues for American Indians and Alaska Natives (Eschiti, 2004). American Indians and Alaska Natives are the original peoples of our land. The opportunity for mutual learning and unity is characterized by what we do to ensure health and well-being for all people.

American Indian culture is a complex social structure and a deeply embedded personal life experience. For those of us who are American Indian or Alaska Native, culture is simply our original way of being. Some American Indian cultural symbols and stories recently have become popular among persons involved in New Age movements and certain groups seeking to incorporate images of diversity into their agendas. There has been a lot of curiosity about native cures and ceremonies, yet culture is much more than art, music, and exotic foods. These facets of culture are vibrant expressions of history, values, beliefs, and resources. This history and these values, beliefs, and resources shape tradition. Culture guides behavior and decision making and ascribes meaning to action and circumstance. Culture tells us how to raise our children,

treat our mothers-in-law, and spend our time and money. When people from the outside look in, cultural expressions can be singular or selective—it may be characterized by eating fry bread or running to greet the sun each morning. At the same time that interest in American Indian culture is increasing, concomitant racist advertising in public forums offers bounties for killing American Indians. Also concurrently insidious forces invite the gradual undermining of culture through culturally dissonant programs and services. Today, contemporary versions of massacre and marginalization exist. The most remarkable characteristic of American Indian culture is its resilience, thus far, to such assaults.

BUILDING BRIDGES

Addressing health disparities in ethnic minority groups involves connections that have not occurred sufficiently to date. American Indians have been isolated by poverty, inadequate services, and lack of coordinated care for complex problems. Furthermore, communities themselves have experienced exploitation and disregard of traditions essential to health behavior and health service use. The purpose of a bridge is direct access to connect two places separated by substantial barriers. Sometimes the two points of connection can be seen; sometimes they cannot be seen at all, or only major landscape features can be seen. Mountains, rivers, and canyons are metaphors for cultural distance. The reason that nurses need the metaphorical bridge is based on their obligation to provide health care for all people. Building bridges involves considerable time and effort. Nurses have become more involved in identifying cultural competence as a critical aspect of practice for American Indians (Holkup et al., 2004; McCauley, 2004; Struthers, Eschiti, & Patchell, 2004). Specific skill sets are needed

to provide care to culturally diverse people. The issue of culturally competent care is important as a quality indicator for effective nursing practice.

We who write this chapter are three American Indian (Indian) nurses who are involved in different professional roles. We represent different tribes, different professional paths, and different contributions to the profession. This diversity reflects the exciting options of our profession and exemplifies a small part of the interesting within-group cultural diversity of American Indians. As Indian nurses we care passionately about cultural competence and our careers as a vehicle to bring the best of dominant science to enhance the spiritual continuity of our culture. Our professional training and the wisdom of our elders help us know that untoward side effects can come even in actions filled with good intentions. Side effects can be serious, even fatal. We are eager to embrace technology and its benefits so long as these do not short-circuit the soul. The “missionary mindset” (Keltner, 1994) typically is not brought to Indians by people of faith today, it is brought by people of science and the helping professions streaming onto reservations (in good weather) and urban Indian centers armed with solutions to the many problems they have assessed.

The major fault line in achieving cultural competence is the inability to appreciate the different experience and perspective of other people’s lives. Looking only at the visible cultural markers—even important things such as art, music, and food—is insufficient to understand how people live. A discovery that one of your relatives reports “Indian blood” somewhere in your personal lineage may spark interest in the culture but does not convey understanding of a lived experience. This chapter provides a framework rather than a blueprint for building bridges between Native Americans and nursing. We seek to give readers information about tools to develop blueprints, the kinds of raw material that will be needed, and where to go to get the material for building bridges. The bridges we support are those that will not desecrate the beauty of the landscape.

BACKGROUND

Overview

Approximately 2.5 million citizens have identified themselves as American Indian in the U.S. census, and another 1.6 million have claimed some American Indian heritage.(U.S. Census Bureau, 2001) American Indians are the only ethnic group for whom self-identification is

insufficient for most purposes. To receive benefits as a “real” American Indian (authenticity can be challenged), a person must be enrolled in one of the 562 federally recognized tribes (Department of the Interior, Bureau of Indian Affairs, 2008). Tribes exist with sovereign nation status in treaty relationships with the U.S. government. Therefore, although many individuals claim some Indian heritage, degrees of acculturation are marked not only by life experience but also by specific pedigree. Diversity among tribes can be considerable. A pan-Indian perspective will always be limited. Tribes of the Northwest rely on fish as a staple food and fundamental to the economy. In the arid Southwest, some tribes consider fish sacred and would never eat them. A Southeastern tribe developed a popular tourist business but constantly was plagued by tourists wanting to see tipis. Because few buffalo roamed the heavy forests and mountains, tipis were not part of this tribe’s history. However, a tipi was installed for business purposes. If tourists took time to visit the museum, they would learn that the tribal ancestors lived in longhouses made from the abundant wood given to them by their Creator.

As a group category, American Indians often are forgotten or misrepresented. A very public image of Indian people is rooted in elementary school history books and Hollywood Western movies. In general American culture, specific notions about how ethnicity among American Indians should be validated persist. Carrying out the federal government assignment of ethnicity, it is common to question whether a person is “full-blood Indian,” a question seldom asked of persons from other ethnic groups.

A current distorted image of casino wealth has become a popular topic for journalists and television personalities. Gaming has operated on some Indian reservations since the early 1980s. Only 249 of the 562 federally recognized tribes have gaming compacts (National Indian Gaming Association, 2009a). The top 20 gaming operations (less than 10% of tribes that operate gaming) account for 55.5% of total gaming revenue (National Indian Gaming Association, 2009b). The key indicator for financial success in gaming is proximity to metropolitan areas. Most reservations were selected to be isolated with few known natural resources when they were established. Urban growth has changed this scenario for some reservations, and consequently, they have some advantages related to developing this type of recreational industry. Just as state governments use taxes to operate programs and services for their constituents, the reservations use casino profits to increase the number of programs and services for tribal members. Recent

revenue generation from gaming has transformed a few tribal operations but, for the most part, has been insufficient to erase centuries of neglect. A public perception that wealth has infused all Indian reservations and enriched Indian people is seriously wrong. The Indian Health Service (IHS), which undergirds the primary service system, spent an average of \$1914 per patient in the year 2003 (Roubideaux, 2005) and \$2130 per user in 2005 (IHS, 2006). One should note that basic income is highly correlated with health and social well-being and, as such, is of concern for Indian people and society at large. However, although there is naturally within-group variation, Indian cultures are fundamentally not materialistic. Although economic needs are a primary concern of Indian leaders, a position of aggressive acquisitiveness is rare. Pursuit of wealth is different from establishing an economic base for basic needs. Poverty clearly is a major component of disparate health and a prominent issue for Indian people. Economic inequities underlie much of the health disparities.

Social Systems

The formal social structures that exist in the world shape how resources are allocated and services are delivered. These structures are symbols of values and history. Many aspects of daily life arise from social systems. One cannot understand how to work with American Indians until one knows about basic structures of social systems that have powerful effects on Indian health. Indian social structure is rooted in a sense of place and people. The actual geography and animal and plant life can have historic, spiritual, and social meaning. The solution of relocation away from Indian reservations is proposed repeatedly as one way to mediate problems of unemployment and inaccessible services. A common and not necessarily unreasonable question from a dominant culture perspective is to pose the possibility that Indians who are very poor or suffer serious hardship related to isolation move away from their homelands. Moving for advancement is an entrenched American value. Relocation has a long, unhappy history in Indian country starting with the reservation system itself.

The nineteenth century was one in which the U.S. government fought many battles with Indian people wanting to preserve their land and way of life. At the conclusion of conquests, tribes generally were sent to new places typically known to be insufficient to sustain life. Even in times of peace and post-treaty agreement, Indians could be moved away from their assigned lands if the land was perceived to be of value to European immigrants. The Indian Removal Act of 1836 forced the

fraudulent relocation of Indians in the Southeast by federal troops to an area called "Indian Territory" where, according to the New Echota treaty, the land could never be annexed by another state or territory. Within a generation it became the state of Oklahoma. This relocation is called the Trail of Tears because of the high mortality among Indian people who left their land and belongings at gunpoint to walk from North Carolina, Tennessee, Georgia, and Alabama to Oklahoma. Two quotations remind readers about the values of land to Indians (Eagle/Walking Turtle, 1995, p. 10):

- ◆ "They made us many promises, more than I can remember, but they never kept but one; they promised to take our land, and they took it."
- ◆ "The Great Spirit raised both the white man and the Indians. I think he raised the Indian first. He raised me in this land. It belongs to me. The white man was raised over the great waters, and his land is over there. Since they crossed the sea, I have given them room. There are now white people all about me. I have but a small spot of land left. The Great Spirit has told me to keep it."

In the late 1940s and early 1950s, another federal relocation called for Indian people to leave their reservations and allotment lands to move into major U.S. cities. This relocation plan was to entice Indian families into places with more job opportunities. A sense of place is associated with extended family, cultural referents, and spiritual base. Relocation of various types and plans has undermined, sometimes violently, the basic cultural strengths that unite and sustain families and tribes.

To understand the sense of communal grief and pain shared by most Indian communities today, one first must understand relocation that occurred in "boarding schools." For many years, the federal government routinely removed Indian children (as young as 4 years old) from their parents and homes and sent them to boarding schools to be assimilated into American culture. At the boarding schools, Indian children were not allowed to speak their language or to have contact with their families; they were disciplined with beatings, and, too often, were sexually abused. The removal of Indian children from the home tore the fabric of family life. The children did not learn appropriately how to parent the next generation and did not know their culture or traditions, and this caused a major break between the generations. In effect, families did not know each other, and within the space of a few generations, the functioning family systems almost became extinct. Indian people today conjecture that the real reason the boarding schools were established

was to eliminate Indian people entirely. The effects of the boarding school system are felt today with poor parenting skills, alcohol and drug abuse, and related social ills. Consequent to varied forms of assault through relocation, evidence of historical trauma is exhibited in a variety of mental health concerns (Struthers & Lowe, 2003).

Self-determination is a nearly sacred value among American Indians for long-standing cultural reasons and for political position. Indian tribes are sovereign governments, meaning that they have an inherent right or power to govern (American Indian Resource Institute, 1993). At the time Europeans “discovered” America, Indian tribes were autonomous and sovereign by nature. Because the Europeans inconsistently treated the Indian tribes as separate governments or foreign nations, the legal status of Indian tribes was uncertain. The U.S. Supreme Court clarified the situation by establishing the sovereign status of Indian tribes in 1823 (Canby, 1988). American Indians could not vote in U.S. elections until the Indian Citizenship Act of 1924, even though Indian men fought in American wars before that time. Although tribal sovereignty has specific limits, the pledges by the federal government to provide health and education to Indians in exchange for massive amounts of land make public support for human services among Indian people unique. Government assistance is perceived to be “payment” rather than “welfare.”

Tribal government structure varies somewhat from tribe to tribe but has its own sets of dynamics and exerts tremendous influence. Tribal leaders may be called chief, president, governor, or chairman. Governing bodies exercise advisory and decision-making functions for the tribe. If health professionals propose to collaborate with Indian tribes in any way, they must understand tribal government and its scope of responsibilities. This takes considerable time and effort and absolutely cannot be bypassed. Community partnerships are essential for working with American Indians (Holkup et al., 2004; Marks & Graham, 2004). Such models of care have been shown to have a ripple effect, enhancing efficacy and efficiency across a range of health care problems (Deters, Novins, & Manson, 2004).

KEY CHARACTERISTICS OF AMERICAN INDIAN CULTURE

Natural Strengths and Resilience

Indian health and human service summaries generally focus on needs and deficits related to poverty and disorders. When visiting reservations and Indian communities,

many persons come away with an image of deficits: substandard roads, public services, and housing. These facts do become prominent for service providers because they are associated with need for care. However, one must understand important aspects associated with natural strengths and resilience among Indians. The cited abysmal health indicators and markers of poverty and lack of services are indeed all too real. These effects stem in large part from intentional and neglectful social initiatives designed to obliterate Indian culture and Indian people. The fact of survival among Indian people points to cultural strengths worthy of note. Furthermore, Indian culture has been undermined to great extent by “helpers,” individuals who believe that solutions for perceived problems can be imposed from outside without regard to community values, beliefs, and practices. Resilience research is important for American Indians. Negative profiles become contextualized with honor and recognition in a burgeoning field of study that describes and quantifies elements that mark human flourishing in the face of adversity (Keltner & Walker, 2003).

Indian family and community supports can be remarkably strong and supportive. Visitors to Indian communities remark about the sense of interconnectedness and reliance on family ties that mediates many of the visible deficits. As with any small and close groups, tensions and rivalries can play out in different ways. However, Indians typically have strong family obligations and communal identity. Expressions of obligation and identity take a variety of forms. Identity is very much associated with family and tribe. An obligation to assist family and tribe is an important cultural value. This is sometimes perceived as “keeping each other down,” but the same values are those that prompt action, such as taking relatives into one’s home or writing a chapter together. For many tribes, there is no such thing as an orphan. Examples of multigenerational extended family households are common, and even more common are clusters of houses on reservations that house extensive extended family close together. The American tradition of launching young adult children far away to school or jobs is juxtaposed by Indian traditions such as burying an umbilical cord near a family dwelling so that the child will never go far from home.

Various circumstances may cause Indian people to move away from a place where they feel rooted. Economics do impose pressures for some Indians to relocate for jobs. A pattern that is recognized easily but is not well documented by the U.S. Census is the fact that moving “to town” for a job can be a relatively temporary experience, for months or a year at a time, after which

one returns to live “at home” on the reservation or allotment land. Another major force prompting Indians to move is a need for sophisticated or specialized medical services unavailable on most reservations. This relocation is not based on choice or preference but on fundamental need.

A case study in point illustrates this situation. A father, mother, and their four children lived in a small home that is part of a family compound on an isolated section of a large remote Indian reservation. The youngest child repeatedly is misdiagnosed by the nearest IHS providers, resulting in the child becoming blind, deaf, and severely mentally retarded because of untreated meningitis. As the child turns 4 years old, nourished via a gastrostomy tube and with the developmental level of a newborn, the frequency and nature of specialized medical needs require the family to move to the nearest major city, a distance of 500 miles away from home. Caregiving responsibilities, which previously were shared among extended family members, now rest exclusively on the parents. Not only are the parents exhausted and overwhelmed (and frightened) by their duties, older family members are no longer available for guidance with the older children. The older brothers of the “sick child” who previously played primarily with cousins fell into violence as victims and perpetrators. The father could no longer participate in ceremonies and tribal activities. Instead he had a series of low-level jobs that served to constantly remind him of his low value to society. The young mother suffered from lack of instrumental and emotional support in raising all of her children. She had been a confident and effective mother in her home community but had not grown up with a model or expectation of independent family units. Her attempts to sustain the important traditions and daily family routines were undermined when she was given an overwhelming script from clinics, hospitals, schools, and social service agencies about what she should be doing. The child, for whom this upheaval had occurred, received surgery and other sophisticated therapies while missing the daily touch, prayers, and sense of belonging and acceptance that the tribe would have given her. This relocation was successful on some levels but came at a price that undermined natural family strengths and family supports.

Characteristics of Resilience

The origins of resilience, a phenomenon of thriving under stress and duress, may be multifaceted but center primarily on family life and spiritual beliefs and practices. Resilience comes partly from individual factors

but mostly from collective experience. Families and communities shape experience and response to events and circumstances in ways that are important to characteristics of resilience. Although risk and resilience are calibrated on an individual basis, Indians who circumvent probable risk regularly identify family and community support and their spiritual traditions and practices as sources of strength.

Almost always, American Indians are spiritual people. Faith or “religion” is an integral part of daily life not separated by time and place. Recently, interest has arisen concerning the dominant culture in traditional Native American spiritual practices, particularly those ancient beliefs known to tribes when Europeans first arrived. And although clearly a lineage has sustained these beliefs and practices, a revival of sorts also has occurred among Indians who have reclaimed these beliefs after generations of disconnection from them. Certainly, these renewed practices have strengthened many individuals, families, and communities. Spiritual beliefs, however, have a dynamic nature, a particularly critical quality as they interact with current circumstances and events. The dynamic nature is characteristic of responses to contemporary issues with enduring core values. It is important to note that there is a wide diversity of ancient spiritual beliefs among tribes.

Sometimes selected practices from Native American spiritual beliefs are incorporated into multigenerational Christian traditions. Diversity of religious practices and beliefs includes the fact that many families have more than 300 years of tradition in a Christian faith and deliberately choose to continue with these beliefs. This does not itself make them less “Indian.” Therefore, Indians who actively use sweat lodges also may be devout Catholics. Other Indians may adhere to only one or the other system of beliefs and forms of worship. A priori assumptions regarding specific beliefs are inappropriate even though it is well known that most Indians attribute resilience to being involved in some type of daily spiritual practices.

Another key characteristic of resilience has been the Indians’ ability to discern the importance of family and community. This type of collective wisdom is associated with expected behavior and may be symbolized in stories, proverbs, or community rules for etiquette. Respecting and caring for persons with disabilities and family role expectations epitomize how important it is for individuals to have an obligation to others and not only to oneself. Information such as this is passed down through family generations. Nursing homes to care for the elderly have never figured prominently in Indian

communities. Indians have a sense of obligation to care for the elderly at home, and the elderly have a role in their families and communities. Many elders have acquired the ability to pass down the most critical aspects of culture that make their people unique and strong. Wisdom is also manifest in knowing what aspects of the dominant culture can be useful or helpful or congruent with traditional values. Most Indian people use some aspects of Western health care, even if it is combined with traditional healing methods. Many people, however, use Western health care only as a last resort, a reverse picture of white Americans who sometimes turn to native practices when unsatisfied with conventional Western health care.

Resilience has not been without price. The social costs associated with the powerful cultural assaults directed toward Indian people have been high. Many of these cultural assaults (such as bounties, boarding schools, relocation programs, and explicit termination policies) have overtly aimed at extermination. Social costs have come in the form of pervasive effects such as high rates of poverty, domestic violence, and substance abuse. In recognizing cultural strengths and sources of resilience, these qualities may be celebrated and leveraged for addressing some of the more difficult challenges now facing Indian tribes. Most importantly, interventions and services should be examined carefully to determine whether, in the purpose of assistance, aspects of strength and resilience could be undermined (Keltner & Ramey, 1993).

Health Needs

The cause of disorders leading to disease or death can be categorized as having genetic, environmental, infectious, and situational antecedents. As increased understanding for the natural history of disease and injury emerges, it becomes clear that for most disorders interactive effects are among these etiologic agents. American Indians share common risk for many disorders with the general population. The leading causes of death for Indians residing in IHS areas are heart disease followed by malignant neoplasms. However, Indians have unusually high risk for diabetes, sudden infant death syndrome, alcohol abuse, developmental disabilities, and spinal cord injuries. Regional and tribal variations in risk exist among certain conditions (such as sudden infant death syndrome, which is 6.8 times higher in the IHS Aberdeen Region than in the Navajo Region (IHS, 2003). The IHS (2006, 2004) service area age-adjusted death rates illustrate that, overall, Indians experience mortality rates substantially higher than the general

population in key conditions: alcohol induced (510% greater), tuberculosis (600% greater), diabetes mellitus (189% greater), motor vehicle accidents (229% greater), Cervical cancer (221%), unintentional injuries (152%), suicide (90% greater), pneumonia and influenza (80% greater), and homicide (80% greater).

In addition to death, Indian people have higher frequency of complications and disability associated with common health problems. Besides morbidity and mortality, the burden of disease and disorder is exponentially increased because of poverty and isolation. For example, rehabilitation hospitals assist patients in learning to ride buses and use common assistive devices such as ramps. However, on reservations there is no public transportation. Indian tribes, which have sovereign nation status, do not have to adhere to the federal Americans with Disabilities Act. Ethnic disparities in morbidity, mortality, and burden occur because of many factors, including genetic predisposition; environmental risk and infectious agent exposure; lifestyle; and inaccessible, poor-quality, or inappropriate health care.

Standard health indicators of morbidity and mortality point to the extent of health needs among Indian people. Data collection for Indian people is subject to greater error than other ethnic groups because raters (health professionals) often take it upon themselves to identify a patient's ethnicity or race based on skin color or surname. Indian people may "look" Hispanic or fail to have what the rater considers to be a "real" Indian last name. Misclassification on death certificates of American Indians range from 1.2% in Arizona to 30.4% in California (Centers for Disease Control and Prevention, 2008). A common saying is that persons are born Indian but die white because birth certificates are more likely to use self-identified data than do death certificates. Furthermore, Indians are more likely to be born close to home and transferred to mainstream medical centers for dying. Geocoding and more specific data-tracking mechanisms are elucidating how the interactive effects of ethnicity and location account for some of the variance in health disparities for American Indians (Krieger et al., 2005; Probst et al., 2004; Puukka, Stehr-Green, & Becker, 2005).

In spite of known underreporting, health indicators for Indian people show a bleak picture. Rates of disease, injury, and death are disproportionately higher among minorities in the United States, and American Indians profile significantly in this differentiation. These epidemiological ethnic disparities, after decades of documentation, now are being addressed within a

systematic research agenda at the National Institutes of Health (Eaglestaff, McClain, & Fernbach, 2003). American Indians, as with other underserved minority groups, experience higher frequency of serious disease, injury, and death. However, also in common with other underserved minority groups is extreme suspicion associated with research participation based on a history of exploitation. Specific events vary, but examples of using and abusing Indian people in a quest for mainstream knowledge are numerous. Treatment testing for tuberculosis has a history for Indians similar to that of African Americans in the Tuskegee experiments on syphilis. Therefore, an effective research agenda to reduce ethnic disparities is not impossible, but it is complex and not amenable merely to generalizing standard protocols to a new participant population.

For all tribes, a traditional belief is that treatment involves treatment of the whole person. Although this is common rhetoric in health care, it should be an essential premise in the care of Indian people. Many disorders are perceived to have origins that speak to lack of balance or harmony, violating a taboo, or disarray in social relationships. Few Indian people refuse to have any type of conventional medical treatment, but most feel it is necessary or at least important to have traditional healing practices performed as well. Prayers and ceremonies engage major social supports and rely on ancient wisdom. In some tribes, prayers are never for oneself but only for others, a symbolic expression of healthy interpersonal adaptation, avoiding problems of self-absorption common in some people in the dominant culture. Traditional indigenous healing practices have breadth and depth in nature and use (Novins et al., 2004; Struthers et al., 2004). Prayer has been associated with positive health outcomes for elderly Indians (Meisenholder & Chandler, 2000). Many traditional remedies are characterized by elements of social support, familiarity, and a more egalitarian model in contrast to a prescriptive model.

Expectations regarding health and the meaning of health are different in different societies. Good health and optimal functioning are valued in all cultures, and the richness of cultural practices to support health across many different traditions is important knowledge for nurses to have. A variety of tribal traditional beliefs provide traditional explanation and treatment for certain disorders. For example, in one tribe it is believed that epilepsy is a sign of sibling incest. This creates an overlay of special needs associated with conventional treatment of this disorder. Some health disorders, nonspecific in Western terms, require and respond

to traditional treatments. Sometimes these disorders have symptoms that might be described as predominantly psychosocial, perhaps a symptom such as sleeplessness commonly associated with depression. Traditional treatments can be highly successful in reducing many such symptoms. Rarely does an Indian person believe that there should be no suffering in life; there are too many visible experiences with suffering and pain. Indians have many ways to live a healthful life and have varied ways among tribes to treat a wide range of disorders. However, meaning and purpose often are ascribed to health problems that cannot be changed. The attribution of meaning and purpose assigned to a serious health disorder, whether terminal or chronic, aids individuals in coping and adapting.

Health Behavior

Behavioral expectation can vary across cultures. Even though human development follows a fairly typical trajectory, the identification of key milestones is known to vary from culture to culture. In some Indian tribes, the age of the first word is a less important developmental marker for social-cognitive development than is the first smile or laugh, and the occasion of a naming ceremony or christening may stand out more in parental memory than does the age of first steps. Child development milestones achieved by almost all human beings have been catalogued by Western professionals with special emphasis on indicators marking independence from the family unit. These milestones are important, but not all cultures have celebrated them in the same ways. Similarly, role expectations establish some parenting practices. In a study of several different parenting practices among different ethnic groups in the San Francisco Bay area, it was found that American Indian parents expected their children to dress themselves at an earlier age and care for themselves and younger children at an earlier age (Joe & Malach, 1992). An appreciation of the meaning associated with developmental milestones is helpful for nurses.

Lifestyle, including daily habits, is well known to increase risk or serve a protective function for individual health. Lifestyles develop in many ways but most commonly arise from cultural practices within families. Routines from tooth brushing to activity patterns are formulated in childhood. Such practices are not immutable but sometimes are value laden. Pima Indians who were experiencing enormous health problems associated with type 2 diabetes improved overall health when they reclaimed their tribal tradition of running. Many short-term interventions yield good outcomes that lack

sustainability. Among the most remarkable features of the Pima Indian exercise intervention is that it was linked directly to tribal custom and responsibility for the program became embedded within the tribe rather than a service provided by external health providers (Wingood & Keltner, 1999). Effectiveness in achieving good health outcomes, particularly in the area of health promotion, is facilitated by honoring rather than ignoring the culture. Issues related to sustainability, an imposing challenge, also are enhanced when culturally competent methods are used.

One of the most well-known health risk behaviors is smoking. In many tribes, smoking is linked directly to lung cancer, heart disease, low birth weight, and other known consequences of tobacco use. Smoking is a health behavior that hurts Indian people as much as it harms other people. Correlates of smoking include family influences and alcohol use (Nez Henderson, Jacobsen, & Beals, 2005). Tobacco use includes other modalities such as chewing. In some tribes, more than half of adolescents and adults use tobacco in some way (Robinson, 2003). In many health arenas, tobacco is abhorred, for good reason, with many health professionals believing that tobacco should be outlawed. One should note, however, that tobacco has a different history, and sometimes different uses, among Indian people. Tobacco is a New World discovery, a crop that early Europeans learned about when first meeting Indians in America. Tobacco has long been used in different ways and continues to be associated with certain spiritual ceremonies. Tobacco is the appropriate gift for medicine people. Therefore, the dominant culture's war on tobacco, which would ban it, misses the distinction between use and abuse of this substance. It can be hard to make a case to decrease smoking when specific ceremonial uses are not acknowledged.

Alcohol addiction is another health behavior sometimes associated in stereotype with Indian people. Rates of alcoholism and alcohol-related disorders are extraordinarily high in many tribes. Most reservations are "dry"; that is, they do not sell alcohol. However, this does not correlate with lack of alcohol consumption. Stores and bars often are established on reservation borders with the express purpose of selling to Indians. Although many Indians are teetotalers, it is also true that most Indians have been affected by alcohol in some way, personally or with close family members. Motor vehicle injuries and domestic violence are highly correlated with intoxication. It was found that from 2001 to 2005 American Indians were more than twice as likely to die from alcohol-related causes than individuals in the general

population, and 11.7% of deaths in this group were associated with alcohol compared to 3.3% in the general population (Centers for Disease Control and Prevention, 2008). The experiences of poverty, isolation, and unemployment interact with a biological delay in alcohol metabolism among Indians and also with social drinking patterns originally introduced by hard-drinking trappers or traders intending to take advantage of Indians in an intoxicated state. The effects of these different factors make alcohol abuse an important health behavior concern for many tribes. Binge drinking is especially problematic as a habitual pattern and is associated with periods when money is available.

Increasingly, tribal leaders are implementing successful alcohol treatment and prevention programs, incorporating culture-specific principles and methods. Issues related to health behavior appear to be most amenable to change when solutions come from within the community. Certainly, sustaining good health outcomes has been a particular challenge because Indian reservations often have not had the type of formal infrastructure to continue programs that have shown promise. Sustainability is enhanced when programs are "owned" by the local community and continuity is supported from within the group.

Violence is a pervasive threat for American Indians (Manson et al., 2005). Lifetime injury rates for men (62% to 67%) and women (66% to 70%) show a substantial health threat within the communities in which American Indians live. American Indian Women are 2.5 times more likely to be raped or sexually assaulted than U.S. women in general, and during their lifetimes, 34% of Indian women will experience rape. There are jurisdictional issues that also can complicate response and treatment (Amnesty International, 2007). Domestic violence is a behavioral phenomenon having serious and pervasive effects on health. A public and personal profile is associated with domestic violence. The public image exists as data, media reports about individual situations, and work done by service providers involved in health and social services. The visible parts of domestic violence rate include epidemiological estimates about nature and frequency; services specific to intervention, such as offender treatment; services such as emergency care that require nurses to be alert for signs of unreported abuse; law enforcement involvement; and stories revealed in newspapers and on news programs. Domestic violence commonly is associated with other health and social ills such as alcohol abuse, stress, unemployment, and family dysfunction. Indians experience these correlates in higher frequency. Domestic violence is by no means an

Indian problem, but in communities with high numbers of Indian people, the public perception of domestic violence among Indians can be magnified. Domestic violence has a personal dimension as well. The most enduring effects of this experience are generally psychological and cannot be seen. Potential conflicts in this thorny area became increasingly problematic because one common solution to child abuse has been removal of Indian children from their families. In the past, Indian children have been placed primarily in institutions or in care of white families, adding to cultural assault. The Indian Child Welfare Act has kept children within their tribal communities unless there is compelling reason to do otherwise.

Health Services

Indian people are not explicitly excluded from using typical health services options, but the IHS is part of the “agreement” of giving Indian people services in exchange for land. IHS is an organization with three aims in partnership with American Indian and Alaska Native people: (1) the mission is to raise their physical, mental, and social health to the highest level (IHS, 2006); (2) the goal is to ensure that comprehensive, culturally acceptable personal and public health services are available and accessible to all American Indian and Alaska Native people; and (3) the foundation is to uphold the federal government obligation to promote healthy American Indian and Alaska Native people, communities, and cultures and to honor and protect the inherent sovereign rights of tribes (Nolan, 2005). In recognition of the deep spiritual nature of American Indian culture the IHS strategic plan for 2006-2011 specifically has added spiritual health to its mission statement.

The 2008 appropriation for IHS is \$3.35 billion toward a tribal needs-based budget of \$19.7 billion (National Indian Health Board, 2007). Provision of health care for Indians was determined by the U.S. Supreme Court in the 1830s. In 1954, the responsibility for providing health care to Indian people shifted from the Bureau of Indian Affairs (which is in the Department of Interior) to the IHS as a branch of the U.S. Public Health Service. The IHS is the principal federal health care provider and health advocate for Indian people, and its goal is to raise the health status of Indians to the highest level possible. Indians often refer in shorthand to IHS or PHS (Public Health Service, the broader entity in which IHS exists) as their source of health care service. The operation of the IHS delivery system is managed through local administrative units called service units. A service unit is the basic health

organization for a geographic area served by the IHS program, just as a county or city health department is the basic health organization in a state health department. The IHS is composed of 12 administrative units called area offices. Area offices consist of 163 service units, of which 84 are operated by tribes. The IHS operates 31 hospitals, 50 health centers, 2 school health centers, and 31 health stations. Approximately 1.9 million people need IHS services. Tribal run facilities include 15 hospitals, 254 health centers, 166 Alaska village clinics, 112 health stations, and 18 school health centers. (IHS, 2008). Today, the IHS is in the process of restructuring. This is the first attempt in 40 years by the IHS to restructure in order to provide better services for Indian people. The need for change was prompted by external and internal factors. External factors include the change in the general health care industry and its impact on the ability of IHS to provide quality care at a reasonable cost. The “reinvention” of government has included streamlining government from the bottom up so that downsizing of federal employees within IHS reduced approximately 1000 full-time equivalents in a system known to be seriously underfunded. The possibility of converting federal support to block grants to states jeopardizes a focal understanding of Indian health needs. Among the internal forces affecting the need for a system change are sophistication of the Indian health care consumer and increasing abilities of tribal management to assume the delivery of health care for their communities (Design for a New IHS, 1995).

The Indian Health Design Team was created in 1995 to examine the issues of Indian health care, IHS, and tribal health care provision and to recommend changes in the IHS structure. In part, the Indian Health Design Team recommendations include restructuring IHS organization above the local (tribal) level; letting tribes determine their own course of action; providing IHS support for the unique needs of the tribes; authorizing, upon request, the tribal government flexibility to manage its budget and authorize alternative sources for tribal health care agencies essential business and professional support functions; and authorizing the tribes to purchase and develop billing and accounts receivable systems that are equal to the private sector. Therefore, Indian tribes recently have been able to compact or contract directly with the federal government for their portion of the health care money that would have been retained by the federal government at the IHS level rather than distributed to the tribes. To date, 328 tribes have entered into such a compact with the federal government. This means that 58% of federally recognized

tribes are under self-governance authority (IHS, 2009). Although there is a federal obligation to provide health care for Indian people, the future for Indian health care often is called into question because federal funds for Indian health are appropriated annually and frequently are challenged and negotiated downward by members of Congress.

IHS is funded at a lower rate per capita than funding for Medicaid, veterans, and prisoners. The former are all part of a mandatory funding system at the federal level while IHS funds are processed as a category called discretionary. The instability of funding complicates health care delivery for American Indians and exaggerates the actual funding amount. The source of health disparity and access is not only the amount of funding but also the nature of funding requiring annual reauthorization. Delays and backlogs are systemic problems affecting daily life for nurses in service units. The gap between mandatory spending on a Medicare beneficiary and discretionary spending on an American Indian or Alaska Native beneficiary has grown dramatically (Westmoreland & Watson, 2006).

BUILDING BRIDGES

Communication

The fundamental resource for building a cultural bridge is communication. Cultural competence is care that respects knowledge and traditions in different cultures and uses both in pursuit of better health. Verbal and non-verbal communication skills are key to culturally competent care. The statement that white professionals talk too much and listen too little is generally true. Much may be noted about communication styles among Indians; first and foremost is that within-group variation is considerable, as one would expect from any large group of people. In comparison with the overall population, it is likely that Indian styles of talking are often more understated or subtle, and the speaker may be misinterpreted as "slow." Indians are more likely to be comfortable with silence and even use silence as an expression of respect for what has just been said. This communication style can interfere with the current expected pace for health care services. As with any group that has experienced discrimination and marginalization, suspicion or caution often arises when one is communicating with outsiders. Such barriers cannot be circumvented in a single session. A system is needed that strives for consistency and follow-through of commitments.

Some Indian traditions identify self-promotion as ill-mannered. Indeed, humor—a wonderful human

characteristic that Indians also have in abundance—is often self-deprecating among Indians. The particular belief that self-promotion is inappropriate runs counter to many core principles in advocacy groups, including health advocacy groups such as parents of children with disabilities. Relatively few Indians have college degrees, a tool that aids in making system and service changes. Advocacy training can empower Indian families who lack formal education with knowledge and skills that, when combined with their own traditions of resilience, improve health and well-being for themselves and their children. Nevertheless, change will not come naturally for all Indians to be assertive in this way.

Communication can be impeded simply by the fact that health professionals have a culture almost to themselves. Words, concepts, and values are used and expressed that are particular to health care. For example, the continued search for knowledge and the value placed on new information is a facet almost everyone can appreciate in the abstract but that can become confusing in practice. When a young mother takes her child for a well-baby visit and is advised that feeding strained foods in the first months is "bad" for her child and that her baby should be put to sleep on his back, the information can be interpreted as conflicting. Not only have older women in the family probably recommended something different, personnel in the same clinic were dispensing opposite advice just a few short years ago. The major point of conflict is when value judgments are ascribed (e.g., feeding a child strained fruit at the age of 4 weeks is "bad"). Rarely are explanations for changes given and certainly not in the amount of detail to be understood. Grandmothers not only give instrumental assistance and care in child rearing but also rarely change their minds about what is good and appropriate care. Therefore, communication—not just what is said, but how it is said—becomes a critical part of health care delivery.

When linguistic diversity is spoken about in the United States, it rarely is recognized that certain tribal languages, such as Navajo, continue to be the primary or only language for some Indian people. For others who speak English, experience with serious illness may inhibit their understanding of English or require words and phrases of particular intimacy that only the use of native words can suffice. When one works with people who speak a language different from English, one should learn as much of that language as possible. Interpreters will be needed at times. The use of interpreters is a skill in itself (Wingood & Keltner, 1999). Anyone who knows multiple languages knows that precise translations are not always possible. Another

aspect of the use of interpreters is to pay attention to who is serving in this role. Young school-age children often are pressed into this duty, but it is of course inappropriate for a young child to inquire, for example, about the dates of his mother's last menstrual period. Although this may seem self-evident, such courtesies routinely are violated among many people who use interpreters. In some tribes, communication customs exist about when and how men speak to women such as mothers-in-law. Communication is important to building bridges between cultures, but it is essential to recognize the complexity and iterative nature that good communication should have.

Research and Measurement

As the discipline of nursing becomes more empirical, research tools that measure common health phenomenon take on a larger profile. As previously mentioned, meaning can be ascribed by context and experience. Concern about validity of measures with ethnic populations that have been underrepresented in research is ongoing. Serious concern exists about abbreviating the careful instrument development process used in dominant research programs through shortcuts. Shortcuts in this area are not only poor science but also can lead to faulty conclusions and perpetuation of cycles of misunderstanding and poor practice. Many examples of popular instrumentation that can be inappropriate for use with Indian tribes are available. A common question on the Family Resource Scale, for example, inquires about resources to take a "vacation" or "have time alone." In a community with long-standing high (85% to 95%) unemployment and where being with family members is more valued than time alone, the original meaning of these questions is not in concert with the context.

A common problem for American Indian people is that they are "used" by researchers who seek them out for interviews. Although this avoids the many pitfalls associated with inadequate instrumentation and state of the art tools to be used among Indians, there are potential problems. Not uncommonly, qualitative methodologies are chosen by some researchers less for reasons of interest and more because of their personal limitations in quantitative skills. This particular motivation does not bode well for meaningful findings through narrative data. Analyses must be just as rigorous using qualitative techniques. Even words in English may have particular meaning for people. In a detailed analysis of qualitative data to learn about Indian families' adaptation to children with disabilities in seven different tribes, Keltner (1994) learned that parents of

children with disabilities expressed many occasions of burnout. Burnout (stress) is not atypical for families with these types of challenges, but it simply did not ring true with what had been learned in interviews with 150 families. When examining the interviews transcriptions more carefully, it was discovered that families were referring to their houses burning down rather than to emotional stress. Several potential problems of interpretation of data can occur from a researcher's perspective. American Indians have a long history of exploitation, and marking the perceived problems and deficiencies for a group of people can bring harm, particularly when validity can be reasonably challenged.

Concurrent Challenging Life Circumstances

As a health professional addresses a disorder such as diabetes or childhood asthma, the professional should consider the entire context of a patient's experience. One cannot easily disentangle interactive effects of either of these disorders in the presence of domestic violence, crowded living conditions, long distance to health care facilities that are sometimes of questionable quality, alcoholism, and diet options that have the variety of commodity or trading post sources. Something as basic as distance and travel can be misunderstood. Many Americans vision of "rural" is quite different from the vast and empty spaces in Wyoming, Arizona, and New Mexico where we have lived. As service delivery models emphasize varied efficiencies, the difficult life circumstances associated among Indians overlook some of the most potent forces in determining morbidity, mortality, and burden of disease.

Partnership Models

The only paradigm for effective health care among American Indians is using some variation of an appropriate partnership model. This is important because involvement is more engaging than command; exploitation can be minimized; and essential information about history, communication styles, resources, and challenging life circumstances can be discerned more readily. Partnerships contribute to an overall goal of self-determination.

Partnership in health care initiatives, in research and practice, has become de rigueur in our vocabulary if not actual function. Improvements toward developing partnerships in which Indian leaders and health care professionals work toward common goals have been steady. Such models take a lot of time and personal effort. Partnership models are beginning to demonstrate how such an approach can lead to more

effective and enduring results (Keltner & Ramey, 1993; Petersen et al., 2003).

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Building bridges should be based on seeing the beginning and the destination associated with a desired connection. The Native American worldview of a circle of life and a circular way of living is common. Among the many different tribes are terms and images related to a sacred circle, sometimes called a sacred hoop. This image is considered sacred because it epitomizes family and cultural continuity. Dwellings and ceremonies from most tribes often have used circular or curved walls or borders that illustrate this perspective. The image of a circle is different from the way Americans typically envision a bridge. Bridges, as Americans know them, are linear and direct. Bridges in the physical sense may be seen as essentially unidirectional for different parties. People may pass with different destinations or purposes or perhaps even go back and forth but with a sense that one direction is definitely “to” and the other direction is essentially “from.” A linear image is fundamentally different from a circular one. A circular worldview captures a notion of multiple iterations and retains a sense of returning to the beginning time and time again. Within a circular framework there would always be much give and take across the metaphorical bridge, illustrating the partnership paradigm for working with American Indians. The contrasting images of a circle and a straight line serve as a symbolic reminder of how different assumptions and styles of different cultures can be. From a pragmatic point of view, the pace of interactions is distinctly different in a circular lifestyle. People sometimes comment on “Indian time,” meaning a significantly slower pace. Cultural rhythms for Indians traditionally have been tied to cycles of nature such as seasons, rather than segmented by repeated minutes and hours. Much benefit can be gained through sharing knowledge and traditions. A metaphorical bridge that encompasses a circular worldview will be a preferred cultural fit with most Indian communities.

Need for Nursing

Health care needs among American Indians are not only extensive but also complex. As major health care providers, nurses are prepared to deliver care to people with a variety of needs and within contexts that also may vary substantively. In earlier times, most nurses may never have met Indians in the course of their practice. As mobility dramatically increases and outreach becomes a

health care responsibility in a technological world, nurses are more likely to serve Indians. Epidemiological data document ethnic disparities in risk for disorders and deleterious outcomes among Indians. Concerns can be grouped according to mortality, morbidity, and burden. Health needs too often are complicated by challenging life circumstances and inadequate community infrastructure to address these needs. Nurses involved in primary care, public health, trauma, and rehabilitation are greatly needed to provide service to diminish the ethnic disparities that are so troublesome in society. As IHS continues to support the development of health information technologies like telemedicine to improve the quality, cost, and availability of services such as medical imaging, mental health, diabetic vision screening, and consultation with specialists in rural areas (IHS, 2006), new roles for nurses will continue to emerge. Nursing practice and research must engage in culturally competent actions to provide effective care. Standards for cultural competence have not been well defined.

What Is Culturally Competent Nursing Care for American Indians?

Care and comfort certainly can be provided by Indian-to-Indian nursing care. Such a model has many merits because special sensitivity would increase the likelihood that personal needs would be met. Not enough Indian nurses are available to meet the need, however. Only 0.3% of RNs in 2004 were American Indians while Indians made up 0.7% of the U.S. population (Health Resources and Service Administration, 2006). Another good way would be to include caregivers from a different culture who have acquired a certain level of cultural competence. Nevertheless, it is always reassuring to see visible representation of one's own culture somewhere in the immediate health services. If an Indian person enters a hospital or clinic, seeing other Indians in professional roles communicates some reassurance that the Indian way of life matters to the institution.

The question arises from time to time whether non-Indians actually can provide culturally competent care for Indians. We believe emphatically that they can but that cultural competence is a skill that requires as much knowledge, sophistication, and continuing education as any other skill within nursing. Cultural competence has three key components: sensitivity, specificity, and synergy. Sensitivity is the essential respect afforded to a culture with long-standing strengths and traditions that are positive and sustaining. Being culturally sensitive means possessing a certain humility as an outsider or

“nonexpert” in domains that are valuable and beneficial to good health. Specificity means assuming a responsibility to learn about specific cultural traditions of a people—words of a native language, knowledge about cultural healers, and healing traditions—and an engagement or referral to those experts who can best assist persons in gaining, regaining, or maintaining optimal health. Synergy is a characteristic that combines traditions from two life forces and pathways to provide complementary rather than separate or competing health care supports. Cultural competence, therefore, is something that can be taught and learned.

Summary and Future Directions

For reasons of philosophy and pragmatism, it is essential that Indians become part of the health care delivery system. A fundamental social value exists in opening education and professional training to people who have long been underrepresented and excluded from participation. Knowledge and professional advancement can be enhanced with a diversity of background perspectives. How cultural competence can be articulated or communicated without the participation of Indian health professionals, including Indian nurses, is hard to imagine. A variety of educational preparation models for nurses are available. Several tribal colleges have nursing programs, mostly at the vocational and associate-degree level. Indian nurses are more likely than other Indian health professionals to remain in their own communities and even within the service systems that provide care for Indians. This permits nurses to have important opportunities in the design and implementation of culturally competent care. Many nurses serve on tribal councils and are becoming increasingly prominent in certain arenas, as tribes assume more responsibility for their own health care programs. The opportunity to advance nursing practice is especially unique in this context.

Increasingly important is having minority persons in positions of influence in clinical decision making; setting administrative standards; in shaping health services; and most importantly, in directing health care resources. A persistent barrier to leadership is that the basic, and too often the only, educational preparation Indian nurses have attained has inherent limits. Many, many more Indian nurses have practical licensure and associate's degrees than bachelor's or advanced degrees. Sixty-four percent of American Indian nurses received their initial education in associate degree programs. If highest educational degree is examined, 13.2% of American Indian nurses have a diploma as their highest degree, 49.4% have an associate's degree, 26.6% have a

baccalaureate degree, and 9.8% have a master's or doctoral degree. Graduate degrees for this group are the lowest reported for all racial/ethnic groups (Health Resource and Service Administration, 2006). Among Indian nurses who have standard professional degrees, they are more often from the least selective, least prestigious baccalaureate schools. Education quality and networking opportunities vary according to these parameters of preparation. Nursing has multiple roles, and it is important that the best fit for the individual be made.

When mere overall numbers are examined, however, minorities most seriously are underrepresented within the professional field in the positions of influence. Significantly fewer key administrators and policy makers, academic leaders and full professors, senior scientists, and nursing leaders are from any minority group but, most particularly, American Indian. A need exists for direct care to be culturally competent, but just as important is that systems of inquiry, program, and service also have the capacity for cultural competence. As the overall presence of nursing dramatically declines in highly selective universities in the United States, there are even fewer opportunities for minority representation in leadership roles in schools with superior education, unparalleled professional networks, and sophistication. At the same time, the best educational institutions in the United States are recruiting many more young Indians into careers other than nursing. Although in important ways this expands opportunities for Indian youth, they are more likely not to return to their home communities than are Indians who choose nursing careers. Most definitely a need exists for bright young members of minorities to enter highly selective schools of nursing because they are being aggressively recruited for other professions. The intellectual vigor and potential scope of influence that minorities can bring to benefit the general public are magnified greatly through this educational stream.

Professional organizations are important networks for support and development. The unity for all nurses through local and national professional organizations fosters such growth. Indian nurses are dispersed widely across the United States but also have a unified organization, the National Alaska Native American Indian Nurses Association (NANAINA). In addition to support and networks, NANAINA provides a voice to advocate for cultural competence and for addressing special health care needs for Indian people. Although the organization is relatively small and young, NANAINA is increasing its public profile and scope of involvement. An annual summit is held for members and supporters who are interested in promoting Indian health and

Indian nursing. In the spirit of advancement and collaboration, NANAINA is a founding member of the National Coalition of Ethnic Minority Nurse Associations. The coalition is composed of NANAINA, the National Black Nurses Association, National Association of Hispanic Nurses, Asian American/Pacific Islanders Nurses Association, and the Philippine Nurses Association. The opportunity to leverage greater political position and support each other's organizations is an important step toward decreasing ethnic disparities in health outcomes.

The National Coalition of Ethnic Minority Nurse Associations has moved forward to provide a forum to produce minority nurse scientists with assistance of a \$2.6 million grant from the National Institute of General Medical Sciences. American Indian mentors and mentees are part of this systematic program to develop research capacity in nursing. The skill, advanced education, and networking connections for American Indian nurses are vital components in developing leaders in this field.

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SECTION 9

Ethical, Legal, and Social Issues

Ethical, Legal, and Social Concerns in a Changing Health Care World

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

With fiscal recession and job uncertainty, the concerns for health care coverage and cost control escalate. During such times, it is increasingly difficult to focus on people's needs and the underlying legal, ethical, and social issues that surround health care decision making. Escalating health care costs clearly stress the national economy, and per capita health care expenditures for insured persons have been increasing at rates that are sharply disproportionate to overall inflation and worker earnings. There is growing evidence of instability in insurance coverage with increasing premiums, increasing required copayments, and limitations in health benefits. As health care insurance becomes more costly, the number of uninsured grows in a vicious circle. This creates increased health care costs as the costs of uncompensated care are passed on to the government and insured consumers in the form of higher charges. The current economic crisis, coupled with an unrelenting increase in health care costs, serves as the catalyst for change that will not allow the new administration or the American people the luxury of postponing a pragmatic discussion about health care.

As the debate over the future of health care continues, much of the discourse is based on an assumption that the problem is a lack of resources. Therefore, the argument continues that rationing in some form is the only solution. This basic assumption requires examination. Is the problem based on a lack of resources, or is it rather a matter of how these resources are spent? More than 45 million people in the United States have no health care insurance, and more than 80% of the uninsured are in working families who are effectively cut out of the health care system. Whose problem is it? Health care is currently rationed, with the wealthy able to access elaborate and costly care, while the poor are able to freely choose inadequate health care. Although

this is a *de facto* form of rationing, full disclosure and rationing in broad daylight is advocated as an alternative. In the future, ethical, legal, and social questions will be pushed to a new level with the current advances in the genetic field and the possibility of detecting genetic problems at a much earlier stage. A whole new world of options, each fraught with new legal and ethical issues, is emerging that will further complicate decision making and allocation of resources.

As you read the chapters in this section, we urge you to keep in mind some of the broader issues that have been addressed. Are our problems based on a lack of resources, or are they a reflection of a lack of ability to debate hard issues and reach a reasoned consensus that is fair and just? Much of health care decision making has been pushed out of the clinical domain, which was predominantly a case-by-case approach into the world of "business," which makes decisions on the basis of financial concerns. The general public has usually been left out of the decision-making process. In this section, many diverse issues are raised that should be a matter of public debate. These issues are certainly a matter of debate within the nursing community.

In the opening chapter, Karen Dunn Lopez addresses the ethics of U.S. health care reform. This debate chapter presents arguments for the question "Should health care be rationed?" Two definitions of *rationing* are provided, the most common referring to "the denial of certain health care services to those who have enough money to buy them." The more difficult definition refers to "the persistent and systematic denial of health care services to those who cannot afford them." In setting up the debate, Dunn Lopez includes perspectives from both definitions and points directly at two major forces driving the need for reform: economic and ethical. She identifies solid indicators of an economic crisis in health care and cites four major reasons:

increasing technology, aging population, increased pharmaceutical costs, and the high cost of providing hospital care to the uninsured. She says that the ethical issues concerning inequalities in health care are equally compelling and notes that the uninsured rate varies disproportionately by age, race, and income. An interesting review of historical influences builds to the failed attempts in the United States to provide universal access, and she provides a very interesting pro-con debate based on philosophical underpinnings. The “equal opportunity for welfare” (EOW) is presented as a bridge. A stark discussion of rationing decisions for vulnerable populations includes age-based rationing, rationing based on birth weight of premature infants, and rationing of intensive care unit services. Dunn Lopez says, “Nurses are in a position to see the direct outcomes of those compromised by the current method of allocation.” How we address the issues of health care rationing should be governed by a concern for justice for the powerless, vulnerable, and disenfranchised.

In the first viewpoint chapter, Karen Markus, an attorney, addresses the intertwining of nursing and patient advocacy roles and questions whether there is a conflict of interest. She clarifies that *advocate* is both a verb (to support, vindicate, or recommend publicly) and a noun (one who assists, defends, or pleads for another) and states that these legal definitions translate into three fundamental duties in the health care setting: to ensure that patients are informed of their rights in a particular situation, including the right to refuse treatment; to support patients in decisions they make; and to protect patients, which includes reporting threats to their well-being. Markus posits that with the “development of biomedical technology and the corresponding fragmentation of medical care, came a shift in nurses’ primary loyalty from the physician and institution to the patient.” She provides an extensive review of numerous cases and judicial findings related to legal protection for nurse patient advocates in nonstatutory and statutory claims: Nursing Practice Acts, Conscience Acts, Whistleblower Acts, and Constitutional Provisions; she also discusses the current confusion in the courts. Markus recommends that specific language should be incorporated into each state nursing practice act or its regulations, “based on a widely acknowledged code of ethics, such as the American Nursing Association Code for Nurses, to clarify the distinction between moral and ethical decisions.” This is an interesting and very well-written chapter that should be read

by all nurses and critically considered by all state nurses’ associations.

In the next chapter, Wendy Austin, with laser insight, addresses complex issues across the lifecycle that are faced by nurses and their patients in practice settings. The foundation of her discussion rises from the works of nursing leaders and makes us remember why we became nurses. She discusses the philosophy of care that makes nursing unique and absolutely fundamental in the health care of fellow human beings and reaffirms the underpinning of ethical nursing. Although institutional ethics committees are in place in most settings, they have limitations when it comes to placing nurses in a particularly difficult position. Although nurses are faced with complexities related to the ethics of clinical decision making, they may also be confronted with problems such as sexual harassment in the workplace. Austin states that ethical nursing practice must be grounded in meaningful relationships with patients, families, and communities. She states, “When such grounding is not cultivated and supported within health care systems, nurses are unable to practice safely, competently, and compassionately, and are made increasingly vulnerable to moral distress and compassion fatigue.” This is a chapter you will very much enjoy as it arises from a kindred spirit in a voice of shared experience.

Anita Szczepanski, also an attorney, notes that “there are many forms of discrimination and harassment in the nursing world, some of which are illegal and some of which are not.” Her chapter discusses both illegal kinds of discrimination or harassment and those kinds that are not necessarily against the law. She provides excellent and specific information as to the most effective way a nurse can go about dealing with such situations. Szczepanski identifies the federal laws that prohibit different types of discrimination by employers both public and private and provides a list and insightful discourse of the main federal laws and the types of discrimination they prohibit. She notes that many states also have similar laws prohibiting discrimination and that some states go beyond federal laws to give additional protection to employees. This is a fascinating chapter and is truly a must-read for all nurses.

The remaining chapters in this section turn to specific ethical and social issues. Sara Groves addresses the problem of health care for the poor and underserved. The author identifies the underserved as “the uninsured, the underinsured, the poor, and the working poor who do not receive adequate and quality health care.” She believes that uninsured and underinsured

people receive less health care (usually too little and too late), less primary prevention, less care for their chronic conditions, and worse care in the hospital. Racial and ethnic minorities are more likely to be uninsured, and this is a reflection of less education and lower-income employment that provides less health coverage. Groves states that the health care cost to society for the poor and uninsured is not just the actual dollar amount of uncompensated care but the decreased health capital of the underserved who have poorer health, premature mortality, and markedly increased unnecessary morbidity. The author provides a solid review of previous legislation and new policies and solutions. Groves emphasizes that nurses can be a strong political force and can create change to move people out of poverty and provide real opportunities for improved health. This is an important chapter that pines to our roots.

One of the particularly troubling ethical problems confronting nurses is providing care to persons with diminished capacity, including Alzheimer's disease. Nancy Edwards states that 22 million individuals are expected to have Alzheimer's by the year 2050, and nearly half of those age 85 and older may have the disease. With a growing population of patients older than 80, this problem will increase in the years ahead. The author advocates that in decision making regarding care of Alzheimer's patients, the first step is determining the capacity of the individual to participate in decision making and, as much as possible, respect the patient's choices. Advance directives are particularly useful. One of the major ethical concerns is creating unreasonable burdens for caregivers while weighing the rights of the patient against those of the caregivers. Nurses can be caught in particularly problematic decisions when the proxy for the patient may make decisions, such as that of withholding medication, that the caregiver may feel obligated to refuse to obey. Advance directives and communication with caregivers are advocated in reaching ethically viable decisions.

Susan Young and Diane Kjervik specifically address issues related to advance directives. Noting the fundamental value in our society of individualism, advance directives are a way of empowering patients. After describing the main types of advance directives, the author clarifies the ethical aspects. The value of a living will is that it provides a clear way of stating what a patient wants at a specific point before a crisis. The major objections to advance directives are (1) the paternalistic view of health care providers that they know best; (2) living wills, which are made at a point when the patient is not in a crisis situation; and (3) the slippery

slope between living wills and murder or genocide. Nurses play a key role in the development and implementation of advance directives, and this chapter provides an excellent and vital discussion of this issue.

Tener Goodwin Veenema states that environmental disasters resulting from the release of radiation or chemical agents would create a sudden unanticipated demand for nursing services. She notes that these events would also create significant clinical challenges and potentially moral and ethical dilemmas for the nurses involved as standards of care may need to be altered. Her chapter is a spellbinding review of scenarios that might involve the accidental or intentional release of these agents. Veenema explains that the intention of a terrorist attack is to cause illness, injury, social panic, and chaos, and to place substantial demands on our health care system's ability to respond. She deftly provides an overview of the health and psychosocial implications from such events along with three historical disaster scenarios as examples of what might result from the release of these environmentally hazardous agents. This is an excellent and captivating chapter.

Lisa Summers and Robbie Prepas describe how midwives, as experts in normal birth and advocates for mothers and babies, have worked to ensure that the needs of childbearing women and infants are addressed in all-hazards preparedness. While this chapter is of special interest to readers with a focus on maternal-child health, there are also lessons for all nurses related to advocating for groups during times of sparse resources. The principles discussed have broad applicability, and this story can be viewed as a case study in advocacy and policy work done by nurses on behalf of a special population. Additionally, there is an overview of the important work that the American Nurses Association (ANA) has done to ensure that the larger nursing community is involved in all hazards planning.

It is with great pleasure that we introduce Janice Springer's chapter, our first coverage of the essential work of the American Red Cross in providing disaster nursing. Although it is not a governmental agency, the American Red Cross has a congressional mandate that requires action in time of emergency to alleviate human suffering. Responding to over 70,000 disasters each year, including catastrophic events such as Hurricane Katrina, Red Cross nurses and health services volunteers play a vital role in disaster response in the United States. Establishing shelters and emergency aid stations and providing meals, health assessments, and crisis counseling, the Red Cross is a constant and dependable resource for disaster-stricken communities.

As Springer notes, Red Cross Disaster nursing is the quintessential public health care delivery opportunity. This chapter is the first of all eight editions to include photographs, and they truly portray nursing across time and disasters. We thank our publishers for agreeing to the extra expense in honor of nursing's historical role in providing care during the darkest times.

In the final chapter, Barbara Sattler and Denise Choiniere move us from red to green in their leading-edge chapter on the greening of health care. They note that hospitals have begun to make some dramatic shifts in their efforts toward sustainability motivated by patient and employee health and safety, increased awareness about hospitals' roles in environmental stewardship, and their bottom line. They point to the fact that sustainability efforts can positively address all three of these motives, and this has encouraged new partnerships within and from outside the health care sector. Their chapter describes some of the environmental health issues that are serving as drivers for these efforts,

review a range of specific efforts, and provide examples of how hospitals are structuring their efforts. This is an excellent chapter that provides a valuable framework for nurses to move their institutions and agencies toward this essential responsibility.

Nurses stand in the gap between patients and the health care system. As pressures build from all sides, the profit-making motives of big business at the expense of humane and quality patient care and the escalation of a wide array of social problems are inextricably intertwined with health. Nurses are obliged to examine the moral, ethical, and legal implications that govern their practice. Never have the challenges been greater. But with challenge comes opportunity—the opportunity to rise to the forefront as a voice for the powerless and disenfranchised, a lifeline for the disaster victim, a comforting hand to the weary, an advocate for the elderly, and a leader to assist health care agencies to address environmental health issues.

Ethics of Health Care Reform: Should Health Care Be Rationed?

KAREN DUNN LOPEZ

Of all the forms of inequality, injustice in health care is the most shocking and inhumane.

Martin Luther King, March 25, 1966

The debate about health care reform in the United States has been ongoing for decades. While it continued with much rhetoric in the years immediately preceding the 2008 presidential election, unfortunately little progress was made in the last decade. This chapter includes a review of the major causes of the increasing health care costs in the United States and the accelerated calls for reform due to the current economic crisis. This chapter includes a discussion of recent approaches and challenges in health care rationing and highlights proposals for reform as they relate to the concept of rationing.

Health care providers make decisions daily regarding the allocation of health care to individuals. Generally, U.S. providers are comfortable with the idea of not providing every available treatment alternative to every patient in every situation (Truog et al., 2006). However, use of explicit “rationing” is a contentious issue. For the public and many providers, rationing is associated with the unpalatable idea of denying certain health care services to individuals in need (Truog et al., 2006). In addition to the negative connotations, the word has inconsistent definitions, therefore obscuring public understanding and thwarting substantive discussions of health care reform. The most common understanding of the term *rationing* in the context of health care refers to the denial of certain health care services to those who have enough money to buy them (Aaron & Schwartz, 1990; Wells, 2002). However, a complete discussion of rationing is impossible without acknowledging the second definition of the term that refers to the persistent and systematic denial of health care services to those who

cannot afford them. Despite discomfort with the concept of rationing, the current economic crisis, coupled with limitless treatment opportunities and an unremitting increase in health care costs, signals that Americans will not have the luxury of postponing a pragmatic discussion of health care rationing (Aaron & Schwartz, 1990; Congressional Budget Office, 2007; Fleck, 2002; Lauridsen, Norup, & Rossel, 2007; Oberlander, 2009). While some have contended that health care reform is not a priority in the context of the economic crisis, then president-elect Obama asserted a urgent need for health care reform: “It’s not something we can put off because we are in an emergency. This is part of the emergency” (Levey, 2008).

The goal of this chapter is to foster an understanding of the factors associated with the need for health care reform that includes some form of rationing and the many ethical issues that are relevant to this discussion. Although other countries have experience in health care rationing, this debate focuses on the United States, including major historical influences on the evolution of health care allocation and the projected trends for the future. The pro and con arguments for rationing in health care include perspectives from both definitions of the word *rationing*.

FORCES ASSOCIATED WITH THE NEED FOR U.S. HEALTH CARE REFORM

The need to proceed with health care reform in the United States is driven by two macro-level forces: economics and ethics. Economically speaking, the rising cost of health care has been a major concern to the

overall U.S. economy for several decades (Aaron & Schwartz, 1990; Iglehart, 2009). Health care is the single largest sector of government spending (Heffler et al., 2004). The continuing rise in health care cost relative to the gross domestic product means that the United States is forced to decrease relative spending in other important areas of the economy such as housing, education, job training, defense, police, transportation, fire services, and so forth. In addition to the increased cost to the federal government, the out-of-pocket costs to individual consumers also have increased (Congressional Budget Office, 2007; Strunk & Ginsburg, 2004).

Several micro-level forces are involved in driving up U.S. health care costs. Most analysts agree that the most important force is the continued rate of technical innovation in health care (Aaron & Schwartz, 1990; American Thoracic Society, 1997; Congressional Budget Office, 2007; Fletcher, Lombardo, Marshall, & Miller, 1997). While technological advances can reduce costs, in practice, such advances generally increase health care costs (Congressional Budget Office, 2007). Research in health care often is supported through government agencies, such as the National Institutes of Health, and it is costly. Successful research generates new demand for new health care services (Butler, 1999; Orszag & Ellis, 2007). No signs of a future decline in health care innovation are apparent, for technological possibilities seem without limit (Lauridsen et al., 2007; Nyland, 2005). In addition, U.S. citizens, providers, and policy makers highly value research and technology in health care (American Thoracic Society, 1997; Fleck, 2002; Fletcher et al., 1997). Recent projections from the Congressional Budget Office predict that the bulk of increases in health care expenditure are due to increases in per beneficiary spending (Congressional Budget Office, 2007).

A second reason for growth in health care costs is related to the growth of insurance coverage. This has resulted in a substantial decrease in the percentage of health care spending that is paid out of pocket (Congressional Budget Office, 2007), which leads to greater health care consumption. In addition, historically, insured Americans, compared with citizens of other developed countries, have a strong preference for choosing what services they want and believe they are entitled to every health service they desire (Buchanan, 1998; Butler, 1999; Neumann, 2004), which furthers demand for limited health care resources.

A third, but less important, reason for increasing health care costs relates to demographic changes of the

aging population (Congressional Budget Office, 2007). As disease and disability become more prevalent with age, so does the consumption of health care services (American Thoracic Society, 1997). A fourth factor driving increased health care costs is pharmaceuticals. The cost of pharmaceuticals has been increasing at a staggering rate for several years (Heffler et al., 2004). Although fewer blockbuster drugs were introduced in the last few years, economic forecasters predict that drug-spending growth will continue to exceed total health care spending growth over the next several years (Heffler et al., 2004).

The high cost of providing care to the uninsured is a fifth major force behind increasing health care costs. Individuals without insurance continue to seek health care but often are diagnosed later, incur more costly services, and have worse outcomes than those with insurance (Thorpe, 2004). Although hospitals try to extract payment from the uninsured (Hadley, Holahan, Coughlin, & Miller, 2008; Institute of Medicine, 2004a; Thorpe, 2004), the vast majority of the uninsured cannot pay these medical bills. The cost of uncompensated care is passed on to the government, which pays over \$40 billion annually to reimburse for this care, and to insured consumers in the form of higher charges (Hadley et al., 2008; Thorpe, 2004). See Box 62-1.

Escalating health care costs clearly place stress on the national economy but directly affect businesses and individual consumers as well (Center for Medicare and Medicaid Services, 2008). Per capita health care expenditure for insured persons has been increasing at rates that are sharply disproportionate to overall inflation and worker earnings (Strunk & Ginsburg, 2004; *Working families*, 2007). Evidence is increasing of instability in insurance coverage with increasing premiums, increasing required copayments, and limitations in health benefits (Center for Medicare and Medicaid Services, 2008). In addition, the current failing U.S. economy means that additional Americans will qualify for

BOX 62-1 Major Reasons for Increasing Health Care Costs

1. Technology
2. Growth of insurance coverage
3. Aging population
4. Increased pharmaceutical costs
5. High cost of providing hospital care to uninsured

federal health care programs, adding substantial strain to already budget-strained states to maintain these programs in their current form (Oberlander, 2009). Many experts believe that increases in health care spending will continue into the distant future and are simply unsustainable (Congressional Budget Office, 2007). See Box 62-2.

Economic reasons alone provide sufficient justification for discussing new ways to contain health care costs that include the taboo subject of rationing. However, the ethical issues concerning inequities in U.S. health care are equally compelling. Instead of having a system that provides some amount of basic health care services to all citizens, the United States has a fragmented market-based approach. Approximately two-thirds of

the population obtains private health insurance via employer-sponsored health plans that provide a wide range of services. Trends indicate, however, that some benefits such as prescription drugs and durable medical equipment increasingly are being limited (Center for Medicare and Medicaid Services, 2008; Hartman, Martin, McDonnell, Catlin, & The National Health Expenditures Accounts Team, 2009). Services are available to elders (older than 65) and the chronically ill via the government-sponsored Medicare program. Far fewer services are offered to the very low-income individuals via the government-sponsored Medicaid program and to moderately low-income, uninsured children via the State Children's Health Insurance Program (Henry J. Kaiser Family Foundation, 2007). States provide varying amounts of health care, but no one state is able to provide health insurance to all persons under the poverty line (Henry J. Kaiser Family Foundation, 2007). This approach leaves approximately 16% of the population, or 45 million people, uninsured (Henry J. Kaiser Family Foundation, 2007). Contrary to the public misconception that the majority of the uninsured are unemployed, more than 80% of the uninsured are working families (Institute of Medicine, 2004b). The uninsured rate varies disproportionately by race, with an uninsured rate ranging from 12% for non-Hispanic whites to 33% for Hispanics (Henry J. Kaiser Family Foundation, 2007). Most statistics of uninsured underestimate the problem by asking only about current insurance status. When families with children enrolled in the State Children's Health Insurance Program were asked if they had been without health insurance in the previous year, 42% reported being without health insurance for some months of the preceding year (Federico, Steiner, Beaty, Crane, & Kempe, 2007). These statistics also do not note the problems of underinsurance that include exclusions for preexisting diseases, waiting periods, and maximum lifetime benefits (Beauchamp & Childress, 2001; Ward, 2006).

In addition to inequities in access to health care, the U.S. approach to health care contributes to inequities for population subgroups. An explosion of research has demonstrated that racial and ethnic minority groups receive a lower quality of care compared to white patients based on a variety of measures (Chin, Walters, Cook, & Huang, 2007). As a result, these populations have a higher burden of disease and disability (Chin et al., 2007). There is no evidence to suggest that these disparities are caused by explicit rationing, but it is plausible that unconscious rationing is involved. While insurance status is an important component of health

BOX 62-2 By the Numbers: Signs of Continued Economic Crisis in Health Care

1. Rising number of uninsured (DeNavas-Walt, Proctor, & Smith, 2007)
40 million in 2000
43.6 million in 2002
47 million in 2006
2. Rising health care expenditures relative to economy (Congressional Budget Office, 2007)
From 1975 to 2005, spending per capita increased an average of 4.2% annually.
From 1975 to 2005, the gross domestic product grew an average of 2.2% annually.
3. Deteriorating insurance coverage (Schoen, 2009; *Working families*, 2007)
From 2000 to 2005, insurance premiums rose 73%.
In 2005, 34% of adults (58 million) reported problems paying their medical bills, faced bill collectors, or were in debt for medical care.
In 2007, 41% (72 million) reported problems paying their medical bills, faced bill collectors, or were in debt for medical care.
4. National economic decline impacts employer-sponsored insurance, state-funded public insurance, and uninsured (Holahan & Garrett, 2009)
National unemployment grew from 4.6% in 2007 to 6.7% in 2008.
Predicted decrease in employer-sponsored insurance is 5.9 million.
44 states face budget shortfalls for FY 2009 or 2010.
Predicted increases in state-funded insurance programs (Medicaid and State Children's Insurance Program) is 2.4 million.
Predicted increase in uninsured is 2.6 million.

care disparities, socioeconomic status and neighborhood characteristics also play major roles in the causes of health disparities for African Americans and Hispanics (Kirby, Taliaferro, & Zuvekas, 2006). In addition to disparities for racial and ethnic groups, people with intellectual disabilities and mental illness also receive less medical care, and as a result, they tend to experience poorer health than the general population (Krahn, Hammond, & Turner, 2006).

Those who deny the need for health care rationing claim that reforms aimed at the elimination of wasteful practices in health care would allow the United States to continue to provide all beneficial health care services. Although previous efficiency-related reforms have been useful, they have provided only one-shot savings. Various state-level approaches have been used to cut health care costs and improve insurance coverage (Pratt & Ouellette, 2007). Unfortunately, these incremental state efforts are inadequate on many levels. They are limited by their geography and funding sources, create inequity based on geography, and largely focus on financing limitless health care through employer requirements and/or new taxes (Pratt & Ouellette, 2007). None of the recent state efforts that target improved insurance coverage address the exponentially increasing health care technology that drives the demand for increasingly expensive health care (Pratt & Ouellette, 2007).

THE INTERNATIONAL HEALTH SYSTEM AND OUTCOMES COMPARISONS

The U.S. government consistently spends substantially more on health care than other countries (Aaron & Schwartz, 1990; Cylus & Anderson, 2007; Davis et al., 2007; Vladeck, 2003). U.S. health care consumers also spend more out of pocket than the other nine industrialized OECD countries (Organization for Economic Cooperation and Development) (Cylus & Anderson, 2007). Despite the rising cost of health care and the inequities in health care, many feel that the market-based approach to health care in the United States is superior and that the United States has the best health care in the world (Starfield, 2004). International comparisons suggest otherwise. The United States has the distinction of being the only industrialized nation without universal health care insurance. It has the highest percent of obese individuals and the highest percentage of potential years of life lost due to circulatory diseases, diabetes, and respiratory diseases (Cylus & Anderson, 2007). The United States also has the

distinction of having the highest percentage of medical errors (Cylus & Anderson, 2007). In addition, it has the highest infant and maternal mortality rate and the lowest years of healthy life expectancy when compared to seven industrialized countries (Canada, Denmark, Germany, Norway, Sweden, Switzerland, and the United Kingdom) (World Health Organization, 2008). For these and many other reasons, dissatisfaction with the health care's status quo structure in the United States is growing among consumers, businesses, and unions (Daniels & Roberts, 2008; Oberlander, 2007), suggesting that Americans' openness to more aggressive health care reform may be increasing.

HISTORICAL INFLUENCES ON U.S. HEALTH CARE REFORM

The roles of the U.S. government and the private sector in providing access to health care have been shaped by changing economic and social conditions. This section provides an overview of some of the major influences, most of which originated in response to specific conditions rather than as incremental steps to a national agenda for health care delivery. One of the earliest health care insurance companies began in 1929 as the country began to experience the outcomes of the stock market crash that began the Great Depression. The administrator of Baylor Hospital entered into an arrangement to provide care to a group of teachers on a prepaid basis that eventually became Blue Cross Insurance (Fletcher et al., 1997). Although technically not health care, in 1935 in the midst of that depression, Franklin Roosevelt established Social Security. This provided public dollars to support unemployed and needy older Americans who could no longer be provided for via charity (Vladeck, 2003). In the 1940s, during World War II, wage controls were placed on American employers, giving rise to employer-based health insurance as employers used health insurance to compete for workers. In 1948, President Truman proposed single-payer public health insurance, but his plan was denounced by the American Medical Association and was labeled by some as a communist plot. In the 1960s, the U.S. government took a major step toward increasing health care access to two of its most vulnerable population groups via Medicare, which provided public health insurance to those over age 65, and Medicaid, which provided public insurance to the poor (Fletcher et al., 1997). In the 1970s, health care costs soared because of unexpected costs of the Medicare program. In response, President Nixon sought to

control costs through price controls that proved too complex to enforce. Nixon also proposed a mandate requiring employers to provide health insurance, but this initiative failed (Aaron & Schwartz, 1990).

In the 1980s, Medicare shifted to a prospective payment system for hospitalized patients, whereby hospitals were reimbursed based on the patient's diagnosis (diagnosis-related groups) (Geyman, 2004). The private sector followed suit through similar prospective payment systems within managed-care companies. Although these programs successfully halted the rate of Medicare expenditure growth, they are regarded widely as only having shifted costs to hospitals and employers (Fletcher et al., 1997; Geyman, 2004; Mayes, 2004). In the early 1990s, newly elected president Clinton proposed a plan for universal public health care coverage that he believed would solve the problems of escalating health care costs and increases in the number of uninsured (Brock & Daniels, 1994). As was the case with President Truman's attempt to enact universal coverage, the plan failed, with major stakeholders putting forth massive "information" campaigns that misled the public by labeling the proposal "socialized medicine" (Geyman, 2004). A disappointed President Clinton went on to make incremental changes in health care reform such as the State Children's Health Insurance Program, which makes insurance available to uninsured children who do not qualify for Medicaid, and the Health Insurance Portability and Accountability Act, which protects workers from loss of health insurance when they change or lose their job. Despite these incremental advances in health care access during the Clinton administration, the overall rate of uninsured did not improve, and as previously described, costs continued to escalate.

During the years of the George W. Bush administration, health care reform efforts took a different direction. Some states moved in the opposite direction by restricting eligibility to Medicaid and the State Children's Health Insurance Program (*Healthcare costs*, 2004). The major republican initiatives for health care focused on insurance deregulation, consumer tax credits, tax incentives for businesses, malpractice reform, and the expansion of personal health savings accounts (Bush, 2007; Oberlander, 2007). During his last two years in office, Bush (2007) adamantly rejected Congress's multiple efforts to increase access to the State Children's Health Insurance Program because he viewed this expansion as leading to "government-run health care for every American."

In February 2009, President Obama took action to resume efforts to improve access to health care within

his first month in office by signing the Children's Health Insurance Bill, which expanded health insurance coverage to 11 million children by 2013 (Pear, 2009). Despite the definitive initial step, his overall goal is to improve health care, taking a more moderate stance than his two predecessors. While not fully outlined, elements of President Obama's (2009) plan includes the following:

1. New, affordable insurance programs
2. Preservation of existing insurance for satisfied consumers
3. Improved competition in the health insurance industry
4. Lower drug costs
5. Mandatory hospital cost and quality reporting

In summary, the major attempts to provide universal access in this country over the last 50 years have failed. Incremental changes, although well intentioned, have left Americans with an increasingly complex array of choices, escalating costs that many in the business industry are no longer willing to pay and gross inequities in access to care and health outcomes. President Obama's more moderate stance to address the ethical issues of unequal access in health care is currently being hotly debated (Eggen & Connolly, 2009). However, his approach does not address the economic problems within our health care system and is therefore unlikely to help stem the current economic crisis in the United States.

Meaningful health care reform must address both the access and the economic dilemmas. The economic incentives for reforming U.S. health care are virtually irrefutable, yet the methods of reform to address this must be determined. Because the major driver of health care costs is the increased use of high-technology and high-cost health care, limits in this area are necessary. Thus, the concept of rationing necessary care is inescapable in the current context of an ever-increasing array of innovative and expensive health care services that are available to the individual consumer. Despite discomfort with the word *rationing*, as a matter of national policy, the United States has historically limited access to routine health care services to vulnerable populations outside the traditional employee-based insurance or government insurance programs. This method of rationing has denied potentially beneficial care to approximately 16% of U.S. citizens. The challenge ahead is to determine more ethical ways to allocate health care services in the United States that will fulfill the requirements for fiscal solvency.

ETHICAL ISSUES IN HEALTH CARE REFORM

Ethicists agree that health care is an important focus of concern in the field because good health is necessary if an individual is to participate fully in society (Beauchamp & Childress, 2001; Butler, 1999; Emanuel, 1994). Furthermore, ethicists argue that structures for health care allocation are the responsibility of a just government and should not be left to chance forces (Butler, 1999). What has been missing in the U.S. debate about health care reform is the societal (versus individual) perspective. Several ethical principles will guide this debate:

- ◆ *Beneficence*: The duty to do good for patients who requires balancing of benefits against risks and costs (Beauchamp & Childress, 2001; Spencer, 1997)
- ◆ *No maleficence*: The duty to avoid causing harm (Beauchamp & Childress, 2001)
- ◆ *Social justice*: The way in which the basic structures of major social, political, and economic institutions are arranged such that everyone has a fair share (Butler, 1999)
- ◆ *Distributive justice*: “Fair, equitable, and appropriate distribution determined by justified norms that structure terms of social cooperation” (Butler, 1999)
- ◆ *Utilitarianism*: A principle that emphasizes social efficacy and maximum benefit (Beauchamp & Childress, 2001)
- ◆ *Collective social protection*: A principle that focuses on the similarity between health care and other needs to which the government provides access, such as crime control, firefighting, sanitation, and pollution control (Beauchamp & Childress, 2001)
- ◆ *Egalitarianism*: A principle that focuses on the equal worth of persons and fair opportunity (Beauchamp & Childress, 2001)
- ◆ *Autonomy*: A principle of respect for the decision-making capabilities of individuals (Beauchamp & Childress, 2001)
- ◆ *Libertarianism*: Under this principle, “a just society protects rights of property and liberty, allowing persons to improve their circumstances and protect their own health on their own initiative” (Beauchamp & Childress, 2001)

Pro Argument

The majority of ethical principles support the idea of providing universal health care coverage within a just society (Emanuel, 2002). Principles of social justice provide general support for reforming the approach to allocation of health care so all citizens have a fair share

of access to health care. In addition, justice often requires favoring aggregation of modest benefits to many over substantial benefits to a few (Daniels & Emanuel, 1996). The principle of fair equality of opportunity permits inequality in distribution of health care as long as everyone has an opportunity to access basic health care (Emanuel, 2002). Collective social protection finds similarities between health care and other needs that the government provides for and helps one formulate the argument that if the government provides equal access to those services, it also has the obligation to provide for equal access to health care. Although the principle of beneficence catches health care providers in a conflict, for health care providers who interact chiefly with individuals, the principle of beneficence does not require unlimited care to individuals at great cost to society (Brock & Daniels, 1994; Fletcher et al., 1997; Wells, 1995). Furthermore, even those who favor libertarian ideals must acknowledge that it is not possible to have unlimited choice in some areas (Brock & Daniels, 1994).

Con Argument

The United States has long favored the libertarian tradition in which health care is distributed through a free market ideal (Beauchamp & Childress, 2001). This approach allows individuals to protect their health by their own initiative with minimal government intrusion. Many in American society believe that this approach is the best because it respects individual autonomy and self-determination (Fletcher et al., 1997; Wells, 1995). Under this view, health care systems that are characterized by a great degree of equity place unacceptable costs on individual liberty (Menzel, 2003). Distributive justice emphasizes the role of social cooperation in determining allocation. Several attempts have been made in the United States to adopt universal coverage. The fact that universal coverage has been defeated every time indicates that this endeavor may not reflect the values of American society and may not be realistically achievable in the context of social cooperation required by distributive justice.

Bridging the Ethical Gap

At its most basic level, the conflict among individual and societal needs, justice and liberty, and clinically possible and economically affordable health care seems to be an endless ideological battleground (American Thoracic Society, 1997). Menzel (2003) argues for an alternative view of distributive justice called “equal opportunity for welfare” as a way to bridge this divide.

Under this principle, “people should not be worse off than others through no fault or voluntary choice of their own.” In the United States, those with the access to insurance would continue to purchase insurance. A structure could be created for those without access to insurance to provide basic access at realistic and equitable prices. Bad outcomes for those who choose not to access insurance would be tolerated based on their voluntary choice not to purchase insurance. A basic package of treatment options must be developed that includes cost-effective treatments. Treatments that are not considered cost effective can still be available for individuals with financial resources to purchase. This preserves more of a role of individual choice to satisfy the libertarian view and offers a chance for equality in access. What emerges from this approach is a third sense of rationing that provides for equal opportunities for access to health insurance for basic services, while allowing individuals with financial resources choice to access services beyond the basic package, as well as tolerating individuals who choose not to access insurance (Beauchamp & Childress, 2001; Fletcher et al., 1997).

Gaps in Ethical Guidance

Although most ethical principles support universal access health care insurance as a way to distribute health care fairly, the ethical theory does not provide enough guidance to inform what the concrete content of a fair, minimum basic package of health care insurance should include in these times of a vast assortment of potentially beneficial services and limited resources (Buchanan, 1998; Emanuel, 1994; Jennings, 1994; Reinhardt, 1997; Daniels, Kennedy, & Kawachi, 2006). The concept of distributive justice concerns how to distribute resources fairly and requires that one look to “justified norms” to develop a fair allocation of health care. The problem of how to determine what the “justified norm” is could range from allocating care when normal opportunity is impaired to providing enough care to ensure individual happiness (Butler, 1999). Furthermore, norms are constantly changing. This point is especially relevant in health care because potentially beneficial treatments are introduced frequently. A sharper definition of this concept of distributive justice for health care is needed for real-life application. The principle also requires that society be engaged meaningfully in social cooperation in determining allocation. Examples of this kind of social engagement are rare in the United States, and it has proved difficult to establish what this minimum basic health care should be. One of the examples of this type of process took place in Oregon in the mid-1990s, when

multiple methods—including telephone surveys, educational forums, and town hall meetings—were used to engage Oregonians in determining which services to allocate to the Medicaid population (Bodheimer, 1997). Critics of this experiment in rationing found that many treatments, such as incapacitating hernias, were left off the treatment list and questioned how the outcomes could be in accord with social justice even when the process involved a high degree of social cooperation (Beauchamp & Childress, 2001). Utilitarian theories require one to look at social efficacy, which may lead one to the slippery slope of microallocation determined by an individual’s value to society.

Ethical Dilemmas in Microallocation Rationing Decisions

Age-Based Rationing. How much and what care should be pursued for the elderly at a time when technical possibilities may be virtually limitless are two issues of great concern to ethicists (Nyland, 2005). Age-based rationing has been actively discussed for over a decade, but currently no evidence-based guidelines have been developed to justify how to ration this way (Boumendil, Somme, Garrouste-Orgeas, & Guidet, 2007). In addition, functional status and not age has proven to be a more accurate predictor of mortality in acutely ill elderly patients (Boumendil et al., 2007). Some argue that priority for health care spending should be given to the young because elders have had a chance to live their lives (Butler, 1999). In general, older patients have less life expectancy and less opportunity to benefit from life-sustaining treatments (Clarke, 2001). Others assert that elders have a moral duty to die rather than continuing to pursue costly medical care near the end of their life (Hardwig, 2000). Justice and egalitarian philosophies value life at any age and require persons to be treated equally (Butler, 1999; Clarke, 2001). Others assert that if viewed in terms of an entire life span, elders will have had a fair and equal opportunity to health care over the entire course of their lives even if they do not receive as many services when they are older (Beauchamp & Childress, 2001; Butler, 1999).

Rationing Based on Birth Weight for Premature Infants. Neonatal intensive care unit technology has made it possible for very low-birth-weight infants to have long-term survival (Meadow & Lantos, 2009). This technology is costly, and children who are born prematurely at very low birth weights typically require many additional forms of specialized care throughout their lifetimes. Some have argued that this expensive technology should be rationed. Research suggests that the life

of adults and older children is valued more than that of premature infants (Janvier, Bauer, & Lantos, 2007). An analysis of this issue notes that this practice would increase racial disparities in health care further because of a higher rate of African American low-birth-weight infants. The authors also felt that setting a birth weight cutoff point at which care will not be offered would deny care to many infants who would have long-term survival (Stolz & McCormick, 1998).

Rationing of Intensive Care Unit Services. Critical care consumes a growing portion of health care expenditures: up to 20% of hospital costs (Truog et al., 2006). Because of the high costs, the critically ill are another group that may be likely targets for rationing decisions because intensive care services are in increased demand and are expensive. Decisions to limit these services often have immediate life or death consequences (Truog et al., 2006). A task force of the American Thoracic Society (1997), along with legal and bioethical consultants, developed a framework for fair allocation of intensive care unit beds. The task force arrived at the following principles to allocate services:

- ◆ Sufficient medical need
- ◆ Sufficient potential for benefit
- ◆ Equal access regardless of ability to pay and personal character

Aged-based rationing was discarded because it does not take into account the risk of death in a young person who may be critically ill with a low chance of benefit (American Thoracic Society, 1997).

Although the framework is not explicit, it takes significant steps in the right direction that will assist hospitals to formulate policies. A recent analysis developed three categories to guide ethical rationing of critical care services: rationing due to external constraints, such as no available intensive care beds; rationing due to clinical guidelines, such as using a narrow-spectrum antibiotic to control the emergence of resistant organisms; and rationing based on clinical judgment (Truog et al., 2006). The last form of rationing is the most controversial because it is not guided by clinical evidence or ethical guidelines and is inconsistent with a physician's responsibility to act in the best interests of individual patients (Szalados, 2004).

Rationing Emergency Services. A new and controversial approach to rationing is being touted as a model for urban health care reform. The goal of the approach is to stem spiraling hospital costs related to lack of insurance, low reimbursement from federal insurance programs, and overcrowded emergency rooms (Japsen, 2008). The approach involves triaging emergency room

patients and directing some of the patients to a nearby community hospital or health clinics before any care is offered (Japsen, 2009). This policy has drawn national criticism. A leading professional group has expressed concern that the medical center is failing in its responsibility to treat emergency room patients and that the policy raises ethical concerns about how hospitals decide which patients to send elsewhere (American College of Emergency Physicians, 2009). U.S. Senator Charles Grassley, a ranking member of the Senate Finance Committee, has stated that he believes this approach may be "culling the least profitable patients from its emergency room" (Japsen, 2008). In response the medical center states that it is trying to manage its costs while focusing on patients with specialized care needs (Japsen, 2008).

Rationing Futile Care. Care may be considered "medically futile" when research demonstrates that a proposed therapy will not improve the patient's medical condition (Bernat, 2005). Some may argue that treatments that are futile should be eliminated completely so more effective treatments can be offered. However, medical futility is not a simple concept and has spurred much controversy. There is no consensus, either from the medical community or society at large, as to what the threshold for "futility" should be (Bernat, 2005; Burns & Truog, 2007). There is often disagreement between health care providers and patients and families as to what the patient might benefit from the treatment (Bernat, 2005; Burns & Truog, 2007). Some hospitals have adopted specific policies, and some states have enacted legislation to overrule disputes from patients and families by formally empowering their hospital ethics committees to determine what is futile (Burns & Truog, 2007). Given the absence of a consensus, however, these attempts have been fraught with problems (Burns & Truog, 2007; Pope, 2007).

THE RESPONSE OF THE PROFESSION

Nurses are in a direct position to see the outcomes of those compromised by the current methods for allocation of health care services. Because of this unique position, it is vital that nursing's voice be an active component of planning for a more equitable and economically viable health care system. Over the last two decades, the American Nurses Association (ANA) (2008) has taken an active stance to articulate the professions' vision for health care reform. ANA's most recent policy statement was put forth in 2008 advocating for a single-payer insurance system. Other key tenets of ANA's agenda are

access, quality, cost, and improvement to the nursing workforce (ANA, 2008). While these are essential elements, it is important for nurses to understand that addressing these elements in isolation will not help with the unsustainable and continuously increasing cost of health care. Nursing leaders had a key involvement on Clinton's Health Care Task Force in the early 1990s (Rubotzky, 2000).

SUMMARY

It may be time again for nurses to consider their role in health care reform efforts. As a profession, we have an obligation to develop needed expertise in the myriad of ethical dilemmas associated with the macroallocation of health care. We also need to develop a cadre of nurse economists. In addition, all nurses should be educated to promote the understanding of both the ethical and economic limitations of both the current and proposed approaches to health care allocation. The debate about health care reform in the United States has been ongoing for decades and will continue as issues such as technology, insurance coverage, an aging society, costs of pharmaceuticals and caring for the uninsured continue to challenge the present system. Nurses need to be involved and advocate for patients and help design a system that works.

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The Nurse as Patient Advocate: Is There a Conflict of Interest?

KAREN MARKUS

Lorraine, a middle-aged widow, is wheeled into the busy emergency department of a large urban teaching hospital. She has been severely beaten and raped, sustaining multiple jaw fractures and pulmonary contusions from blows to the chest. Both wrists are fractured. Doctors insert an endotracheal tube via a tracheotomy to treat her pulmonary edema and provide an airway for reconstructive facial surgery. Although alert, she is able to communicate only by slight head movements. Before she is intubated, however, Lorraine whispers that she got a good look at her assailant. Thus, the detective in charge of her case is eager to get a description of the perpetrator, who is suspected of being a brutal serial rapist.

Her nurse, an emergency room veteran, suggests deflating the cuff of Lorraine's endotracheal tube and briefly occluding the opening of the tube to allow her to whisper. The attending physician vetoes the suggestion on clinical grounds and accuses the nurse of being overzealous in her advocacy on behalf of female assault victims. He believes Lorraine should not answer the detective's questions until after surgery, when her condition is more stable. The nurse, convinced that time is of the essence if the culprit is to be apprehended, obtains Lorraine's consent to her plan. She verbally informs Lorraine of the risks, assuring her that she will be there to handle anything that might go wrong. She does not alert the physician.

The nurse justifies her actions on the grounds that she is complying with Lorraine's wishes and contributing to the greater good, yet she is uneasily aware that she is disobeying the attending physician's orders, as well as promoting her own agenda. The nurse deflates the cuff and Lorraine manages to whisper, "White guy, dark hair" to the detective before she regurgitates, aspirates, and arrests.¹

Melodrama notwithstanding, this scene exemplifies the conflicts that occur daily in health care facilities nationwide: between patients and external entities, such as law enforcement agencies or even family members; between physicians and nurses; between patients' wishes and their own best interests; and between nurses themselves and patients. Many, if not most, of these conflicts implicate nurses' obligations to advocate for their patients.

But what does it mean to be a "patient advocate"? The word *advocate* can be used as both a verb and a noun. As a verb, it means "to support, vindicate, or recommend publicly," and as a noun, it means "one who assists, defends, or pleads for another."² These legal definitions translate into three fundamental duties in the health care setting: (1) to ensure that patients are informed of their rights in a particular situation, including the right to refuse treatment; (2) to support patients in decisions they make; and (3) to protect patients, which includes reporting threats to their well-being.³

Conflict stems from the fact that while nursing is an independent profession with its own body of knowledge and legal accountability,⁴ the vast majority of nurses do not legally function as independent practitioners. Rather, they serve employers within the bureaucratic structure of institutions and implement the orders of physicians.⁵ In the first instance, conflict may arise from countervailing pressures on hospitals. While liability provides hospitals with an incentive to avoid negligence, they are also under economic pressure to increase revenues by treating the largest number of patients with the smallest possible number of nurses. Consequently, the nurse's perception of her advocacy duty may diverge from her⁶ employer's goals. Second, the unique body of knowledge encompassed by nursing, as distinct from that of medicine, may contribute

to conflicts. While medicine focuses on pathology, nursing focuses on patients' response to health problems and the nursing needs that arise from them and are at the root of many quality-of-life issues.⁷ Thus, a nurse's view of her obligations may diverge from a physician's. Third, conflicting loyalties also lie at the crossroads of the nurse's duty of advocacy and her own religious or moral beliefs. Thus, when patient advocacy involves a nurse's duty to support the patient in a decision contrary to his or her personal beliefs or those of the physician, institution, or society as to what is "right," divergent loyalties may lead to fundamental conflicts.

The complexity of the medical environment requires the use of professional judgment to apply the model of advocacy on a case-by-case basis. Application of the model in actual practice may be problematic, however, because legal support for patient advocacy is unsettled. There is insufficient legal guidance to instruct nurses in how to carry out the patient advocate role. As the following survey of case law illustrates, standards of nursing practice are sometimes vague regarding patient advocacy. They may provide minimum guidelines but fail to adequately define professional behavior. Codes of ethics are unlikely to provide legal protection for the nurse who acts as a patient advocate and often are too abstract for the courts to apply. To further complicate the situation, new federal regulations have just come into play, adding to the mix the issue of actions or omissions based on the nurse's own moral or religious beliefs and their impact on his or her role as patient advocate.

SOURCES OF THE PATIENT ADVOCATE DUTY

The duty of advocacy stems from the impact of illness on patients' autonomy and the ability to make decisions, which places the nurse in a powerful position. The experiences to which individuals increasingly are subjected as institutionalized patients create a responsibility to assist them to cope with this environment. Consequently, along with the development of biomedical technology and the corresponding fragmentation of medical care, nurses' primary loyalty shifted from the physician and institution to the patient. This attitudinal shift was recognized by the American Nurses Association in 1976, when it amended its *Code for Nurses* to replace directives about respect for and obedience to the physician with statements affirming the duty of patient advocacy.⁸

The Ethical Basis of Patient Advocacy

Nurses are not covered by employment contracts, so the majority of them are subject to the employment-at-will doctrine, a judicially created rule that permits termination of employment by either party without cause. Thus, a common legal claim made by health professionals sanctioned for acts of patient advocacy is in tort for wrongful discharge. To prevail in this type of claim, the nurse must convince the court that her conduct fell within a public policy exception to the employment-at-will rule. For instance, a nurse may allege that her conduct was supported by important ethical concerns that warrant preventing her employer from discharging her in retaliation. Nevertheless, courts generally have been unwilling to support health professionals' claims based on professional oaths and codes of ethics. A leading case, *Pierce v. Ortho Pharmaceutical Corp.*,⁹ involved a research physician who alleged that she was forced to resign after she refused to work on the development of a drug she believed was hazardous to public health. She argued that doing so would violate her vow to do no harm as a medical doctor under the Hippocratic Oath, thereby giving rise to a cause of action for wrongful discharge.

The court disagreed, ruling that the general language of the Hippocratic Oath falls short of the standard required for public policy. The court stated that an employee has a cause of action for wrongful discharge only when the discharge is contrary to a "clear mandate" of public policy, which emanates from sources such as legislatures and regulatory agencies. However, the court tempered this pronouncement by stating in dicta, "In certain instances, a professional code of ethics may contain an expression of public policy." The burden of proof is on the employee to identify a specific expression of public policy for the judge to evaluate on a case-by-case basis.

The court criticized the physician for failing to use a professional code of ethics to buttress her ethical objections to the drug experiments, recognizing that professional employees "owe a special duty to abide not only by federal and state law, but also by the recognized codes of ethics of their professions." The broad reach of this statement was limited, however, by the proviso that this duty does not permit employees to prevent their employers from pursuing their business. The court admonished professional employees to distinguish business decisions that offend their personal morals from violations of their professional codes of ethics.

However, the court failed to identify a method by which to make this sometimes difficult distinction.

Despite the New Jersey Supreme Court's statement that a code of ethics can serve as a source of public policy, five years later, in *Warthen v. Toms River Community Memorial Hospital*,¹⁰ a New Jersey Court of Appeals refused to recognize the American Nurses Association *Code for Nurses* as such. In that case, a nurse who was assigned to perform hemodialysis on a terminally ill, double-amputee patient had to terminate the procedure on two occasions because he suffered cardiac arrest and severe internal hemorrhaging. The nurse notified her supervisor in a timely manner of her "moral, medical, and philosophical objections" to performing a procedure that further complicated a terminal patient's condition. When the nurse subsequently refused to provide dialysis as ordered, she was discharged.

While acknowledging the nurse's good-faith effort to comply with her professional code of ethics, the court held that the *Code for Nurses* does not provide the clear mandate of public policy required by *Pierce* because it defines "a standard of conduct beneficial only to the individual nurse and not to the public at large." The court articulated the fear that it would be virtually impossible to run a hospital if nurses were allowed the freedom to decide whether to treat patients based on their personal beliefs. The court closed the door further on the use of professional codes of ethics when it stated, "The source of public policy is the statutes enacted by the legislature and in the decisions of the courts; there we find what acts are considered harmful to the public . . ." Significantly, the court assigned the role of identifying public policy to the judge, comparing it to the judge's duty to interpret statutes. Thus, the court took away from juries, which tend to be more plaintiff-oriented, the issue of whether a clear public policy mandate exists to support an act of patient advocacy.

Subsequently, at least two courts in different jurisdictions struck additional blows against the use of professional codes of ethics to define public policy. First, in *Carl v. Children's Hospital*,¹¹ a District of Columbia court specifically agreed with *Warthen*, stating that the American Nurses Association code of ethics does not, as a matter of law, rise to the level of public policy. More recently, in *Medina v. EMSA Correctional Care, Inc.*,¹² a federal trial court in Minnesota declared that the "vague ethical standards" in the American Nurses Association *Code for Nurses* did not allow it to rule on the actions a nurse should have taken in a particular clinical situation.

The Legal Duty of Advocacy

Courts have been more willing to limit the harshness of the employment-at-will rule when the discharge violates a legislatively declared public policy embodied in a nursing practice act. The nursing regulations of some states confer on registered nurses an affirmative legal duty to act "as the client's advocate . . . by initiating action to improve health care or to change decisions or activities which are against the interests or wishes of the client, and by giving the client the opportunity to make informed decisions about health care before it is provided."¹³ To that end, "the nurse, acting as a patient advocate, must assure that appropriate and timely instructions are provided to the patient."¹⁴

Nursing regulations that fail to define the duty of advocacy are less likely to support a nurse's legal claim for wrongful discharge. Thus, attempts by nurses to derive public policy exceptions from existing laws have yielded inconsistent results. For example, in *Francis v. Memorial General Hospital*,¹⁵ a New Mexico court denied the claim of a nurse who refused to float to a specialized unit on the grounds that it would jeopardize patient safety. The nurse argued that to do so would violate his licensing statute, but the court instead stated that floating implements a more important public policy: staffing in a cost-effective manner. Clearly, the court, viewing nurses as a fungible commodity, did not appreciate the degree of specialization required for competent nursing practice. California law, on the other hand, directly addresses the issue of floating to an unfamiliar unit, stating that a registered nurse cannot be temporarily reassigned absent validation of her competency to practice in the new unit.¹⁶

In *Lampe v. Presbyterian Medical Center*,¹⁷ a Colorado court also declined to interpret the broad language in a nursing practice act to protect a nurse against wrongful discharge. The nurse relied on the legislative declaration of policy in the Colorado Nurse Practice Act, which required her to act in a manner consistent with the health and safety of her patients. In that case, the head nurse of an intensive care unit who could not reduce overtime expenditures without jeopardizing patient care was fired for being "unwilling to fulfill the requirements of her job description." She contended that had she done as ordered, she would have violated the statute under which she was licensed. However, the plaintiff's claim for relief was denied due to the lack of prescriptive specificity in the statute governing her professional behavior. Similarly, in *Free v. Holy Cross Hospital*,¹⁸ a

nurse was discharged when she refused to transfer a patient “even if removal required forcibly putting the patient in a wheelchair and leaving her in the park.” The court rejected the nurse’s wrongful discharge claim based on the Illinois Right of Conscience Act, which it interpreted to apply to moral convictions arising from sincerely held religious beliefs as opposed to ethical concerns relating to her duty as a registered nurse. Since the nurse did not allege that the transfer order violated her religious beliefs, the court declined to create a public policy exception to her employer’s right to discharge her. Interestingly, the court stated that the nurse’s ethical concerns fell within the province of the Illinois Nursing Act but did not use it to support her wrongful discharge claim. Thus, the *Free* court missed an important opportunity to clarify the legal parameters of the duty of advocacy.

In contrast, *Tuma v. Bd. of Nursing*¹⁹ illustrates the proscriptive inadequacy of a nursing practice act. The plaintiff, an instructor of clinical nursing, was assigned to administer chemotherapy to a terminal leukemia patient. At the patient’s urgent request, the nurse discussed a controversial alternative treatment with her, but the chemotherapy was continued and the patient died two weeks later after experiencing serious adverse side effects. Although there were no allegations that she had harmed the patient, hospital personnel complained that the nurse “had interfered with the physician–patient relationship.” The Board of Nursing suspended the nurse’s license on the grounds that her discussion with the patient constituted unprofessional conduct in violation of the Idaho Nurse Practice Act. Although the Act explicitly conformed to the policies of the American Nurses Association, she was not permitted to testify regarding the *Code for Nurses*. On appeal, the Idaho Supreme Court found nothing in the language of the Nurse Practice Act to put the nurse on notice that her license would be suspended if she engaged in the conduct at issue. The court decried depriving the nurse of a property right as important as a license to practice her profession in the absence of guidelines established by the Board of Nursing. Therefore, it held that the Board of Nursing had violated the nurse’s constitutional due process rights by suspending her license on the grounds of unprofessional conduct without an explicit statutory definition of such conduct.

On the other hand, sufficiently detailed legislation defining the practice of nursing may support a wrongful discharge claim. Thus, in *Deerman v. Beverly California Corp.*,²⁰ a North Carolina court vindicated a nurse who was fired for responding to a family’s

inquiries about the deteriorating condition of a nursing home resident. When the family was unable to contact the patient’s physician, the nurse advised selecting another doctor because the patient was not receiving adequate care. Although the court expressed reluctance to recognize public policy absent “substantial justification grounded in compelling considerations,” it gave great weight to the comprehensiveness and specificity of the nursing practice act and its administrative regulations, which enabled the court to appreciate that the practice of nursing includes “‘assessing,’ a patient’s health, which entails a ‘responsibility’ to communicate, ‘counsel,’ and ‘provid[e] accurate . . . guidance to clients [and] their families.’” Thus, the court concluded that firing the nurse violated public policy because her comments were proffered in fulfillment of her statutory responsibilities.

CONFUSION IN THE COURTS

Ambiguous legal holdings have caused uncertainty about the behaviors that are subject to sanction. Consequently, nurses have been disciplined or discharged for discussing treatment alternatives,²¹ reporting illegal practices to a government agency,²² and protesting substandard care that resulted in a patient’s death.²³ Moreover, the courts have been unclear about valid grounds for the conduct at issue—for example, whether it must be based on ethical, religious, or moral beliefs. The inconsistent decisions rendered by the courts raise unanswered questions. Should a court first consider whether the nurse’s conduct falls within her obligation to function as a patient advocate if it is set forth in her state nursing practice act? Also, given the fact that different rules may apply to ethical decisions as opposed to those founded on religious and moral beliefs, how should the court distinguish among these bases for behavior?

However, while cautioning health professionals against confusing moral and religious precepts with ethical considerations, courts have failed to provide guidelines with which to accomplish this task. Thus, the *Warthen* court’s characterization of a nurse’s refusal to perform renal dialysis as moral rather than ethical led it to deny her wrongful discharge claim. More important, the court’s failure to articulate standards by which to make this distinction deprived nurses of guidance for future conduct. Moreover, the *Warthen* court erroneously concluded that the plaintiff’s reliance on the American Nurses Association *Code for Nurses* was solely for her own benefit when it stated, “By refusing to perform the procedure, she may have eased her own

conscience, but she neither benefited the society-at-large, the patient, nor the patient's family." On the contrary, the *Code for Nurses* is a policy document intended to promote the quality of patient care rather than the personal interests of individual nurses.²⁴ To add to the confusion, the new federal conscience regulations apply to "religious, moral, ethical, or other" beliefs, but the Department of Health and Human Services (DHHS) has advised that the regulations take precedence over medical codes of ethics.²⁵

Courts need to address the difference between ethics and religion or morals. Ethics focuses on rational methods for choosing the best course of action among conflicting alternatives. Thus, ethics centers on the best interests of the patient. On the other hand, both *religion* and *morals* refer to prescribed beliefs or rules of conduct.²⁶ In terms of conscience regulations, the focus is on the nurse's belief system. This raises the critical question of how the new federal conscience regulations will impact the nurse's duty of patient advocacy.

COMPLICATIONS OF CONSCIENCE ACTS

Following the U.S. Supreme Court's decision in *Roe v. Wade*,²⁷ most states and the federal government enacted so-called "conscience acts" that prohibit discrimination against health care workers with respect to involvement in abortion, sterilization, and sometimes contraception.²⁸ In an attempt to further protect the conscience rights of a broad category of health care workers, controversial midnight federal regulations took effect on January 20, 2009, that implement and arguably expand existing laws.²⁹ The regulations apply to refusing to assist in the performance of health services for a wide variety of reasons: religious, moral, ethical, or "other," although DHHS declines to define these terms. They cover all activities with a reasonable connection to any part of a procedure, health service, or research program that receives any federal funds, either directly or indirectly. DHHS specifically states that the reach of the regulations is broad; thus, direct involvement in the procedure or service at issue is not required to invoke federal protection. For example, an employee whose job it is to clean instruments may refuse to do so depending on the procedure in which they were used. Even referral to a different provider may constitute participation in an objectionable procedure. Furthermore, the regulations cover volunteers, trainees, and contractors in all categories of health care, including pharmacists. Institutions must certify that they are in compliance with the regulations or risk

losing federal funding, even if compliance causes an undue burden on the institution.³⁰

During the official notice period required by law, DHHS received numerous expressions of concern that the regulations will restrict access to medical care, especially basic reproductive health services and contraception. Experts also worry that the vagueness of the regulations may interfere with end-of-life care, "aggressive pain management, transfusions, vaccinations, HIV/AIDS treatment, infertility treatment, and treatment for sexually transmitted diseases." Nor do the regulations contain exceptions for emergency treatment of rape victims or surgical conditions such as an ectopic pregnancy.³¹ According to DHHS, however, the current shortage of health care providers necessitates additional protection of conscience rights. Thus, if the risk of acting contrary to conscience deters individuals from entering the health care field, there will be further shortages, thereby decreasing patient access. Furthermore, DHHS declares that if the regulations do restrict access to services, it will simply mean that they are necessary to protect the rights of health care workers who previously had been providing care in spite of personal religious or moral objections.³² While the Obama administration has proposed rescinding the new federal conscience regulations, rescission will not affect the underlying federal statutes on which the regulations are based.³³ Thus, the law is clearly in flux with respect to the interaction between the nurse's rights of conscience and her duty of patient advocacy.

SUMMARY

Case law and federal regulations demonstrate that nursing advocacy must be specifically supported by statute. Without legislative acknowledgment of nurses' need for legal protection in their role as patient advocates, compliance with this mandate will continue to be confusing and risky. Revision of current laws and administrative regulations governing the professional practice of nursing will decrease the potential for misapplication, as well as provide the clear expression of public policy required by the courts. Therefore, language that sets forth nurses' affirmative duty to advocate for patients should be incorporated into each state nursing practice act or its regulations. This language should be based on a widely acknowledged code of ethics, such as the American Nursing Association *Code for Nurses*, to clarify the definition of ethical decisions. This will enable both the nursing profession and the courts to apply consistent guidelines to more accurately identify conduct that is legally protected.

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Ethical Nursing Practice: It's All About Relationship

WENDY AUSTIN

Over three decades ago, in a special feature on ethics in the *American Journal of Nursing*, Myra Levine argued that being an ethical nurse was not about having moral courage in times of crises, but rather it was the everyday expression of a commitment to the well-being of those in one's care (Levine, 1977). She emphasized that the ordinary, everyday aspects of care were at least as morally important as the heroic ones and were where the excellence of the nurse was revealed. The need for her to make this argument was critical: It was a time of incredible advances in biotechnology when new types of life and death decisions had to be made. In fact, a new field, bioethics, was developing in response to such decisional demands and the pressing need to determine, for example, who would get access to the new and still scarce treatment, kidney dialysis, and who would not. The philosophical tradition of moral rationalism (the application of abstract principles to particular actions) shaped bioethics' use of objective, impartial moral reasoning to solve such quandaries (Taylor, 2000), with the "autonomy of persons" identified as a key value (Jonsen, 2007). In this type of climate, it was vital that nurses reconfirmed that relationships were the underpinning of ethical nursing and that "all nursing practice is ethical practice" (Tschudin, 2003, p. ix).

This imperative has arisen again. Nurses are beleaguered, not only by the continued hegemony of biotechnology but by the market demands driving health care and the form of evidence used to validate effective care. Bioethics, still privileging objectivity, remains intent on principled decision making regarding ethical dilemmas but stays silent on the moral environment of health care systems (Austin, 2007a). In this chapter, the claim will be made that ethical nursing practice must be grounded in meaningful relationships with patients, families, and communities.

When such grounding is not cultivated and supported within health care systems, nurses are unable to practice safely, competently, and compassionately, and as a result, they are made increasingly vulnerable to moral distress and compassion fatigue. The inherent challenges to relational engagement with patients are identified and ways to respond to systemic constraints offered.

STAYING "CLOSE" TO THOSE IN OUR CARE

A contemporary of Myra Levine, nurse theorist Virginia Henderson (2006) chose as her topic for the 1979 Nursing Lecture of the Royal College of Nursing in the United Kingdom "Preserving the Essence of Nursing in a Technological Age." In her lecture, Henderson posits that the essence of nursing lies in its "personal, individualized and human character" (p. 245) and then makes the claim that this essential element was endangered. She points to the conflict between the humane and technical aspects of health care by describing a personal incident: a visit to a friend who was a patient in an intensive care unit (ICU). Henderson found the ICU to be a large, cold, almost windowless room with "forbidding monitoring and other equipment" (p. 247), busy with vigorous, young, cheerful nurses wearing stethoscopes. She describes how frightened her friend looked and how cold he was. He complained that he had been "freezing all day." She asked him if he had told the nurses. "Oh, no," he replied, "the nurses are so busy!" (p. 247). No nurse, she noted, ever approached her to see if she was someone who could help this man who had no close relatives. Henderson's description of three decades ago is entirely consistent with the results of a recent study of the experience of intensive care patients.

Patients in this study found the ICU setting to be a room "as sterile and bare as a cold garage" (Almerud,

Alapack, Fridlund, & Ekebergh, 2007, p. 154). They described feeling invisible as people, reduced to the status of organs, objects, or diagnoses. The researchers point out the irony that although the patients were under extreme clinical scrutiny, they felt unseen at a personal level—"a stranger cared for by a stranger" (p. 151).

The ICU staff was described as having an aloof, cheerful attitude that made it difficult for patients to share their innermost concerns. Some have labeled this "the 'iceberg' pattern of relationship." Like an iceberg, the elements that make up a relationship are unseen or ignored; the veneer of the nurse's smiling, cheerful demeanor keeps the patient's suffering expression at bay (Doane & Varcoe, 2007, p. 192). While the ICU staff in this study kept keen vigilance over technological devices and measurements, they paid scant attention to the patients' timid attempts to tell stories, share experiences, or deal with the eminent possibility of their death. Technical routines controlled much of the nurses' time and attention, leaving little or no time to engage with the patients as individuals. Patients described trying to lie still so they would not set off some gizmo and disturb the staff. Unfortunately, these findings are congruent with other descriptions of the ICU experience. Before her death from cancer, one patient related her experience in a different ICU:

I had tubes down and around me everywhere. I was tied to the bed so I couldn't do anything except gag. . . . There were all these people like me lined up all around the walls on these beds, . . . and the nurses were in the station surrounded by glass. . . . I didn't have any sense of being an individuated character at all, just none, [more] like a log or just something there. . . . The nurses seemed to have no interest. I don't know whether they had interest or not. Anyway, they didn't ever come and look at me or touch me or do anything personal. They would come and check the monitor and do things like that, but they would not look at me. (Liske, 1995, p. 8)

We can only imagine how surprised her nurses might be by this patient's description of their care. They, no doubt, considered that they were keeping her close and safe. It probably never occurred to them that it was the machines and monitors, not the patient, to which they kept close. Technology and its demands can make it difficult even to *see* the person in the bed. In the privileging of technological knowledge and skills, our gaze is redirected.

In the popular television show *House*, Dr. House is fascinated by diseases and the challenges of curing them but not by the human beings who have the

disease. Dr. House represents, it has been said, "the ultimate expression of modern medicine" (Strauman & Goodier, 2008, p. 130). The patient is a body, a case to be solved, and Dr. House's use of reason in encounters with patients is unhampered by emotion or compassion. This notion of the dispassionate, expert gaze, made more valid by its lack of recognition of the patient as a person, is a competing vision that constrains the importance of relationships in care. It is interesting to note that nurses only rarely, and then very briefly, appear in *House* episodes.

In the phenomenological study "Making a Difference in Critical Care Nursing Practice," one of the nurse participants explains, "You can make a difference for the patient when you take into account what they are experiencing and perhaps what it means to them. So I try to get as close as I can" (Hawley, 2005, p. 111). Getting close for the nurses in this study included actions that ranged from the simple—bending the rules about visitors—to the creative—taking a ventilated patient across the street to a pizza parlor (the patient bagged the entire time)—to the daring—barricading a patient's door to keep out the transplant team while family members come to grips with the news that their daughter is dying. These nurses could make a difference for those in their care because they ensured that they were close enough to see them as real people.

In another qualitative study, the experience of accessing health services by individuals living with HIV illness was explored (Mill et al., 2009). Participants shared stories of both genuine engagement and of lack of connection with health care professionals. Learning that you are HIV positive is a frightening experience. One woman described it as "HIV always stands in front of me—like a blockade." She said, however, that her caregiver gave her the necessary courage to live with HIV by reaching across the blockade of contagion and the specter of death to support her. The participants in this study were very clear about the type of caregivers they wanted: "*real* caregivers who make them feel human and not just a number. He really cares about his patients and it's not superficial because you see it in his eyes. He has my interests at heart. I know that because he shows it to me. Like, he stays and asks me what is on my mind. I could tell him anything, or ask anything, whatever I want to ask. That's really good, you know." *Real* refers to a thing that is actual or true, genuine, not imaginary (Barber, 1998, p. 1201), and real nurses engage those in their care in a genuine way, seeing the person before them as more than a number, a disease, a matter of paperwork, or a customer. *She actually looks at me and she acts like she cares.*

THE INHERENT CHALLENGES OF REAL, ETHICAL ENGAGEMENT WITH PATIENTS AND FAMILIES

Reaching across blockades of fear, suffering, and illness to get close to the person in one's care is not easy. An inherent privilege of nursing practice—and one of its greatest challenges—is that every nurse is brought close to the most profound aspects of life—birth, suffering, and death—to grief, pain, and joy. It takes courage to be a nurse. In thinking about relational engagement with patients, it is necessary to acknowledge this and to recognize the circumstances that may make close connections especially challenging.

Reaching out to a patient can literally be dangerous to the health of the nurse if the patient has an infectious disease. When HIV/AIDS first appeared, for instance, little was known about it except for its virulence. There was only symptomatic treatment. Yet nurses and other caregivers placed themselves at risk (the disease could seem like a needle prick away) to care for those who were suffering with and dying from this terrible new disease. When there was an outbreak of Severe Acute Respiratory Syndrome (SARS) in Canada in 2003, some nurses and staff members caught the disease while caring for patients and died. Their colleagues carried on, keeping close to the sick, encumbered though they were with protective goggles, gloves, masks, fear, and exhaustion. Connie Leroux, a nurse who contracted SARS and recovered, was questioned about her potential response if an avian flu outbreak occurred. She answered as follows (Spicer, 2006):

My initial response when I think about [avian influenza] is that I'd like to run away from it all and protect my family, . . . and that's the sense I get from my colleagues.

She went on to say, however, that her feelings of responsibility to her community and patients would convince her to stay. Risk and responsibility are intertwined in nursing relationships.

Sometimes the challenge resides simply in being close to death itself. Consider pediatric intensive care nurses who, in the course of one shift, may be expected to care for a child who dies and becomes an organ donor. Systematically, this occurs as a tidy, scientific ordering of events: the nurse literally makes a final note in the child's chart and then starts a new one for the organ donor. For the nurse, however, the change to caring for the body of the child, a living patient only moments before, is not so simple (McGibbon, 2005). Comforting the child's family can be overwhelming,

and even having no family to comfort can be profoundly sad. In an article, Pask (2001) relayed the following:

A young man rapidly became brain dead after a motorbike accident. Even though I dreaded meeting his grieving family, the absence of the family was worse. I had to take care of his young, lacerated body and accompany him to organ donation without any family saying farewell. (p. 50)

Judy Rashotte (2005) says PICU nurses practice while “dwelling with the stories that haunt us” (p. 36). Haunting stories are intrinsic to nursing.

Sometimes it may be our very “expertise” that gets in the way of genuine engagement with a patient. Dennis Greenwood, a nurse manager, has elucidated this by describing a “rather mundane incident” that, by creating “a distinctly ‘relational’ experience,” transformed his response to “Rodney,” a patient with dementia (Greenwood, 2007, p. 225). Rodney's dementia was progressing to the point that the coherency of the patient was diminishing and the risks of self-harm increasing. Dennis had to decide whether Rodney should be transferred to a secure unit, a decision he decided to delay until after his holiday. On his first day back at the nursing home, Dennis meets Rodney at the top of a set of stairs and is greeted with “Hello, old boy! Had a good holiday?” Rodney's recognition of him and his ability to link Dennis's absence with a holiday startled Dennis and dramatically changed the way he was contemplating the transfer. In this unexpected moment, he saw this patient in a face-to-face way that was not obscured by nursing perceptions of a patient with dementia. Dennis Greenwood made the following conclusion:

The “gift” of care emerges from a commitment to a relationship between people who give care and those who receive it; systemized approaches that are based on impersonal assumptions about people impose a “discipline” at the expense of this gift. (p. 231)

It is not a matter of rejecting expert knowledge of disease, its effects, its treatment, and related nursing practices. Such knowing is necessary; it is simply not sufficient. Nurses need to get close enough to recognize how the disease manifests in a *particular* patient's life if they are to give ethical care.

The challenge of ethical engagement, in fact, may reside in difficulties in understanding the patient's life. The culture of patients and families—more than culture: their religion, socioeconomic status, education, and life experiences—may be so different from that of the nurses from whom they are accepting care that

sensitive efforts to seek such understanding must be made (Pascoe, Morse, & Olson, 2004).

To hear patients' voices that are new or strange to them, nurses need to get close. In *Listening to the whispers: Rethinking Ethics in Health Care*, Dinkins and Sorrell (2006) emphasize that those who are marginalized in society—such as the elderly, the disabled, the poor—may only feel safe discussing their suffering if they whisper. Health care, they argue, must be a place where even these soft voices can be heard. Their assumption is ethics is about human suffering and our capacity to compassionately address it.

At times, understanding a patient and his or her experience is incredibly difficult because of the very identity of the patient. Nurses in the military who must give care to wounded enemy soldiers or "detainees" may have to overcome seeing such a patient as only "the enemy." Seeing this soldier as a human being, as someone's son or husband or brother, can help make a bridge to that person for the nurse; it can help the nurse to "attempt to see the world through the detainee's eyes" (Smith, 2008, p. 11).

Nurses who are practicing in forensic settings can have patients who have committed terrible crimes: arson, murder, rape, child abuse. In my own area of clinical practice, I have been studying with an interdisciplinary team the way health professionals enact ethical relationships in these settings (Austin, 2007b). In our study, one participant recalled looking at the hands of his patient, a man who had murdered a woman by strangulation. He remembered thinking about how very ordinary these hands, which had committed such a terrible act, seemed. Without being blind to a patient's crime—perhaps a crime that seems impossible to understand—forensic nurses must be able to see beyond to the person before them, ordinary in many ways, who committed it. For both the military and the forensic nurse, the challenges to ethical connection can be uniquely complex, encompassing the potential harm from the patient to the nurse.

Nurses profess to be trustworthy in their practice—that is, they claim a fiduciary relationship with those in their care. While this relationship underlies all that nurses do, it cannot go unrecognized that there are challenges inherent to it. Nurses' efforts to be close and connected to their patients require support by the health care environments in which they practice. Yet it seems that rather than support, nurses are increasingly encountering barriers to practicing ethically.

SYSTEMIC BARRIERS TO ETHICAL PRACTICE

In the Pulitzer Prize-winning play *Wit*,¹ the main character, Vivian, is being experimentally treated for ovarian cancer. A scene opens with Vivian (bald from chemotherapy) sitting on her bed. A nurse enters the room and asks, "How are you?" but then leaves without even waiting for Vivian's answer. Vivian later explains to the audience that she had been asked how she was while vomiting into a kidney basin and while coming out of a four-hour surgery with tubes in every orifice. She figures that she will be asked how she is even when she is dead. "I shall miss that," she says. What is so disturbing about this scene is that a nurse's "How are you?" comprises an ethical question. As nurse philosopher Brenda Cameron (2004) describes it, it is a question meant to open up "a relational space that calls forth a response" (p. 53). The question reflects the nurse's attunement to the vulnerability of the patient and, in its asking, opens an ethical moment. This is not the case, however, when someone asks Vivian the question. It is as much an empty gesture as the "How are you?" that you get from a grocery store cashier.

It is becoming increasingly difficult to retain individualized care from health care systems that have undergone massive commodification and market rationalization (Herdman, 2004). These changes have been termed *McDonaldization* by the sociologist George Ritzer (2004), who uses the restaurant McDonald's to represent the societal push toward extreme efficiency, calculability, predictability, and control. We see this push in health care systems in changes to how work is done (e.g., cost effective routinization, standardization, quantitative measurement and evidence, and prescribed modes of engagement). It alienates genuine emotions, like compassion, from practice (Herdman, 2004; Peter & Liaschenko, 2003). Even emotions are McDonaldized. According to Meštrović (1997), they become "bite-size, prepackaged, rationally manufactured emotions—a happy meal of the emotions" (p. xi). In this type of system, the superficial smile of the too-busy nurse becomes the accepted norm.

Ruth Malone (2003) has described meaningful proximity to patients as central to nursing practice. She characterizes such proximity as being of three types—physical, narrative, and moral—all "nested" together

¹ The play was adapted as a movie in 2001, directed by Mike Nichols and starring Emma Thompson.

(p. 2318). *Physical* proximity she defines as “a nearness within which nurses physically touch and care for patients’ bodies”; *narrative* as coming to know the patient by learning the patient’s particular story (of illness, of life); and *moral* as encountering the patient as other and recognizing “a moral concern to ‘be for’” him or her. She argues that organizational restructuring and its economic and ideological pressures toward objectification, standardization, and control have caused a loss of the once taken for granted closeness of nurses to patients. Nursing, she warns, is being reshaped as a “distal” practice, with nurses losing their connection with patients and becoming more like technicians with a “we just run the trains” mentality (p. 2324). She wonders if the departure of experienced nurses from hospitals is connected with the role of the distal nurse being incongruent with nurses’ understanding of nursing practice.

Janet Rankin and Marie Campbell (2006), nurse sociologists, argue that health care management, driven by accounting logic and shaped by information technologies, aims at improved productivity rather than holistic responses to health care needs, with people in the system—patients, families, and staff—becoming administrative objects to manipulate. The result is, they claim, that nurses, educated and committed to care for people, are instead expected to care for the organization.

Nortvedt (2001), a nurse philosopher, says what has become central to nursing practice is not how to give the best care to one’s patients but how to minimize harm created by sociocontextual circumstances. In health care systems, when economic rewards are the dominant criteria for success, calculations become “grotesque,” “putting dollar assessments on human lives” (Taylor, 1991, p. 6). Certainly, the organization’s economic well-being as the ultimate focus of care has direct implications for ethical nursing practice.

In a qualitative study of ways to support relationships between staff and families of persons residing in continuing care facilities, lack of sufficient resources were identified by both groups as negatively affecting relationships (Austin et al., 2007). Families searched for clues to the quality of care being given. They looked for what they termed *the little things*: their mother was up in a chair, her hair was brushed, and she was wearing her favorite sweater. It was important that their family member was *known* to the staff and that individual needs were being recognized and met whenever possible. Staff participants in this study described the way a shortage of staff and/or time could make only basic aspects of care (e.g., feeding patients) possible, and they

felt badly on these days. A nurse who had been practicing for 20 years described feeling pity for the new generation of nurses:

They don’t know the kind of nursing you could do. I mean, right now you are almost like a triage nurse. Like [having to say to patients], “If you’re not this sick, sorry.”

The families were very cognizant that nurses and other staff were constrained by systemic demands. A family member participant put it this way: “If there’s any fault, it’s at the systemic level and not with the individuals working here. I’m convinced of that.”

Nurses who are “unable to answer the call” of their patients feel terrible, even when they recognize that it is systemic problems such as a lack of resources (especially lack of time) that are diminishing their ability to give quality care. The moral distress that nurses experience at such times can lead to thoughts of quitting one’s current position, or even nursing itself. Some give up listening to patients’ calls (Austin, Bergum & Goldberg, 2003). Moral distress occurs when nurses are unable to practice as they believe they should. Nurses frequently point to institutional practices and policies as the source of constraint on their professional practice that enforces their distance from patients. The related, but distinct, experience of compassion fatigue is described by nurses with hopelessness and extreme sadness. In a study of nurses’ compassion fatigue, we found that nurses think back, regretfully, on “the nurse I used to be” (Austin, Goble, Leier, & Byrne, 2009). Nurses identify a health care environment in which they are unable to be the kind of nurses they want to be and where they have to constantly struggle to give the quality of care they believe necessary as a major contributor to their overwhelming fatigue. Both moral distress and compassion fatigue directly affect nurses’ ability to practice.

Being genuinely present, attuned, and engaged with those in our care will always involve great challenges. Such challenges are inherent in the nature of caring work. Health care environments must be designed and administered in such a way that the possibility of real care relationships is cultivated and sustained. When they are not, it costs not only patients and families but health care professionals as well. All are negatively affected. Without ethical engagement with caregivers, patients are alone, no matter how many professionals stand around them (Gadow, 1995). Without real connections to patients, professionals cannot meet their fiduciary responsibilities to patients (Reynolds, Scott, & Austin, 2000).

WHAT CAN NURSES DO TO ENSURE ETHICAL NURSING PRACTICE IS SUPPORTED?

One of the most fundamental things that nurses can do to get support for ethical practice is to explicitly identify relationships with patients, families, and communities as the foundation of ethical nursing. It is important to be clear that ethics is more than making good decisions in times of crises and to name care issues appropriately as ethical ones. While studying nurses and the social organization of ethics in hospitals, Chambliss (1996), a sociologist, discovered that although “just over the nurses’ shoulders” there was “a young man dying of AIDS whose parents refused to visit him; or an old woman, who when not lost in a drugged stupor would beg to die; or a hopelessly deformed infant who hadn’t breathed on her own for four months” (p. 59), the nurses did not see such situations as ethical ones. While they were not oblivious to their patients’ situations, they simply did not recognize them as involving ethics. Yet a precondition of ethical practice is a sensitivity to the moral domain of practice (Vetlesen, 1994), a recognition of the fiduciary nature of everyday practice. To label a clinical situation as an ethical one can be powerful. With such naming, the situation becomes more than a problem for the individual nurse to resolve.

If there is reluctance on the part of nurses to identify relationships as foundational to ethical practice, it may lie in the numbing of emotions or the detachment that seems necessary to survive in some practice environments. When NICU staff were surveyed about ethical dilemmas and their professional self, the prime issue identified was aggressive treatment of infants on the “edge of viability” and the moral distress it caused (Hefferman & Heilig, 1999, p. 177). One nurse noted, “From the perspective of an NICU nurse, I can detach myself emotionally and just be a highly skilled, highly technical RN. It seems I must do this in order to handle 22- to 25-week infants” (p. 176). Another responded, “Basically after working in the NICU for 10 years, I have become numb to my emotions involving ethical concerns.” In an article entitled *Caregiver Distress: If It Is So Ethical, Why Does It Feel So Bad?*, Doka, Rushton, and Thorstenson (1994) suggest that caregivers are expected to keep their distress “in the closet” even though ethical decisions concerning patient care affect them on an emotional as well as an intellectual level (p. 437). We need to achieve in our health care environments the space for nurses and others to raise the messy ethical questions and to safely voice their concerns.

Ethical communication involves conversation, not just the sharing of information (Bergum, 2004; Frank, 2002). Nurses need to find ways to share their own points of view and to be open to others’ views if our health care institutions are to be morally habitable (Austin, 2007a). And if they are to be morally habitable places, not just “well-run” businesses, it must be stated as an explicit, articulated expectation. One must ask the question “Is this a place where I can practice ethically?”

As nurses, we need to acknowledge that there are inherent challenges to getting close to patients and that we need to be supported in initiating and sustaining such closeness. We must be sensitive to threats to genuine connection. They can occur even when care is to be focused upon relationships. Based on her experience as the mother of a young woman with schizophrenia, Maureen Foy (2007) described the key to the difference between a good and a terrible experience for families who deal with mental health care services: It is whether her daughter’s vulnerability is recognized and responded to with respect. She warns us, “We can advance as much as is humanly possible in brain imaging, psychotropic drugs, models of therapy and so on, but if you cannot smile, give comfort, or even acknowledge another person’s presence, then all this is for nothing, absolutely nothing” (p. 2).

Arthur Frank (2004), a sociologist, claims that the main challenge of 21-st century health care is not new treatments for illness or disabilities, which have already been accomplished but to “increase generosity with which we offer the medical skill that has been attained” (p. 1). Frank offers the paradigm of hosts and guests to replace that of consumers and providers. He calls for a hospitable welcome to exist in health care: “the grace to welcome those who suffer” (p. 1). The ICU researchers cited previously in this chapter, although unaware of Frank’s work, make a similar point: “*Hospes* in its Greek root means ‘stranger-guest-friend’” (p. 151), signifying that hospitals should welcome (greet kindly) those who must be there. Nursing is grounded in the values of generosity and kindness. We must be cognizant that threats to our upholding of such values are threats to ethical practice.

SUMMARY

In this chapter, it was argued that ethical nursing practice must be situated in meaningful relationships with patients and families. When time pressures, systemic demands, and the inherent challenges of getting close to others hinder nurses from engaging with those in

their care, ethical practice is placed at risk. Given the contemporary forces (e.g., biotechnological, economic, structural) shaping today's health care environments, it is crucial that nurses keep in mind that it is the everyday, relational commitment to those in their care that characterizes the ethical nurse.

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Harassment and Discrimination Issues in Nursing

ANITA J. SZCZEPANSKI

In the nursing world, discrimination and harassment can take many forms, some of which are illegal. This chapter describes both illegal discrimination and harassment and the types that although not against the law, can still inflict injury on the victim. We then present effective ways that nurses can deal with such situations.

DISCRIMINATION

Several federal laws prohibit different types of discrimination by employers both public and private. Many states also have similar laws prohibiting discrimination, and some states go beyond federal laws to give additional protection to employees. Table 65-1 lists the main federal laws and the types of discrimination they prohibit.

TABLE 65-1 Major Federal Laws and the Prohibited Discrimination

Statute	Basis of Prohibited Discrimination
Civil Rights Act of 1964 88 P.L. 352, 78 Stat. 241 (1964) ¹	Race, color, religion, sex, or national origin
Americans with Disabilities Act 101 P.L. 336, 104 Stat. 327 (1990) ²	Disability or perceived disability
Pregnancy Discrimination Act 95 P.L. 555, 92 Stat. 2076 (1978) ³	Pregnancy
Family Medical Leave Act 103 P.L. 3, 107 Stat. 6 (1993) ⁴	Serious health illness, birth or adoption of child
Equal Pay Act of 1963 88 P.L. 38, 77 Stat. 56 (1963) ⁵	Gender with respect to compensation

Discrimination under the Civil Rights Act of 1964

Most employees are familiar with the legal prohibition on employers regarding racial and ethnic discrimination, religious discrimination, and sex discrimination, which includes sexual harassment. A lawsuit for discrimination can be proven with direct evidence (which is difficult to find, and often none exists) or indirect evidence through a test known as the McDonnell Douglas test.⁶ The requirements for making a case against an employer for illegal discrimination using indirect evidence are (1) the employee is a member of a protected class, (2) the employee was meeting the employer's legitimate expectations at the time of the adverse action, (3) the employee was subjected to an adverse employment action (such as discipline, demotion, failure to promote, termination, failure to hire, being paid less money, etc.), and (4) the employer treated similarly situated employees not in the protected class more favorably.⁷ Once the employee can establish these four things, the burden shifts to the employer to show that it had a legitimate nondiscriminatory reason for the adverse employment action, and then the burden shifts back to the employee to show that the employer's proffered reasons are merely pretextual.⁸

Many nurses today are from foreign countries and may have a strong accent or not speak English well. One example where ethnic discrimination can occur is where a nursing supervisor tells a Filipino nurse that she is not going to be put in charge because her accent is too thick, and others have trouble understanding her. Employers need to see the special traits of foreign nurses as beneficial to the health care world because patients from other countries who do not have a good command of English may need a nurse who speaks their language. Nurses must understand and respect the fact that patients come from many different backgrounds and cultures, but the same standard does not

seem to apply to nurses when dealing with one another. We have seen an increase in workplace programs, such as diversity training, because employers are attempting to take preventive measures against racial and ethnic discrimination. However, diversity training is not mandated by law, and even where it is instituted, it may have little or no effect on someone who holds a great deal of prejudice against people of a different race or national origin.

With respect to religious discrimination, the standard is a bit different. The employee must prove that he has a sincere religious belief that conflicts with a requirement of his employment, that he informed his employer of his religious beliefs and resultant conflict, and that his employer took adverse action against him as a result of his failure to comply with the conflicting employment requirement.⁹ When the issue of religion is involved, employers may be required to accommodate a nurse whose religious beliefs do not allow her to work on Saturdays or do not allow her to participate in procedures such as abortions.^{10,11} Another nurse should be assigned to assist with abortions or other procedures that may be the basis of a nurse's religious objection. How should employers comply with the Civil Rights Act to accommodate a nurse's religious beliefs and simultaneously prevent discriminatory or retaliatory behavior from the rest of the nursing staff?

The more common types of discrimination in the nursing world are sex discrimination and sexual harassment. Because nurses are predominantly female, it can often be the male nurse who is the victim of sexual, or the more appropriately termed *gender*, discrimination. Female nurse managers and other female staff nurses sometimes believe that the male nurse cannot do as good a job of nursing because women are thought of as nurturers. Male nurses report that they are treated differently from female nurses when it comes to personal hygiene and being able to care for female patients, especially when it comes to obstetrics and gynecology.¹² On the other hand, it seems that discrimination against males in nursing has decreased in recent years, with some males reporting that they have always felt the doors of opportunity in nursing were open to them.¹² While male nurses could also be the victims of sexual harassment, it is difficult to know how often this occurs because "currently no specific studies of men in this area are available."¹³

The Equal Pay Act goes hand in hand with gender discrimination when a salary disparity based on gender exists. The Equal Pay Act requires that men and women be given equal pay for jobs that require substantially equal

skills, efforts, and responsibilities, performed under similar working conditions in the same establishment.¹⁴ However, different levels of pay are allowed when they are based on seniority, merit, quantity, or quality of production, or some factor other than gender.¹⁴ The majority of perpetrators of sexual harassment toward nurses are physicians. Often, physicians rank above nurses in medical facilities, and gender, socioeconomic status, and job description can make a nurse subordinate.¹³ The two types of sexual harassment are *quid pro quo* and hostility in the work environment. *Quid pro quo* means "this for that." An example is when the harasser (such as a physician or manager) states that he will give some type of employment benefit to the nurse in exchange for some type of sexual contact. It can also come in the form of a threat, where the perpetrator threatens to discipline, terminate, or otherwise take away some employment benefit or condition if the nurse does not agree to his demands.

A hostile work environment is created by direct or indirect sexual comments or unwelcome sexual advances that interfere with the nurse's work performance or create an intimidating, hostile, or offensive working environment.¹⁵ The comments or other acts must be more than an isolated incident in order to create a hostile environment. Many people often misuse the term *hostile environment* to describe bullying or lateral violence (discussed following), but the term comes from the Civil Rights Act to describe a type of racial or sexual discrimination. If the hostility is not based on race, color, or gender, it is probably not the kind of discrimination or harassment that falls under the protection of federal laws and, therefore, is not illegal.

It is reasonable that discrimination from a supervisor, an agent of the employer, or an independent contractor or another co-worker is illegal, but what about when a patient is the source of the discrimination? What should a nurse do when the person he or she is caring for makes inappropriate comments or sexual advances? Does the employer have an obligation to do something about it? If so, how should the employer respond? How should the nurse respond?

Americans with Disabilities Act (ADA)

The ADA prohibits employers from discriminating against individuals who have a physical or mental disability that substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment.¹⁶ To qualify for protection under the ADA, the disability must affect one of the nurse's major life activities, such as

standing, sitting, walking, pushing, pulling, lifting, sleeping, eating, reading, bending, working, and communicating.¹⁶ A nurse must request an accommodation under the ADA for the disability in writing. If the nurse can work in the position with or without a reasonable accommodation, the employer must allow the nurse to work in that position unless the employer can show it will cause an undue burden.¹⁶ As of January 1, 2009, new amendments to the ADA became effective that changed the way *disability* is interpreted and the definitions of coverage.¹⁷

It may be obvious when a nurse has a physical disability and needs an accommodation, but something that is not as obvious is when a nurse has a substance abuse problem. Health care workers have a high rate of substance abuse, mainly because they often have easy access to drugs, but also as a result of the stress of nursing. A nurse is protected under the ADA while he or she is in recovery but not while abusing drugs.¹⁶

Pregnancy Discrimination Act

Pregnant women should not be discriminated against in the workplace.¹⁸ An example is when an employer refuses to hire a pregnant job applicant because he realizes the potential employee will soon go on maternity leave and possibly not return to the job. Pregnancy discrimination cases can be difficult to prove because the employer's motives can easily be concealed.

Jenna worked as an ER nurse on the night shift at a relatively small hospital. She already had one child before being hired, and that pregnancy had been particularly difficult. She had also gone through a nasty divorce. Not long afterward, Jenna learned that she was pregnant.

Jenna's supervisor had been trying to get pregnant for a couple of years. Everyone knew that she had been receiving fertility treatments for some time. Although Jenna wanted to conceal her pregnancy, she had severe morning sickness and vomited at work one day. She also learned that she had gallbladder disease that was exacerbated by the pregnancy. Although she was very ill, she wanted to keep working because she knew she would now need both maternity leave and surgery.

Jenna finally told her supervisor that she was pregnant. She had been vomiting all day, and she asked her supervisor if she could leave early. The supervisor was upset about Jenna's unplanned pregnancy because she was unable to get pregnant herself. She commented about Jenna's prior difficult pregnancy and suggested that Jenna see a doctor who could "take care of it."

Later, the supervisor also commented that she wished she was as sick as Jenna.

Over the next few months, Jenna was repeatedly disciplined for missing work due to illness both before and during her pregnancy. One night, she was so sick that the ER doctors insisted that she check herself into the hospital. She did so and completely forgot about punching her time card. As a result, her supervisor put Jenna on a four-month probation and told her if she took any more sick days, she would be terminated.

Jenna came to work every day after that because she was so afraid of losing her job. She continued to vomit frequently while at work. One day Jenna went to the break room to take some antinausea medication, and she rested for 15 minutes past her normal break time. A house supervisor entered the break room, and when Jenna told her she was not feeling well, the house supervisor informed the ER supervisor, who fired Jenna for violating her probation by taking an extended break. Was Jenna a victim of pregnancy discrimination, or was the supervisor justified in accusing Jenna of falsifying her time card and then violating her probation?

Family Medical Leave Act

The FMLA allows an employee to take up to 12 weeks of leave per year for the following reasons:

- ◆ Birth of a child adoption, or foster placement of a child
- ◆ Serious health condition of the employee
- ◆ Serious health condition of a family member (defined as a spouse, child, parent)¹⁹

The employee must have worked for the employer for at least one year and must have worked at least 1250 hours in the last 12 months preceding the leave. A physician must provide certification regarding the basis for the FMLA time. If the leave is foreseeable, the employee must give 30 days' notice to the employer. FMLA time can also be taken intermittently, or the employee can work a reduced schedule.²⁰ The nurse should be very specific when calling to use intermittent time. If the nurse just says she is "sick" and does not provide enough information for the employer to understand that the illness is covered by a previously approved intermittent leave, the time may not be covered.

An employer may not discriminate or retaliate against a nurse for taking or using approved FMLA time.²⁰ Retaliation often occurs when an employer counts approved FMLA hours or leave time against the nurse as an absence that can lead to discipline. It doesn't matter what the absenteeism policy requires; such absences cannot be counted against the nurse if

the FMLA is approved. Retaliation can also occur more subtly, such as when the employer makes small changes to the nurse's working conditions after she returns from the leave. Finally, if the employer does not place the nurse in an equivalent position with equivalent pay and benefits after returning from a family medical leave, it is a violation of the FMLA.²⁰

HARASSMENT

Harassment can be similar to discrimination in that if the harassment is based on the person's race, color, religion, gender, or national origin, it is illegal. Many people confuse somebody at work giving them a hard time with harassment. While this type of behavior may feel like harassment, it is not illegal. Still, it should not be allowed or tolerated. Today's nursing workforce, however, has become savvy enough to identify certain kinds of improper workplace conduct and are attempting to fight back.

Workplace Bullying

The term *bullying* is quickly becoming more commonplace. Bullying is defined as "conscious, willful, and deliberate hostile activity intended to harm, induce fear through the threat of further aggression, and create terror."²¹ Bullying in the workplace is "persistent, nonsexual, occurs without physical violence, involves an imbalance of power or privilege, escalates from less to more severe behaviors and results in a negative effect on the nurse."²² Some common examples of bullying toward nurses are persistent and unwarranted criticism in private, criticism in public designed to humiliate, treating nurses as if they are incompetent, and unreasonable changes to the nurse's patient assignments or work responsibilities.

Brenda is a nurse in the cardiac ICU on the night shift. She has a lot of experience and has worked at the hospital for about eight years. Very often, the physicians get angry at both Brenda and the other night nurses if they call the physician in the middle of the night to ask about medication orders or to report on a patient's condition. The physicians can get quite verbally abusive. One night, Brenda calls a physician about one of his patients, and without even answering Brenda's question, the physician yells, "Would you like it if I was *your* doctor and I hadn't gotten any sleep the night before seeing you?" Brenda complained to her supervisor about the physician's response, but the supervisor was intimidated because it involved a doctor.

Recently, the hospital changed its policy on notifying nurses about new physicians' orders. Under the previous policy, the orders would be flagged by the desk clerk on the day shift, and the chart would be placed on the nurse's station. The day shift nurses would check the charts and would easily notice the flags so they could attend to new orders. Under the new policy, the new physicians' orders were not flagged at all, and the day shift nurses would have to actively look for new orders. This was leading to a huge problem with the day shift nurses missing orders and not even being aware of when a physician had completed rounds on the patients.

One night when Brenda was at work, a day shift nurse informed her that she had just noticed that another day shift nurse had missed a physician's new order for penicillin G IV. The day shift nurse had requested that the medication be brought to Brenda. Unfortunately, the house supervisor brought Brenda the wrong medication. Brenda did not feel comfortable calling the physician to ask about the medication order due to the previous verbal abuse she had experienced. How can Brenda effectively advocate for her patient and ensure that he receives the right medications in this type of environment?

Lateral Violence

Lateral violence has been defined as consisting of unacceptable behaviors that range from unintentional, thoughtless acts to purposeful, intentional, destructive acts meant to harm, intimidate, or humiliate another group of nurses or an individual nurse.²³ The behavior can be isolated and random or a pattern of repeated behaviors that create a culture of hostility in the workplace.²³ While *lateral violence* is a relatively new term in the nursing world, it is not a new phenomenon. It has been occurring for a great number of years, but many have simply not recognized how inappropriate it is or they were not sure how to address it. Some nurses have probably even tried to address it but have not experienced any lasting or successful results.

Caleb, a nursing student, is doing his clinical rounds in the OB department, and he comments to one of the nurses about how well the unit works together and how the nurses are very respectful to one another. He asks the nurse how they have managed to create such a great working environment in their unit. The nurse responds, "We just drive away any nurse we don't like or who doesn't work well with others." Caleb is shocked. This is obviously lateral violence toward the nurses who have been forced out, but it is also a subtle threat toward Caleb

about how he must “fit in” if he is going to continue to work in that unit or perhaps any nursing unit.

As of January 1, 2009, the Joint Commission is requiring that all hospitals, nursing homes, home health agencies, laboratories, ambulatory care facilities, and behavioral health care facilities must have a code of conduct in place that determines which behaviors are tolerated and which are not and that creates a formal procedure for managing any unacceptable behaviors.²⁴ This is the first step in formally and uniformly addressing lateral violence in the nursing world. Nurses can help end lateral violence by recognizing it, standing up for one another and for themselves, and challenging employers who tolerate bad behavior or fail to enforce the Joint Commission's required code of conduct.

PROTECTING YOURSELF: STOPPING AND PREVENTING WORKPLACE DISCRIMINATION AND HARASSMENT

Besides the obvious lawsuit the nurse can file for certain kinds of discrimination and harassment that meet the legal definitions, how else can a nurse address discrimination and harassment problems in the workplace? The *best* protection is a collective bargaining agreement. A collective bargaining agreement starts with a union organizing campaign. Many different unions represent nurses and other health care workers for purposes of collective bargaining and advocacy of nursing issues. A union can provide avenues for addressing improper conduct in ways that nonunionized employees cannot do on their own. A collective bargaining agreement can provide additional protection that the law does not.

The most important thing a collective bargaining agreement provides is job security. Under all MNA collective bargaining agreements, an employer cannot discipline or fire a bargaining unit nurse without having just cause. Such improper disciplinary action can be challenged through a grievance. If the discipline or termination of a nurse is the end result of ongoing bullying or lateral violence toward the nurse who is disciplined or fired, the union can argue that the employer did not have just cause to implement the disciplinary action. In a collective bargaining relationship, the union and the employer are generally free to agree to any provision above and beyond what the law requires or covers. The collective bargaining agreement can include prohibitions on bullying, lateral violence, and any other form of harassment and may include references to how such behavior will be handled by the employer. The

collective bargaining agreement can provide specialized protection for nurses and give the nurses a voice in the decisions made about their workplace. When the workplace is harmonious, the nurse is better able to care for her patients.

Quan and Debbie are ICU RNs at a hospital. All of the staff RNs at the hospital are unionized with MNA and have a collective bargaining agreement with a just cause provision regarding discipline and termination. Quan is an older nurse and has been in the department for over 15 years, whereas Debbie has been a nurse for only 2 years. Quan thinks that Debbie does not fit in well with the other nurses because she is not outgoing and tends to keep to herself and do her work. Quan begins to make snide comments behind Debbie's back to the other ICU nurses but still making sure Debbie is within earshot. He tells other nurses that Debbie is a bad nurse and doesn't belong in the ICU where she could hurt patients. Most of the ICU nurses don't say anything in response to Quan's comments, but they are not friendly with Debbie either.

One day, Quan sees Debbie in a room with a patient, hanging an IV medication. He goes to the supervisor the next day and reports that Debbie was not hanging the IV bag properly. The supervisor is suspicious of Debbie because she thinks Debbie is too shy and the supervisor has always praised Quan's work. The supervisor questions Debbie about the IV medication. Debbie insists she did not hang the IV improperly, but because Quan has been there longer than Debbie, the supervisor believes Quan and thinks Debbie is just trying to cover up a mistake. The supervisor gives Debbie a one-day suspension. Under the MNA collective bargaining agreement, should Debbie claim the suspension is without just cause and file a grievance? What if the supervisor claims to know nothing about Quan's lateral violence or his desire to drive Debbie out of the ICU? What if Debbie thinks the supervisor has been present at the nurse's station when Quan has made some of his snide comments? If one of Debbie's co-workers is willing to testify about Quan's comments and the general atmosphere of lateral violence in the ICU, what should the employer do about Debbie's discipline?

Nurses need to stand up for themselves and protect one another instead of trying to hurt one another. It is well past the time when discrimination, harassment, bullying, and lateral violence should continue without consequences. While nurses have some legal protection, more needs to be done to provide the utmost protection so nurses can go back to concentrating on caring for patients.

SUMMARY

Discrimination and harassment can take many forms within health care organizations. The difference between illegal and actions and those that fall outside the current laws are important for nurses to understand. This chapter described both illegal discrimination and harassment and the types that although not against the law, can still inflict injury on the victim. The chapter offers many thoughtful questions for discussion. The authors advocate for nurses to stand up for each other when discrimination occurs. Ways to protect yourself and others are discussed and provide a road to better organizational cultures that support positive work environments.

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Health Care for the Poor and Underserved

SARA GROVES

The poor and underserved of the United States have never received health care equal to that of Americans with higher socioeconomic status. Lack of care for minorities was brought to the forefront in the 1985 landmark Heckler Report: the Report of the U.S. Department of Health and Human Services Secretaries Task Force on Black and Minority Health (Heckler, 1985). In a more contemporary discussion, the five reports of the Institute of Medicine on *Insuring America's Health* (2001-2004) have spelled out the problems clearly and have provided four prototypes that could reform the health care system. Today, the need to eliminate disparities among racial and ethnic minorities is one of two goals for Healthy People 2010 (U.S. Dept of Health and Human Services, 2000). Even a *Journal of Health Care for the Poor and Underserved*, American Medical Association (AMA) for the uninsured, and an Association of Clinicians for the Underserved exist. What has happened in the richest country in the world that this problem of health care distribution has not yet been solved?

Health care in the United States should be an entitlement for all individuals. In 2007 the United States spent \$2.26 trillion on health care; \$7,439 per capita; 15.3% of the U.S. gross domestic product (Centers for Medicare and Medicaid Services, 2007; Organisation for Economic Co-Operation and Development, 2008; World Health Organization, 2007a). This is the highest cost worldwide, yet health disparity still exists, resulting in part from not having adequate and universal health care for all U.S. residents. Those without health care are frequently disenfranchised, not a strong political block to vote for change. Universal health care coverage has lacked broad-based political support, but in the 2008 election, the health care crisis once again became an important domestic issue, overridden only by the financial crisis. In 2007, 57 million Americans (19.4%) had difficulty paying medical bills compared to 43 million (15.1%) in 2003. Of the 57 million in 2007, 42.5 million had had some medical insurance. As a direct result of

medical bills, 2.2 million were forced to file for bankruptcy (Cunningham, 2008). Adults without insurance are less than half as likely to get medical care for serious health problems and have unmet medical needs (Cunningham, 2008; Institute of Medicine, 2001). Is the goal then to achieve universal high-quality health coverage for the poor and underserved? Several groups have proposed inclusive state health plans that would provide this care, and other plans stress the positive economics of a universal single-payer system.

PREVIOUS SOLUTIONS

President Franklin D. Roosevelt, in his State of the Union address in January 1944, reviewed his "Economic Bill of Rights." One of his major thrusts was the right for all Americans to have adequate medical care. President Roosevelt already had provided the population with its first economic safety net: the Social Security Act of 1935. Senator Robert Wagner, with the support of President Roosevelt, unsuccessfully introduced a bill in February 1939 to create a national compulsory health insurance program administered by the states. President Truman, likewise, repeated the request for legislation for a compulsory national health program from 1945 to 1951 without success (Greenberg, 2007; Mayes, 2004).

Finally, in 1965, after President Lyndon Johnson submitted a proposal to pay for health care for the elderly and poor children, Congress established the Medicaid and Medicare programs under amendments to the Social Security Act. The Medicaid program was designed to pay medical bills for low-income Americans who had no other way to pay. Medicaid is a basic health insurance program for the poor and an insurance program for persons with chronic or long-term health care needs. In the last 43 years, as a federal/state matching program, Medicaid has expanded greatly. Currently, the Medicaid program has 51 million beneficiaries and exceeded \$349 billion in 2006 (Hoffman, Klees, & Curtis, 2006; Hoover

Institute, 2006). There are still 45.7 million people who do not have any health insurance (Sherman, Greenstein, & Parrott, 2008). Currently, several safety nets provide access to quality health care for the poor and underserved and include state-funded primary care clinics, Federally Qualified Health Centers, local health departments, other nonprofit clinics supported by public funds, faith-based organizations, private foundations, and local contributors. Are these the permanent solutions?

THE CURRENT PROBLEM

The underserved include the uninsured, the underinsured, the poor, and the working poor who do not receive adequate and quality health care. Uninsured and underinsured persons receive less health care, usually too little and too late. They also receive less primary prevention, less care for their chronic conditions, and worse care in the hospital. Concentration of uninsured and poor can add to the community burden of disease (Institute of Medicine, 2003b). In the United States, in 2007, 15.3% of Americans under age 65 were uninsured—a slight decrease from the previous year as a result of the significantly expanded Medicaid coverage for children in the State Children's Health Insurance Program (SCHIP). In 2007 the annual federal funding for SCHIP was fixed at \$5 billion (Congressional Budget Office, 2007). President George W. Bush vetoed in 2007 two additional bills to expand the SCHIP coverage, and on December 21, 2007, he finally signed a bill to reauthorize and fund the existing program to extend until four months past the November 2008 election. The greatest increase in the uninsured has been among children whose family incomes do not qualify them for these federal benefits (Vimo Research Group, 2007). Predictions for the future are that the number of uninsured individuals will continue to grow significantly as unemployment rates increase during the current financial crisis. In 2008 Texas had the most uninsured at 24.4%, and Hawaii and Massachusetts had the least with 8.3%, a reflection of their new programs to provide universal health coverage (Urbina, 2008). In 2008 uninsured individuals spent \$30 billion out-of-pocket for health care, and the federal government financed 75% of the \$56 billion of uncompensated care (Hadley, Holahan, Coughlin, & Miller, 2008).

Medicaid provides health insurance, guaranteeing health care for the very poor. However, the growing cost of this program threatens its continuation at the currently funded level. Historically, at the Families USA Conference in Washington in January 2005, Senators

Clinton, Kerry, and Obama expressed hope that the Medicaid program funding would not be cut and that SCHIP would be extended. Senator Obama, the newly elected Senator from Illinois in 2005, also expressed concern that President Bush would invest in fixing the Medicaid and Medicare programs that appear more broken than the Social Security system (Rathbun, 2005).

Eighty-five percent of the uninsured are part of families with working members (IOM, 2002). Racial and ethnic minorities are more likely to be uninsured—a reflection of less education and lower-income employment that provides less health coverage. Most families do not choose to be uninsured (IOM, 2001). The Institute of Medicine (2002) found that the health and economics of the entire family suffered when even only one member was uninsured.

The health care cost to society for the poor and uninsured is not just the actual dollar amount of uncompensated care (\$35 billion in 2001) but the decreased health capital of the underserved who have poorer health, premature mortality, and greatly increased unnecessary morbidity at an estimated cost of \$65 billion to \$130 billion (IOM, 2003a). The Institute of Medicine (2002) concluded, based on its dollar estimates, that the benefits to society of providing universal health care coverage were greater than the social cost of the increased burden of disease to the uninsured.

THE NEW SOLUTIONS

In 2000 the United States was ranked 37th by the World Health Organization in health care. The low ranking was not reflective of how much is spent per capita but rather on whether health care is fair and equitable (WHO, 2007b). There are several possible answers to making health care fair and equitable. The Institute of Medicine (2004) has offered four solutions for universal health care coverage:

1. Expand current public programs such as Medicaid and Medicare and provide a new tax credit to those who purchase private insurance.
2. Offer individual selections of health insurance plans from the workplace, public programs (Medicare and Medicaid), or individual purchase.
3. Place responsibility on the individual to obtain his or her own insurance using tax credits with Medicare intact.
4. Enroll everyone in a single-payer system administered and funded federally with no other public programs.

Some of these policy solutions already are being pursued actively. At the same time, many of the safety nets are being enhanced to provide health care in the interim.

New Policies

One health policy promotes universal state health insurance instead of a national program. Health Care for All is a legislative campaign in multiple states, including Oregon, Washington, Vermont, Massachusetts, California, Maine, and Maryland. The goal of the campaign is for everyone in the state to have health insurance so everyone can receive affordable, quality health care. Most of the plans are a coalition of health plans with governmental and private monetary support to increase federal and state coverage, employer plans (including small businesses), and individual policies. In its health initiative, Maryland wants to make sure that the plan is community based (Maryland Citizens' Health Initiative, 2008). The state has 1100 organizations that include religious, health, local community, labor, and business groups. The state is working with current public and private insurance groups to guarantee universal affordable insurance plans. The strategy is built on private sector coverage, with 80% of Maryland residents receiving care through preexisting plans. Other components include supporting the small-group market, monetarily supplementing small businesses and individuals to purchase health insurance, and providing more affordable drug prescriptions for seniors through a statewide buying pool to supplement the current new Medicare program. The initiative annually supports legislations that, in incremental steps, will reach the overall goal. Maryland has passed legislation to lower the cost of prescription drugs for the uninsured, create stronger safety nets, and provide more equitable reimbursement for physicians treating Medicaid patients (Maryland Citizens' Health Initiative, 2008).

McCormick, Himmelstein, Woolhandler, and Bor (2004) sampled 904 Massachusetts physicians and found that 64% favored single-payer national health insurance and 70.3% did not want the insurance industry to continue playing a major role in medical care delivery. Many of the doctors commented on how well Medicare works for both themselves and their patients. In this friendly environment in 2006, the state implemented mandatory universal coverage. It was a prime state for the implementation, with less than 8% uninsured. The newly passed legislation required almost every resident to obtain health insurance. The state subsidizes people who have the lowest incomes and are the most

vulnerable, and partially subsidizes those at 300% of poverty. This plan requires individuals with adequate income to purchase health insurance or pay a fine. It will be important to evaluate the successes and difficulties of this innovative program identifying influences for future policy (Felland, Draper, & Liebhaber, 2007).

The city of San Francisco is attempting to implement a local system to provide primary care to their uninsured, mostly financed by the city. The city is gambling that they can provide universal and quality care at about the same cost as they are spending in uncompensated costs, much of it in emergency rooms. The initiative, Healthy San Francisco, utilizes 14 health department clinics and 8 community clinics. The service is for city residents only and will be open to all who have been uninsured for at least 90 days regardless of income or immigration status (Sack, 2007).

As reflected in the preceding initiatives, there is popular support from both the general population and health care leaders to reform the health care system, especially the way the providers are paid, noting strong dissatisfaction for the fee-for-service model (Stremikis, Guterman, & Davis, 2008). In a survey of physicians in April of 2008, 59% supported a single-payer system similar to the Medicare program (Carroll & Ackerman, 2008). A growing number of practitioners see that a single, public-sponsored system would reduce inefficiency and the burgeoning cost of administration—about one-third of our health care dollars. Several supporters of this plan see Obama's election as the opportunity for system redesign (Thomson Reuters, 2008).

One new policy, in addition to universal health coverage, is the allocation of research dollars to develop improved technology to save lives by medical advances, thereby decreasing the inequities of health outcomes among the poor and underserved. Woolf, Johnson, Fryer, Rust, and Satcher (2004) examined this as a potential solution. What they found was that better drugs, better devices, and better procedures did result in lives saved between 1991 and 2000, averting 176,633 deaths in the United States. However, this number of averted deaths could be increased to 886,202 if the age-specific mortality rate for whites and African Americans was the same. The authors clearly assert that instead of investing millions of dollars in technology, investing this money in resolving the causes of higher mortality in African Americans would save five times as many lives (Woolf, 2004). Robbins and Webb (2004) also verified that African American adults who were living in neighborhoods with high poverty rates had high excessive mortality. Between 1999 and 2001, 5305 excessive

deaths occurred among African Americans in Philadelphia, compared with the same gender- and age-specific rates for non-Hispanic whites. Robbins and Webb found a strong, graded association between neighborhood poverty and mortality.

Enhanced Safety Nets

The Association of Clinicians for the Underserved currently is making efforts to improve the health of the poor and underserved by educating health practitioners in a transdisciplinary role. This enhances the efficiency of health care in a situation with limited resources (Rhee, 2004). Other communities have designed and implemented innovative approaches to deliver care to the uninsured. This approach usually occurs with strong partnerships between private and official agencies and with strong continual financial commitment to meet the identified need. The New York Academy of Medicine, with the Robert Wood Johnson Foundation funding, examined 20 such programs to provide a synthesis of what communities can do to meet the needs of their uninsured (Andrulis & Gusmano, 2000). The report also provides guidelines for policy implication at the state and federal levels. Another safety net is the school-based health centers. Allison, Crane, Davidson, and Kempe (2007) found that the school-based centers increased quantity and quality of care when compared to traditional clinics for underserved adolescents.

Free clinics, another safety net, were first established to provide medical care in the 1960s. They are by definition a service that is private and community-based and free of charge. In 2004 Volunteers in America identified more than 1000 functioning free clinics in the United States (Geller, Taylor, & Scott, 2004). One example is the annual University of Virginia Health System Remote Area Medical clinic that, with 314 staff members in 2008, gave free treatment to 2539 underinsured or uninsured individuals during a three-day clinic in a fairground in Wise County, Virginia. In 2000 the Virginia clinic was considered a temporary measure, but the need has grown instead of decreasing (Rowe, 2008). Keis, DeGeus, Cashman, and Savageau (2004) reported on three free clinics in Massachusetts. The clients on average were poor, uninsured, and female. Many of the long-term clients (less than 25% of the total visits) had limited health insurance but used the clinic for free prescription medication. In another survey of volunteer-based (free) clinics in seven Midwestern states, the 106 clinics clearly provided a substantial safety net for the poor and uninsured with 200,000 total visits. The most common services were primary care and

pharmaceutical assistance, with 75% of the clinics also providing some specialty care. For many, the focus was on the adult, given that Medicare, Medicaid, and state children insurance programs serve the young and the elderly. In these free clinics with budgets (mean) of \$237,170, there were almost no paid staff (Geller et al., 2004). These authors again emphasized that free clinics are a bandage for the medical system. They provide no comprehensive care, long-term care, or hospital care. For many poor Americans, the free clinic is health care of last resort.

ALTERNATIVE SOLUTION

There is another solution. Walker, Mays, and Warren (2004) suggest that nurses, as health professionals, have not been adequately cognizant of the broad assortment of health determinants that affect the racial/ethnic disparities of morbidity and mortality. Lack of medical care accounts for only 10% to 15% of premature deaths (McGinnis, Williams-Russo, & Knickman, 2002). Isaacs and Schroeder (2004) noted, "Ensuring adequate medical care for all will have only a limited effect on the nation's health." Others have found that the difference in health persists among different socioeconomic statuses even when health-risk behaviors are controlled (*Linking health and low income*, 2008). This difference persisted in Canada and European countries with much lower mortality in persons with higher socioeconomic status (Mackenbach et al., 2008; Wilkins, Tjepkema, Mustard, & Choiniere, 2008). In 2004 Lu, Samuels, and Wilson found that health behavior and health insurance explained only 10% to 16%, respectively, of the socioeconomic differences in health in the population covered by the 2000 Kentucky Behavioral Risk Factor Surveillance System. Would there be more impact on the health of the poor and underserved population if public health officials paid attention to other factors such as changing demographics, economics, environment, and globalization? Is there now too much emphasis on health insurance issues and access to quality health care and not enough on poverty? Nurses and policy makers need to put more weight on optimizing the health of the entire population.

Thus, correcting these inequities for the poor and underserved becomes even more complicated. The answer is not as simple as providing universal health insurance or quality technical medical care. The answer is not providing more education in the area of health promotion and disease prevention. Nurses need to influence the more distal health determinants that are

part of a complex continuum of causality. Macinko, Starfield, and Shi (2003) divide distal health determinants into two broad classifications: national policies and culture. National policies include economics, international relations, and income distributions. Culture refers to a wide set of beliefs that influences the population's choice of political and legal institutions that include social participation, institutional development, lifestyle choices, and individual overall priorities. These are the determinants of macroeconomics, healthful environments, positive sociodemographics, and education. This is where nurses need to influence policy and determinants related to health. This solution would be a complete reorientation of where nurses would put resources.

Adverse socioeconomic conditions place obstacles in the way of the poor and underserved to be healthy. They need literacy to understand and communicate health needs, but they also need literacy to have adequate employment. They need secure employment to have adequate housing and health insurance for their family. They need to know they have adequate and consistent food, services, safety, and protection to provide and care for their family, reducing stress in their lives. Families can neither nurture nor place appropriate emphasis on health promotion and disease prevention until the family is secure and stable in a secure and stable community.

Consistently, research and surveillance show an inverse relationship between race and premature death. That same inverse relationship is also true for social class. Isaacs and Schroeder (2004) note that in general, this class pattern of premature death is true in a progressive fashion from the poor to the rich. They acknowledge that smoking, poor nutrition, less activity, environmental hazards, lack of insurance, and being African American increase risk. However, they show that rates of premature cardiac death between poor and rich are significantly greater than between African Americans and whites. Exactly what defining factor of class leads to poor health is not clear. Isaacs and Schroeder acknowledge that stress could be one of these mechanisms. Mike Rowson (2008), based on world poverty figures, concludes that poverty is the number one world killer, even greater than smoking.

Without concern about the lack of positive distal opportunities for the poor, the whole community can be at risk. The lack of social justice is a disgrace, but inequities in health care also can be a problem for all members of society. In areas of high unemployment and low-paying jobs, the limited tax base contributes to limited resources for public education, health, and

policing. The Baltimore City Health Department in 2008 organized its health and demographic data into 55 separate city areas. In examining the data, the disparity between the very poorest neighborhoods and the wealthiest is a two-decade difference in life expectancy. With every \$10,000 increase in household income the community lived 3.4 years longer. In looking at the years of life lost, in 10 communities homicides were the single largest cause of lost years of life, which was very destructive to these communities (Linskey, 2008).

SUMMARY

The poor and underserved should have the same health care as other Americans. Obviously, they should have access to comprehensive primary health care, prescriptions, and inpatient hospital care, equal in quality to what those with more economic resources receive. Nurses can provide health care, advocate for their clients, and help set policies for universal health care coverage. However, I call for more assertive action. Nurses as a group can be powerful in demanding better inner-city schools and better jobs with better pay. Nurses can work to build strong communities that promote social cohesion. Nurses can be a strong political force, creating change to move people out of poverty and provide real opportunities for health care. The time to work for change has come.

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Legal, Ethical, and Moral Considerations in Caring for Individuals with Diminished Capacity

NANCY EDWARDS

As we enter the 21st century, the growth of the elderly population, the cost of health care, and the advances in medical technology and science continue to have a profound impact on the health care system. This transformation in the health care system raises ethical, legal, and moral issues. Individuals with diminished capacity put special challenges on the already strained health care system. “Clinical syndromes characterized by progressive deteriorations in multiple cognitive domains that interfere with daily functioning” is the definition often used by medical professional to define *dementia* (Qui, De Ronchi, & Fratiglioni, 2007). These individuals with dementia are the hallmark of diminished capacity and will be the focus of this chapter. The special nature of persons with dementia and the natural trajectory of their disease require special care on the part of the health care team to meet the ethical challenges and to establish health care goals that result in consistent, reasoned, and compassionate care.

The United States spends more than \$148 billion annually in direct costs to Medicare and Medicaid and indirect cost to business for employers to treat individuals with dementia, making it the third most costly disease in the United States after heart disease and cancer (Alzheimer’s Disease Education & Referral Center, 2008). More than half of these costs are related to caregiving. Medicare currently spends more than three times as much for people age 65 and older with dementia than for other older adults without dementia (ADEAR, 2008). The worldwide costs of dementia in 2005 were estimated to be more than \$300,000 billion U.S. dollars yearly (Wimo, Winblad, & Jonsson, 2007). Without any intervention for a cure, federal spending on dementia will increase to more than U.S. \$1 trillion per year in 2050 in today’s dollars, resulting in more than 10% of the gross domestic product (Gingrich & Egge, 2007).

The increasing prevalence of dementia creates significant challenges for health care providers. It is estimated that dementia currently affects 5% to 10% of older individuals in the United States, and over two-thirds of the residents in long-term care have a diagnosis of dementia (Christensen & White, 2007). The increase in life expectancy and the “graying of America” with the growth of the aging population are expected to increase the number of individuals diagnosed with dementia in the upcoming years. Epidemiologists estimate that every seven seconds, a new patient is diagnosed with dementia (Ferri et al., 2005).

Alzheimer’s disease, one type of dementia, is the sixth leading cause of death for people in the United States and the fifth leading cause of death for those over the age of 65 (ADEAR, 2008). By one estimate, barring prevention or a cure, the worldwide prevalence of dementia will quadruple to 106.2 million individuals by the year 2050 (Brookmeyer, Johnson, Ziegler-Graham & Arrighi, 2007). Scientists estimate that as many as 5.2 million Americans and 26.6 million people worldwide suffer from Alzheimer’s disease (ADEAR, 2008). The disease usually begins after the age of 60, and risk increases with age. Although younger persons may get dementia, it is much less common. About 5% of men and women over age 74 have dementia, and nearly half of those age 85 and older may have the disease (ADEAR, 2008). It is projected that the number of persons over age 80 with dementia will increase by a factor of about 3.7 by the year 2050 (Brookmeyer et al., 2007). One in 6 women and 1 in 10 men who reach age 55 can expect to develop dementia in their lifetime (ADEAR, 2008).

In addition to Alzheimer’s disease, several million additional individuals are affected by one of the various other types of dementia, including vascular dementia, dementia with Lewy bodies (DLB), fronto-temporal

dementia (FTD), and dementia in individuals with Parkinson's disease. The prevalence of all dementia is expected to triple in the next 50 years, creating a burden of crisis proportion for the health care system (Grossman, Bergmann, & Parker, 2006). In light of the increase in absolute numbers of elderly, dementia obviously will be a national health problem of increasing proportions.

The cost of dementia care is astronomical. One study found that for a six-month period, the cost could rise to more than \$30,000 per patient, depending on the severity of symptoms. In most cases, neither Medicare nor most private health insurance covers the necessary long-term care that frequently is required. Care for a six-month period costs approximately \$20,000 for a typical high-functioning patient, compared with \$35,000 for a patient with severe dementia. The unpaid caregiving provided by family and friends, combined with the caregivers' lost productivity, is often more than the direct medical costs, with per-patient estimates as high as \$47,000 per year (Small, McDonnell, Brooks, & Papadopoulos, 2002). The average lifetime cost per patient is estimated to be more than \$174,000 (Joyce et al., 2007). With limited health care and financial resources, issues related to care demand and delivery must be examined.

There are nearly 10 million Americans providing 8.4 billion hours of unpaid care to people with Alzheimer's disease or other dementias that are valued at \$89 billion. Seventy percent of people with dementia live at home and are cared for by family and friends. Approximately 250,000 American children age 8 to 18 years old are providing care for an individual with dementia (ADEAR, 2008). There are between 1 and 1.4 million "long-distance caregivers" in the United States. About 1 million of these caregivers live more than two hours away from their loved ones with dementia. The progressive decline in cognitive functioning and physical abilities that characterizes dementia raises numerous issues that can vary and evolve throughout the course of the illness. Those who are afflicted with the disease, their families, and health care providers all must face these issues, which must be examined in light of patient autonomy, justice, veracity, beneficence, and nonmaleficence.

DETERMINATION OF CAPACITY

One of the first issues to be considered is respecting patient choice regarding the right to know the diagnosis, participation in treatment, and informed consent.

Often the diagnosis of dementia automatically leads to the assumption that individuals are incapable of making decisions for themselves. Nurses are in a key position to evaluate the decision-making capacity of persons with dementia in long-term care facilities, acute care settings, primary care clinics, and the home.

The principle of autonomy is fundamental to the U.S. legal system; that is, individuals are entitled to make their own decisions. The American Nurses Association (2005) Code of Ethics for Nurses instructs nurses to practice with respect for the inherent worth and uniqueness of each person. To the extent possible, the legal and health care communities support the concept of self-determination. Loss of competency, or decision-making capacity, is an inevitable consequence of dementia, but nurses must remember that dementia is not an automatic declaration that the patient has lost all decision-making capacity. A 1914 decision, *Schloendorff v. Society of New York Hospital*, noted, "Every human being of adult years and sound mind has a right to determine what shall be done with his own body." Each adult is presumed competent to make personal decisions unless the evidence demonstrates that the person is incompetent. The words *competent* and *incompetent* are legal terms and should be relegated to the legal setting; however, the reality of the health care setting compels professionals to make competency judgments every day. Some have suggested that the term *capacity* would be more appropriate when referring to the health assessment necessary to determine the ability to make health decisions (Caralis, 1994; Weiler, 1994).

Capacity is not an all-or-nothing condition but rather a continuum that incorporates wide variations between total capacity and total incapacity (Sands, Ferreira, Stewart, Brod, & Yaffe, 2003). A major issue for physicians and other clinicians in evaluating and treating patients with dementia is judging an individual patient's decision-making capacity to handle a number of tasks, including competence to consent to medical treatment or to manage finances. Individuals with dementia may be unable to make complicated, detailed decisions, such as estate or financial matters, but they may well maintain the ability to make decisions regarding their own health care. Marson and Harrell (2000) identified five standards necessary for competency. First is the expression of treatment choice, or being aware of what treatment is being offered. Second is the ability to make reasonable choices. Third is having the capacity to appreciate the emotional and physical consequences of the choice. The fourth standard is that the person can

appreciate rational reasons for the treatment choice. The fifth standard is that the individual can understand the treatment situation and the associated risks and benefits. Therefore, assessment of capacity must be considered in light of the preceding standards. Box 67-1 provides definitions for common terms associated with these standards.

Numerous tests are used to assess capacity, from simple interviews to objective measures such as the Folstein Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975). The difficulties with the objective tests presently used are that the tests do not contain capacity-specific assessment measures. One must remember that

the concepts of cognition and judgment are not synonymous. Assessment of the individual for the ability to understand treatment options and consider treatment alternatives in light of all the risks and benefits is essential. If the person is able to do that, alone or with support, the person must be given the opportunity to determine the course of medical treatment.

ADVANCE DIRECTIVES

The reality is that 90% of all individuals will have an extended period of illness before they die. This is especially true for the patient with dementia, the course of which can run for 2 to 20 years. In an era of advanced medical technology, it is more important than ever to have an advance care plan (Murphy, 2005). This allows the person to maintain autonomy when loss of capacity can be anticipated. This can be accomplished through the completion of estate wills, living wills, and durable powers of attorney for the health care. These documents allow individuals with Alzheimer's disease who maintain competency to determine what health care measures they would like to be carried out as their disease progresses.

One area of difficulty that often occurs is that the person who makes the prospective directives (decisional autonomy) most likely will not have the ability to carry out these decisions (executorial autonomy). In many situations the consequences of these decisions fall on the family and caregiver. The child of the person with Alzheimer's disease now has to expend a large amount of time, energy, and money to follow through with the directives. Rhymes (1995) states that the presumption in favor of autonomy assumes that persons possess the capacity to decide, to carry out decisions, and to manage and be accountable for the consequences of their decisions. If there comes a time when they are not able to carry out and manage their decisions, the presumption of autonomy must be considered.

This is especially true when the execution of those decisions creates unreasonable burdens on the caregivers or other persons who have a legitimate interest in avoiding undue stress and demands on their time and resources. Rhymes (1995) contends that "guidelines which advocate that decisions that can be articulated should be accepted, may abrogate the rights of an entire class of others who are affected by those decisions" (p. 1437).

What may occur is that when caregivers decide to meet the predetermined guidelines, it may be at the expense of others in terms of financial, emotional, and social resources. Often, caregivers are required to use financial resources needed by other family members,

BOX 67-1 Definitions

Autonomy: The capacity to think, decide, and act on the basis of thought and decisions freely and independently (Purtilo, 1999). The right of independence and self-determination.

Beneficence: The requirement to do good. This includes a holistic approach to the individual, including the patient's beliefs, thoughts, values, and judgments.

Health care representative: An individual appointed to make health care decisions on another's behalf if that person becomes unable to make such decisions.

Incapacity: Being incapable of managing property or providing self-care or both. Incapacity may stem from infirmity, insanity, mental illness, alcoholism, excessive drug use, or neurological deterioration. Although these conditions may contribute to incapacity, an individual who has one or more of these problems is not necessarily incapable.

Justice: Equitable distribution of burden and benefits. It is the obligation to be fair to all individuals regardless of race, creed, religion, gender, or socioeconomic status.

Living will: A document in which one states one's wishes and desires to have or not to have life-prolonging procedures such as respirators, surgery, or feeding tubes, which may delay but would not prevent imminent death.

Nonmaleficence: The principle to do no harm intentionally or unintentionally.

Power of attorney: A document that gives another person the authority to handle one's personal matters.

Veracity: The principle to tell the truth. It requires that the health care worker be honest and not intentionally deceive or mislead the patients.

invite outside caregivers into the home to assist in the caregiving tasks, and split limited time between family and the care recipient. If caregivers decide that they cannot meet the predetermined guideline, they often live with the guilt that accompanies such decisions. One must consider that long-term care decisions involve not only the autonomy of the person with dementia but also those who are expected to provide the caregiving support.

DO NO HARM

Ethical and moral conflicts can appear when a person who is delegated to make health care decisions (proxy) follows a course of action that seems not to be in the patient's best interest. One must be careful to avoid the paternalistic route; that is, if the patient or proxy decides on a course of treatment that is not recommended or that threatens the patient's well-being, it must not be dismissed automatically for the individual with dementia's "own good." For example, if the proxy decides that antibiotics will not be given in case of pneumonia, one must look at all sides of the situation and not just insist that antibiotics be given.

However, the health care provider has the duty to act as the patient's advocate if necessary. If the course of treatment decided by the proxy is not considered in the patient's "best interest," the health care provider has a moral obligation to take into account possible motives. Such motives may be caregiver burden, including emotional, physical, or financial; financial gain such as inheritance, pension, or disability payments; or possibly abuse or neglect. The principle of nonmaleficence requires health care workers to do no harm. This does not imply that every time proxies disagree with health care providers that they are acting for their own gain but that each case must be investigated on its own merits with an open mind. One must consider all aspects of the case to reach an ethical decision. In most institutions, ethics committees are available as sounding boards to consider the positive and negative aspects of such decisions and to provide support and feedback to the health care providers.

DISCLOSURE OF DIAGNOSIS

Protecting patients from harm while respecting their autonomy sometimes creates difficult ethical dilemmas that health care providers must confront. The patient's right to know is now a well-established priority, with patients demanding more equality within

the doctor-patient relationship and wishing to be more actively involved. Giving a diagnosis can allay patients' fear of "going mad" or "being stupid" if it is seen in the context of a biological disorder or illness rather than negative personality characteristics. In a recent study, 50% of individuals with dementia had not been informed of their diagnosis, and roughly 77% of patients had not been informed about symptoms, management, or prognosis (Holroyd, Turnbull & Wolf, 2002). In contrast, over 93% of the family/caregivers were informed of the patient diagnosis (Holroyd et al., 2002).

Three reasons are usually given for nondisclosure: the uncertainty of the diagnosis, the feeling of futility, and protecting the individual from undue stress. Being told the diagnosis may aid the issue of psychological adjustment, enabling patients to share their anxieties with professional and informal caregivers and thereby relieving some of their uncertainties (Pinner & Bouman, 2003). The patient has the right to know the diagnosis in enough time to be able to make the appropriate advance decisions for his or her health care. The principle of veracity requires the health care worker to be honest. It states that the truth must always be told. The family, however, may contend that withholding information is not the same as being dishonest. At that point, the family must be informed that the person who has been diagnosed with Alzheimer's has a moral and legal right to be present and to receive a specific diagnosis unless he or she waives it. If the dementia is advanced at the time the diagnosis is made, disclosure may no longer be an issue.

Regarding autonomy, as much as individuals have a right to be informed of their diagnosis, they equally may wish to waive that right of autonomy. When considering whether to disclose would be in the best interest of the individual, one should ensure that there is not undue influence of another person's needs and that emotional factors such as fear or depression that are overwhelming to the individual are identified and addressed so the individual may face the situation from a position of strength (Pinner & Bouman, 2003).

If disclosure is to occur, it should take place in a setting that encourages the person and his or her support system to be present so the information can be presented to all at the same time and so emotional support can be given. Pinner and Bouman (2003) suggested the following guidelines for diagnosis disclosure:

1. Use a multiprofessional approach to answer questions and make recommendations.

2. Consider telling patient and caregiver together.
3. Allow each individual present separate time to talk and ask questions.
4. Arrange follow-up meetings to continue discussions.
5. Discuss how the disease might progress.
6. Agree on a care plan.
7. Provide written educational materials.
8. Provide a list of community resources and contacts.
9. Arrange for further support.

In this type of setting, the expectations of the patient and family and their perceptions of the disease can be discussed in an open forum. The health care provider can advise the person with dementia and the family to discuss and agree on a plan of care that incorporates the personal values and resources of all involved.

DRIVING

Driving represents independence, competence, and control. Driving is a way to access health care, buy necessities, be productive, and stay connected to family, friends, and the community. In protecting the persons with Alzheimer's disease and the community from harm, one must consider when driving privileges should cease. The diagnosis of dementia in itself is not sufficient reason to revoke driving privileges. However, individuals often have navigational impairments that limits driving and independence. Individuals with dementia are at a higher risk of automobile accidents, and they may get lost even when they are driving in familiar environments (Cushman & Duffy, 2007).

One difficulty in the decision is that there is no precise test to indicate that the person with dementia is no longer capable of driving. Individuals with mild dementia with visuospatial problems may be more dangerous on the road than individuals with severe dementia with amnesic or memory problems (Green, 2005). Deciding when to limit or stop driving can be a confusing issue for individuals diagnosed with dementia and their caregivers. Most information about dementia warns against driving but does not describe when or how to stop. Some caregivers must assume the responsibility for monitoring and regulating the driving of a person with dementia (The Hartford, 2007).

Consideration has been given to reporting persons with the diagnosis of dementia to the motor vehicle department. This mandated reporting would compromise patient confidentiality and might even deter an individual from seeking diagnosis and treatment. What is vital is that communication lines remain open among the person with dementia, the caregivers, and the health

care professionals. The decision to drive should include the individual's capacity, the individual's driving history, current driving patterns, transportation needs, and alternative means for transportation.

If restriction of driving becomes necessary, negotiating with both the person with dementia and the family may result in the person's agreeing to limit driving, such as driving only in the daytime hours. Later, the decision can be made as to when the driving privileges should be terminated completely. The family must consider that when driving ceases, other arrangements should be made to ensure that transportation will be available when necessary. It is important that the person with Alzheimer's disease does not feel that he or she is a burden to others and thus unnecessarily to restrict his or her freedom.

RESTRAINTS

Ethical dilemmas related to behavior control may occur as the disease progresses. Wandering occurs in 38% to 63% of homebound persons with dementia and in 24% to 50% of institutionalized patients with dementia (Lai & Arthur, 2003). In addition, many persons with dementia have episodes of aggression and agitation. Many methods have been tried to manage these behaviors, including chemical and physical restraints, but any type of restraint should be a last resort. Instead, efforts should be made to try to determine whether there is an underlying cause for the behaviors and to correct those causes. For example, sometimes individuals act out because they are in pain or they are constipated or hungry, and they cannot make their needs known. As health care providers, nurses have the responsibility to do no harm and to look for the least invasive intervention.

Medications are necessary in some instances, but ethical problems arise when behavior-controlling medications are given at doses that interfere with what cognitive function remains. The person with dementia should be given the lowest effective dose of medications for the shortest duration possible. These medications should be given only for specific purposes, such as control of anxiety, and should be used cautiously. Medications should be used in the lowest possible doses and should be increased only when all other interventions have been exhausted.

Physical restraints are usually not necessary and in fact may be hazardous to the person. A physical restraint is considered anything that restricts or controls an individual's freedom of movement. In many instances, the person with dementia does not understand the purpose

of the restraints, and in most instances the restrained person becomes more agitated. Often as the person is attempting to get free from the restraint, a fall occurs, resulting in an injury. For example, a person may fall trying to crawl over a side rail and, as a result, fall from a higher distance than if the rail had not been raised. The ethical dilemma that occurs is the person's right to freedom and autonomy and the health care provider's duty to prevent harm. In many instances, the health care provider is fearful of liability if the person with dementia falls. Physical restraints are rarely a necessity and then should be used for only a brief period, and the person must be monitored carefully while being restrained. All attempts to use alternative methods such as redirection and deescalation are essential in providing care with individuals with dementia.

END-OF-LIFE ISSUES

Although dementia is a progressive disease, death usually occurs from pneumonia, sepsis, or other infectious diseases that may result from the immobility that frequently occurs. Therefore, the person with dementia may want to consider what life-prolonging procedures he or she would want. A living will can be made to help health care professionals determine what the patient wishes when the patient becomes incapable of making his or her wishes known. In addition, a living will helps the health care representative make decisions based on the patient's wishes. The health care representative document specifies the individuals who are permitted to make health care decisions for patient should he or she become incapable of making decisions.

Advance directives often eliminate legal battles that may occur when family members disagree. The documents allow the health care professional to support the family or health care representative to make the difficult end-of-life decisions. Goals for end-of-life care should be discussed among the person with dementia, the family, and the health care professionals. The parties should clarify whether the long-term goal is that of comfort and emotional well-being or that of prolonging life. A cohesive decision about the goal will make future health care decisions more clear.

One must remember that health care professionals and caregivers should not equate the right to refuse treatment with assisted suicide or euthanasia. If a person with dementia requests no life-prolonging procedures and this wish is not followed, the community may begin to lose trust in the health care system. If this occurs, persons

erroneously may believe that they do not have control of their future health considerations and view suicide or assisted suicide as a viable alternative.

An important end-of-life issue that legislators and policy makers must address is the availability of hospice care to families of persons with dementia. The present difficulty is that to qualify for hospice care, the physician must certify that death is imminent and likely will occur within six months. Persons with dementia need hospice care for extended periods, and hospice workers need to be prepared for the long-term demand of the care of the person with dementia. Research suggests that services currently available only to patients who are hospice eligible (such as bereavement and counseling services before death for the family and pain control for the patient) would benefit the more than 6 million unpaid caregivers who provide care to individuals with dementia (ADEAR, 2003).

Although palliative care can be dated back to Hippocrates, it is more recent to the care of individuals with diminished capacity (Mahon and Sorrell, 2008). Palliative care is the person-centered attention to physical symptoms and to psychological, social, and existential distress and cultural needs of patients with limited prognosis in order to optimize quality of life of patients and their families or friends (Ahmedzai et al., 2004). Although palliative care is not common protocol for the individual with advanced dementia, it is becoming more common in the United States. Individuals with diminished capacity are at an increased risk for undertreatment related to the misinterpretation of patient symptoms and behaviors. In addition, individuals with dementia can be at an increased risk for unnecessary procedures due to the lack of knowledge related to the patient's specific wishes. Goals of care should be discussed early with both the individual with dementia and the family.

Three components of palliative care can be applied with the care of individuals with diminished capacity: aggressive symptom management, assistance with decision making, and optimal end of life care (Mahon and Sorrell, 2008). Aggressive symptom management includes decreasing patient, and therefore family, suffering. The second component enacts utilizing decision making in order to enhance quality of life. Extension of life without consideration to quality could just prolong potential suffering of the individual with dementia and the family. The third aspect is concerned with providing compassion and comfort for the dying individual and the family. Promoting a death with dignity is a hallmark of compassionate nursing.

GENETIC TESTING

The progress being made in the area of genetic testing to predict dementia makes the exploration of ethical and moral implications a necessity. Over the past several decades, researchers found that some Alzheimer's disease cases, specifically those with early onset, ran in families. Early-onset Alzheimer's disease in persons younger than 50 years has been linked to chromosomes 1, 14, and 21 (Prasher et al., 2008) and represents less than 1% to 3% of all cases of Alzheimer's disease. Amyloid precursor protein gene mutations were linked to chromosome 21. The amyloid precursor protein gene encodes amyloid precursor protein, a large protein that contains beta amyloid protein, which is a core component of senile plaques.

Plaques are a characteristic finding in the brains of individuals with Alzheimer's disease. In 1995 mutations of the presenilin I gene were identified on chromosome 14. These mutations lead to a particularly aggressive form of Alzheimer's disease, with average ages of onset between 30 and 50 years of age (Sherrington et al., 1995). Following the discovery of the presenilin I gene, another gene associated with early onset was identified on chromosome 1. This gene was identified in a group of families with Volga German ancestry and accounts for a small number of individuals with early-onset Alzheimer's disease (Levy-Lahad et al., 1995). For families in which these genes were identified, characteristics include disease onset before ages 60 to 65 and autosomal dominant patterns of influence. All three of these cases demonstrate an autosomal dominant pattern.

In contrast to the rare variations (mutations) identified in the genes associated with early-onset Alzheimer's disease, common variations (polymorphism) within genes have been identified that influence an individual's risk for developing more common late-onset Alzheimer's disease. An association of apolipoprotein E (APOE) with the onset of the most common familial late-onset Alzheimer's disease is only the beginning of what is yet to be learned. Apolipoprotein E, a protein located on the chromosome 19, is found in three variations in the population. These variations are called alleles, and they are named APOE $\epsilon 2$, $\epsilon 3$, or $\epsilon 4$. The presence of the $\epsilon 4$ allele is not only associated with an increased chance of ultimately developing AD but is also associated with an earlier age of disease onset (Green, 2005). Each person inherits one allele from his or her mother and one from the father, resulting in one of six combinations ($\epsilon 2/\epsilon 2$, $\epsilon 2/\epsilon 3$, $\epsilon 2/\epsilon 4$, $\epsilon 3/\epsilon 3$, $\epsilon 3/\epsilon 4$, $\epsilon 4/\epsilon 4$). The APOE $\epsilon 3/\epsilon 3$

allele combination is the most common, occurring in 59% of the population.

Roses (1996) found that the inheritance of two specific combinations of the 4 allele ($\epsilon 3/\epsilon 4$ or $\epsilon 4/\epsilon 4$) is associated with an increased risk for earlier age of onset of Alzheimer's disease compared with the other genotypes. The combination $\epsilon 3/\epsilon 4$ is found in 21% of the white population, whereas the combination $\epsilon 4/\epsilon 4$ is found in only 2% (Roses, 1996). The presence of the allele triples the risk of getting Alzheimer's disease, although the factors that indicate which persons with the $\epsilon 4$ allele will actually develop Alzheimer's are under investigation. The presence of two $\epsilon 4$ alleles increases the risk of developing Alzheimer's disease by approximately 15-fold (Green, 2005). The observation that approximately 50% of the late-onset AD patients have no $\epsilon 4$ allele makes it clear that other factors are involved in the dementia (Green, 2005). Interestingly, the presence of APOE $\epsilon 2$ has a protective function, decreasing the overall risk and the increasing age of onset (Bretsky, Guralnik, Launer, Albert, & Seeman, 2003). Mayeux and Schupf (1995) state that "while the apolipoprotein E genotype may be undeniable as a genetic risk factor for AD, it does not provide sufficient information to be an adequate predictive genetic test" (p. 1281). Under some circumstances, APOE genotyping may be helpful in the diagnostic workup of individuals with dementia, but it is not recommended for predictive risk assessment except within controlled risk assessment (Green, 2005). Currently, predictive genetic testing for the presence or the absence of the APOE4 allele is not recommended for general practice.

Several issues arise from this. First, the question must be asked whether this is a health care need or a health care desire. With the high costs of health care, the principle of justice must consider health care for all. For example, cosmetic surgery in most cases is considered a health care desire. In these cases, an individual who had such a desire but did not have the economic resources to fulfill those desires would have no basis for claiming unjust treatment. Therefore, one must assess the benefits of and who will benefit the most from these new technological advances.

The second issue arises from the prospect that genetic information may be entered into a database where it may become accessible to others. This presents the issue of privacy. If genetic testing becomes more prominent, issues of job or insurance discrimination may arise. In addition, if this information is used as a type of genetic testing, a protocol must be in place to

ensure that appropriate counseling and support systems are available.

One suggested use of genetic testing is with an older individual who is suspected of having dementia. The additional information gained by the testing would be a benefit if as a result it would reduce the cost of the evaluation or if the diagnosis could be confirmed. This predictive testing also could be used for the purposes of family planning issues once the testing has been refined and the meaning associated with the presence of the gene has been determined and solidified.

SUMMARY

Health care teams must provide special care to individuals with dementia due to the natural trajectory of this disease in order to provide consistent, reasoned, and compassionate care. With the increasing incidence of individuals with diminished capacity, the ethical, legal, and moral issues affect nurses as they deal daily with the patient with dementia, his or her family, and other caregivers. Care must be provided in a way that is compassionate not only for the patient but for the entire support system. Nurses must be forward thinking enough to help facilitate the discussion and planning of future health care needs. Nurses must consider the principles of autonomy, justice, veracity, beneficence, and nonmaleficence as they counsel, educate, and provide care for persons with dementia and their caregivers.

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Nurses' Role in Patients' Advance Directives: Facilitation or Reduction of Patient Autonomy?

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The fundamental values upon which the United States was founded include a commitment to ensuring individual autonomy and promoting self-determination. In fact, individual freedom is seen as the hallmark of a democratic political system. The Bill of Rights in the U.S. Constitution promises freedom to speak one's own mind, to associate with persons and groups with whom one wishes to associate, to practice one's own religion, and to the right of privacy. Concomitant with the orientation to individual freedom is a corresponding right to make decisions about where one lives, what one does with one's property, and, in terms of health care, what one will allow to be done with one's body.

Historically, the patient-provider relationship was based on the belief that the physician, acting in the best interest of the patient, was to direct care and make treatment decisions. Katz (1984) discusses the history of silence between physicians and patients that has led to the doctrine of informed consent. Nurses and patients, however, have not experienced the same degree of silence in relation to nursing care. This could be because nursing care involves patient participation and discussion about the implementation of nursing tasks. In addition, nurses have long espoused the importance of mutual respect between nurse and patient.

In 1914 Justice Cardozo validated the need for consent to medical treatment in declaring, "Every human being of adult years and sound mind has a right to determine what shall be done with his own body; and a surgeon who performs an operation without his patient's consent commits an assault, for which he is liable in damages" (*Schloendorff v. Society of New York Hospital*, 1914). As respect for patient autonomy has increased, the paternalism of the past has largely been replaced by patient-centered health care and shared clinical decision making (Kiesler & Auerbach, 2006). Many patients desire to have

some control over their health care, even if they are unable to participate in decision making. Therefore, advance directives can be used by individuals to make their wishes known to family members and health care professionals.

ETHICAL ASPECTS OF ADVANCE DIRECTIVES

While advance directives are legal mechanisms, ethical principles underlie the development of the statutes and practice related to advance directives. The concept of personal autonomy, which is a fundamental ethical principle, refers to the individual's ability to act freely according to one's chosen plan, without interference from others and with the capacity for intentional action. This includes freedom from limitations such as an inadequate understanding that restricts purposeful choice (Beauchamp & Childress, 2008).

The concept of nonmaleficence reflects the principle of "do no harm" (Beauchamp & Childress, 2008, p. 149) and includes such moral rules as not killing, causing pain or suffering to, or incapacitating a patient. Controversy arises when withholding or withdrawing medical treatment is seen as resulting in death, which may be interpreted by some as killing. Additionally, the administration of medication to control pain may have the unintended consequence of hastening death. Non-maleficence is strictly concerned with prohibiting certain actions, whereas beneficence reflects positive action requirements such as providing beneficial care.

Caring for patients (beneficence) is manifest in the concern for the individual's decision-making capability and the empowerment of the individual in the decision-making process. To give patients a voice in what happens with their health care is a beneficent act. Additionally, to feel sympathy, compassion, fidelity, and love for

the person who is facing difficult choices exemplifies the ethics of care (Beauchamp & Childress, 2008).

Empowerment is also an ethical concern. Coercion or manipulation makes the choices of less powerful individuals meaningless, whereas cooperation and conflict resolution among human beings is enhanced by empowering all persons in the relationship. In the case of advance directives for health care, empowerment of both nurse and patient is an ethical matter. If the nurse has far more power than the patient in the interactions, the decisions made by the patient may lack autonomy. Therefore, the patient must be empowered to speak her mind with the nurse when she discusses the decisions to be made. An advance directive can empower the patient by providing a visible, concrete statement of his or her wishes (Lipkin, 2006).

Another fundamental ethical issue underlying advance directives is the value placed by society on life. In *Cruzan v. Director, Missouri Department of Health* (1990), the U.S. Supreme Court justices were divided on the importance of life per se in relation to quality of life. The majority of the justices in the Cruzan case (filed by Nancy Cruzan's parents to terminate life-prolonging treatment as she remained in a persistent vegetative state [PVS] after a serious automobile accident) believed that life per se was worth preserving and that a state had the right to set the parameters for using advance directives. Conversely, the minority opinion emphasized the quality of life and the right of an individual to determine when that quality of life had deteriorated to the point that intrusive measures were no longer justified.

Considerations of the quality of life must always address the question of who is to determine it. Advance directives are premised upon the belief that the patient determines what he or she believes "quality of life" means. Those who are more paternalistic in their orientation say the quality of life is to be determined by health care providers or the government. In reality, the quality of one's life can only clearly be ascertained by oneself based on an evaluation of whatever criteria the individual decides constitutes quality.

Although ethics plays an important role in end-of-life decision making, the issue is also influenced by many other factors. The Terri Schiavo case (*Jeb Bush, Governor of the State of Florida v. Michael Schiavo* (2004), perhaps more than any other, exemplifies the interactions among medicine, ethics, law, family, politics, and society in the controversy over life-sustaining therapies. After 15 years in a PVS and a lengthy legal battle,

the courts found that there was clear evidence that enforcing life-prolonging treatment was against the patient's will, and her feeding tube was removed. Although treatment decisions should ideally be made based on the wishes of the patient, family discordance and the "very loud, self-interested public debate" (Quill, 2005, p. 1633) surrounding this case drew intense media coverage, highlighting the numerous issues involved in such decisions and the consequences of imposing the wishes of others upon end-of-life decision making.

The desire for and right to a peaceful and respectful death is acknowledged, yet many die in circumstances that go against their personal wishes or commonly held ideals of a peaceful death (Collins, Parks, & Winter, 2006). At the end of life, patients desire to remain in control and retain independence as well as have their pain and distressing symptoms managed adequately by kind, compassionate, and caring nurses (Johnston & Smith, 2006). In the absence of written directives, even casual statements about one's wishes have been honored and considered sufficient evidence of one's desires regarding end-of-life care (Emanuel, 2008). Yet, often written or oral directives do not ensure that decisions made by health care professionals or surrogates would have been the ones the patient would have chosen had he or she been competent or, if a directive is not issued, are in the patient's best interest (Quill, 2005).

INFORMED CONSENT

In order to understand end-of-life treatment decision making, one must first review the process of informed consent (Furrow, Greaney, Johnson, Jost, & Schwartz, 2008). The concept of "informed consent" has become widely accepted in health care and legal circles as the standard for entering into a patient-health care provider contract for services. In obtaining informed consent, information must be disclosed to a patient who has the capacity to give a valid informed consent and is able to comprehend and retain the information (Kuczewski & Marshall, 2002). With knowledge of the options presented in a clear and consistent fashion, the patient can become an active participant in his or her health care, and the power imbalance created by the lack of information between patient and provider is reduced (Katz, 1984).

A corollary of the right to consent to treatment is the right to refuse treatment. The Cruzan case leads to discussions about the right to die, including the high costs

associated with prolonging life, and determining who can make decisions for the dying when one is incapable of doing so for himself or herself (Giger, Davidhizar, & Fordham, 2006). As a result, legislation was enacted to address the manner in which end-of-life decision making occurs through The Patient Self Determination Act of 1990. Values inherent in the act include patient autonomy; informed decision making; truth telling, in that information will be openly provided by health care professionals; and control over the dying process (Giger et al., 2006). This act requires health care institutions to inform patients of the right to participate in health care decisions, accept or reject treatment, and execute an advance directive. Advance directives are essentially legal documents that make one's end-of-life wishes known in the event that he or she becomes unable to communicate. In health care, such directives usually state what the patient does *not* want done and, in effect, refuses to have done.

TYPES OF ADVANCE DIRECTIVES

Advance directives are legal mechanisms that enable a person to make decisions about financial arrangements or health care services before the occurrence of a situation in which the person is unable to make such decisions. Advance directives enhance autonomy by providing a written document signed by the person that indicates what that person wants done under certain specified circumstances. When properly legally executed, these documents serve as a valid statement of the person's wishes and cannot be invalidated without compelling reasons.

Advance directives include those relating to financial affairs such as wills, trusts, representative payeeships, powers of attorney, and joint tenancy, as well as those relating to health care: do-not-resuscitate (DNR) orders, living wills, a Durable Power of Attorney for Health Care, and health care proxies (WebMD, 2007).

The DNR was initially proposed in 1976 and is the earliest commonly used directive. It informs health care providers that the patient is not to receive cardiopulmonary resuscitation (CPR) in the event of cardiac or pulmonary arrest. The order typically applies to patients in hospitals or long-term care facilities and can be written by the physician after discussion with the patient and family. With the passing of the Hospice Medicare Benefit act of 1983, some states now have DNR forms available for those who wish to die at home. These orders are especially helpful in situations

where emergency medical service (EMS) personnel are called to help and must follow the physician-ordered DNR (WebMD, 2007).

An important development in the effectiveness of the DNR is its portability. Patients may carry the order with them, or the provider may send it with the patient to the hospital—for example, from a nursing home. However, the consistency with which the order is successfully transferred has been criticized (Collins et al. 2006). Portability of advance directives is important for persons who travel from state to state, and uniformity of law among states would enhance the effectiveness of the directives. Likewise, health care agencies should develop protocols for handling DNR orders. The DNR can be part of an overall comprehensive advance planning initiative (Emanuel, 2008).

A living will is a written document that states that under specific circumstances, such as terminal illness or a PVS, an individual prefers to have certain choices exercised on his or her behalf if unable to participate in decision making (Giger et al., 2006). In 1976, California became the first state to enact legislation that allowed advanced decision making for end-of-life situations. The typical direction of the living will is that life-sustaining activities, such as artificial hydration and nutrition, are to be withheld so the person may die a peaceful death. Without this kind of direction, a hospital or independent health care provider may feel obligated to maintain life for fear of a wrongful death lawsuit (Emanuel, 2008). The legal right to accept or reject treatment is protected under the Constitution and case law. In fact, all states and the District of Columbia have statutes recognizing one or more forms of advance directives (Emanuel, 2008). Yet, state laws vary as to when a living will goes into effect and may place limitations on its use (WebMD, 2007).

The Durable Power of Attorney for Health Care is a legal document that authorizes another to engage in certain business or legal transactions on behalf of the patient in the event of an incapacitating medical condition. This can include making bank transactions, signing checks, applying for disability, buying or selling property, signing contracts, and paying bills (Superior Court of California, 2009). Most states have enacted laws that provide for Durable Power of Attorney for Health Care (Giger et al., 2006).

Another related legal document is the health care proxy or surrogate, in which one names another person to be a substitute health care decision maker under the circumstances of impaired functioning on the part of

the person executing the document (WebMD, 2007). If the person is impaired to the point of being unable to decide what to do, then the substitute decision maker can do so.

ADVANCE DIRECTIVES IN VULNERABLE POPULATIONS

Vulnerable populations, such as the elderly, those with developmental disabilities, and the mentally ill, have specific considerations in relation to advance directives. Elderly patients who suffer from dementia are particularly vulnerable to initiation of life-sustaining treatments that the patient may not have wanted (McNamara & Kennedy, 2007). Yet, only 60% of nursing home residents have advance directives in place (McAuley, 2006). Furthermore, methods to address informed consent, end-of-life care, and surrogate decision making must be supported for those with developmental disabilities (Goldsmith, Hendrix, & Gentry, 2006).

North Carolina enacted a statute that allows a patient to develop an advance instruction for mental health treatment (North Carolina Statutes, 1998), and the New York Office of Mental Health issued a policy encouraging the use of written statements by psychiatric patients to identify the types of treatments they prefer to receive during crises ("18 Deaths," 1994). A psychiatric crisis can precipitate life-or-death consequences as with other illnesses, and many patients who have been through emergency episodes can identify what works well for them. Therefore, psychiatric advance directives (PADs) were introduced in the 1980s to give psychiatric patients some control over treatment during periods of decisional incapacity. However, such directives may be legally overridden by clinicians in that professional judgment is often favored over the patient's expressed wishes to avoid standard treatment (Swanson, McCrary, Swartz, Elbogen, & Van Dorn, 2006).

CULTURAL CONSIDERATIONS

Each individual's wishes regarding end-of-life care should be considered. In some cultures, decision making may fall to the head of the family, or multiple family members, resulting in a family-centered model of care (versus a patient-centered one). Decision makers may defer to the physician's opinions and suggestions for treatment or prohibit the patient from being informed that they are dying. Nurses should diligently assess each patient's unique beliefs and values regarding treatment wishes and health care proxy designation (Giger et al., 2006).

CRITICISMS OF ADVANCE DIRECTIVES

Several arguments are raised in opposition to advance directives. The first is the paternalistic belief that the health care provider, usually the physician, knows what is best for the patient. In its modern form, this paternalistic attitude cloaks itself in a discounting of the patient's choice to stop treatment by arguing that the patient is incapable of deciding for himself or herself. Paternalism has been eroded considerably by consumer activism and by health care providers who are interested in sharing power with other members of the health care team and their patients. The designation of "patient" is even undergoing challenge and revision because of its emphasis on a one-up/one-down position between doctor and recipient of care. As consumers become more active and interested in their own health care, they expect to be part of the decision-making process and ultimately to participate in treatment decisions. One reason they are interested in asserting their own voice is their awareness of past instances of inadequate diagnostic and treatment decisions by health care providers that have resulted in injury to patients and corresponding large medical malpractice awards. However, even though individuals may seek control at the end of life, use of the advance directive is rare in spite of legislative and other efforts to encourage people to execute living wills. The percentage of those who have living wills remains at approximately 20% (Collins et al., 2006).

Another argument against living wills asserts that these directives do not reflect an incompetent patient's interests accurately. Because these documents are formulated when the person is competent, relatively healthy, and presumably has different interests, it is argued that later, when the person becomes incompetent, his or her best interests are served in entirely different ways than what was long ago envisioned (Collins et al., 2006; Schamp & Tenkku, 2006). Following this line of reasoning, one's will and choice would have to be recorded continuously for a living will or any other form of advance directive to be considered valid. Contracts, wills, and trusts would all have to be invalidated because they were developed before the time they are acted upon. Clearly this is an absurd result that would create tremendous dysfunction in several areas of the law. However, the health care proxy option allows for the patient's appointee to decide what the patient would want given the present circumstances. So although the living will may not represent the patient's decision accurately, the proxy decision maker may do so. Also, proxies are easier to prepare, require fewer and simpler

choices to be made, and can improve decision making in that the surrogate knows more about the patient's condition at decision time than the patient can possibly know in advance (Fagerlin & Schneider, 2007).

A third argument points to research that shows patients are willing to grant their surrogates leeway in the way the living will is interpreted and do not expect strict adherence to written wishes. Often, physicians and family members may expect surrogates to interpret how the patient would make treatment decisions if able to do so. However, surrogates may not completely understand or pursue patient preferences for a given, and perhaps unforeseen, circumstance (Perkins, 2007). As a result, inaccuracy is often viewed as a criticism against surrogate decision making. However, many patients prefer that the proxy use his or her own judgment in arriving at treatment decisions, rather than adhering specifically to the tenants of the living will (Collins et al., 2006). The response to this argument is that specification as to areas of leeway and principles to be followed can and indeed should be enumerated in the living will itself. Alternatively, the proxy can be instructed orally by the patient as to the leeway to be given.

A fourth argument is that living wills are not available when needed; many patients do not take them to the hospital or give copies to their physicians. Even when forms are given to clinicians, they are not always placed in the patient's chart and rarely follow the patient on hospital admission (Collins et al., 2006).

Another argument is that even when available, advance directives do little to influence health care decision making (Collins et al., 2006). "The Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatment (SUPPORT)," a landmark study of end-of-life decision making and advance care planning in hospitalized patients, found that patients' preferences for end-of-life care did not have a significant impact on the care that was actually provided (SUPPORT Investigators, 1995). In more recent studies, it was found that 25% of patients experienced an unmet need for pain control, and 50% lacked adequate emotional support during end-of-life care, as reported by family members (Teno, Gruneir, Schwartz, Nanda, & Wetle, 2007). Also, despite patients' expressed wishes, many internists are simply unwilling to withhold or withdraw certain life-sustaining treatments (Farber et al., 2006).

Probably the most vociferous argument against living wills has been raised in legislative sessions in which opponents warn of a slippery slope between living wills and murder or genocide. This argument can be

rebutted by the realization that the law examines carefully any coercion or manipulation involved in entering into this, as with any other legal contract. Therefore, only documents that are the will of the patient are to be followed. No independent judgment by health care professionals that a given patient or a given group of patients should die would control the situation where a living will is in effect. The law would not want to reach the absurd result that no contract or other legal document could be entered into if there were any possibility of coercion or manipulation. Ethical and legal rules must be adopted based on their ability to organize human behavior. These rules cannot be controlled by the fear of numerous possibilities of human evil. As far as coercion and manipulation go, to not allow a person to determine what will be done with his or her body during a terminal illness is a form of coercion as well—one in which a person decides that the life of another should be preserved at all costs. This argument against living wills also overlooks the fact that some persons indicate in their living wills that they wish every possible means to be used to keep them alive (request directives). However, nurses may experience strong emotional responses and moral distress when a patient receives care that is believed to be medically futile (Ferrell, 2007).

NEW DIRECTIONS

Criticisms of current approaches to advance directives have led to implementation of combined or integrated directives. These hybrid directives combine aspects of instructional advance directives, health care proxies, and patient value histories in order to obtain a more comprehensive and accurate understanding of the patient's wishes (Collins et al., 2006). Some examples include the Physician Orders for Life-Sustaining Treatment (POLST), Caring Conversation from the Midwest Bioethics Center, and the *Five Wishes* (Aging with Dignity, 2007) document, available in over 20 languages, through Aging with Dignity (Collins et al., 2006). One's values are a critical element in ascertaining the quality of one's life and can be ascertained by use of a values history such as that developed by the Institute for Ethics at the University of New Mexico that allows one to indicate both values and preferences for his or her care at the end of life. A values history can give a picture of the patient's beliefs about organ donation, respirators, and independent functioning, for instance (Institute for Ethics, 2008). However, as they have been relatively recently implemented, the usefulness of these

advance directives in assisting clinical decision making is not yet clear.

ADVANCE DIRECTIVES IN RELATION TO NURSING PRACTICE

Nurses are likely to be there for patients and families facing the end of life whether in the home setting, an emergency department, an intensive care unit, or long-term care facility. Patients and families may depend on nurses to provide pain relief, manage symptoms, ensure standards of care are met, respect human dignity, and provide clear and open communication about the situation (Matzo & Sherman, 2006). Therefore, nurses are considered by some to be among the best qualified to discuss advance directives with patients and their families. Nurses can assist by helping the patient to identify a proxy, or health care surrogate, who can make decisions on their behalf. Actively listening to patients' concerns about quality of life, helping them to develop health care goals, and formulating contingency plans to meet palliative care objectives (aimed at alleviating suffering) are also important ways in which nurses can assist patients with end-of-life health care decisions (Bunting-Perry, 2006).

The nursing process can be enhanced by the use of advance directives. As part of the assessment of the patient's goals in relation to severity of health care status, the nurse can discuss provisions that exist in the patient's living will or health care proxy. Members of the health care team must respond to provisions of the living will, so they need to understand what the document means to the patient, and they need to understand what the laws in their state require for the document to be considered valid. Legal cases have been brought in many states when patients' express wishes were not followed. Collaboration with the attorney(s) for the health care facility is necessary in order to make the legal mandates regarding advance directives clear to both the staff and administrators.

Knowing the patient's beliefs about artificial extension of life, comfort measures, and resuscitation wishes, the nurse can plan and implement care that is respectful of the patient. If the patient chooses to have no heroic measures exercised, the nurse will be present to assist with comfort measures. However, interventions in the direction of this goal (rather than that of preserving life) might create moral conflict for some nurses who may feel they are helping the patient to die. The American Nurses Association issued a statement about nurse-assisted suicide that makes clear that direct assistance with suicide is not an accepted standard in

nursing (American Nurses Association, 1994). Interestingly, however, carrying out the patient's wishes for withdrawal of treatment (which may hasten or result in death), as specified in a written advance directive, is legally and ethically acceptable as previously argued.

Nurses often face obstacles in providing end-of-life care based on the patient's advance directives or stated desires. Dealing with family members, physicians, other nursing duties, and organizational restrictions can be challenging for nurses. Family-related issues surrounding end-of-life care include continuing treatment at the family's request even though it goes against the patient's expressed wishes, unwillingness to accept the prognosis, angry family members and infighting about the decision to continue or stop life-sustaining treatment (while needing to continue to provide care for the patient), lack of understanding about the treatments, continually calling the nurse for updates, and various cultural practices or beliefs. Physician-related issues include being overly optimistic in informing the family about the patient's prognosis and continuing treatment for fear of litigation. Systemwide considerations include being called away from the bedside for a new admission or to assist another nurse, visiting hours that are too liberal or too restrictive, units that do not allow for privacy, lack of additional support (such as social workers or clergy) to assist families, and the need to limit family grieving after death in order to admit the next patient (Gross, 2006).

Nurses' interactions with patients can help them to formulate advance directives. First, however, nurses are moral agents who are responsible for their own conduct. The nurse cannot assist the patient to examine values without having a sense of his or her own values. Therefore, part of the process of caring for the patient involves self-reflection and decision making about how one views one's own life and death. Completing value histories and advance directives can clarify the nurse's own wishes and help him or her to assist patients with clarifying theirs. Also, talking with patients about their stories of the meaning of life and death assists them to make decisions about advance directives. Self-disclosure by the nurse enriches the process and contributes to mutual understanding and concern. Nurses should recognize the variety of "right" answers available to patients, should be aware of their own vulnerabilities, and should be able to discuss these with patients. Also, they should recognize their equalities and inequalities with patients. As Katz (1984) states, "Trust must be earned through conversation." It is in the face-to-face

encounters with the patient that mutual understanding develops, and with understanding comes more effective decision making about health care choices.

An important foundation upon which the ethics of care, the principles of nonmaleficence, beneficence, and autonomy are based is the relationship between the nurse and the patient. Trust is imperative to this relationship and can be enhanced by the execution of advance directives. Katz (1984) poses several assumptions that are part of a trusting, mutual relationship in the context of informed consent:

1. There is no single right or wrong answer for how life, health, and illness should be lived. Numerous treatment options exist, and suffering can be alleviated in a variety of ways.
2. Health care providers and patients both have vulnerabilities and conflicting motivations, interests, and expectations. Sameness of interests cannot be presumed; it must be confirmed in conversation.
3. Both parties relate to each other as equals and unequals. Professionals share professional expertise and patients their personal expertise. At the outset, neither knows what each can do for the other.
4. Human behavior contains both rational and irrational elements. These elements must be accepted in health care providers and patients. Incompetence should not be presumed for either when signs of irrationality appear. (Katz, 1984)

SUMMARY

Nurses play a key role in the development and implementation of advance directives. Nursing values of mutual respect, open and direct communication, and caring uphold the use of advance directives for health care. A shared decision-making model is natural for nurses and patients and is helpful during the dying process. Such a model should include patient and family decision making, continuity of care, physical and emotional support, comfort care along with symptom management, spiritual support, and organizational as well as emotional support for health care professionals (Collins et al., 2006).

Patients are challenged to be honest and forthright in expressing their wishes. The skills nurses have in developing trusting relationships with patients can be used as a model for other health care professionals who are burdened with silence or lack of support in their relationships with patients. The Patient Self-Determination Act of 1990 provides the impetus for nursing involvement with patients on the preparation and implementation of advance directives. Nurses must engage patients,

their families, and other health care providers in deliberate discussions about the end of life.

*We help our patients speak.
We help them look deep within
For truth, conflict, and decision.
Then we accept their paths
As we accept our own.*

Diane Kjervik

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Environmental Disasters: Nurse Preparedness for Radiation and Chemical Events

TENER GOODWIN VEENEMA

“All substances are poisons; there is none which is not a poison. The right dose differentiates a poison and a remedy.”

Paracelsus (1493-1541)

We live in a world where numerous potential toxic industrial chemicals and toxic metals are readily available in our society, along with sources of radiation that remain hidden to most American citizens. Yet, these hazards exist in many of our local businesses and communities and represent a real threat to population health and safety. Environmental disasters resulting from the release of radiation or chemical agents would create a sudden unanticipated demand for nursing services. These events would also create significant clinical challenges and, potentially, moral and ethical dilemmas for the nurses involved as standards of care may need to be altered. Currently, the most likely scenarios that might occur would involve the accidental release of these agents in an industrial accident; however, an intentional release of the agents by terrorists is within the realm of possibility. The intention of such a terrorist attack, as critical analysis reveals, is to cause illness and injury and potentially large numbers of casualties and to create social panic and chaos and substantial demands on our health care system's ability to respond. This chapter provides an overview of the health and psychosocial implications resulting from these events. Three historical disaster scenarios are presented as examples of what might result from the release of these environmentally hazardous agents. A framework for the early detection, recognition, and management of toxic chemical and radiation events is provided in order to optimally prepare nurses with the knowledge and skills necessary to respond to an environmental disaster involving these agents.

BACKGROUND AND SIGNIFICANCE:

The extent to which we are able to respond to the increasingly complex health challenges of the 21st century and continue to protect the health of the public depends, in large part, on the preparedness of our health care workforce. Nurses number the largest sector of any workforce, and as such are certain to be “first responders” or “first receivers” to any major public health event. Environmental disasters that involve radiation and chemical agents of “opportunity” in particular—whether real or perceived—will create significant burdens for the health care system and the community it serves (Bland, 2004). The safety of patients, their families, and nurses will be dependent on the recognition and management skills of the health care providers themselves. Yet, nurses receive very little educational preparation or training for disaster response. In the past eight years, there has been significant federal funding directed toward national emergency preparedness, but precious little has been directed at workforce development, and nurses in particular remain largely underprepared for a large-scale disaster response. Events that involve the release of toxic chemicals or radiation into the environment are considered low-probability, high-impact events, and they would create social distress and considerable danger to those who respond (Barnett, Parker, Blodgett, Wierzbą, & Links, 2006). Nurses and other health care providers must be knowledgeable of the impact of these events and appropriate strategies to minimize the dangers to both patients and self.

Nurses responding to the needs of populations affected by environmental disasters involving either radiation or chemical agents will require rapid assessment skills and knowledge of the basic tenets of environmental health, methods of control and hazard containment, decontamination, and the use of personal protective equipment. The need for surge capacity will be immediate, and the societal implications and psychological impact of these environmental disasters will be far reaching and may create as much demand for health care services as the physical impact (National Center for Injury Prevention and Control, 2007).

NURSE PREPAREDNESS

The National Response Framework describes 15 disaster scenarios for preparedness purposes (U.S. Department of Homeland Security, 2008). The National Planning scenarios are tools that represent credible scenarios depicting the range of potential terrorist attacks and natural disasters and related impacts facing our nation. They form a basis for coordinated federal planning, training, and exercises. Of these 15 scenarios, 2 address the release of radiation (#1—improvised nuclear device and #11—radiological dispersal device) and 4 address chemical attacks (#5-8—blister and nerve agents, chlorine gas, and toxic industrial chemicals). The chemical agents most likely to be used by terrorists, according to the American College of Medical Toxicology, include metals, cyanide, pesticides and rodenticides and chemicals that could be released as a toxic gas. These are also the chemicals most likely to be involved in an accidental release, yet most nurses receive little to no preparation in their nursing school curriculum to respond to these types of events. The expectation of the federal government is that all communities and the health care systems in them are prepared to effectively manage the specific types of events articulated in the national planning scenarios. This implies that the health care workforce—nurses in particular—must also be prepared to respond to these disaster events.

Nurses must recognize that response activities to environmental disasters must focus on the following:

1. The immediate removal of the hazard from the environment (or if this is not possible, the movement of the population away from the hazard)
2. Decontamination of exposed individuals
3. The restoration of services to meet the immediate physiological needs of the affected people

4. Prevention of further illness or injury as a result of exposure to the hazard
5. Prioritization of the safety of those first responders and first receivers involved in the event

Yet, studies have demonstrated that events involving toxic chemicals and radiation may impact willingness to come to work (Qureshi et al., 2005; Veenema, Walden, Feinstein, & Williams, 2008) and that student nurses will not be willing to care for victims if there is a lack of protection for both themselves and their family (Young & Persell, 2004). Perception of personal safety is an important contributor to a disaster worker's willingness to respond (Fullerton, Ursano, Reeves, Shigemura, & Grieger, 2006).

RISKS TO ENVIRONMENTAL HEALTH: CHEMICAL TOXINS

Chemical environmental disasters may occur as a result of a transportation accident, an industrial spill, or an act of terrorism. Given the wide-scale availability and use of industrial chemicals in the United States, industrial accidents are a persistent threat. The intentional release or accidental leakage or spill of certain chemical substances into the environment can have devastating consequences on human health.

While the threat of conventional chemical warfare (e.g., mustard gas, sarin) has received much attention since September 11, 2001, less interest has been paid to other chemical agents that are more readily available and have great potential to wreak havoc on communities and produce mass casualties. Increasingly, emphasis is being shifted to those chemicals and sources of radiation that are easily accessible and may result in environmental disasters of epic proportions.

What chemicals are we concerned about and why do nurses need to know about them? Industrial facilities are omnipresent. According to one report, 850,000 U.S. businesses use, produce, or store toxic industrial chemicals. The Environmental Protection Agency (EPA) has suggested that 123 chemical plants across the United States have enough toxic chemicals to kill or injure 1 million people in a terrorist attack. In addition, another 750 other plants have enough chemicals to kill or injure at least 100,000 people. These are worst-case estimates based on the EPA's Risk Management Program. Existing weather conditions, wind dispersion, and other factors may result in far more or fewer injuries.

Unlike the battlefield chemical agents that are highly secured and tightly controlled, toxic industrial chemicals are ubiquitous and can easily be purchased

BOX 69-1 The 1984 Union Carbide Bhopal Chemical Disaster

The accidental release of methyl isocyanate at the Union Carbide plant in Bhopal involved in the production of the carbamate pesticide Sevin in 1984 was the worst industrial disaster on record, killing 8000 people and injuring at least 150,000. Recent scientific investigations suggest that the victims of this environmental disaster are still suffering from its effects. Levels of mercury in some places were 6 million times higher than expected. Drinking water wells near the factory used by local people were heavily polluted with chemicals known to produce cancers and genetic defects years after the event occurred. The study on Bhopal found lead, mercury, and organochlorines in the breast milk of nursing mothers (Sharma, 2006). The Bhopal disaster was a watershed in the area of environmental policy and legislation worldwide.

at neighborhood stores. One seemingly innocuous source of highly toxic chemicals is local farm and garden supply stores (e.g., Lowes and Home Depot). Many of these threats involve chemicals used as fertilizers or for industrial purposes that are routinely transported throughout our country by railroad, trucks, and other bulk transporter systems. The recognition that highly toxic chemicals are moving all across our country through our towns and villages brings the specter of chemical toxic disasters—whether deliberate or accidental—into everyone's backyard.

Nurses need to be aware of the environmental and safety hazards that exist in or near the communities in which they live and work. The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed in response to concerns regarding the environmental and safety hazards posed by the storage and handling of toxic chemicals. These concerns were triggered by the disaster in Bhopal, India, in which thousands of people suffered death or serious injury from the accidental release of methyl isocyanate (Kalelkar, 1988). To reduce the likelihood of such a disaster in the United States, Congress imposed requirements on both states and regulated facilities (Box 69-1).

CHEMICAL TERRORISM

Chemical terrorism refers to the use of chemicals to harm or alter the behavior of an adversary. Unlike conventional military chemicals, chemical terrorism utilizes

existing stored chemicals or the wide availability of industrial chemicals throughout the United States and the proximity of industrial operations to large urban centers. Even the threatened use of these toxic substances is terrorizing to the public and creates uncertainty, fear, and panic, which can provide tactical and/or psychological advantages to the perpetrators of the event.

Chemical agents can be incapacitating or can kill if the exposure is to a high dose for a long enough period of time. Many of the industrial chemicals of concern may not kill except at very high doses. At lower doses, they can incapacitate physically, emotionally, or financially. As an example, the intended goal of the terrorist use of some chemicals, and certainly the use of radiation, is to damage or contaminate the infrastructure. Such contamination by itself may create havoc and be extraordinarily disruptive. Even the intended threat of chemical exposure may prove terrorizing, even without actual use. Potential exposure may create uncertainty, fear, and panic. Such uncertainties provide the terrorist with an asymmetrical advantage and provide tactical and psychological advantages.

College laboratories and hospitals are another source for obtaining chemicals and radioactive substances. The medical facilities in which many nurses work utilize a large number of cancer chemotherapeutic agents that are highly toxic by design and also store and utilize a variety of sources of radiation (radionuclides) for diagnostic and therapeutic use. One of the main concerns for emergency planners about radiological terrorism involves the use of hospital-based sources of radiation, given their extensive availability. Although the quantity may be small, the psychological impact of their potential use in a radiation dispersal device (RDD or "dirty bomb") scenario is profound. A terrorist attack involving a bomb with real or perceived involvement of radiation would result in a sudden and massive surge of patients (National Center for Injury Prevention and Control, 2007).

RADIATION EVENTS

The concept of terrorists using radiation as a weapon is concerning, and the perceived threats from radiological and nuclear devices range from true weapons of mass destruction to weapons of mass disruption. Ionizing or "nuclear" radiation has the clear potential to "terrify" the public as it is associated in the public mind with the destructive force of nuclear weapons, it is invisible and acutely undetectable to the senses, and it is associated with cancer. Other effects are not well understood by

the general public. Nurses and other health providers can play a vital role in minimizing fear and panic. It is important to remember that exposure to radiation is different from contamination, and, if proper precautions are taken, these patients pose little risk to responders, nurses, and other health care providers (Karam, 2007).

Several potential scenarios involving the use of radiation by terrorists include the surreptitious placement of a radiation source, the stealth dispersal of radioactive material, an explosive radiation dispersal device ("dirty bomb"), a deliberate attack on a nuclear power plant, or the detonation of a nuclear weapon. Nurses may be called upon to care for patients who have been exposed to high levels of radiation or who have been contaminated with radioactive materials. Some of these patients may be gravely ill with radiation sickness or may have radiation burns, while others may have no radiological medical problems other than minor skin contamination. It is essential that nurses be able to recognize radiation injury and provide appropriate treatment. It is also essential that nurses understand that patients who are merely contaminated may be treated without risk of radiation injury to the medical and nursing

staff, although contamination control measures may be prudent if the medical condition permits (Veenema & Karam, 2003).

A deliberate attack on a nuclear power plant is always a possibility (McFee & Leikin, 2005). This event or the detonation of a nuclear weapon is horrifying in its potentially devastating impact on health. If the radiation is detected promptly following a lesser-scale radiation event, such as the accidental release of an industrial source of radiation, few individuals are likely to absorb a lethal dose before they can evacuate the area. In terms of human casualties, it is hopefully unlikely to involve "weapons of mass destruction." The Centers for Disease Control and Prevention would establish a registry to track patients exposed to radiation (Figure 69-1 and Box 69-2).

Radiation sickness will be limited to individuals who have ingested, inhaled, or otherwise internalized substantial amounts of the radiation source. Acute radiation syndrome is a constellation of signs and symptoms that develops after total body irradiation. The initial signs and symptoms of radiation illness are nonspecific and could be misdiagnosed as a viral

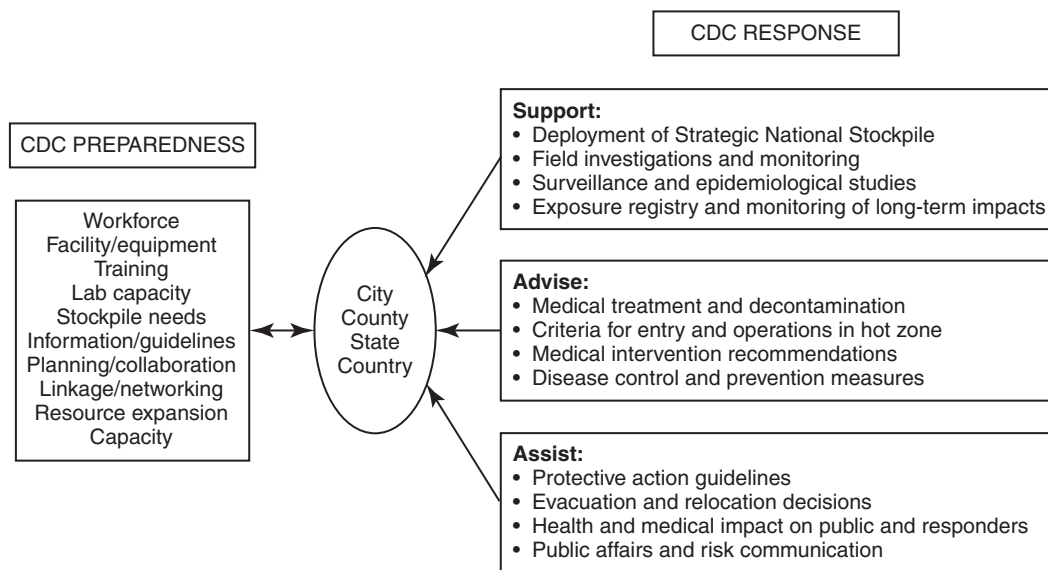


FIGURE 69-1 CDC Radiation Exposure Registry. Following an incident involving radioactive materials, CDC/ATSDR would like to establish an exposure registry. The purpose of this registry would be to monitor people's exposure to radiation and perform dose reconstructions to determine the exact amount of radiation to which people were exposed. This registry would help CDC determine the necessary long-term medical follow-up for those who were affected by the incident (Centers for Disease Control and Prevention, 2006).

BOX 69-2 The 1986 Chernobyl Nuclear Power Plant Disaster

On April 26, 1986, the most serious accident in the history of the nuclear industry occurred at Unit 4 of the Chernobyl nuclear power plant in the former Ukrainian Republic of the Soviet Union. The explosions that ruptured the Chernobyl reactor vessel and the consequent fire that continued for about 10 days resulted in large amounts of radioactive materials being released into the environment. The cloud from the burning reactor spread numerous types of radioactive materials, especially iodine and cesium radionuclides, over much of Europe. There were 134 acute radiation syndrome victims, 48 with severe burns, and 28 acute radiation injury deaths, plus 19 late-occurring deaths. Radioactive cesium-137, which contributes to both external and internal doses, has a much longer half-life (30 years) and is still measurable in soils and some foods in many parts of Europe.

syndrome or gastroenteritis. It is important in triage to attempt to ascertain the time interval between a person's acute radiation exposure and the onset of gastrointestinal signs and symptoms. Individuals who become symptomatic in less than four hours and certainly in less than two hours after exposure are likely to have absorbed a lethal dose of radiation and cannot be saved. In a mass casualty incident, they might have to be triaged to palliative care rather than intensive supportive care.

DOSE RESPONSE RELATIONSHIPS

At the beginning of this chapter is a quotation from the renowned 16th-century toxicologist Paracelsus on what makes something a poison. If you take enough salt or water or even oxygen at high enough doses, all of these life-sustaining chemicals can be toxic. The health implications of an exposure to a chemical or radiation source will be directly related to the dose of the agent, the distance between the victim and the hazard, and the length of time the individual is exposed. Once the scene has been secured and the potential for a secondary disaster event has been ascertained, the priority becomes the immediate removal of the victim from the hazard and the commencement of decontamination.

DECONTAMINATION

Decontamination is the reduction or removal of chemical agents. Decontamination may be accomplished by removing these agents by physical means or by chemical neutralization or detoxification. Decontamination of skin is the primary concern, but decontamination of eyes and wounds must also be done when necessary. Liquids and solids are the only substances that can be effectively removed from the skin. Removal of the victim's clothing will remove the majority of the hazard.

The most important and most effective decontamination of any chemical exposure is that decontamination is implemented within the first minute or two after exposure. Early action by first responders will make the difference between survival (or minimal injury) and death (or severe injury). Decontamination of a surge of victims is an enormous task. The process requires dedication of both large numbers of personnel and large amounts of time. Even with appropriate planning and training, the requirement demands a significant contribution of resources.

CARING FOR PATIENTS EXPOSED TO CHEMICALS OR RADIATION: CONTAMINATION CONTROL

To control the spread of contamination, a special treatment area layout should be established. Use of such a layout allows for the control of individuals and materials both going into the area and exiting the area, and it allows for a radiation survey of individuals and materials coming out of the area.

The key to this layout is the buffer zone between the potentially contaminated area and the clean area. This buffer zone should be set up so individuals or items leaving the contaminated area are first monitored for contamination (while still on the step-off pad) and contaminated gloves, shoes, clothing, or other materials can be placed in receptacles set aside for them before stepping off the step-off pad. Nursing staff should survey their entire bodies with a radiation meter, taking special care of hands, feet, and face. The speed of the survey should not exceed 2 inches per second, and the distance between the probe and the skin should be approximately 1 inch (Oak Ridge Institute for Science and Education, n.d.; Skorga et al., 2003).

Hospital-based nurses are well versed in protecting themselves and their work areas from microbiological

contamination through the use of standard precautions. The same techniques can be used effectively to protect personnel and the work area from contamination by chemical and radioactive materials (Fong, 2002; Karam, 2007).

1. Use standard precautions. Although standard surgical masks reduce the possibility of blood splashing into the mouth or hand-oral contamination, they do not protect against inhaling all respiratory hazards. Fitted particulate respirators such as N95 or higher will provide a higher level of protection. However, experience suggests that if N95 masks are not available, surgical masks should provide adequate protection.
2. Survey hands and clothing with a radiation meter at frequent intervals.
3. Replace gloves or clothing that is contaminated.

PSYCHOSOCIAL BEHAVIORS AFTER ENVIRONMENTAL DISASTERS

The initial stages of a mass chemical or radiation exposure, particularly one of unknown origin or malicious intent, may engender fear and anxiety in the general population and have the potential to overwhelm emergency department staff and clinical care centers (Bushberg et al., 2007). After a mass chemical or radiation exposure, the vast majority of individuals presenting for treatment or screening will be the “worried well.” Adding to the burden of identifying those who need immediate care and reassuring those who do not, stress reactions among patients (and nurses and other health care personnel) may closely mimic the symptoms of certain chemical exposures (Box 69-3).

As was seen with past chemical exposure crises (1995 Tokyo sarin attack, 1984 Union Carbide Bhopal disaster, 1986 Chernobyl nuclear disaster), patients who were far from the event may also exhibit symptoms. Given the added burden of having to triage so many additional patients, nurses and other health care personnel may be inclined to err on the side of caution when dealing with potentially exposed patients. However, injudicious or overliberal application of decontamination procedures and aggressive antidotal therapies (atropine, cyanokit) may create a risk to population health outcomes. Additionally, in order to minimize the added burden of patient surges on the system and preempt unnecessary clinical visits, it is critical that information regarding the event be rapidly and widely

BOX 69-3 The 1995 Tokyo Sarin Gas Attack

One of the worse “chemical” incidents perpetrated by terrorists involved the release of the deadly nerve agent sarin on the Tokyo subway in 1995. This terrorist group known as Aum Shinrikyo had a number of highly educated scientists as its members. Their deliberate release of sarin on the Tokyo subway resulted in more than 5000 visits to local Tokyo emergency rooms, but fortunately the number of fatalities was low. Problems in producing truly weapon-grade sarin (estimates were that the product was less than 30% pure), as well as limitations in their chosen delivery systems (a motorized fan in Matsumoto and using umbrella tips to break open plastic bags containing sarin in several Tokyo subway cars), likely contributed to limiting the potentially catastrophic effects of these highly toxic chemicals.

disseminated. Nurses must be informed and work with the media to create an accurate picture of the event as it unfolds. Nurses must also consider that standards for providing clinical care may need to be adjusted if they are faced with a surge of patients that has the potential to overwhelm existing resources (Veenema & Toke, 2007).

Victims’ stress reactions to hazardous materials release follow a somewhat predictable progression. This process begins when people become aware of the release or potential release of a dangerous toxin. The initial fear response in individuals is mediated by the novelty of the agent at hand, the subject’s knowledge regarding the agent, whether antidotes or therapies exist for the treatment of this exposure, and whether the agent itself can be detected and/or identified.

A natural fear that one has been exposed engenders a heightened awareness of body sensations. Minor symptoms or observations may become magnified, thereby exacerbating the initial reaction and potentially leading to autonomic arousal. The outward signs of this autonomic arousal may be misinterpreted as symptoms of exposure. Further complicating matters, many of the nonspecific symptoms relating to stress reactions may themselves closely mimic signs of chemical exposure (headache, dizziness, nausea, mucous membrane irritation, numbness, weakness, and drowsiness).

Nurses should be aware that disaster management and appropriate planning for a mass chemical exposure

should focus on what people are likely to do during an emergency. While overt labeling of subjects as “hysterical” or “worried well” can be stigmatizing to victims, any response plan must consider the burden from both psychological and physical casualties.

It is critical that triage staff should not get preoccupied attempting to determine if a given exposure is “real.” As psychogenic illness is generally a diagnosis of exclusion, triage strategies should focus on identifying toxic syndromes and addressing objective signs of exposure. While caution is warranted, one should presume symptomatic patients are poisoned unless other evidence exists.

SUMMARY

The 21st century will, with certainty, bring events that will test the capacity of the health care system to respond. Environmental emergencies involving the release, or threatened release, of radioactive materials or hazardous chemicals may potentially affect communities and the surrounding environment. Releases may be accidental, as in the case of a spill at a chemical plant, or they may be deliberate. In either case, the health implications on affected individuals can be devastating. Nurses may be placed in the unenviable position of being asked to participate in health care events that they have not been educated or adequately prepared for. The responsibility lies within the profession to ensure that nurses are aware of these hazardous events and that they are clinically competent to participate safely and appropriately in any major response effort.

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RESOURCES

Centers for Disease Control and Prevention, Radiation Emergencies <http://www.bt.cdc.gov/radiation/>

International Commission on Radiological Protection <http://www.icrp.org/>

National Council on Radiation Protection & Measurements
<http://www.ncrponline.org/>

Radiation Event Medical Management <http://www.remm.nlm.gov/>

United States Nuclear Regulatory Commission <http://www.nrc.gov/about-nrc/radiation.html>

All-Hazards Preparedness: Advocating for Mothers and Babies

LISA SUMMERS ♦ ROBBIE PREPAS

This viewpoint chapter describes how midwives, as experts in normal birth and advocates for mothers and babies, have worked to ensure that the needs of childbearing women and infants are addressed in all-hazards preparedness. While the chapter may be of special interest to readers with a focus on maternal-child health, there are lessons to be learned for *all* nurses, as we all have a role as advocates for special populations, and we all have a personal responsibility to be prepared. The principles discussed have broad applicability, and this story can be viewed as a case study in advocacy and policy work done by nurses on behalf of a special population. It illustrates how a partnership built between individuals and their professional association—in this case, midwives and the American College of Nurse-Midwives (ACNM)—can raise awareness and affect policy in a manner that neither the individual nor the association could do without the other. In addition, there is an overview of the important work that the American Nurses Association (ANA) has done to ensure that the larger nursing community is involved in all-hazards planning and to ensure that individual nurses have the necessary information to develop both personal and professional preparedness plans (Box 70-1).

THE CONCEPT OF “ALL-HAZARDS PREPAREDNESS”

The work of ACNM over the past several years illustrates the development of the concept of “all-hazards preparedness.” The initial focus was on bioterrorism. Not long after 9/11, when preparing for a terrorist attack and “sheltering in place” was of concern throughout the United States, ACNM published *Giving Birth “in Place,”* which provided instructions for family-attended home births in an emergency situation (Williams, 2004). These instructions were designed to provide reassurance and

advice for childbearing families. After Hurricane Katrina, when there was much focus on natural disasters and a shift to disaster planning and response, ACNM documented the work of midwives in relief efforts, activated their Blankets for Babies Campaign, and stepped up information for members on disaster preparedness and first responders. Then, as the number of avian influenza cases began rising around the world, ACNM joined the Pandemic Flu Working Group in Washington, D.C., and began getting information to members about state and local influenza planning. By 2006, the lingo among policy makers began to reflect the realization that we cannot have one plan for bioterrorism, one for hurricanes and natural disasters, and one for pandemic flu; we speak now of “all-hazards” preparedness.

In each of these instances, the needs of mothers and newborns had been almost universally overlooked. In the Louis Armstrong Airport in New Orleans, where many pregnant women were seen and several gave birth, there were no procedures in place to care for pregnant women, and supplies were lacking. And when the federal government and state and local governments began releasing plans for pandemic flu, they did not include addressing the needs of healthy, pregnant women. The work carried out by ACNM to raise the awareness of policy makers illustrates the effectiveness of a partnership between individual practitioners and a professional association.

While disasters of a huge scale, such as September 11 or Katrina, serve to raise awareness and underscore the necessity of planning, it is important to remember that a relatively local or relatively simple event such as an ice storm can also put health and lives at risk. Even a planned event that includes closure of roads and major thoroughfares, particularly around a health care facility, can create a situation that needs advance planning to protect health.

BOX 70-1 The American College of Nurse-Midwives (ACNM) and Midwifery Care

With roots dating to 1929, the American College of Nurse-Midwives is the oldest women's health care association in the United States. ACNM's mission is to promote the health and well-being of women and infants within their families and communities through the development and support of the profession of midwifery as practiced by certified nurse-midwives (CNMs) and certified midwives (CMs). Midwives believe every individual has the right to safe, satisfying health care with respect for human dignity and cultural variations (American College of Nurse-Midwives, 2005a). More information can be found at www.midwife.org.

While the overwhelming majority of CNMs/CMs in the United States attend births in hospitals, the philosophy of midwifery is to support the physiologic process of birth and limit intervention. This philosophy and experience is well suited to providing care in a public health emergency. For example, midwives are capable and comfortable with monitoring the fetal heart rate with a fetoscope rather than with continuous electronic monitoring and are expert at nonpharmacologic pain relief in labor. Midwives are also highly skilled in triage, can determine when women can safely give birth in a low-resource setting, and can identify which women need transfer for medical care when such care is limited. In addition to being skilled in the provision of maternity care, CNMs and CMs are also prepared as primary care providers, making them particularly well suited to provide the breadth of care that is often necessary in an emergency response.

DEVELOPMENT OF A "SHELTERING IN PLACE" RESOURCE TO ADDRESS EXPECTANT MOTHERS

After September 11, when the public was urged to prepare for "sheltering in place," ACNM began to receive inquiries from pregnant women and their families: What sort of preparations could be made for a woman who might give birth without a trained attendant? Using their expertise in physiologic birth and knowledge of providing care in out-of-hospital and low-resource settings, ACNM produced *Giving Birth "in Place": A Guide to Emergency Preparedness in Childbirth* (Williams, 2004). The guide, available on the ACNM Web site, has served as an important resource for parents and policy makers and as a foundation for later work.

DEVELOPMENT OF A COMMITTEE ON DISASTER PREPAREDNESS

An ACNM (2005b) newsletter, *Quickening*, documented the stories of just a few of the midwives who responded to Hurricane Katrina. Robbie Prepas, CNM, NP, had been a member of a Disaster Medical Assistance Team (DMAT 4) for six years and had been deployed to Ground Zero in New York City post-9/11, as well as to Guam. That did not prepare her for the "surreal" scene her DMAT faced when they arrived at the airport in New Orleans. She responded to a continuous flow of women in labor, delivered many babies right in the airport, and delivered a set of twins in an ambulance en route to Baton Rouge, all without many essential supplies.

While proud of the work that her DMAT had been able to do, she was disappointed at the lack of a coordinated, planned effort to care for childbearing women. She reached out to staff at ACNM to learn how the organization had responded and how attention could be brought to the needs of childbearing women in the postdisaster work at the federal level. At the next ACNM annual meeting, with unanimous support from the membership and the Board of Directors, ACNM created an Ad Hoc Committee on Disaster Preparedness (Carr, 2006) and appointed Robbie Prepas to chair the committee.

WORKING IN COALITION: THE WOMEN AND INFANTS SERVICE PACKAGE

Having a formal committee structure in place and a mechanism to facilitate the work of members who have particular expertise allowed ACNM to work more effectively in coalition with other groups and to influence policy makers. The most striking example of the power and potential of a coalition of advocacy groups is the creation of the Women and Infants Service Package (WISP). The WISP provides a framework for minimum and initial responses required for pregnant women and new mothers and their mothers. It was created by the White Ribbon Alliance for Safe Motherhood.

The staff of the White Ribbon Alliance for Safe Motherhood (WRA) saw the mass chaos that followed Hurricane Katrina as a wake-up call and formed a working group of WRA members to determine how best to respond. It was noted that animal rights advocates had generated publicity about the problems of abandoned animals, raised millions of dollars to aid in the care of rescued animals, and lobbied effectively to ensure that the care of animals would be attended to in any future disaster. Sadly, maternal child health advocates could not point to the same kind of response to the tragedy of

women who gave birth without adequate care or babies who were separated from their mothers (Box 70-2).

The working group decided what they needed was a package of guidelines for state and local government and nongovernmental organizations (NGOs), private groups, and individuals that would help them plan for the needs of women and infants in a crisis or emergency. Over the years, experts in international health, refugee situations, and reproductive health have cooperated to document their interagency expertise in field manuals and learning modules (The Women's Commission for Refugee Women and Children, 2006; United Nations High Commissioner for Refugees, 1999). The WRA working group reviewed these international standards as well as a variety of national and professional standards with the goal of producing a document that would not be exhaustive or prescriptive but would help policy makers, planners, and responders in the United States to ensure that the health needs of pregnant women, new mothers, fragile newborns, and infants could be adequately met during and after a disaster. The resulting document, the Women and Infants Service Package (WISP), benefits from international experience, adapts lessons learned in refugee camps abroad as well as lessons learned from Katrina, and also seeks to address plans for pandemic influenza. When the Association of Maternal and Child Health Programs (AMCHP), supported by the U.S. Department of Health and Human Services, Health Resources Services Administration, Maternal and Child Health Bureau, convened a group of experts to produce planning and emergency preparedness recommendations, the resulting guide was compared with the WISP (Association of Maternal and Child Health Programs, 2007).

PANDEMIC INFLUENZA PLANNING

While the lack of preparation for childbearing women during the Gulf Coast hurricanes has been concerning, arguably of even greater concern are the implications of not having an adequate plan for the care of healthy childbearing women in the event of pandemic influenza. In

2006, the director of Professional Services at ACNM (the first author) shared with ACNM members in the newsletter *Quickening* her experience attending a Hill briefing on pandemic flu planning sponsored by the National Association of County and City Health Officers (NACCHO):

Two health officers presented detailed plans that are underway for responding to pandemic influenza. They are planning for three levels of care: there are pamphlets to educate the public about how to provide appropriate *home* care that will meet the needs of most flu victims (hydration, isolation, comfort measures); they are working with local *hospitals* to assess surge capacity and their ability to meet the needs of the sickest (perhaps ventilator dependent) victims; and they are designating places such as hotel ballrooms and convention centers (places with adequate bathroom and food facilities) to be used as "*influenza care centers*" for those too sick for home care, but not in need of (or who cannot be accommodated in) limited hospital beds. (Summers, 2006)

She described how she came to the microphone to ask a question on behalf of ACNM—one of many times she did so. To take full advantage of such an opportunity for advocacy, it is helpful to have at the ready a few brief facts that will provide basic information and highlight the needs of this special population. In this situation, those facts might include the following: There are about 4 million births each year in this country, making childbirth the second most frequent discharge diagnosis for hospitalization in the United States (Merrill and Steiner, 2006). It is important to note that this is true because, unlike in many other countries, 99% of births here occur in hospitals (Martin et al., 2009). We know from experience in the 1918 and other flu epidemics that because of the immune suppression inherent in a normal pregnancy, pregnant women are likely to die disproportionately in a flu epidemic (Barry, 2005, p. 239). She expressed concern that pregnant women should not be unnecessarily exposed and asked the following:

What plans are being made to determine the best level of care for childbearing women? Will the influenza care centers be appropriate places for women to give birth?

The response at this briefing, as it was in many situations, was—after a moment of puzzled silence—"That's a good question. We hadn't considered that." As a follow-up to the briefing, NACCHO staff organized a call that brought together health officers working on disaster preparedness and maternal-child health, raising their awareness of these important questions and offering the expertise of ACNM and midwives in their states and local health departments (Box 70-3).

BOX 70-2 The White Ribbon Alliance for Safe Motherhood (WRA)

The White Ribbon Alliance for Safe Motherhood (2008) is an international coalition of individuals and organizations launched in 1999 to promote increased public awareness of the need to make pregnancy and childbirth safe for all women and newborns in developing as well as developed countries. More information is available at www.whiteribbonalliance.org.

BOX 70-3 Nursing Expertise in State and Local Preparedness Efforts

One example of nursing lending expertise in state preparedness efforts can be found in New Mexico, where the Emergency Preparations for Vulnerable Populations (Center for Development and Disability) program was managed by Elaine Brightwater, DNP, CNM. Their materials include a laminated "Tips for First Responders" card that includes care necessary for pregnant and laboring women, their newborns, and families.

COALITIONS AND GOVERNMENT AGENCIES HEEDING THE CALL

In subsequent years, there has been increasing attention paid to the special needs of pregnant women, infants, and children. In the aftermath of Hurricane Katrina and the increasing possibility of pandemic flu, there were several important conferences and meetings that were held. These important stakeholders included the Centers for Disease Control CDC in partnership with the Association of Maternal and Child Health Programs (AMCHP) and the March of Dimes (MOD). Subject matter experts from many maternal and child health organizations, including the American College of Nurse Midwives, were brought together to discuss public health recommendations related to pandemic influenza and pregnancy. Subsequent meetings were also held from associated organizations, including the American Academy of Pediatrics, to discuss the critical needs for children in emergency preparedness. Several federal and state experts made recommendations for pregnant women and infants in the event of pandemic flu preparation that included prophylaxis and treatment, vaccine use, nonpharmaceutical interventions, and communications strategies (Rasmussen et al., in press).

Recommendations

- ◆ The group-supported treatment of influenza-associated symptoms with acetaminophen and no changes in the recommendations for treatment and prophylaxis with the present anti-influenza medications used for the general population (site draft of *Pandemic Influenza: Special Considerations for Pregnant Women*).
- ◆ Recommendations were made for all pregnant women to have the seasonal influenza vaccine. Pregnant women are considered a high-risk group, so all women of childbearing age should receive the

vaccine. More information needs to be provided to the pregnant population about the safety and experience with the seasonal influenza vaccination. More research is needed on the safety of the vaccine and the anti-influenza medications.

- ◆ Communicating messages to pregnant women is critical because the knowledge, attitudes, and beliefs about pandemic influenza and emergency preparedness of women of reproductive age and health care will be essential to develop appropriate communication strategies during a pandemic event.
- ◆ Planning strategies for a disaster plan for inpatient and outpatient obstetrics in the event of a pandemic event is essential.

Recommendations from the AAP and NACCHO

- ◆ Identification of critical needs for the pediatric population and ensuring a sufficient pediatric dose stockpile in the Strategic National Stockpile's (SNS) managed inventory.
- ◆ Development of disaster family reunification plans.
- ◆ Development of performance measures in all clinical preparedness and preparation for hospital plans in the event of a likely critical workforce shortage in areas traditionally staffed by women (nurses, pediatricians) of reproductive age.

THINKING OUTSIDE THE BOX

The Minnesota Emergency Readiness Education and Training Program (MERET) is an example of a project that has not only worked to incorporate the needs of pregnant women and infants in their predisaster planning and training programs but has been ready to think outside the box in doing so. Led by a nurse, MERET is a joint program of the University of Minnesota School of Nursing and School of Public Health Centers for Public Health Education and Outreach (CPHEO) that is designed to educate and train Minnesota's health care workers in emergency preparedness. MERET provides education and training in a variety of ways, including face-to-face trainings, interactive Web-based courses, CD-ROMs, and through group events such as state meetings.

MERET staff utilized the expertise of ACNM staff and volunteers in developing material specifically focused on maternal and newborn care during disasters. Among their online courses are five that have such a focus, including "Caring for Pregnant/Birthing Women and Their Newborns During Disasters: An Introduction to the Issues"; "Caring for Women Giving Birth"; and

“Caring for Postpartum and Breastfeeding Women” (Minnesota Emergency Readiness Education and Training, 2009).

MERET training programs and educational materials have cautioned that “stocking birth and newborn kits based on the average number of births in a region is a step that few emergency preparedness teams have considered,” and they have spelled out the need to think “outside the hospital paradigm” (Pfeiffer et al., 2008). Particularly in a pandemic, with hospitals a likely place to be exposed to virulent disease, healthy pregnant women and their care providers may want to assess the relative risks and benefit of out-of-hospital settings. Just as we are assessing the surge capacity of hospitals, we need to assess the capacity of existing freestanding birth centers and consider the use of sites like ambulatory surgical centers that might provide an alternative to low-risk women for labor and birth.

Disaster planning in general and pandemic flu planning in particular provide a unique opportunity for “birth advocates” to educate the public and a variety of health care providers about the relative risks and benefits of all birth settings. This should include the “usual” settings—hospital, birth center, and home—as well as additional settings that might be considered in emergency situations, such as ambulatory surgical centers or specially outfitted trailers.

This is a time to end the rhetoric that has surrounded the debate about birth settings and to focus on the evidence for the safety of planned home births for healthy women, as well as the safety of birth centers. This is not easy; planning for giving birth OOH requires a significant paradigm shift for women and families and for providers—midwives and physicians alike (Boxes 70-4 and 70-5).

BOX 70-4 Birth Centers and the American Association of Birth Centers (AABC)

The American Association of Birth Centers is a non-profit membership organization founded by Child-birth Connection (formerly the Maternity Center Association) that has for 25 years been the nation’s most comprehensive resource on birth centers. AABC has built a solid foundation for growth in birth centers by establishing national standards and accreditation, promoting state regulations, conducting research, and educating parents, professionals, and policy makers to the birth center concept (American Association of Birth Centers, 2007). More information is available at <http://www.birthcenters.org>.

BOX 70-5 American Nurses Association (ANA)

The ANA is the only full-service professional organization that represents the interests of the nation’s 2.9 million registered nurses through its constituent member nurses associations, its organizational affiliates, and its workforce advocacy affiliate. The ANA advances the nursing profession by fostering high standards of nursing practice, promoting the rights of nurses in the workplace, projecting a positive and realistic view of nursing, and lobbying Congress and regulatory agencies on health care issues that affect nurses and the public (American Nurses Association, 2009). For more information, visit www.nursingworld.org.

ANA AND THE LARGER NURSING COMMUNITY

While ACNM has been advocating for mothers and babies for several years, the American Nurses Association (ANA) has a long history of involvement in disaster preparedness. In 1998 the organization participated on the Nuclear, Biological and Chemical Task Force established by the American College of Emergency Physicians under a grant from the Department of Health and Human Services. That task force examined the level of preparedness of emergency medical technicians, emergency nurses, and emergency physicians to respond to a major disaster and identified the barriers to improving the overall level of preparedness of the health professions. Since that time—and certainly post-9/11—ANA’s involvement in disaster preparedness and response has substantially increased.

Through a variety of projects and initiatives, ANA is actively involved in creating a stronger disaster response system that facilitates the appropriate use of nurses and their skills, knowledge, and ability during any type of disaster or pandemic event (Trossman, 2008). As a part of this work, ANA collaborates with multiple federal departments and agencies and partners with multiple stakeholders. For example, ANA has been a member of the Institute of Medicine Forum on Medical and Public Health Preparedness, as well as the Health Sector Coordinating Council, a partnership with the Departments of Homeland Security and Health and Human Services. In these settings, ANA works to promote the occupational safety and health of all disaster responders, including nurses, and to identify strategies that promote the integration of the public health, the acute care health system,

and the disaster response system to create a seamless health response network to disasters.

ADAPTING STANDARDS OF CARE

Among the most difficult issues that must be addressed in disaster planning are the shift in the ethical framework that guides decision making and the need to adapt to scarce availability of resources. Under normal circumstances, clinicians typically have an array of tests and equipment available, focus on caring for one individual, and make decisions with only that individual in mind. In an emergency, clinicians may well find resources severely limited and are likely to need to shift to a utilitarian framework in which the goal is to provide the greatest good for the greatest number of individuals.

ANA has taken the lead in examining policy issues related to nursing ethics and scopes of practice and the standard of care provided during an emergency and has published a policy paper “Adapting Standards of Care under Extreme Conditions: Guidance for Professionals During Disasters, Pandemics, and Other Extreme Emergencies” (Center for Health Policy, 2008). This policy paper is the result of a multistakeholder policy conference, consultations with an expert panel, and public review, and it has been recognized as a model for all disciplines, not simply for nursing. In discussing decision making during extreme conditions, the paper refers to the need to consider “outpatient care for a condition that might otherwise be treated in an inpatient setting,” clearly providing the framework to consider a different setting for childbirth.

Extreme conditions might also require nurses and other health care providers to perform outside of their usual roles. Event planning often includes plans for rapid training specific to the event, but nurses will need to use their best judgment to provide the best care possible under the circumstances.

A PERSONAL PREPAREDNESS PLAN

While it is important for everyone to have a personal preparedness plan, one might argue that it is particularly important for nurses. Public opinion polling repeatedly confirms that nurses are among the most highly respected professionals, and their modeling of preparedness is likely to influence the behavior of others. In addition, while registered nurses are key to the success of any disaster plan and have historically worked long hours through a host of events, they are more likely to be able to respond

and respond effectively if they know an effective plan is in place for their families.

A personal plan encompasses items such as food, water, medicine, and batteries, as well as a communication plan that serves to address the unique needs of each family. Detailed information and checklists are available from a number of sources, including the Department of Homeland Security (www.dhhs.gov) and the American Red Cross (www.redcross.org). It is critical that nurses “practice what they preach.”

A PROFESSIONAL PREPAREDNESS PLAN

Because registered nurses are often the single largest group of responders in a disaster, another focus of ANA’s work has been to create a better legal and regulatory environment for the movement of health professionals during a disaster and to strengthen the surge capacity of health human resources. One of the most important ways to achieve that goal is through the development and promotion of volunteer registries.

Volunteer registries are designed, through preparation *before* a disaster, to ensure that respondents are adequately trained and licensed and will be deployed in an organized manner. Registries can help prevent the situation of the well-meaning “spontaneous volunteer” who appears on the scene at the time of a disaster. Such volunteers can, at best, be underutilized and, at worst, might divert the attention of those leading the response effort or even place themselves at risk.

Many registration programs are available, including the DMAT teams referred to earlier and the Emergency System for Advanced Registration of Volunteer Health Professionals, known as ESAR-VHP. The Medical Reserve Corps (MRC) includes teams of volunteer health professionals who are under the auspices of the U.S. Surgeon General but are organized and managed at the community level. Another organization, well known to many nurses, is the American Red Cross. It is important that a nurse who wishes to be ready to respond at the time of a disaster preregister with one—and only one—of these programs. Peterson (2006) has described the options and provides some questions that can help nurses make a reasoned decision based on their individual skills, family situation, and work.

Health care institutions are becoming increasingly sophisticated in their emergency planning, and it is important that nurses be actively involved in that planning. All nurses should clearly understand the

role they are expected to play in their employer's emergency response plan so it doesn't come as a surprise during an actual event, and nurses should encourage periodic testing and revision of emergency plans whenever they work.

SUMMARY

While it tells the story of midwives advocating for mothers and newborns, this chapter illustrates a number of important points that have relevance beyond this specialty:

- ◆ Nursing brings a unique perspective and special expertise that are important to incorporate in all aspects of health care, including disaster planning. Midwives, as experts in physiologic birth, are uniquely suited to provide care in a public health emergency. Like all nurses, they bring a holistic view and a special expertise in communication, and they are trusted by the general public.
- ◆ A strong professional association working in tandem with passionate individuals can have an impact well beyond what either can accomplish alone. A nationally recognized association like the ACNM or ANA is sought out for expertise, is offered a "seat at the table," and can join coalitions to advocate on behalf of the profession and the public it serves. An individual can tell a compelling, personal story that breathes life into statistics and underscores the depth of the problem. Neither can be completely effective alone, but by working effectively together, the professional association and individual members can have a dramatic impact.
- ◆ Building a strong coalition is critical to effective advocacy, particularly for vulnerable populations. Similar to the symbiosis that occurs when an association partners with its individual members, a coalition of groups can be much greater than the sum of the parts. The ACNM has effectively partnered with a host of organizations from AAP to NACCHO and joined in collective efforts like the White Ribbon Alliance in order to raise awareness about the unique needs of women and families in disasters.
- ◆ Valuable lessons can be learned from beyond our borders. The WRA Working Group leaned heavily on the experience of international organizations to inform a plan to care for women and infants in the United States. International cooperation has been critical to the monitoring of avian influenza and will be critical in efforts to minimize the impact of pandemic influenza.

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Disaster Nursing and the American Red Cross

JANICE SPRINGER ♦ CHERYL K. SCHMIDT ♦ KAY FARRELL

Although it is not a governmental agency, the American Red Cross has a congressional mandate that requires action in times of emergency to alleviate human suffering. As a donor-funded, volunteer-driven organization, the Red Cross relies on donations of time, money, and blood to do its work. Responding to over 70,000 disasters each year, including catastrophic events such as Hurricane Katrina, Red Cross nurses and health services volunteers play a vital role in disaster response in the United States (Yeater & McKelvey, 2007). Establishing shelters and emergency aid stations and providing meals, health assessments, and crisis counseling, the Red Cross is a constant and dependable resource for disaster-stricken communities.

Red Cross Disaster nursing is the quintessential public health care delivery opportunity. The first public health nurses in New York City, at the turn of the last century, were Red Cross nurses. The public health-oriented perspective from those early years is still driving our practice 100 years later. No matter what the assignment setting, we not only are considering the individual client but their family and community as well in our assessment, intervention, and referral process.

Red Cross Disaster nursing care delivery is tied directly to the type of disaster that is being planned for or responded to. If there is flooding, we are doing outreach with information on sanitation, clean water, how to clean your home, prevention of respiratory consequences of mold, and more. If there is a tornado, we are able to offer on-site health assessments, assist with replacement of medications or medical equipment lost in the storm, and help with recovery planning for disaster-related illnesses and injuries. For any disaster where evacuation sheltering is part of the response, Red Cross nurses are in the shelter providing care for individuals and families, monitoring for communicable disease, and responding to general health concerns.

Critical thinking skills are a fundamental resource that Red Cross nurses bring to the job. We are expected to be able to sort through information at many levels, provide referrals, and respond to individual health needs as they present. In almost any disaster, the majority of those affected are not in the hospital or on the public health radar, but they are in Red Cross shelters, visiting Red Cross Service Delivery sites for resource acquisition, or are at home, where Red Cross outreach teams are going door to door to inquire if anyone needs help or information.

Red Cross nursing is an autonomous nursing practice model, supported by signed medical protocols (compared to a medical practice model). Red Cross nurses through our Health Services activity provide a vital function for disaster response. Red Cross registered nurses work in leadership and as team members with other licensed health professionals including EMT-paramedics, LPNs, NPs and MDs (among others).

HISTORY OF RED CROSS NURSING

In April 2004, Cheryl K. Schmidt (2004), PhD, RN, spoke eloquently of the roots and essential nature of nurses' roles in disaster response in her *American Journal of Nursing* article "American Red Cross Nursing: Essential to Disaster Relief." Schmidt's research on Clara Barton informs us of how integral the ideals that are common among nurses are to our very beginnings (Figure 71-1).

Resistant to the limitations placed on women in her day, when Barton learned of the lack of medical preparations made by the Union Army, she arranged to get herself involved in helping wounded soldiers. When her contemporary Dorothea Dix was appointed as superintendent of nurses, Barton would not join because nurses



FIGURE 71-1 Clara Barton. (Courtesy of Clara Barton National Historic Site–National Park Service.)

were not permitted to serve on the battlefield. Instead, she rallied women to collect food, clothing, medical supplies and whiskey and deliver them directly to the soldiers on the battlefield.

When Barton became ill at the end of the war, she went to Switzerland for a respite and there met Henry Dunant, who had started the International Red Cross in response to the suffering he had seen during the wars in Europe. Inspired by the Geneva Conventions that were signed in 1864 (“Laws of War”), she brought home the messages of the 12 government signatories, a treaty that Barton described as providing for the “neutrality of all sanitary supplies, ambulances, surgeons, nurses, attendants, and sick or wounded men, and their safe conduct when they bear the sign of the organization, the Red Cross” (Barton, 1906).

Clara Barton spent the rest of her adult life nurturing the “American” version of the Red Cross, nudging and petitioning Congress to move forward on the vision of what we now know as the American Red Cross. She continued to build corps of nurses to respond to disasters including the Johnstown floods of 1889, providing food shelter and medical care to 25,000 victims. She traveled to Armenia in 1896 to deliver food and medical supplies by camel to the survivors of genocide; responded to the Spanish American War in 1898; and was, at age 78, with the Red Cross team on the first train into Galveston in 1900, spending three months delivering aid to the residents, whose island had been devastated by a hurricane that took over 6000 lives (*The changing face*, 2006).

In 1900 and again in 1905, Congress chartered the Red Cross with a mandate to serve both the military in times of peace and war and communities in times of disaster. With the vision of Clara Barton, the organizational leadership of Mabel Boardman, and, in 1909, the drive of Jane Delano, nursing roles in the Red Cross became a fundamental resource to our citizens. Jane Delano founded the Red Cross Nursing Service; this soon expanded to the Rural Nursing Services, which expanded to include the official nursing reserve for the U.S. Military. Red Cross nurses were the first “public health” nurses and set the stage for an entire branch of the nursing profession (Box 71-1 and Figure 71-2).

Nurses have served again and again, with 24,000 nurses sent abroad in WWI and another 15,000 nurses who volunteered in the 1918-1919 influenza pandemic. During aid operations in WWII, the American Red Cross certified more than 100,000 nurses for military duty. The Red Cross became so interwoven into the fabric of the nation during that time that nearly every American family had a Red Cross connection, either receiving aid or, in the case of the 7.5 million volunteers, delivering it (*The changing face*, 2006). The posters of that era show a strong connection between patriotism and being a Red Cross nurse (Figure 71-3).

Today, nurses are integrated throughout the organization, working in Blood Services, teaching CPR and other courses through our health and safety services, and volunteering in disaster services to provide care to victims of natural and manmade disasters.

ROLES OF THE RED CROSS NURSE IN DISASTER RESPONSE

The Red Cross philosophy is that all disasters are “local.” This understanding drives every part of our preparedness and response system. In the local chapter, disaster preparedness includes having “go-kits” ready for immediate deployment for opening shelters or emergency aid stations. It may involve providing staff health consulting within the Disaster Services Human Resources (DSHR) system to make sure that all of the disaster volunteers are healthy at deployment. Disaster nurses are “natural” Red Cross resource persons for community disaster planning. We sit on public health advisory boards, work with state health departments, consult for pandemic flu planning, and are on the Medical Reserve Corps planning teams.

Disaster response involves a variety of assignment settings. All of the health care delivered by the Red Cross is supported by nationally driven but locally supported and physician-signed protocols that clearly

BOX 71-1 Fundamental Principles of the Red Cross

HUMANITY The International Red Cross and Red Crescent Movement, born of a desire to bring assistance without discrimination to the wounded on the battlefield, endeavors, in its international and national capacity, to prevent and alleviate human suffering wherever it may be found. Its purpose is to protect life and health and to ensure respect for the human being. It promotes mutual understanding, friendship, cooperation, and lasting peace amongst all peoples.

IMPARTIALITY The International Red Cross and Red Crescent Movement makes no discrimination as to nationality, race, religious beliefs, class or political opinions. It endeavors to relieve the suffering of individuals being guided solely by their needs, and to give priority to the most urgent cases of distress.

NEUTRALITY In order to continue to enjoy the confidence of all, the International Red Cross and Red Crescent Movement may not take sides in hostilities or engage at any time in controversies of a political, racial, religious, or ideological nature.

INDEPENDENCE International Red Cross and Red Crescent Movement is independent. The National Societies, while auxiliaries in the humanitarian services of their governments and subject to the laws of their respective countries, must always maintain their autonomy so they may be able at all times to act in accordance with the principles of the Movement.

VOLUNTARY SERVICE It is a voluntary relief movement not prompted in any manner by desire for gain.

UNITY There can only be one Red Cross and Red Crescent Society in any one country. It must be open to all. It must carry on its humanitarian work throughout its territory.

UNIVERSALITY The International Red Cross and Red Crescent Movement, in which all Societies have equal status and share equal responsibilities and duties in helping each other, is world wide.

Courtesy of The American Red Cross.

describe our scope of practice. Sheltering is one of the more visible and common settings. In a shelter, health care includes assessment, triage, and care of individuals and families. It includes infection control, isolation if needed, and communicable disease monitoring (Figure 71-4).

Service delivery sites can involve a variety of places and can take many forms. As health concerns are identified in



FIGURE 71-2 Butte, Montana, 1918. During World War I American Red Cross volunteer workers were busy in communities throughout the United States. Warm garments and medical supplies for the “boys” up front were produced by volunteer hands in great quantities. This photo shows a typical group of volunteer workers making influenza face masks during the influenza epidemic. (Courtesy of The American Red Cross.)



FIGURE 71-3 James Montgomery Flagg was already well known for his portrayal of Uncle Sam in the famous “I Want You!” recruitment poster from World War I when he created this poster for the American Red Cross during World War II. (Courtesy of The American Red Cross.)

these settings, nurses or other licensed health service volunteers are available to help meet disaster-related needs. These sites can be service centers, emergency aid stations, or colocations with other disaster responders such as FEMA.



FIGURE 71-4 Event: Hurricane Katrina. Location: Astrodome, Houston, Texas. Photographer: Daniel Cima. Caption: A giant American flag hangs over the massive crowd of people on the floor of the Astrodome. (Courtesy of The American Red Cross.)

Red Cross services also include home visits and outreach. The Red Cross wants to account for all possible victims of a disaster. In some types of disasters, the ideal way to “find” all of the potential clients is to go door to door. This is another ideal public health style setting where nurses can meet clients in their immediate needs environment, do an assessment, and make referrals on the spot. Most public health departments do not have the resources to do this depth of client assessment after a disaster, and the Red Cross is well positioned to partner with local public health departments in finding and supporting the “public health” in a community. The Red Cross also “reaches out” to clients in the form of Integrated Care Teams and when there is a death involved. Condolence call teams of Disaster Health Service, Disaster Mental Health, and Family Service Caseworkers typically visit the families in their home to help with the transition phases of disaster recovery (Figure 71-5).

The American Red Cross Disaster Health Services collaborates with the CDC to compile morbidity and mortality statistics. When we see clients with disaster-related illnesses or injuries, we collect aggregate data to generate reports to improve client service delivery on future disaster relief operations.



FIGURE 71-5 California wildfires. Caption: Red Cross nurse Pat Passalacqua checks on Jazmin Meraze, 1, at the Red Cross shelter in Saugus High School, Saugus, California. (Courtesy of The American Red Cross.)

Teaching

Training others is a natural fit with nurses’ basic preparation. At least three disaster training courses are available that accommodate nurses’ training and experience. One of them is the “Health Services Response” course, which prepares licensed health care providers to deliver care under Red Cross protocols in disaster response. Another course is “Psychological First Aid in Disaster,” which provides a toolkit that helps those responding to a disaster to remember ways to provide psychological comfort to victims, recognize when the psychological needs require a referral to licensed professionals, and manage psychological self-care when on the job. “Working with Persons with Disabilities in Disaster” is an excellent course that helps disaster workers to broaden their scope of understanding of the ADA (Americans with Disabilities Act), and the content takes advantage of the depth of experience a nurse brings to client assessment and advocacy.

The “Health Services Response (HSR)” course is one of the few comprehensive courses in disaster nursing that is readily available to the public. This course is often taught at nursing schools, at the BSN level as part of a community health curriculum, and in ADN programs as an introduction to community preparedness.

Once the students complete their RN, they can be affiliated with the Disaster Health Services sector of their local chapter and can be deployed to disasters. Becoming affiliated with a chapter in conjunction with the HSR course opens the door for the nurse to take the Red Cross Ready RN course—a 20-module course that provides a unique opportunity to study bioterrorism, sanitation, disasters and children, and many other facets of disaster nursing. CEUs are available for each of these modules.

INTERNAL OPERATIONS

The infrastructure of Disaster Health Services activity is supported throughout the country by an all-volunteer workforce. There are only a few paid positions in the American Red Cross in the Disaster Health Services activity. Volunteerism is a fundamental principle of the Red Cross mission, so even in the midst of many new “paid” initiatives across the country, the Red Cross Disaster Health Services remains a voluntary effort.

Our work starts at the chapter level, where nurses in disaster help to manage information on the health of volunteers. Nurses can help the chapter prepare for opening shelters by having health care supplies on hand and support the local single-family fire response. They help small Disaster Action Teams by being available to consult on disaster-related health issues. They are also invaluable resources for teaching family disaster preparedness (Farrell, 2007).

At the next levels of support are State Nurse Liaisons (SNL) and Staff Health Consultants. These volunteers act as resource people to chapter executives and local nurses who may have questions, and in some states, they sit on committees with departments of health, county emergency planning boards, and public health advisory groups to assist with representing the scope of practice of the Red Cross Disaster Health Service delivery.

The SNL program came about in 1998 in response to requests from nurses who wanted to be more involved in the broad spectrum of ARC services. The SNL scope is larger than disaster. They also are leaders in representing nurses wherever they may be within the American Red Cross services branches. They support nurses in Blood Services and Health and Safety Services or wherever there is a nurse working in client care or service delivery.

Staff Health Consultants are focused on maintaining a healthy workforce. When volunteers are deployed to a disaster response, it is important that they are prepared for the hardships they might encounter and that they have no contraindications to being in that setting. Staff Health reviews health data and makes recommendations—for example, ensuring that volunteers with asthma are not deployed to wildfires.

The volunteer nature of this work can be a two-edged sword. In one sense, we are on the cutting edge because we can draw on expertise and leadership from throughout the country in our curriculum, our service delivery, and our response. Anyone is welcome to come and work as much as they’d like, and we are fortunate to have an incredible pool of expertise in our circle of leadership as well as in our service delivery. The other side is that many of these experts are

also working full time at something else in nursing. This can hamper the speed at which we make changes, the scope of our outreach capabilities, the number of instructors across the country, and the number of volunteers who come.

The challenge to our future is to build capacity in our ranks and in our leadership. We need to stay focused on nourishing those volunteers with training, highlight the opportunities to participate, and give rewards for service. With a nursing shortage across the country for paid work, we are at a disadvantage, but perhaps with renewed focus on community service as the “new norm” for our citizens, the rich opportunities available in Red Cross Disaster Health Services will call out to our colleagues.

PARTNERSHIPS AND THE FUTURE

Building capacity in Red Cross Disaster Health Services is no different than in any other venue of nursing care delivery. Even though there is an acute nursing shortage, the demand for the skill set and service delivery unique to nursing is a high value in disaster response. Nurses are needed to help with relief efforts in the wake of natural and manmade disasters, including floods, hurricanes, forest fires, and earthquakes. The current war on terrorism has also increased the demand for nurses with appropriate response skills in all settings (Schmidt, 2004). Since Schmidt’s 2004 article, planning for pandemic flu and the preparation for public health disasters has also increased the demand for nurse volunteerism (Box 71-2).

The combination of 9/11, pandemic flu preparedness, and Katrina all pushed the government to free up money and set expectations of heightened preparedness and partnerships at local, state, and federal levels for response to disasters. One initiative that began after 9/11 is the creation of a “system” called the Medical Reserve Corps (MRC). MRC is a national network of local groups of volunteers. MRC volunteers include medical and public health professionals, as well as

BOX 71-2 Essential Skills List for Disaster Health Services

- Critical thinking
- Assessment
- Technical skills
- Illness and disease management
- Information and healthcare technologies
- Ethical behavior
- Confidentiality
- Team oriented

others who are interested in strengthening the public health infrastructure and improving the preparedness and response capabilities of their local jurisdiction. In April 2009, the American Red Cross National Headquarters and the Medical Reserve Corps signed a joint memo strengthening our partnerships in disaster response.

In many states, MRC groups, public health departments, and the ARC are working together to identify the needs of the community and the strengths of the various organizations that respond to disaster to craft a response plan to meet anticipated needs of their populations. Not all disasters are public health disasters, however, so the need for nurses in the American Red Cross is not diminished by this somewhat parallel volunteer-based development. Red Cross nurses in national disaster response are asked to deploy for two to three weeks; most public health nurses are fully employed and not able to be away from their work site for that length of time. Red Cross nurses not only do public health, but they also do triage and referrals, assessments of disaster-related health needs, and illness and injury surveillance.

Red Cross Disaster Services needs nurses today just as much as they were needed in World War II. They need nurses to lead, to provide direct care, to teach, to sit on public health boards as advisors, and to respond to disasters. Not only are we needed at events that make it into the media lens but just as much, or more, at the local floods, tornadoes, and family fires, where the loss and trauma and needs are no less for the family or individual than the largest of wildfires.

CASE STUDY

Hurricane Katrina brought out the full range of our nursing scope of practice—and then some! Each day in the shelters, we were challenged to meet the individual health needs of our clients while staying alert to communicable disease risk. We were stretched to support a medical system infrastructure that was crumbled in New Orleans, and we were pushed to capacity in the communities receiving overflow populations secondary to the Diaspora.

There was no “typical” day in the shelter whose health care delivery system I managed, but the opportunities for multilevel solutions were endless. We were the first large shelter outside of New Orleans, so we had an initial population of “early” evacuees, who may not have had disaster-caused problems but certainly had health needs that had been aggravated by the disaster. Some had a few personal things with them, including medications, and others had nothing at all. Later, as

personal supplies of medications ran out and late evacuees from New Orleans arrived, our delivery plans had to shift to meet a higher acuity (Springer, 2007).

Our clients consisted of the following groups:

- ◆ HIV/AIDS clients, who were now separated from their source of life sustaining medications
- ◆ Clients in methadone treatment programs, who also had no access to their daily supply
- ◆ Diabetics who had not been doing regular sugar testing, who now had access to on-site nursing care, education, glucometers, and insulin
- ◆ Clients with acute and chronic hypertension who had no medication
- ◆ Schizophrenic clients and others with mood disorders, who by now were out of sync with their usual routines and support community
- ◆ Clients on DOT (directly observed therapy) for treatment of TB, now estranged from their local public health department

During our time there, we did the following:

- ◆ Set up a bottle sterilization system for mothers with infants
- ◆ Had several cases of diarrhea and had a visit by the CDC to help us design a reporting system to capture high-risk situations
- ◆ Found a nurse volunteer who was a diabetic educator, who set up training and support every day for the diabetic clients
- ◆ Assisted several multipara women who were over 32 weeks gestation, living in this particular community where the local hospital no longer took OB clients. We were able to work with a nearby community to get those families moved closer to the designated delivery hospital.
- ◆ Worked with clients who spoke several languages
- ◆ Had clients literally from cradle—a two-week-old newborn—to a senior in her 80s who sat for three days on a concrete sidewalk in New Orleans, until she finally developed third-degree decubitus

In the fall of 2008, Hurricane Ike brought another massive loss of homes, and thousands of people had to flee their towns. Because of lessons learned during Katrina, we found new and stronger partnerships in health care delivery. The state of Texas Department of Health was a daily presence in the Galveston Island Mega-Shelter, providing guidance and taking the lead in ensuring the appropriate level of care and safe transition of clients with special medical needs that exceeded the Red Cross medical protocols. The Texas government

had been very proactive in evacuating their citizens, a prevention move that undoubtedly saved lives. The core mission of the American Red Cross Disaster Services—to provide food, shelter, health, and mental health care—once again delivered without charge to the victims of disaster and their families.

SUMMARY

Red Cross nursing is not a M*A*S*H* unit, but the opportunities to attend to the health needs of individuals and populations are beyond comparison. With a history of 100 years of service, Red Cross Disaster Health Services is ready to continue to respond to the multitude of disasters that seem to come our way. New initiatives encouraging volunteerism and new leadership within our ranks leave us poised to reach out to our public health and other partners with renewed confidence in the role we can take to light the way in disaster health response. In an economy that is strained, we can expect fiscal challenges, as the Red Cross is primarily supported by the American public's generous donations. The mission of volunteerism remains a strong asset that Red Cross Disaster Health Services brings to our citizens.

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The Greening of Health Care

BARBARA SATTLER ♦ DENISE B. CHOINIERE

In the past several years, hospitals have begun to make some dramatic shifts in their efforts toward sustainability motivated by patient and employee health and safety, increased awareness about hospitals' roles in environmental stewardship, and their bottom line. The fact that sustainability efforts can positively address all three of these motives has encouraged new partnerships within and from outside the health care sector. This chapter describes some of the environmental health issues that are serving as drivers for these efforts, reviews a range of specific efforts, and provides examples of how hospitals are structuring their efforts. Often, nurses are providing leadership for these efforts in the many positions and roles they play within the health care sector, including direct-care nurses, nurse executives, and infection control nurses.

ENVIRONMENTAL HEALTH

While most health care professionals—nurses, physicians, and others—learn little about the relationship between human health and environmental exposures (biological, chemical, or radiological), the field of environmental health science is abundant with critical evidence about the relationship. Despite the fact that health care providers are not well prepared in environmental health, the general public is learning on an almost daily basis about the health risks associated with environmental exposures from air and water pollution, chemical (and biological) contaminants in our food, and potential toxins in our consumer products to name just a few.

Ever since the germ theory helped health professionals to recognize the relationship between pathogens and infectious diseases, health care providers have substantially focused on biological exposures for disease causation. However, in the last half century, we have learned much about the relationship between chemical exposures and human health. Lead poisoning is a familiar

environmental malady, as are asbestos- and tobacco-related illnesses. But health professionals have learned little else about health risks associated with chemical exposures from our air, water, food, and products. This deficit has obscured our vision to some of the threatening exposures that exist even in the health care setting.

ENVIRONMENTAL HEALTH IN THE HEALTH CARE SETTING

Over the last decade, several national, nongovernmental organizations have been helping nurses and others to understand some of the human and environmental risks that are associated with the delivery of health services. Health Care Without Harm is an international campaign that has specifically helped to define the issues associated with sustainability and environmental health in health care. Originated in the United States in 1996, the campaign represents over 400 organizations in the United States alone, including the American Nurses Association and several nursing subspecialty organizations, but also environmentalist organizations, physician groups, and others. It now has offices and activities in every major region of the world and has an active Nurses Work Group. One of the initial foci of the campaign was the elimination of mercury from health care settings, starting with mercury thermometers and sphygmomanometers and moving toward less obvious sources like thermostats and fluorescent lightbulbs. Another focus was the reduction of polyvinyl chloride (PVC) plastic because of the associated dioxin pollution that is emitted when PVC plastic is manufactured and/or incinerated. Dioxins are a group of chemicals that include some of the most carcinogenic chemicals known. They are also endocrine disruptors (Birnbaum & Fenton, 2003). The campaign also targeted the elimination of incineration as a final disposition method for medical waste because of the grave health risks created by medical waste incineration emissions, which include

mercury and dioxin emissions (Health Care Without Harm, n.d.).

The campaign's domestic progress to date can be summarized in a few of its highly visible successes: virtually no U.S. hospitals continue to use mercury-containing thermometers or sphygmomanometers, and there has been a dramatic reduction of medical waste incinerators in the United States. Since 1995, 95% of the U.S. medical waste incinerators have been closed (Hampton, 2007). As of 2006, there were 84 medical waste incinerators operating, with the expectation that more will close as stricter air emission rules are put forth by the EPA (Health Care Without Harm, 2007). Many states have no longer permit medical waste incinerators. The campaign continues to work on the elimination of mercury-containing hospital products and medical waste incinerators worldwide. In developing countries, there is still much work to be done.

The U.S. hospital industry has been an enthusiastic partner in the campaign's mission, and they have helped to create new infrastructures within their walls, such as Green Teams. Additionally, two new national organizations have been created that are helping to define a new environmental ethic for the health care sector, as well as provide the technical assistance to accomplish a mission of long-term sustainability. In 1996, Hospitals for a Healthy Environment (H2E) was created when the American Hospital Association, the American Nurses Association, and the U.S. Environmental Protection Agency coalesced with Health Care Without Harm and created a pledge by which hospitals could declare their commitment to the goals of environmental health, safety, and sustainability.

In 2008, Hospitals for a Healthy Environment became a membership organization called Practice Greenhealth (www.practicegreenhealth.org) by merging with the Green Guide for Health Care and the Health Care Clean Energy Exchange. Green Guide for Health Care created a practical guidance document for building, renovating, and operating hospitals, which in turn has been substantially adopted as the LEED (Leadership in Energy and Environmental Design) standard of the U.S. Green Building Council. The Clean Energy Exchange is organized to offer sustainable energy options for hospitals to purchase. The new combined organization, Practice Greenhealth, provides excellent guidance documents and weekly webinars on a wide array of subjects. Hospitals and health systems can join Practice Greenhealth, thereby providing hospital employees access to its helpful resources. Another new

organization, the Global Health and Safety Initiative, also focuses on improving patient safety, worker safety and environmental sustainability and is comprised of major health systems, nonprofits, and governmental organizations. All of these organizations communicate very closely and are mutually supportive.

NURSES ENVIRONMENTAL HEALTH RISKS

Nurses are aware of risks from needle sticks and back injuries, but they seldom think about other health threats posed by their jobs. In 2006 a national nursing survey provided some important preliminary indicators regarding the relationship between common exposures in health care and increased health risks for nurses (Environmental Working Group, 2007). Box 72-1 summarizes the survey results.

It is not just nurses (and other employees) who are at risk from potential hazards in hospitals. The data from the nurses' survey reveal a potential increased risk of congenital and health risks to children born to hospital-based nurses (Environmental Working Group, 2007). An international study notes that nurses have the highest risk of adult-onset asthma (Kogevinas et al., 2007). At a time when there is a critical shortage of nurses, it is crucial that our worksites be as healthy as possible and not pose risks to anyone for acute or chronic illnesses. Given this compelling notion, nurses are engaging in new ways to reduce, eliminate, and find alternatives to the potential hazards in their workplaces.

HOSPITAL SUSTAINABILITY ISSUES

The health care sector represents over 16% of the U.S. gross domestic product. Hospitals are great consumers of products, energy, food, and water. They employ millions of workers who collectively travel great distances to work, more often than not in individual vehicles. Hospitals operate 24 hours a day, 7 days a week, and depend on high-energy-consuming technologies and intense ventilation requirements, making them the second largest consumers of energy per square foot in the United States (Guenther & Vittori, 2008). They occupy hundreds of thousands of square feet of buildings and are renovating, expanding, and building anew at a steady pace. They produce 6670 tons of waste per day, which equates to 2.4 million tons per year; this is a combination of solid waste, potentially infectious waste, and hazardous waste (U.S. Environmental Protection

BOX 72-1 Nurse Exposure Survey Summary

Common Health Care Exposures	Reported Health Effects (When comparing nurses with reported high rate of exposure to nurses with reported low rate of exposure)*
Hand and Skin Disinfectants	39% higher rates of asthma
Anesthetic Gases	7 times higher rate of birth defects when exposed during pregnancy
Housekeeping Chemicals	47% higher rates of asthma
Antiviral Medications	19% higher rates of difficulty conceiving
Chemotherapeutic Agents	42% higher rates of cancer
Mercury	130% higher rates of nervous system problems
Personal Care Products	33% all products contain one or more ingredients linked to cancer, and 40% of products contain fragrance, mixtures often associated with allergic reactions
Ionizing Radiation	16% higher rates of cancer
Latex	39% higher rates of cancer
Sterilants and Disinfectants: Ethylene Oxide	45% higher rates of asthma
Sterilants and Disinfectants: Gluteraldehyde	46% higher rates of asthma

* High rate of exposure = reported exposure frequency of at least once a week for at least 10 years.
The Nurse Exposure Survey was conducted by the University of Maryland, School of Nursing, American Nursing Association, Health Care Without Harm, and the Environmental Working Group.
Source: Environmental Working Group, 2007

Agency, 2005). In each of these categories, there are a number of sustainability subplots that can be explored and addressed to reduce pollution, greenhouse gases, and unhealthy exposures in hospitals and to encourage sustainable food purchases, carpooling and the use of public transportation, and building/maintenance in accordance with best sustainable practices.

There are myriad ways in which sustainability work has begun, with a range of products and processes that are being addressed. Many hospitals are eliminating or reducing the use of mercury and PVC-containing plastics (particularly those plastics with the plasticizer Di-ethylhexyl phthalates). The asthma report noted following provides helpful guidance on the reduction of asthmagens and asthma triggers. There are several resources that can assist with the selection of safer cleaning agents that can help to reduce health risks. These resources include Sustainable Hospitals (www.sustainablehospitals.org) and Practice Greenhealth (<http://cms.h2e-online.org/ee/facilities/greencleaning/>). Nurses can contribute to this risk reduction by adhering to safe work practices when working with sterilants and disinfectants, as these can create significant risks for asthma and chronic lung diseases. They can also reduce risks to themselves, their patients, and their patients' families by following best practices when

administering the highly toxic chemotherapeutic agents.

A "menu of options" has been created to guide more sustainable food-related decisions in hospitals. These options include buying local, seasonal, and sustainably farmed produce and meats and poultry; choosing seafood products that are low in mercury; buying dairy products that come from cows raised without being administered recombinant bovine growth hormones; selecting meats and poultry that have been raised without the use of nontherapeutic antibiotics; and buying only produce that has been grown without the use of potentially harmful pesticides and herbicides. The "menu of options" and many resources can be found on the Food Work Group site of Health Care Without Harm (www.healthyfoodinhealthcare.org). Nurses can champion positive shifts in hospital food policies.

As a health system, Catholic Healthcare West made a policy decision to seek food suppliers who have agreed to seek alternatives to foods made with cloned animals or genetically engineered (GE) ingredients. This leading, national Catholic hospital system took the position in recognition of the serious health, environmental, and ethical concerns raised by these untested technologies.

The city of San Francisco implemented a policy that promotes the health of its population by providing

healthy food options that are environmentally sound and through sustainable sources. This policy applies to all county hospitals in San Francisco (San Francisco Department of Public Health, 2006). Catholic Health Care West (CHW) adopted a Food and Nutrition Vision Statement that states the following:

CHW recognizes that food production and distribution systems have wide-ranging impacts on the quality of ecosystems and their communities, and so; CHW recognizes that healthy food is defined not only by nutritional quality, but equally by a food system which is economically viable, environmentally sustainable and which supports human dignity and justice, and so; CHW aspires to develop a healthy food system. (Catholic Healthcare West, n.d.)

Green Guidelines for Health Care is a document that addresses a wide range of building design, construction, and operations issues (www.gghc.org). Nurses are being invited to discuss design and patient care flow issues when hospitals are being designed or renovated. Their input helps to make sure that nursing work can be done efficiently and safely, with as much energy efficiency, natural lighting, sound-reduction strategies, and use of nontoxic building products as possible.

NOISE

According to Florence Nightingale (1898), “Unnecessary noise is the most cruel absence of care which can be inflicted either on sick or well” (p. 47). Hospital noise is an underrecognized pollution in the hospital setting that has been increasing over time. In 1960 average sound levels were 57 decibels (dB), compared to 2005, when average sound levels were 72 dB. Peak noise levels in hospitals can reach 85-90 dB. Excessive noise exposure is associated with sleep disturbances, contributes to stress, and interferes with communication (Stokowski, 2008).

Building design and behavior modification strategies have been implemented in hospitals to decrease noise. When sound-reflecting ceiling tiles were replaced with sound-absorbent ceiling tiles, nurses reported lower work demands and less pressure and strain (Blomkvist, Eriksen, Theorell, Ulrich, and Rasmanis, 2005). Hard surfaces and right angles also reflect and intensify sound, so this should be taken into consideration when designing health care facilities to minimize excessive noise.

In some hospitals, such as the University of Maryland Medical Center, nurses have implemented “quiet hours.” These programs vary slightly from unit to unit, but

efforts are made to decrease noise by closing patients’ doors, dimming the lights, lowering alarm volumes, desisting the overhead page system, and disallowing nonemergent patient procedures during those times. Prior to implementing a “quiet hours” policy, coordination must be sought across departments, such as requesting no deliveries from central supply and others during the designated times. According to informal feedback from the staff and patients, they appreciate the designated “quiet hours.” Patients get a chance to rest, while nurses are able to check orders and complete documentation in a more peaceful environment with less interruptions and distractions.

PHARMACEUTICALS

The Toxic Substances Hydrology Program of the U.S. Geological Survey (USGS) has done extensive research on the quality of U.S. water. The first national-scale study of wastewater contaminants was conducted in 2002 by the USGS. They found a large variety of chemicals in residential, industrial, and agricultural wastewater downstream from areas of intense urbanization and animal production. The chemicals identified included antibiotics, hormones, detergent metabolites, plasticizers, insecticides, and fire retardants (Buxton & Kolpin, 2002). The three more commonly detected chemicals found in susceptible streams were steroids, nonprescription drugs, and an insect repellent, while detergent metabolites, steroids, and plasticizers were found at the highest concentrations (Buxton & Kolpin, 2002).

Hospital pharmacies contain thousands of pharmaceuticals, and with the discovery of pharmaceuticals in our water, they are required to manage pharmaceuticals responsibly through safe handling and disposing. The U.S. Environmental Protection Agency (EPA), per the Resource Conservation and Recovery Act (RCRA), has designated frequently used pharmaceuticals such as physostigmine, warfarin, and nine chemotherapeutic agents as hazardous. Hospitals are at risk for receiving violations and penalties if they fail to manage and dispose of hazardous pharmaceutical waste properly. With funding provided by the EPA, Practice Greenhealth and PharmEcology Associates released a resource guide for health care facilities entitled *Managing Pharmaceutical Waste—A 10-Step Blueprint for Healthcare Facilities in the United States* (Practice Greenhealth, 2008).

In some states, nursing organizations (such as the Delaware State Nurses Association) have sponsored collection programs for community members’ unused drugs. These have resulted in thousands of pharmaceuticals

being collected. While these efforts are laudable, pharmaceutical waste is a complex issue and will require a comprehensive and multistakeholder approach. Hospitals, nursing homes, group homes, and other institutions will need to be at the table, along with pharmacists, government agencies, and, of course, the pharmaceutical industry. These groups are now beginning to meet, but they are a long way from a final set of policies and best practices.

There are two other “stakeholders” that will need to be involved in the pharmaceutical waste discussions. The federal government insurance programs often require a minimum of a 90-day supply for drug prescriptions, which often leads to residual, unused drugs because patients stop taking them or their health provider changes the prescription before patients have used up the first one. In either event, the patient winds up with unused medications that are often flushed down the toilet. The second player that will be brought into pharmaceutical waste discussions will be the sewage treatment facilities (and their regulators) because even if people stop flushing unused drugs down the toilet, they still excrete the drugs they take in urine and feces. Current sewage treatment technologies do not address pharmaceutical pollution.

REPROCESSING

Using reprocessed or remanufactured medical supplies is an easy way for hospitals to reduce waste, as well as reduce purchasing costs. Approximately 3000 hospitals nationwide are contracting with third-party remanufactures processors to reduce waste and save money (DiConsiglio, 2008). Reprocessing does not require a capital investment, and reprocessed devices offer a 50% cost savings when compared to buying new products (Association of Medical Device Preprocessors, n.d.a).

When devices are reprocessed, they are handled by a third-party processor, registered with the U.S. Food and Drug Administration. The Association of Medical Device Reprocessors (n.d.b) defines a third-party processor as one that “inspects, functionally tests, cleans, packages, and sterilizes medical devices labeled for single use in such a manner that the quality, physical characteristics, and performance functions of the device are not significantly affected and the device remains safe and effective for clinical use.” By reprocessing single-use devices, facilities can reduce the amount of waste they generate and find significant cost savings through the reduced purchase of new products.

INFRASTRUCTURE FOR SUSTAINABILITY

To implement sustainable practices into hospital operations, institutions are forming interdisciplinary Green Teams, one of the many names given to dedicated hospital-based committees/groups that address environmental health and sustainability issues. These Green Teams are comprised of a variety of hospital employees from senior executives to front-line care givers, representing a range of departments, including nursing, facilities, environmental services, purchasing, pharmacy, infection control, food and nutrition, clergy, materials management, marketing, and, of course, nursing.

Green Team recruitment is performed in a number of ways. Generally, there is a champion who helps to spark sustainability interests within any given institution. This person or people may come from anywhere in the hospital and any number of disciplines. Initiation can come from the top down or the bottom up, and both have yielded equally successful results. A common thread in the early development of activities is an educational event: a lunchtime educational program, grand rounds (especially nursing grand rounds). Working from the accepted principle of “first, do no harm” and adding the scientific evidence of the environmental health risks, coupled with some easy and practical ways to start, new Green Teams have discovered that there are many easy gains, such as starting to recycle or expanding current recycling efforts to include paper, plastic, aluminum, alkaline batteries, blue wrap, kitchen waste (composting), and so on. Suggested strategies include publishing articles for hospital newsletters and/or requesting time on regularly scheduled and established committee to talk about environmental health and sustainability.

Hospitals are developing mission statements, goals, and principles to support the Green Team efforts. Although the wording varies from hospital to hospital, all are committing to implementation of environmentally sustainable practices at their facility. The following is an excerpt from the University of Maryland Medical Center’s Sustainability Principles:

Recognizing that sustaining a healthy environment is essential to maintaining both personal and public health, UMMC commits to promote healthy patients and communities locally and globally by safeguarding the environment.

UMMC provides health care to the community in a safe and healthy manner and fulfills its obligation to protect and preserve the earth’s resources by seeking innovative ways to conserve, reduce, reuse, and recycle by its own actions and through partnerships with others.

Realization of these principles will be achieved by full participation and the sustained commitment of all our employees, medical staff, and vendors. (Hospitals for a Healthy Environment, 2008, p. 3)

ENVIRONMENTALLY-PREFERABLE PURCHASING

Hospital Green Teams have developed model purchasing policies to help support their efforts, often referred to as Environmentally Preferable Purchasing (EPP). EPP considers the entire *life cycle* of a product starting with its production by looking at the ingredients of the product. Are they toxic or nontoxic, virgin or recycled materials? How much water and/or energy is used to make the product? Are there unintended toxic exposures to manufacturing workers, as well as the potential for toxic air and water emissions? Other production-level issues that are considered in life cycle analysis include how much unnecessary packaging is used and the number of miles the product has to travel from plant to hospital (read: air pollution related to fuel combustion). All of these concerns are associated with environmental health risks that may occur *before* they enter the hospital loading dock. Then we have several use-related questions that need to be asked. Are there health threats associated with the product? Is the product reusable or a single-use device? Is the product recyclable? Does it have special disposal requirements? Once disposed, does it continue to create a potential human or ecological health risk?

While the set of questions regarding life-cycle analysis may seem daunting, there are a number of great resources that can make the work fairly easy. Several organizations have specifically focused on looking at these issues for hospital products, including the University of Massachusetts's Sustainable Hospital Program (www.sustainablehospitals.org) and Practice Greenhealth (www.practicegreenhealth.org). Making purchasing decisions using an environmentally preferable decision tree provides many opportunities for disease prevention and represents a significant commitment to public and environmental health.

Health Care Without Harm commissioned a study to look at products that are used in health care settings that are either asthmagens (primary cause of asthma) or asthma triggers (initiate an asthma event in a person with an underlying diagnosis of asthma). Eleven categories of chemicals were identified, and for each of these categories, alternative purchases or processes were recommended. Box 72-2 provides a summary of the findings.

The motivation for the asthma study was twofold: the increasing number of nurses and other hospital workers with adult-onset asthma and the steep rise in childhood asthma, given the special vulnerability of pediatric patients.

- ◆ Asthma is the third ranking cause of non-injury-related hospitalization among children younger than 15 years of age.
- ◆ In 2006, 9.9 million children under 18 years of age were reported to have been diagnosed with asthma; 6.8 million children had an asthmatic episode in the last 12 months.
- ◆ In 2002, children 5-17 years old missed 14.7 million school days due to asthma.
- ◆ The direct and indirect costs of asthma to the U.S. economy were \$19.7 billion in 2007.
- ◆ Approximately \$14.7 billion are directly associated with the medical care costs of asthma. (U.S. Environmental Protection Agency, 2009)

By eliminating and reducing products and processes that are asthmagenic and/or trigger asthma, hospitals can have a significant effect on this particular health risk.

Kaiser Permanente has implemented an EPP policy that requires the purchasing department to "evaluate the environmental impacts (e.g., waste, toxicity) of products and services in an effort to select healthy and safe products and services that are also environmentally sound" (Kaiser Permanente, 2008). Hospitals are asking manufacturers to disclose the contents of the supplies they are purchasing to ensure that they do not contain harmful chemicals. Targeted chemicals include persistent bioaccumulative toxic compounds, bisphenol-A, carcinogens, mutagens, reproductive toxicants, flame retardants, latex, mercury, phthalates (such as DEHP), polyvinyl chloride, and volatile organic compounds (VOCs). By requiring manufacturers to disclose product contents, health care institutions are shifting the burden of proof back to the manufacturer. If products do contain chemicals of concern, purchasers can ask whether a phase-out plan has been developed and the projected timeline for implementation. Nurses who are on purchasing committees are participating in these important decisions that impact the environment.

SUMMARY

As health care providers, we have committed to "first, do no harm," but unfortunately, the health care industry has great room for improvement. From the supplies we use in patient care to the housekeeping products, safer and less toxic alternatives exist, and hospitals are

BOX 72-2 Asthma Risks Posed by Chemicals Used in Health Care Environments

Chemical	Use in Hospitals	Asthmagen or Asthma Trigger?	How to Reduce Exposure	Safer Alternatives
Cleaners, disinfectants/sterilizers	Cleaning products, equipment sterilizers	Asthmagen and asthma trigger	Use microfiber mops, refine cleaning practices, isolate chemicals	Products free of: <ul style="list-style-type: none"> • Ethylene oxide • Formaldehyde • Glutaraldehyde Green Seal–approved products
Natural rubber latex	Gloves, catheters, and other hospital products	Asthmagen, possibly asthma trigger	Use nonlatex or powder-free latex gloves	Nonlatex or powder-free latex gloves
Pesticides	Indoor and outdoor areas	Asthmagen	Integrated pest management programs	IPM*—using nontoxic pest control methods and products
Volatile organic compounds (VOCs)	Formaldehyde: building materials, paper products, tissue fixatives	Asthmagen, possibly asthma trigger	Increase general ventilation to diffuse VOC off-gassing	Low- or no-VOC products Formaldehyde-free products
Baking flour	Kitchens and bakeries	Asthmagen and asthma trigger	Mechanical flour sprinklers, good ventilation systems, quick cleanup of spills with wet mop	Precombined dry ingredients, low-dust flour, ready-to-bake dough
Acrylics: methyl methacrylate and cyanoacrylate	Acrylic resins used in medical and dental polymers and cement	Asthmagen and asthma trigger	Isolate, enclose, and automate processes that use acrylic compounds, improve ventilation systems	Products free of: <ul style="list-style-type: none"> • Methyl methacrylate • Cyanoacrylate • Acrylic compounds
Perfumes/fragrances	Scented cleaners, fragrance-emitting devices, people wearing perfume	Asthma trigger	Institute fragrance-free policies	Fragrance-free products
Phthalates (plasticizers)	Widespread: plastics, medical devices	Undetermined	Improve ventilation for moisture control to decrease emissions	Phthalate-free products, (both medical and office products)
Environmental tobacco smoke (ETS)	Individuals who smoke	Asthmagen and asthma trigger	Maintain a smoke-free facility and grounds	
Biologic allergens	Mold/fungus, indoor pollen, dust/dust mites, pet hair, cockroaches	Asthmagen and asthma trigger	Good housekeeping and building maintenance practices, moisture control	
Pharmaceuticals	Antibiotics, laxatives, antihypertensives, antituberculotics, H2 blockers	Asthmagen	Hoppers, ventilation hoods, personal protective equipment, respirators	Clinical substitutions if possible

*IPM: Integrated pest management is a systematic approach to managing pests that provides a comprehensive framework for assessing pest problems, assessing the sources of food, water, and nesting that support growth and reproduction of pests, determining the non- and least-toxic techniques and products to be employed, and evaluating successes and/or needs for additional considerations.

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BOX 72-3 Additional Resources

e-Commons is a new Web site created for and by nurses who are engaged in and interested in environmental health issues. www.e-commons.org

Environmental Working Group is a nonprofit organization whose goal is to protect the human population from health problems attributed to toxic contaminants through research, education, and policy change. www.ewg.org

Green Guide for Health Care is a guide for the health industry when implementing best practices for healthy and sustainable building design, construction, and operations. www.gghc.org

Health Care Without Harm is a global coalition of 473 organizations in more than 50 countries working to protect health by reducing pollution in the health care sector. www.noharm.org

Practice Greenhealth is a membership and networking organization for health care institutions that have made a commitment to sustainable, eco-friendly practices. www.practicegreenhealth.org

The National Toxicology Program is part of the Department of Health and Human Services whose mission is to safeguard human health by using research to identify what effects chemicals are having and at what levels of exposure they may become hazardous to humans. <http://ntp.niehs.nih.gov/>

The Sustainable Hospitals Project provides health care personnel with tools, training, and technical support to reduce occupational and environmental risks while maintaining quality patient care and containing costs. www.sustainablehospitals.org

United States Environmental Protection Agency, Office of Children's Health Protection supports and facilitates U.S. EPA's efforts to protect children's health from environmental threats. <http://yosemite.epa.gov/ochp/ochpweb.nsf/content/homepage.htm>

beginning to incorporate these safer products into their daily operations. Health care professionals are among the most trusted by the American people (Saad, 2008) and, as such, have a powerful role to play in environmental stewardship, particularly in our own institutions. The ultimate result of this new sustainability movement will be health care institutions that are healthy and restorative places for people and the planet. What other institution should be leading the sustainability effort and modeling healthy and ecologically sound practices than hospitals? They have taken up this banner, and nurses are leading the efforts (Box 72-3).

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SECTION 10

Violence Prevention and Care: Nursing's Role

Violence: The Expanding Role of Nursing in Prevention and Care

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

If family violence teaches children that might makes right at home, how will we hope to cure the futile impulse to solve worldly conflicts with force?

—Letty Cottin Pogrebin

In metropolitan and rural areas, cities, and small towns, Americans are concerned, and perhaps fearful, that violence has permeated the fabric of their communities and degraded their quality of life. This is understandable since in the last 15 years we have all either directly or indirectly experienced violence. There have been numerous acts of terrorism, including a domestic terrorism attack in Oklahoma City in 1995, the horrors of the series of attacks on September 11, 2001 using American aircraft, and the bioterrorism attacks using anthrax abroad and in the United States in the fall of 2001. In addition, we have the ongoing wars in Afghanistan and Iraq. There have been natural disasters such as hurricanes and tsunamis; daily random and senseless acts of violence towards individuals or groups; and the maltreatment and/or murder of children, women, dependent adults, and elders through family violence. This list clearly illustrates the presence of violence both in our communities and around the globe.

Most people experience these sorrows indirectly through mass media, social networks, or from other sources. However, we know, without ever seeing or hearing, that nurses were directly involved in treating and caring for the victims of all of these tragedies. News reports after 9/11 were filled with stories of heroic firefighters and policemen, but these stories did not focus on nurses. In fact, most reports were completely silent on the role and contributions of professional nursing. Without fanfare, nurses in these metropolitan areas mobilized instinctively and immediately to assist area hospitals and those at Ground Zero. Nurses calmly assumed leadership roles to help care for those injured.

This section does not have a debate chapter; rather, it provides a spotlight on nursing's many leadership and care roles in violence prevention, including child maltreatment, domestic violence, elder mistreatment, gun safety prevention, terrorism events, emergency management and disaster preparedness, and infectious disease disaster preparedness. Few professions have the knowledge, skills, and courage to serve on these front lines. Nurses provide comfort and protection to violence victims and their families; organize community and national relief efforts; and, as the most trusted of all professionals, their presence calms public anxiety. Nursing is the antithesis of violence.

In the opening chapter, Perle Slavik Cowen and Jessica Cowen address the problem of child maltreatment. In 2007 an estimated 794,000 children were victims of maltreatment with 59% experiencing neglect, 10.8% physical abuse, 7.6% sexual abuse, and 4.2% emotional or psychological maltreatment. Tragically, an estimated 1760 children died of abuse or neglect with 75.7% of these younger than 4 years old. Characteristics of maltreatment types are described and cultural, social, and family factors are overviewed. The chapter explores biological research that has begun to provide insight into the physiological pathways underlying numerous deleterious long-term psychological effects. The discussion includes potential lifetime developmental and negative health effects that may require treatment throughout the lifespan and are of importance to practitioners who care for patients from all age cohorts. Recent intervention reviews report that programs provided by nurses to at-risk children and their families continue to

demonstrate the most effective outcomes. Cowen and Cowen state that “nursing’s role as advocate is often the critical determinant of whether at-risk children and youth or adult survivors of child maltreatment are identified and receive the therapeutic interventions and tangible services they need.”

In a change of direction, Mary Fran Hazinski tackles the issues of preventive gun safety noting that although firearm injuries in all age groups have decreased in the United States since 1993, they remain a leading cause of death in adolescents and young adults. She emphasizes, “Many unintentional firearm injuries and firearm suicides can be prevented if firearms are inaccessible to unsupervised children and adolescents.” Hazinski recommends that nurses become knowledgeable about evidence supporting gun safety legislation and identify specific interventions to reduce firearm injuries and fatalities. She cautions that if a nurse is the primary practitioner caring for a patient with a history of depression, alcohol or drug abuse, or violent behavior, they should discuss the risks of guns in the household and encourage the family to eliminate guns from the environment. The nurse should ensure that parents are aware of the data regarding risks when a gun is in the home of an adolescent, particularly if that adolescent has a history of depression or substance abuse. This is an important chapter because it underscores a problem that is often not addressed until a tragedy has occurred.

Janette Taylor presents an overview of issues related to nursing care of African American women exposed to intimate partner violence. She leads us to examine the personal-social context of African American women seeking therapy and to consider individual perspectives and needs. She describes why support groups as collective exchanges are culturally anchored approaches that can provide a therapeutic safe environment for African American women recovering from a variety of social, psychological, emotional, and physical traumas. Taylor says that “Cultural and ideological barriers, such as racism, classism, and sexism, shape African American women’s experience and recovery from relationship violence differently than white women.” She discusses the need for African American leadership and member composition in therapeutic sessions. Racially homogeneous groups are preferred because for many women this group environment maximizes the comfort level; provides more opportunities to disclose more fully the events in their lives; and counters social isolation, which is prevalent in abusive situations and in environments that foster discrimination and racism. She closes with

a series of questions intended to stimulate discussion of these points. This is a very well written chapter that addresses important racial issues in treatment of victims of violence.

Terry Fulmer and Jamie Blankenship provide a detailed overview of issues related to elder mistreatment (EM). They point out, “While there is strong support for legislation related to EM, Senators rarely demonstrate their dedication to this issue and unfortunately, there has been no national legislation on EM.” Currently only 2% of the budget for abuse prevention is allotted to elder mistreatment (physical, psychological and sexual abuse, neglect, abandonment, exploitation or financial abuse and self-neglect). As the baby boomer population (those born in 1946 to 1964) is getting older, the interest in aging issues is said to be increasing; however, the authors say that in the medical community, elder mistreatment has been labeled as a “Pandora’s box.” Many health care providers feel they do not have adequate time to screen older adults for EM or the necessary training to conduct such crucial evaluations. It is estimated that 1.2 to 2 million older adults, or approximately 6% of older adults, are mistreated annually. The authors review symptoms of EM, characteristics of the victim and caregivers, and identify nursing assessment challenges. Fulmer and Blankenship lament the fact that there is a lack of an empirical research base for interventions in elder mistreatment and underscore the need for victim advocacy.

Ian Portelli, Terry Fulmer, and Molie Marr state that recent terrorist events have led to the formulation of a distinct public health perspective within the nursing discipline, which defines the nurse’s role, the stages of disaster response, and the emergency management paradigm. Over the past years this nation has experienced terrorism on both national and international fronts, making terrorism an adverse reality that must be addressed by families, communities, institutions, and government agencies. They posit that preparation, planning, and training for a terrorist attack must be an integral part of the education of future and current nurses and health care providers. Yet even with the proliferation of articles following the attacks of September 11, 2001 they report that there is still a dearth in the education, literature, and research examining models relating to nursing and emergency management. The authors examine models that divide the disaster event into phases such as mitigation, preparedness, response, and recovery. They raise many disconcerting and compelling issues. This chapter is a very informative and a classic, must read chapter.

Appropriately, Mary Chaffee addresses nursing practice in emergency management and disaster preparedness. She notes that a wide variety of opportunities have emerged for nurses interested in preparing the health system for effective response to disasters, mass casualty events, and widespread crises. Nurses, by virtue of their position in every part of the health system from rural clinics, to home care to sophisticated urban medical centers, have become critically needed leaders in emergency management and disaster preparedness. Chaffee provides a richly detailed discussion of nursing roles and considerations during disaster and emergency management. She provides a table that identifies undergraduate and graduate nursing programs that offer disaster content including elective courses, internship opportunities, and specialty tracks. This is a highly informative and enlightening chapter and provides guidance that is sorely needed.

Terri Rebmann follows with a discussion of emergency preparedness for nursing related to infectious disease disaster preparedness. She notes that infectious disease disasters, such as a bioterrorism attack, outbreak of an emerging infectious disease, or pandemic, have a great potential for causing morbidity and mortality and a major strain on health care and public health systems. In the fall of 2001, the threat of bioterrorism became a reality when a terrorist sent anthrax-laden letters to members of the media and government officials. Since that time, numerous outbreaks of emerging infectious diseases have occurred in the United States, including West Nile virus, monkeypox, mad cow disease, Norwalk virus, and severe acute respiratory syndrome (SARS). In addition, the United States is faced constantly with the potential of new infectious disease threats, such as avian influenza that could develop into a pandemic. She skillfully provides a

review of bioterrorism and infectious disease disasters, a detailed framework of a possible impact analysis, and guidelines for nurses' roles in preparing for and responding to infectious disease disasters. This superb and inspired work serves as a solid wake-up call to nurses everywhere.

In the final chapter, Charles Figley and Maryann Abendroth provide a much needed respite with their discourse on compassion fatigue in nursing. Like burn-out, compassion fatigue symptoms are associated with emotional exhaustion, but in addition, the condition is also similar to post-traumatic stress disorder in that nurses are traumatized by their work in treating the suffering. The authors provide a comprehensive review of the literature with a goal of better preparing nurses for the challenges, as well as the joys, of nursing practice. They also seek to stimulate interest in the form of theory, research, and interventions to notice and care for nurses now suffering from the symptoms of or the full syndrome of compassion fatigue. This is a very well-written and valuable contribution to the dearth of literature pertaining to support measures for nurses. The topic is heart and soul for all nurses, and these researchers could be keynote speakers for the next decade and still not reach all of the nursing community interested in this construct.

This is perhaps a section that the reader should allow themselves some time between chapters, to absorb and reflect on the content. The topics address emotionally laden, difficult, and complex issues in nursing and in our world. Nurses caring for patients face child maltreatment, firearm injuries, spousal abuse, elder maltreatment and injuries from terrorist activities. Coping with these types of situations is difficult and can lead to nurses experiencing compassion fatigue, but nurses address these issues with a strong commitment to serve others in need.

Child Maltreatment: Nursing Considerations

PERLE SLAVIK COWEN ♦ JESSICA P. COWEN

Children's talent to endure stems from their ignorance of alternatives.

Maya Angelou, *I Know Why the Caged Bird Sings*, 1969

Child maltreatment is a complex problem that requires a host of multidisciplinary professionals to identify, treat, and provide preventive interventions. Nurses specializing in maternal-child, pediatric, public health, school, and mental health areas have long been aware of the immediate trauma and impaired developmental and health consequences associated with child maltreatment. Biological research is providing insight into the physiological pathways underlying numerous deleterious long-term effects. Recent studies have also identified negative health consequences for adult survivors of child maltreatment that may require treatment throughout the lifespan and are of importance to practitioners of all age cohorts.

Nursing interventions in child maltreatment cover a broad spectrum of roles and approaches throughout the individual's and family's lifespan. Different levels of family functioning require adaptations in the nursing role, therapeutic approach, and helping activities. Primary preventive interventions are directed at the general population in order to prevent or reduce the occurrence of child maltreatment; whereas secondary preventive interventions are targeted at high-risk groups, and tertiary interventions are focused on preventing further injury or harm to children who have been maltreated. Effective nursing interventions have shown significant gains in lessening, ameliorating, and preventing the dire consequences often associated with child maltreatment. Nursing's roles as advocate and practitioner are often the critical determinants of whether at-risk children and youth or survivors of child maltreatment are identified and receive the therapeutic interventions and tangible services they need. An overview of child maltreatment factors, issues and recent findings provide the discussion basis for nursing considerations in this chapter.

TYPES AND CHARACTERISTICS OF CHILD MALTREATMENT

The 1974 Federal Child Abuse Prevention and Treatment Act (CAPTA) (P.L. 93-247) guides child protection. It was amended and reauthorized in 1978, 1984, 1988, 1996, and 2003 and continues to expand and refine the scope of law (U.S. Department of Health and Human Services [USDHHS], 2004). CAPTA is scheduled for reauthorization in 2009, which provides an opportunity for Congress to strengthen available support for at-risk children and families. Historically, CAPTA programs have been grossly underfunded to meet the demands of community-based prevention programs. In fiscal year 2008, approximately \$100 million was appropriated to the states for CAPTA programs, far less than the \$200 million authorized by Congress. In comparison, over \$7 billion was allocated to the Title IV-E Foster Care program for services once children are removed from their homes (Voices for America's Children, 2009). Increased funding levels would allow CAPTA to strengthen basic state grants that in turn assist community-based prevention grants that strengthen and assist families (e.g., family support programs, home visiting programs, respite and crisis care programs, parenting education, and other community prevention programs) and to increase the research and demonstration grants designed for child abuse prevention (ARCH National Respite Coalition, 2003; Voices for America's Children, 2009).

However, as the current recession deepens, many states are scaling back even Medicaid services and are facing an increased demand for Temporary Assistance for Needy Families (TANF) funds. In past years, these programs have provided significant funds for child welfare services. At the same time, it is clear that the states' proportion of spending on child welfare has increased

while the federal share has declined. History has consistently demonstrated that reports of abuse and neglect often increase in difficult economic times. This suggests that many states may face increased demand for child welfare services just as their ability to pay for these services diminishes. A recent child trends study summarizes key findings from a survey of all 50 states and the District of Columbia regarding child welfare expenditures in state fiscal year 2006, the latest year for which data are available. Findings indicate that although child welfare spending has increased for at least a decade, several factors—driven by the current recession—may be converging to threaten states' capacity to serve abused and neglected children (DeVooght, Allen, & Geen, 2008).

CAPTA defines child abuse and neglect as “any recent act (harm standard) or failure to act (endangerment standard) on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm” (p. 44) (USDHHS, 2004). Specific types of maltreatment defined include physical abuse, neglect (physical, educational, health care, and emotional), emotional abuse, and sexual abuse. States and researchers may typically expand and specify additional neglect categories (see Table 73-1). Nurses are mandated reporters of abuse in every state and the District of Columbia along with

other professionals who interact and provide care for children. It is important for nurses to be familiar with their specific state's child maltreatment reporting statutes and definitions, circumstances under which one reports, and to whom reports are made. Nurses who have greater knowledge and expertise in child maltreatment are better reporters (Flaherty et al., 2000).

Individual cases may present with multiple types of maltreatment, in varying degrees of severity, with resultant physical, psychological, and developmental harm to the child. Research has indicated that children who experience chronic maltreatment versus transitory maltreatment have significantly more emotional problems (anxiety, depression) and a tendency for more behavioral problems (aggression, social withdrawal) (Éthier, Lemelin, & Lacharite, 2004). Numerous research studies have also provided empirical support for a substantial overlap between domestic violence and child maltreatment (Appel & Holden, 1998; Casanueva, Martin & Runyan, 2009; Edleson, 1999; Hartley, 2002; Holt, Buckley & Whelan, 2008).

Physical abuse includes the intentional use of physical force resulting in bodily harm, anguish, or pain and includes such acts of violence as striking (with or without an object), hitting, beating, pushing, shaking, kicking, pinching, burning, inappropriate administration of medications, and age inappropriate physical restraints. Some researchers contend that the resultant

TABLE 73-1 Types of Child Maltreatment*

Type	Definition
Physical Abuse	Intentional physical acts by the caregiver that caused or could have caused physical injury to a child younger than 18 years of age, including punching, beating, kicking, biting, burning, unreasonable confinement, repeated acts of punishment, or assault.
Health Care Neglect	Failure by the caregiver to provide necessary health care, medical or mental health treatment, including required immunizations, prescribed medications, recommended surgery or other intervention in case of serious disease or injury, although financially able to do so, or when offered financial or other means to do so.
Neglect/Deprivation of Necessities	Failure by the caregiver to provide needed, age-appropriate care, although financially able to do so, or when offered financial or other means to do so, including minimum shelter, food, clothing, and supervision necessary to maintain life or health; abandonment; expulsion from the home or refusal to allow a runaway to return home; and/or educational neglect.
Sexual Abuse	Involvement of the child in sexual activity to provide sexual gratification or financial benefit to the perpetrator, including contacts for sexual purposes, molestation, statutory rape, prostitution, pornography, exposure, incest, or other sexually exploitive activities.
Psychological Maltreatment	Refusals or delays in psychological care; inadequate attention to a child's needs for affection, emotional support, attention, or competence; exposure of a child to extreme domestic violence; and permitting a child's maladaptive behaviors.

*States may group or specify maltreatment categories

physical injuries are seldom intentional and are instead the parent's "heedless intention" to control the child (Wolfe, 1999). Injuries such as head trauma, third-degree burns, and other serious injuries result in large numbers of children becoming severely disabled because of physical abuse (Kolko, 2002). Of course the physical injuries, scars, and disabilities represent only the visible signs of physical abuse, and as noted subsequently, the emotional scarring may unfold throughout the lifespan.

Generally child neglect is defined as the failure of the child's parents or caretakers to provide the child with the basic necessities of life, when financially able to do so or when offered reasonable means to do so, including minimally adequate care in the areas of shelter, nutrition, health, supervision, education, affection, and protection. State statutes often classify specific subpopulations of neglect by the type of action that the parent or caretaker fails to take. Researchers have identified the existence of child neglect in many forms, including abandonment, educational, emotional, physical, and supervision. The most common form of child neglect involves failure to supervise the child properly, leading to physical harm or death (USDHHS, 2009).

Although there is basic agreement as to what constitutes severe physical child neglect, other specific types and individual cases of neglect include variables that create legal and ethical dilemmas that complicate the recognition and reporting of neglect. These dilemmas include but are not limited to (1) legal exemptions related to parental disability, poverty, or religious practices (Dubowitz & Black, 2002; Johnson, 1993); (2) lack of professional training and guidelines for determining medical neglect of specific diseases (Johnson, 1993); and (3) dilemmas related to the excessive demands of children who are technology dependent or dependent on their parents/caretakers because of disabilities (Cowen & Reed, 2002; Fullar, 2008; Hogue, 1993; Sullivan & Knutson, 1998, 2000).

Child neglect is not a dichotomous variable; it occurs along a continuum from mild to severe with many factors blurring the boundaries between these extremes. Because many parents engage in some kind of neglectful behavior, at least occasionally, the issues of severity and chronicity are critical in assessing the future risk to the child and in designing realistic interventions. Several factors are considered in assessing the severity of neglect including the frequency, duration, and type of neglect; age of the child; potential consequences to the child's development; and the degree of danger to

the child. Significant differences have been found in families who were substantiated for neglect in the areas of child characteristics, home environment, social environment, caregiver, and maltreatment situations. Multivariate analysis indicated that children who were substantiated for neglect were exposed to greater environmental dangers and had caregivers who had poor parenting skills (Connell-Carick & Scannapieco, 2006). Fatal neglect has been associated with both chronic deprivation of the basic necessities of life (Krugman & Dubowitz, 2003; Rosenberg, 1994; Wilkey, et al., 1982) and with situational failures to supervise the activities of young children (Committee on Injury and Poison Prevention, 2001; Margolin, 1990; Mierley & Baker, 1983; Rosenberg, 1994).

Practitioners vary in their individual opinions as to what constitutes health care neglect by specialty, cultural background, and the population they are serving. In general, a solitary omission in health care is unlikely to cause harm in average children. Nonetheless a pattern of omissions in care, such as failure to immunize, could have detrimental effects for even the healthiest children (Dubowitz, 1999a). In addition, there are times when failing to seek or comply with care for a single incidence can have a devastating effect, such as failure to have a severe head injury evaluated or in cases of meningitis (Dubowitz & Black, 2002). Nursing clinical studies posit that when a medically fragile infant is discharged to a family with problems such as domestic violence, mental illness, or substance abuse, the infant is at double jeopardy for both child neglect and poor developmental outcomes (Fullar, 2008). In cases of severe health care neglect, parents are unable, unwilling, or unmotivated to seek all forms of preventive care, and direct assistance is required to locate a provider and transport families to services (Dubowitz & Black, 1994). They are often unable or unwilling to meet the needs of a child with a chronic condition and this may result in significant morbidity or mortality for health conditions such as asthma, diabetes, or cystic fibrosis (Dubowitz & Black, 2002). It has also been asserted that parents should only be considered responsible for health care neglect if a layperson reasonably could be expected to appreciate the need for health care (Dubowitz et al., 2005).

Sexual abuse is any form of sexual contact with a child where consent is not or cannot be given (by nature of age) and includes rape, sodomy, coerced nudity, exposure or voyeurism, molestation, prostitution, and sexually explicit photography. This includes sexual contact that occurs as a result of force, regardless of the

age of the participants, and all sexual contact between an adult and child (Berliner & Elliott, 2002). State statutes specify the age an individual can consent to sexual contact and this typically ranges between 14 and 18 years of age. Contact between an older and younger child can also be abusive if there is a significant disparity in age, size, or development (Berliner & Elliott, 2002). All states have laws prohibiting sexual abuse of children; however, each state individually defines and labels prohibited activities and thus criminal statutes vary among states (Meyers, 1998). State child abuse statutes may include only acts committed by caretakers and address other contacts through criminal statutes.

The characteristics of sexual abuse may vary depending on the data source (clinical or general population); type (intrafamilial vs. extrafamilial); duration (limited vs. ongoing); severity, frequency, and use of force; and the age of the child (Berliner & Elliott, 2002; Kendall-Tackett, 2003). Most sexual abuse is perpetrated by relatives and acquaintances (Finkelhor et al., 2005; USDHHS, 2007), which makes it difficult for children to control or rebuke these interactions (Whitaker et al., 2008). The vast majority of offenders are male, with girls at higher risk of victimization than boys, and with both sexes more at risk if they have lived without one of their natural parents, have a mother who is unavailable, or perceive their family life as unhappy (Finkelhor et al., 1990; Homes & Slap, 1998). The mean age for sexual abuse initiation is approximately 9 years old with a range from infancy to 17 years of age (Berliner & Elliott, 2002). Multiple episodes of sexual abuse are reported as very common, with an incidence of up to 50% in nonclinical samples (Saunders et al., 1999) and 75% in clinical samples (Ruggiero, McLeer, & Dixon, 2000). Attempted or completed oral, vaginal, or anal penetration is reported to occur in approximately 25% of nonclinical groups (Finkelhor & Dziuba-Leatherman, 1994) and in more than 50% of clinical samples (Elliott, Browne, & Kilcoyne, 1995; Ruggiero et al., 2000).

Psychological maltreatment has been conceptualized as consisting of psychological abuse and neglect that may occur alone or in association with all other forms of child maltreatment (Hart et al., 2002). Professional guidelines developed through review by content experts resulted in the following broad conceptual statement: "a repeated pattern of caregiver behavior or extreme incident(s) that convey to children that they are worthless, flawed, unloved, unwanted, endangered or only of value in meeting another's needs" (American Professional Society on the Abuse of Children, 1995, p. 2). The

American Professional Society on Abuse of Children also identified six categories of psychological maltreatment including spurning; terrorizing; isolating; exploiting/corrupting; denying emotional responsiveness and mental health, medical, and educational neglect and has further developed detailed subcategories (Hart et al., 2002). Research findings indicate that "spurning" may be as damaging to a child's psychological development as physical abuse and that "denying emotional responsiveness" may be the most devastating of all forms of maltreatment (Erickson & Egeland, 2002). A recent retrospective study that examined outcomes associated with severe parental physical, corporal, and psychological aggression reported that psychological aggression was the most predictive of psychological dysfunctions in the child (Miller-Perrin, Perrin, & Kocur, 2009).

PREVALENCE OF MALTREATMENT

During the fiscal year of 2007, Child Protective Service Agencies received an estimated 3.2 million referrals of abuse or neglect (a rate of 47.2 referrals per 1000 children), concerning approximately 5.8 million children. They screened approximately 62% of those referrals for investigation or assessment (USDHHS, 2009). Approximately 25% of investigations determined at least one child was maltreated. Overall, victims were reported by professionals (67.5%), nonprofessionals (20.9%), and unknown or other sources (11.5%). Of physical abuse victims, 25.4% were reported by teachers, 23.9% by police officers or lawyers, and 13.3% by medical staff. Police or lawyers accounted for the largest percentage of report source for neglect victims (28.1%) and sexual abuse victims (29.4%) (USDHHS, 2009).

An estimated 3.5 million children received an investigation with 794,000 children found to be victims of abuse or neglect, a victimization rate of 10.6 per 1000 children in the population. Maltreatment types included 59% experiencing neglect, 10.8% physical abuse, 7.6% sexual abuse, 4.2% psychologically maltreated, less than 1% medically neglected, and 13.1% were victims of multiple maltreatments. The rates of victimization by maltreatment type have fluctuated slightly from year to year with child neglect consistently the predominate type (see Figure 73-1). The youngest children had the highest rate of victimization (see Figure 73-2), with children younger than 4 years of age accounting for 31.9% of victims, and an additional 23.8% were in the age group 4 to 7 years. Victimization in relation to gender was split nearly evenly, with 51.5% girls and 48.2% boys. The victimization rate was highest for the very young,

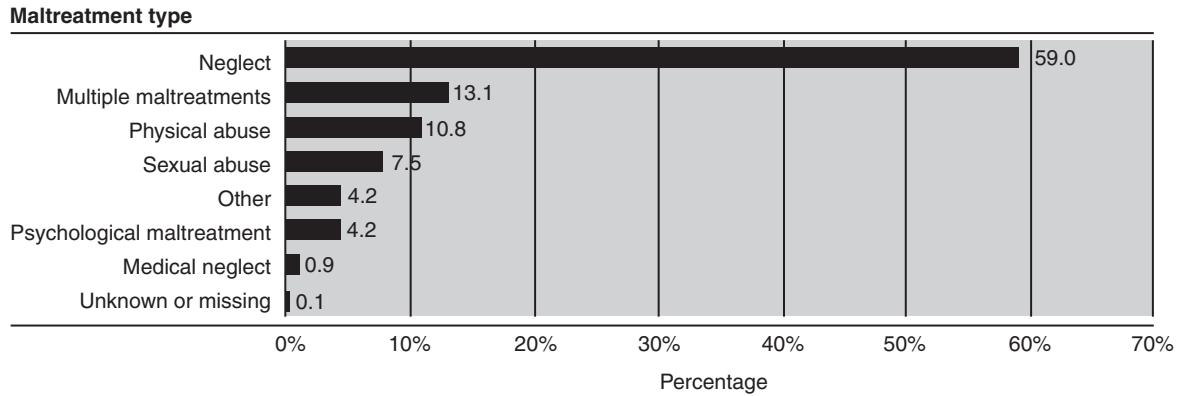


FIGURE 73-1 Victimization Rates by Maltreatment Type, 2007. (Statistics from U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2009). *Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.)

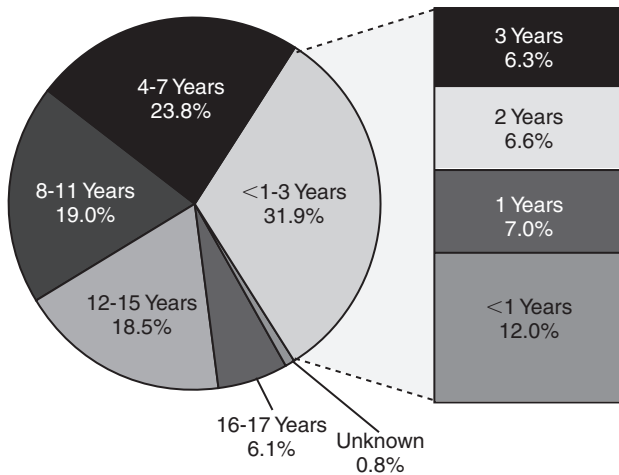


FIGURE 73-2 Victimization Rates by Age Group, 2007. (Statistics from: U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2009). *Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.)

with girls in the age group birth to 1 year at 21.5 per 1000 female children, and the rate for boys in the age group birth to 1 year at 22.2 per 1000 male children. Overall, parents made up the largest percentage of perpetrators (80.1%); statistically, this category included birth parents, adoptive parents, and stepparents. The maltreatment perpetrators' makeup included 38.7% mothers, 19.9% fathers, and 16.8% mothers and fathers (USDHHS, 2009).

Tragically, an estimated 1760 children died of abuse or neglect (2.35 children per 100,000), with attribution by maltreatment type as 35.2 % multiple forms of maltreatment, 34.1% neglect with 1.2% medical neglect, 26.4% physical abuse, 2% other, 0.7% unknown, 0.2% sexual abuse, and 0.1% psychological abuse (see Figure 73-3). Among the children who died, 75.7% were less than 4 years old: 42.2% were younger than 1 year old; 16.5% were one year old; 10.7% were 2 years old; and 6.3% were 3 years old. Nearly 13% were between the ages of 4 and 7, thus indicating the majority of children who die from child maltreatment are young children (see Figure 73-4). Infant boys (younger than 1 year old) had the highest rate of fatalities, nearly 18.85 per 100,000, and infant girls had a rate of 15.39 deaths per 100,000. Almost one half (41.1%) of all fatalities were white children; more than one quarter (26.1%) were African-American children; nearly one fifth (16.9%) were Hispanic children; and children of American Indian or Alaska Native, Asian, Pacific Islander, and multiple race categories collectively accounted for 4.8% of fatalities. Nearly 70% (69.9%) of child fatalities were caused by one or more parents, with more than one quarter (27.1%) perpetrated by the mother acting alone, and unknown perpetrators accounted for 16.4% of deaths (USDHHS, 2009).

THEORETICAL PERSPECTIVES

Theoretical perspectives on the causes and correlates of child maltreatment are many and varied (Cicchetti & Carlson, 1989). The inability of single dimensional models to adequately address the known characteristics

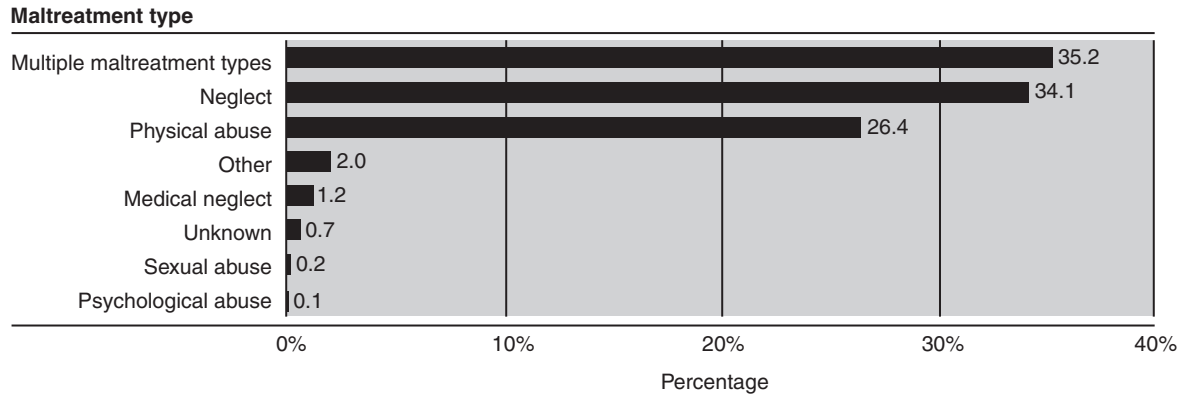
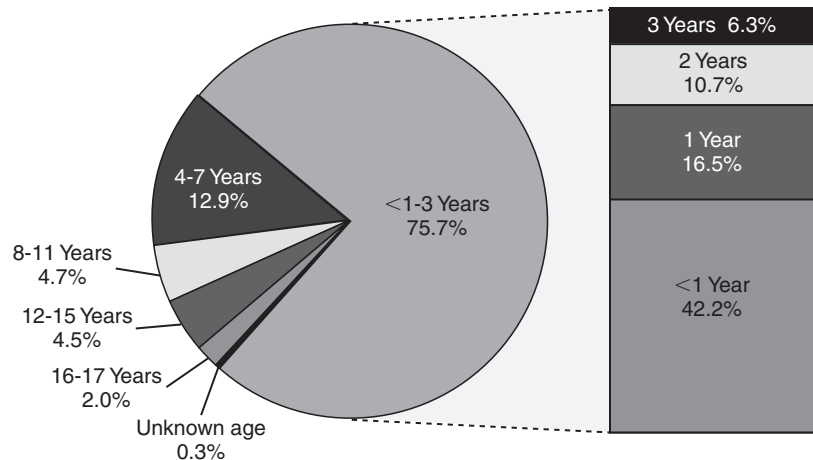


FIGURE 73-3 Percentage of Child Fatalities by Type, 2007. (Statistics from: U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2009). *Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.)

FIGURE 73-4 Percentage of Child Fatalities by Age, 2007. (Statistics from: U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (2009). *Child Maltreatment 2007*. Washington, DC: U.S. Government Printing Office.)



of child maltreatment has resulted in multidimensional models, including the ecological model of child maltreatment (Garbarino, 1977). This model is derived from the ecological model of human development (Bronfenbrenner, 1977) and is a paradigm for examining the complex interactions among parental and child characteristics, intra- and extrafamilial stressors, and the social and cultural systems that affect families. The model offers a framework for considering available supports and resources in relation to a topology of four levels that have been adapted to include individual, familial, social, and cultural dimensions (Howze & Kotch, 1984). Additionally, the model provides a framework for understanding the relationships among stress, social support systems, and child maltreatment and is further adapted to provide guidance to child maltreatment preventive intervention efforts.

RISK FACTOR IDENTIFICATION

The importance of early identification and intervention lies in its potential for reducing or preventing the occurrence of child maltreatment. Nurses who treat children require high levels of awareness of child maltreatment risk factors and have a responsibility to reach professional judgments about the risk of harm for these children. That is not to say that we should base our assessments solely on screening instruments, especially given concerns regarding their lack of predictive accuracy (Peters & Barlow, 2003; Sidebotham, Heron, & ALSPAC Study Team, 2003). The likelihood of child maltreatment has been linked to a range of factors, within and outside families, and knowledge of these factors is useful in primary prevention when coupled with holistically based plans to promote well-being (Taylor, Baldwin, & Spencer, 2008).

Variables that have been associated with child maltreatment can be classified into four separate domains, including socio-cultural, family, parental/caretaker, and individual characteristics of the child. Stress arising from these domains may be situational, acute, or chronic in nature. However, it is important to note that to date research has not indicated that there are any factors present in all child maltreatment circumstances that are absent in all nonmaltreatment circumstances. Additionally, individual risk characteristics may be more related to specific types of maltreatment. Thus, there is no litmus test for child maltreatment, only related risk factors whose identification provides the opportunity for preventive interventions to be directed at stressful environments, interpersonal relationships, and parental psychosocial problems, with securement of the child's safety and optimal growth and development as the desired outcomes.

Sociocultural Factors

Although child maltreatment is reported among all socioeconomic groups, it is disproportionately reported among poor families (Freisthler, Midanik, & Gruenewald, 2004; National Research Council, 1993a; Sedlak & Broadhurst, 1996.). Physical child abuse and child neglect have been highly correlated with poverty, while neglect has been found to be concentrated among the poorest of the poor who typically resided in inadequate housing (Freisthler, Merritt, & LaScala, 2006; Pelton, 1985; 1994; Sedlak & Broadhurst, 1996; Wolock & Horowitz, 1984). Income level has also been associated with the severity of neglect, with higher income families generally associated with less severe forms of neglect, presumably because they have more resources at their disposal (Crittenden, 1996). Low economic status is associated with a range of factors associated with poverty such as unemployment, limited education, large numbers of children, and social isolation (Crittenden, 1999).

In 2007, 18% (13 million) of U.S. children lived in families with incomes below the federal poverty level, \$22,050 for a family of four. A total of 39% (more than 28 million) live in low-income families, and among children under age 6, 21% live in poor families (National Center for Children in Poverty, 2009). In a study that compared the minimum earnings necessary for families to make ends meet in rural areas, midcost cities, and high-cost cities throughout the United States, the researchers found that the American dream of getting ahead through hard work is far out of reach. Even at two and three times the federal minimum wage

(\$6.55 an hour), full-time working parents are routinely unable even to pay for basic necessities. Policy researchers note that in today's economic climate, this scenario is becoming a reality for more and more Americans (National Center for Children in Poverty, 2009).

Child maltreatment rates have also been found to be higher in poorer neighborhoods with fewer social resources than in equally deprived neighborhoods where social resources (such as respite and crisis child-care) were perceived to be higher (Freisthler et al., 2006; Garbarino & Kostelny, 1992; Sedlak & Broadhurst, 1996). Although the indirect stress of poverty may lead to child neglect, there is little doubt that poverty is directly hazardous to children. Poor parents are required to be hypervigilant of the environment (deteriorated housing, fires, lead poisoning, crime), manage scarce financial resources, and provide constant supervision of children with little or no margin for error (Cutts, Pheley, & Geppert, 1998; Erickson & Egeland, 2002; Pelton, 1994). Poor children are more likely than rich or middle-class children to experience material deprivation and poor health, die during childhood, score lower on standardized tests, be retained or drop out of school, have out-of-wedlock births, and experience violent crime. In addition, poor children are more often reported as victims of child maltreatment (Brooks-Gunn & Duncan, 1997; Dubowitz et al., 2005; Duncan & Brooks-Gunn, 2000). However, unlike other forms of child maltreatment, sexual abuse does not appear to be related to socioeconomic status (Berliner & Elliott, 2002). The relationship between poverty and child maltreatment is complex. Most poor parents are not abusive, and poverty alone is neither a sufficient nor necessary antecedent for child maltreatment (National Research Council, 1993b).

Child neglect particularly has been related to the inaccessibility or unaffordability of health care (Barnett, Miller-Perrin, & Perrin, 1997). Since its inception in 1997, the State Children's Health Insurance Program (SCHIP) in concert with Medicaid has provided low-income children with vital health care coverage. SCHIP covered 6.6 million children at some point during the federal fiscal year 2006; however, the number of uninsured children has continued to rise, particularly among families that cannot qualify for SCHIP. In fiscal year 2008, the program faced funding shortfalls in several states. Legislation was signed by President Barack Obama so the program would include an additional 4 million children and pregnant women. Previously, millions of children who qualified for these programs remained uninsured (Hoffman & Pohl, 2002) primarily because of

parental lack of knowledge of program availability or the perceived complexity of enrollment and renewal procedures. Historically, health care of the poor has been the providence of nursing, and it is likely that nurse-coordinated efforts to increase enrollment of poor children into this program will be the most successful.

Family Factors

Disruptions in many aspects of family relations, not just parent-child, are often present in the families of maltreated children, with anger and conflict pervasive in abusive families, and social isolation more prevalent in neglectful families (Albarracin, Repetto, & Albarracin, 1997; Burke et al., 1998; Crittenden, 1999; Gable, 1998; Gaudin, Polansky, Kilpatrick, & Shilton, 1996). Chaotic family organization with high levels of conflict and low levels of verbal expression and communication has been reported as more predominate among families of maltreated children (Gable, 1998; Gaudin et al., 1996). A recent meta-analytical study of 155 studies examining 39 different risk factors reported large effect sizes between child physical abuse and three risk factors: parent anger/hyperreactivity, high family conflict, and low family cohesion. Large effect sizes were also reported between child neglect and five risk factors: parent-child relationship, parent perception of the child as a problem, high parent levels of stress, parent anger/hyperreactivity, and low parent self-esteem (Stith et al., 2009).

Family structure has also been associated with the probability of child maltreatment. Children living with a single parent are reported to be at significantly greater risk of both physical abuse and neglect, most likely due to added stress, fewer resources, lower socioeconomic status, and less opportunity to share child-rearing burdens than in two-parent homes (Dubowitz, 1999b; Nelson et al., 1996; Smokowski & Wodarski, 1996; Wolfe, 1999). Children who live in father-only homes were almost twice as likely to be physically abused as those living with mothers alone (Sedlak & Broadhurst, 1996). A significant risk of fatal child maltreatment has been associated with households with unrelated adults residing with the decedent child (Stiffman et al., 2002). In an additional study, children residing within households with adults unrelated to them had nearly six times the risk of dying from maltreatment-related unintentional injury. Children residing with step or foster parents and those living with other, related adults were also at increased risk of fatal unintentional injury related to maltreatment. However, risk was not elevated for children in households with a single biological parent and no other adults in residence (Schnitzer & Ewigman, 2008).

Nurses can use these findings to facilitate injury prevention by identifying at-risk families and providing anticipatory guidance and referral.

Maltreatment, particularly physical and educational neglect, has also been found to be more common in larger families where additional young children result in greater responsibilities, tasks, and caregiver demands (Gable, 1998; Wolfe, 1999). Additional family factors that have been linked to child maltreatment include geographical or social isolation from family and friends (Albarracin et al., 1997; Campbell, 1996; Caselles & Milner, 2000; DePanfilis, 2006; Dolz, Cerezo, & Milner, 1997; Dubowitz, 1999b; Gable, 1998; Kolko, 2002); younger parents with lower education levels and a larger number of closely spaced children (Jaffee et al., 2001; National Research Council, 1993b; Stevens-Simon, Nelligan, & Kelly, 2001); life stress and distress (Crittenden, 1996; Gable, 1998; Nelson et al., 1996); violent family interactions characterized by marital discord, domestic violence, and sibling violence (Casanueva, Martin, & Runyan, 2009; Hartley, 2002; Jellen, McCarroll, & Thayer, 2001; McGuigan & Pratt, 2001); and violent, antisocial families with a history of aggressive or criminal behavior outside of the family (Abel et al., 1988; Lanning, 2002; Pagelow, 1989; Patterson, 1982).

Physically abusing families are characterized by negative daily interactions, anxious relationships between family members and members who respond more negatively to aversive communication or interactions (Cicchetti & Rogosch, 2001; Crittenden, Partridge, & Claussen, 1991; Lynch & Cicchetti, 1991). Research findings indicate that hostility and aggression often underlie abusers' smiles and affectionate behavior, which may explain the process whereby children (and the adults they become) are more likely to distrust and misuse ordinary communication signals (Crittenden, 1995, 1996; Gable, 1998; Howes et al., 2000; Stith et al., 2009).

Neglect is usually pervasive in the lives of all family members, with both parents and children often perceiving themselves to be powerless and viewing attempts at goal achievement to be futile. There is evidence that child neglect is more likely to be associated with single-parent households (Burke et al., 1998; Dubowitz, 1999b; Smokowski & Wodarski, 1996), chaotic family organization (Gable, 1998; Gaudin et al., 1996), lower socioeconomic status (Slack et al., 2004; Freisthler et al., 2004), large number of children in the family (Gable, 1998; Stith et al., 2009), social isolation (Albarracin et al., 1997; Campbell, 1997; DePanfilis, 2006; Gable, 1998), and domestic violence (Casanueva et al., 2009;

Jellen et al., 2001; McGuigan & Pratt, 2001; USDHHS, 2009). Researchers have reported the co-occurrence of several risk factors (single-parent, substance abuse, maternal depression, and chronic mental illness) for domestic violence and child neglect and suggest domestic violence screening in families founded for child neglect (Hartley, 2002). Substance abusing families have also been reported to exhibit unique characteristics and behaviors that heighten the risk for child neglect (Dunn et al., 2002; Friedman, Heneghan, & Rosenthal, 2009). Vulnerable families may also include those in situational crisis related to such life stressors as death, divorce, relocation, and unemployment (Crittenden, 1996; Slack et al., 2004).

Most child sexual abuse is perpetrated by relatives and family acquaintances (Finkelhor et al., 2005; USDHHS, 2007). Family factors that have been related to child sexual abuse (CSA) include an estranged family; a mother who is absent, ill, or otherwise not protective of the child; unusual sleeping or rooming conditions; the erosion of social networks; and the lack of social support for the mother (Finkelhor, 1984, 1993; Gomes-Schwartz, Horowitz, & Cardarelli, 1990; Weiss, Longhurst, & Mazure, 1999). Empirical studies have found that ongoing sexual abuse often occurs in conjunction with other forms of family dysfunction. Studies have reported that families with a child who has been sexually abused (including both familial and non-familial) are less cohesive, more disorganized, more dysfunctional (Elliott & Briere, 1994; Mannariono & Cohen, 1996a, 1996b), less likely to encourage independence and moral-religious values, and are less involved recreationally (Ray, Jackson, & Townsley, 1991) than families of nonabused individuals. Researchers have noted that although it appears that families in which incest has occurred do exhibit greater dysfunction, it is possible that the pathology is as much an outcome of the incest as the etiology (Briere, 2000). A large meta-analysis of perpetration of child sexual abuse reported that sexual offenders of children were found to have a history of sexual abuse, antisocial personality, difficulty with intimate relationships, experienced harsh discipline as a child, and loneliness (Whitaker et al., 2008).

As previously noted, psychological maltreatment may occur alone or in association with all other forms of child maltreatment (Hart et al., 2002; Miller-Perrin et al., 2009). Research suggests that the most common and long-lasting effects of physical abuse, sexual abuse, and neglect tend to be related to the embedded accompanying psychological experiences and that

psychological maltreatment occurring alone is associated with negative effects equal to or greater than other forms of abuse (Hart et al., 2002). Thus, family characteristics of all other types of child maltreatment must be considered within the context of family factors associated with psychological maltreatment. Studies have characterized the families of psychologically maltreated children as having more psychosocial problems, poor coping skills, greater levels of perceived stress (Hickox & Furnell, 1989), avoidant coping styles, total disregard for the child's emotional experience (severe parental criticism; threatening behaviors; embarrassment; and terrorizing, isolating, and humiliating the child) (Claussen & Crittenden, 1991; Egeland, Sroufe, & Erickson, 1983; Miller-Perrin et al., 2009; Shipman & Zeman, 2001), and negative emotional socialization of children (Krause, Mendelson, & Lynch, 2003; Miller-Perrin et al., 2009; Shaffer, Yates, & Egeland, 2009). Researchers have postulated that vulnerable families may also include those in situational crisis related to such life stressors as death, divorce, relocation, and unemployment (Crittenden, 1996).

Parental/Caretaker Factors

Very dissimilar approaches to child rearing can emerge from the interaction of two fundamental dimensions of parenting, which include the degree of parental "authority" and the degree of parental "sensitivity" (Maccoby & Martin, 1983). Parents who are very demanding while failing to recognize their child's limitations and needs typify the pattern of physically and psychologically abusive parents, while parents who place few demands and little or no structure typify a neglectful, uninvolved style of parenting (Wolfe, 1999). Specific characteristics of parental personality known to increase the likelihood of abuse or neglect have been extensively reported, and behavior is only briefly reviewed in this section.

Identified parental/caregiver risks for child maltreatment include: a history of depression, anxiety, and antisocial relations that are associated with subsequent disruption in social relations, social support, decreased or dysfunctional parent-child interactions, and an inability to cope with stress (Albarracin et al., 1997; DePanfilis, 2006; Dubowitz, 1999a; Éthier, Lacharité, & Couture, 1995; National Research Council, 1993b; Wolfe, 1999); excessive hostility and anger, harsh parenting, disturbances of affect, and other psychological characteristics that may be associated with a history of maltreatment during childhood (Banyard, Williams,

& Siegel, 2003; Carter et al., 2001; Crouch, Milner, & Thomsen, 2001; Milan et al., 2004; Nelson et al., 1996; Whipple & Webster-Stratton, 1991); substance abuse that has been implicated in both rendering parents less able or willing to interact with their children and in aggressive acts toward children (Cash & Wilke, 2003; Dubowitz, 1999a; Friedman et al., 2009; Jaudes & Diamond, 1985; Nelson et al., 1996; Peterson, Gable, & Saldana, 1996), as well as impeding their development related to maternal ingestion during pregnancy (Cash & Wilke, 2003); and domestic violence and/or a history of violent or antisocial behavior (Appel & Holden, 1998; Casanueva et al., 2009; Edleson, 1999; Hartley, 2002; Jellen et al., 2001; McGuigan & Pratt, 2001).

Additional characteristics that have been associated with neglectful parents include an immature, childlike personality related to low self-esteem; poor impulse control; limited financial and household management skills; and limited social competencies (Brooks-Gunn & Duncan, 1997; Burke et al., 1998; Gable, 1998). Abusive parents have been found to demonstrate inappropriate expectations of the child; disregard for the child's needs and abilities; role reversal with expectations that the child will meet their needs; beliefs that the child intentionally annoys them; and inconsistent, rejecting, and punitive child-rearing practices (Cicchetti & Rogosch, 2001; Crittenden, 1996, 1999; Hart et al., 2002; Krause et al., 2003; Shipman & Zeman, 2001). Poor parental physical health and stress-related symptoms have been related to child physical and emotional neglect (when the parent is physically or psychologically immobilized and unable to provide care) and child physical and emotional abuse (Cowen, 1998; Crittenden, 1996; El-Kamary et al., 2004). Meta-analysis research indicated that the strongest risk factors for child neglect were the quality of the parent-child relationship and parent perception of the child as a problem. Risk factors for child physical abuse were parent anger/hyperreactivity and family factors including high family conflict and low family cohesion (Stith et al., 2009). Some of the same risk factors (parent perception of the child as a problem and parent anger/hyperreactivity) were associated with both child abuse and neglect while others were strongly related to neglect (personal adequacy, competency, or resilience; unemployment and family size) but only minimally related to abuse.

Aggressive and violent behavior has also been associated with the following underlying health conditions: (1) illnesses including hypoglycemia; seizure disorders; central nervous system vasculitis; hyperthyroidism; infections; cardiopulmonary insufficiency; dehydration

with resulting electrolyte imbalances; severe pain; and brain lesions such as tumors, abscesses, and trauma-related conditions; (2) exposure to toxins including carbon monoxide, hydrocarbons, inorganic mercury, and boric acid; (3) ingestion, overdose, or withdrawal from psychoactive drugs including alcohol, benzodiazepines, amphetamines, phencyclidine (PCP), corticosteroids, digitalis, lidocaine, pentazocaine, narcotic analgesics, and those with anticholinergic effects that can produce atropinism (atropine, scopolamine, anti-Parkinson, neuroleptics and tricyclic antidepressants) and (4) major mental disorders including schizophrenia and bipolar affective disorders (Barry, 1984).

Child Factors

Certain child health, intellectual, and developmental characteristics have been reported to contribute to an increased risk of child maltreatment and are referred to as child care burden issues. Some researchers contend that the "goodness of fit" between child and parent characteristics influences the child's vulnerability to maltreatment (Black, Feigelman, & Cureton, 1999; Dubowitz & Black, 1994). Others have postulated that additional or heightened care burdens placed on an already stressed or incapable family system may result in a breakdown of parental coping abilities (Cowen, 1998; Dubowitz, 1999a; Sullivan & Knutson, 2000; Pianta, Egeland, & Erickson, 1989). Professional reporting dilemmas related to the excessive care requirements of technology-dependent children on their parents/caretakers have been reported (Johnson, 1993). Nurses are very familiar with parental caregiver fatigue and burnout related to caring for children with demanding chronic illnesses and the resultant "unable to contact parents" situations that may occur for a few days following a nonacute readmission for a chronic problem. In such cases, the nation-wide lack of adequate respite care for children with disabilities could be equally noted as an etiological factor.

As previously noted, children 4 years of age or younger, particularly children less than 1 year of age, are the most frequently reported victims of maltreatment, with 75.7% of child maltreatment fatalities occurring in this age group (USDHHS, 2007). Other vulnerable child characteristics include difficult temperament as perceived by mother (Harrington et al., 1998), conduct disorders (Whipple & Webster-Stratton, 1991), oppositional defiant disorders (Ford et al., 1999), factors related to increased care demands such as prematurity and low birth weight (Cowen, 1998, 2001; Herrenkohl, Herrenkohl, & Egolf, 1983), chronic disabilities and

physical impairments (Cowen & Reed, 2002; National Research Council, 1993b; Sullivan & Knutson, 1998, 2000), and a large number of closely spaced children within the family (Gable, 1998).

The majority of child sexual victims are females with onset at 7 to 12 years of age as the most vulnerable age (Berliner & Elliott, 2002; Finkelhor, 1993). Other characteristics of children vulnerable to sexual abuse include having a mother who is ill or disabled, living with parents whose relationship is conflicted, living with a stepfather or without one's natural parents for extended periods of time, living with parents who have substance abuse problems, and having few close friends (Finkelhor, 1993; Finkelhor & Baron, 1986; Finkelhor & Hotaling, 1984; Fergusson, Boden, & Horwood, 2008). Prior sexual and physical child maltreatment has been reported to make children more vulnerable to child sexual abuse (Boney-McCoy & Finkelhor, 1995). In a prospective study, all types of early child maltreatment predicted elementary school peer victimization and bullying for both boys and girls (Shields & Cicchetti, 2001).

NURSING CONSIDERATIONS

Developmental Outcomes for Children

Research findings conclude that child maltreatment can have severe, deleterious effects on children's physical, cognitive, emotional, and behavioral development (Erickson & Egeland, 2002; Horowitz et al., 2001; Kendall-Tackett, 2003; Knutson, DeGarmo, & Reid, 2004; Repetti, Taylor, & Seeman, 2002; Stith et al., 2009). Physical and psychosocial/behavioral consequences of child maltreatment have been identified at every stage of child development. Researchers have found that child maltreatment occurring early in life is particularly detrimental to subsequent development (Hildyard & Wolfe, 2002; Pears, Kim, & Fisher, 2008), and significant lifetime health effects have been reported (Kendall-Tackett, 2003). Exposure to CSA and child physical abuse (CPA) have been associated with increased risks of mental disorders, including depression, anxiety disorders, conduct/anti-social personality disorder, substance dependence, suicidal ideation, and suicide attempts at ages 16 to 25 years (Fergusson et al., 2008). However, control for social, family, and individual factors reduced the associations between CPA and later mental health outcomes but not those for CSA. This suggests that much of the mental health issues of CPA reflects the general family context in which it occurs, whereas this is less the case for CSA (Fergusson

et al., 2008). There is also substantial evidence of a link between child maltreatment and delinquency and/or aggressive behavior (Siegal & Williams, 2003; Williams & Herrera, 2007).

Recent biological research findings have indicated that maltreated children's exposure to extreme stress produces high levels of cortisol, and the presence of these high levels during brain development may change the brain physically for the long term (Bremner, 1999; Bremner et al., 1997). Children who have suffered chronic maltreatment have been noted to have smaller hippocampi (critical for memory) especially on the left side, smaller cortexes, and differences in limbic and brainstem functions (Frustraci & Ryan, 1999). Damage to the limbic system can result in lifelong difficulties in social relationships and with memory and learning (Perry, 2001).

Some researchers posit that the chronic stress of child maltreatment is a risk factor for acute and chronic post-traumatic stress disorder (PTSD) (De Bellis et al., 1999; De Bellis, 2005). Researchers who examined the effects of extreme deprivation on infants raised in Romanian orphanages reported that at 2 years of age, the orphanage children did not show the usual diurnal variation of cortisol levels and had significantly lower morning cortisol levels that remained elevated relative to the lower afternoon levels compared with home-reared Romanian children (Carlson & Earls, 1997). In a study of 1083 emotionally disturbed 4 to 17 year olds with either no history of neglect or abuse, a history of abuse with no neglect, or a history of neglect with no abuse, the emotionally disturbed children with a history of neglect showed the lowest dopamine-hydroxylase levels and systolic and diastolic blood pressure, which are all functions mediated by the norepinephrine system (Rogeness & McClure, 1996). The researchers note these results support animal study findings that child neglect affects the development of the norepinephrine system in a long-lasting and perhaps permanent way.

However, it is important to note that each child responds differently to traumatic events. There is no one pattern of response that every child follows (Wright et al., 1997). Factors that have been identified as influencing how children will respond to traumatic events include the characteristics of the child, the traumatic event, and those characteristics of the family and the social system (Perry, 2001). It has been posited that the biological response to stress depends on the interaction of several factors, including nature of the stressor (type, chronicity, severity, controllability, and predictability),

prior vulnerabilities (previous stress history, genetic and social vulnerabilities), and the current family environment (Yehuda et al., 1996). The timing of maltreatment in children's lives can explain a range of symptoms in abuse survivors, with each stage of development having its own vulnerabilities and protections (Kendall-Tackett, 2003). Recent research has indicated that emotional maltreatment outcomes may be different for boys and girls, and the processes operating following emotional abuse may differ from those following emotional neglect (Shaffer et al., 2009).

Long-Term Health Effects of Childhood Victimization

Numerous empirical studies have consistently demonstrated child maltreatment to be associated with a broad range of behavioral, psychological, and health problems that persist into adulthood (De Bellis, 2005; Kendall-Tackett, 2003; Yehuda, Spertus, & Golier, 2001). Research has provided a conceptual framework for grouping the many deleterious long-term health effects of child maltreatment into five major etiological pathways (Kendall-Tackett, 2003). These pathways and their characteristics are summarized below:

- ◆ *Physiological pathways*: Trauma changes the body: the sympathetic nervous system becomes more reactive, levels of stress hormones become permanently dysregulated, and pain thresholds are lower. Children are especially vulnerable and such changes are likely to occur when trauma is severe.
- ◆ *Behavioral pathways*: Adult survivors are more likely to engage in harmful behaviors, especially substance abuse and high-risk sexual activity. Author notes that this category has the most empirical support.
- ◆ *Cognitive pathways*: Adult survivors were more likely to have negative beliefs about themselves and others. Negative beliefs can undermine health and may also lead to harmful behaviors and relationships. This can explain some of the difficulties that otherwise high-functioning survivors face.
- ◆ *Social pathways*: Adult survivors have difficulties in adult relationships with manifestations such as revictimization, divorce, marital disruptions, and social isolation and are more likely to be poor, have a hard time in school, and to be homeless.
- ◆ *Emotional pathways*: Depression and PTSD are common sequelae of past abuse that suppress the immune system and cause myriad health problems. Instead of thinking of these as outcomes, we need to think of them as mechanisms that lead to poor health (Kendall-Tackett, 2003, page xiv).

Kendall-Tackett's (2003) review of empirical studies examined the increased risk, higher occurrence or correlations between adult survivors of maltreatment and behavioral, psychological, and health problems. The major negatively impacted variables include: (1) physiological pathways: mood and anxiety disorders and the framework for behavioral variables; (2) behavioral pathways: substance abuse, smoking, obesity and eating disorders, suicide, high-risk sexual behavior, and sleep disturbances; (3) cognitive pathways: shame, self-blame, attributional style, health perception, self-esteem and self-efficacy, mistrust and hostility, and rejection sensitivity; (4) social pathways: insecure attachments, divorce, social isolation, and dysfunctional interpersonal style, difficulties in school, learning difficulties in adults, homelessness, revictimization; and (5) emotional pathways: depression influences on cardiovascular health, immune function, health behaviors, and increased vulnerability; PTSD influences on effects on comorbidity, reactivity, and sleep quality (Kendall-Tackett, 2003). The majority of victims have been reported to manifest at least one negative consequence of their victimization (Erickson & Egeland, 2002). However, since not all maltreated children demonstrate these or other dysfunctional long-term effects, at least part of the mediating factor is posited as the complex pattern of personal relationships (Salzinger, Rosario, & Feldman, 2007) social support, and/or resiliency.

According to Garbarino and Sherman (1980), it is the unmanageability of the stress that is the most crucial factor in child maltreatment, and this unmanageability is a product of a mismatch between the level of stress and the availability and potency of social support. As the largest group of health care providers and positioned on the front lines of care delivery, nurses are a powerful source of social support. To be effective advocates, nurses must be aware of the "high risk" indicators that signal potential, present, or past child maltreatment. Equally as important, they must have confidence in their assessment findings—confidence to take responsibility for translating their assessments into interventions and outcomes that may involve a host of other specialties and agencies. Their role as advocate for the child, adult, and family is often the critical determinant of whether "at risk" children, survivors and families are identified and receive the services they need.

The economic and human costs of maltreatment in American society are astronomical. It is likely that billions of dollars are spent in treatment and social service costs and lost in lessened productivity for a generation of maltreated children (Cicchetti & Carlson, 1989).

Based on data from several sources, an economic impact study estimates that the estimated cost of child maltreatment is \$103.8 billion to the U.S. economy (Wang & Holton, 2007). The human costs include a litany of death, morbidity, and psychological tragedies. The emotional damage due to maltreatment lasts a lifetime for many of the victims. The Pew Charitable Trusts (2007) reports that billions of public and private dollars are spent each year on prevention and intervention. Research on child maltreatment risk factors has supported a range of practices and programs to prevent child abuse and neglect. The current economic recession is restricting available funds, and it is important to target these funds to those programs that are demonstrating effective interventions and outcomes.

Interventions to Prevent Child Maltreatment

The rising evidence that child maltreatment has a pervasive and negative impact on life span, development, and behavior has resulted in greater calls for primary prevention. Recent reviews have focused on identifying the most effective programs and interventions in preventing child maltreatment (Klevens & Whitaker, 2007; MacMillan et al., 2009; Reynolds, Mathieson & Topitzes, 2009).

A study that reviewed early childhood primary prevention programs to reduce rates of child abuse and neglect examined 15 studies of 14 programs that offered home visits, parent education classes, or the provision of health services and reported that only five programs showed significant reductions in child maltreatment and two provided strong evidence of long-term maltreatment prevention (Reynolds et al., 2009). The two programs, Child-Parent Centers and the Nurse-Family Partnership (NFP), are characterized as high intensity and are implemented by well-trained professional staff who provide comprehensive family services. The Child-Parent Centers' staff are all teachers with a bachelor's degree and are certified in early childhood, and the NFPs are staffed by nurses with at least a bachelor's degree. The researchers postulate that poor implementation quality, variability in implementation sites, and level of staff training may influence program effectiveness and note that home visitors in eight of the studies were paraprofessionals including Hawaii Health Start and Health Families America Studies. Only two showed evidence of maltreatment effects. Another previous study comparing paraprofessionals and nurse home visitors also provided support that benefits may be greater for families visited by nurses than families visited by paraprofessionals (Olds et al., 2004).

A follow-up study to test the effects of prenatal and infancy home visits by nurses on mother's fertility and functioning 7 years after the intervention program ended at child age 2 reported very positive findings (Olds et al., 2007). They reported that the program reduced women's rates of subsequent births, increased the intervals between births of first and second children, increased stability of their relationships with partners, facilitated children's academic adjustment to elementary school, and seems to have reduced child mortality from preventable causes. This is an important replication study that focused on low-income black individuals from Memphis Tennessee, whereas earlier studies of the NFP program study had a sample of primarily white, adolescents from Elmira, New York (Olds et al., 2007).

A recent review of interventions to prevent child maltreatment and associated impairment provides findings related to a wide-range of programs, including (1) home visiting programs are not uniformly effective in reducing child maltreatment, with positive findings provided by NFP (best evidence) and Early Start; (2) Triple P-Positive Parenting Program has shown positive effects on maltreatment; (3) hospital-based educational programs to prevent abusive head trauma and enhanced pediatric care for families of children at risk for maltreatment demonstrate promise; (4) parent-child interaction therapy has shown benefits in preventing recurrence of physical abuse and in preventing recidivism in neglect; (5) cognitive-behavioral therapy shows benefits for sexually abused children; and (6) enhanced foster care leads to better mental-health outcomes than does traditional foster care (MacMillan et al., 2009).

Researchers who reviewed 188 primary prevention programs with the goal of identifying gaps in current programs noted that only a few had been rigorously evaluated and were found to demonstrate an impact on child maltreatment (Klevens, & Whitaker, 2007). They recommend development of interventions that target neglected risk factors such as poverty, domestic violence, teenage pregnancy, and social norms tolerating violence toward children.

SUMMARY

As nurses we not only offer valuable treatment and consultation on the physiological and psychological aspects of child maltreatment, but also we provide direct preventive interventions and consult information on such topics as parent-child interactions, a parent's ability to care for a child, and stress management. We

have the education, experience, and skill set to develop, deliver, and evaluate effective intervention programs in partnership with our multidisciplinary professional health partners. Nurses have key roles in the primary, secondary, and tertiary preventive care of maltreatment victims across the lifespan and need to seek out opportunities to coordinate and deliver these interventions.

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Nursing Care: Preventing Firearm Injuries

MARY FRAN HAZINSKI

The incidence of firearm-related injuries and deaths in all ages has decreased in the United States from the epidemic numbers reported in 1993 to the relatively stable levels observed since 1999 (Christoffel, 2007; Karch et al., 2008). Firearm injuries may now be characterized as endemic (always present), rather than epidemic (Christoffel, 2007). They remain a leading cause of death in adolescents and young adults (Karch et al., 2008). For every firearm fatality, there are approximately 14 nonfatal firearm injuries serious enough to require an emergency department visit (Hepburn et al., 2006).

Firearms are the leading cause of suicide death in adolescents and adults and are among the top two causes of suicides for all victims older than 10 years (Karch et al., 2008; Vajani et al., 2007). Many unintentional firearm injuries and most firearm suicides can be prevented if firearms are inaccessible (stored unloaded and locked) to unsupervised children and adolescents (Eber et al., 2004; Grossman et al., 2005).

Nurses have many opportunities to interact with community leaders, legislators, and members of the media and must be knowledgeable about evidence supporting gun safety interventions. In interactions with parents, nurses should encourage parents to store guns and ammunition safely. This chapter highlights the evidence available to support gun safety legislation and regulations and specific interventions to reduce firearm injuries and fatalities. This chapter does not address adolescent violence and gun use but focuses on gun storage and information for parents and children that is likely to reduce unintentional firearm injuries and suicides.

STATE LEGISLATION AND REGULATIONS

A variety of federal and state legislation and state and community regulations have attempted to reduce firearm injuries and fatalities (Hahn et al., 2005). These include the Brady Bill with background checks, mandatory

waiting periods before firearm purchase, regulations pertaining to concealed weapons laws, child access prevention (CAP) laws, and the Gun-Free Schools Act. Readers are referred to Hahn and colleagues (2005) for an excellent review of these laws. Information regarding state-by-state legislation and regulations can be found on the following website: <http://www.bradycampaign.org/legislation/state/>.

The federal Brady Bill (Public Law 103-157) requires an instant background check when a firearm is purchased from a federally licensed gun store. However, some state laws limit the effectiveness of the Brady Bill by exempting purchases of guns from flea markets, gun shows, or swap meets. In addition, the quality and effectiveness of the background checks varies widely from state to state. The checks can be accomplished at the federal, state, or local level; however, records for many restriction categories (e.g., some mental health or drug addiction records) and some criminal records may not be available to federal databases (Hahn et al., 2005; Sumner, Layde, & Guse, 2008). One study relating the quality of state background checks to firearm death rates documented a significant decline in the firearm suicide rate associated with enactment of local background checks compared to federal or state background checks (Sumner et al., 2008). However, the local background checks could be a surrogate/proxy for other variables such as state and local prioritization of efforts to improve gun safety.

Some states require no waiting period for handgun purchase if an instant background check is performed. Other states require waiting periods from 2 days to 6 months for purchase of a firearm. Although the goal of such waiting periods is to allow a “cooling off” period for purchasers contemplating homicide or suicide, data are insufficient to determine the effectiveness of such waiting periods on handgun deaths.

Data also are insufficient to evaluate the effects of regulations regarding establishment of registration (creation and retention of a record of firearm owners) or

licensing (i.e., purchase or possession of a firearm requires a license or other authorization or certification) for the purchase of firearms (Hahn et al., 2005).

Many states have established concealed-weapons carry laws, requiring authorities to issue permits to those who wish to carry concealed weapons. Since 2000, most states have passed “shall issue” laws, eliminating most restrictions for carrying a concealed weapon. Evidence is insufficient to evaluate the effect of these laws on gun-related deaths.

Between 1989 and 2004, 18 states (California, Connecticut, Delaware, Florida, Hawaii, Illinois, Iowa, Maryland, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, North Carolina, Rhode Island, Texas, Virginia, and Wisconsin) passed CAP laws, requiring that firearm owners store firearms locked, unloaded, or both (Hepburn et al., 2006). Some states (e.g., California, Connecticut, and Florida) also hold firearm owners responsible and may charge them with a felony or misdemeanor when a child is injured by an improperly stored firearm or when a child uses an improperly stored firearm to threaten or harm someone. These CAP laws may reduce some intentional uses of firearms, as well as many unintentional injuries and suicides. Most firearms used by students in the 358 school-associated violent deaths reported from 1992 to 1999 were obtained from the perpetrator’s home or from the home of a friend or relative (Centers for Disease Control and Prevention, 2003). In the most recent data from the 16 states with CAP laws, the laws were associated with a significant reduction in unintentional firearm injuries among children 14 years of age and younger (Hepburn et al., 2006). However, the decrease was largely due to the effects produced in Florida and California, two of the three states that pursue felony prosecution of adults when CAP laws are violated (Hepburn et al., 2006). In a state-by-state review of firearm homicides, suicides, and unintentional injuries, state child access prevention laws also were associated with a decrease in juvenile suicide (Webster et al., 2004).

The Gun-Free Schools Act (Public Law 103-382) requires that primary and secondary schools that receive federal funds must have a policy requiring expulsion of any student found in possession of a firearm at school. No studies have documented the effect of such policies on firearm injuries and deaths. However, in Nashville, Tennessee, the zero-tolerance policy resulted in substantial reduction of guns confiscated at schools (Bottorff, 2003).

In summary, the data regarding the effect of most legislation and regulations on firearm injuries and deaths is insufficient to draw any firm conclusions about their effects on firearm injuries or deaths. State child access protection laws do appear to reduce unintentional firearm injuries and firearm suicides in children, and school zero-tolerance policies for firearms appear to reduce the number of firearms brought to and confiscated at schools. Further research is needed to determine what legislation, if any, contributes to an overall reduction in the number or severity of firearm injuries.

RISKS CREATED BY HANDGUNS IN THE HOME

Several studies have documented an association between the presence of a handgun in the home and the risk of firearm injuries or death in the home. The strength of the association is stronger if the gun is stored loaded or unlocked or if there are multiple guns in the home. In 1998, a debate regarding risks and benefits of guns in the home was published in *JAMA: The Journal of the American Medical Association* (Cummings & Koepsell, 1998; Kleck, 1998).

In 1986, Kellermann and Reay examined reports of 398 firearm-related deaths in homes in King County, Washington. Only 2 of the deaths were caused by intruders; the remaining 396 victims lived in or were invited visitors to the home. Only 7 (1.8%) of the 396 victims shot in the home were killed in self-defense, the remainder were victims of homicide, suicide, or unintentional injury.

Kellermann and colleagues (1993) then performed a case-control study, reviewing the circumstances of homicides occurring in homes in Shelby County, Tennessee; in King County, Washington; and in Cuyahoga County, Ohio. The study matched households with homicides to similar households where homicides did not occur. Persons living in households with guns were 2.7 times (95% confidence interval [CI]: 1.6% to 4.4%) more likely to be victims of homicide than were persons living in matched households without guns. The risk of homicide was increased further if the household had a history of violence or alcohol abuse. The vast majority of homicide victims in this study were killed by a family member or an intimate acquaintance.

Using data from 49 states (South Dakota was excluded because it restricts use of death certificates), a study of violent death in the home found that guns in the home increased risk of homicide and suicide, regardless

of the gun storage practice, type of gun, or number of firearms in the home (Dahlberg, Ikeda, & Kresnow, 2004). Males with a firearm in the home were 10.4 times more likely (95% CI: 5.8% to 18.9%) to commit suicide with a gun than males without a firearm in the home, and their risk of firearm suicide was 31.1 times higher (95% CI: 19.5% to 49.6%) than matched males without a firearm in the home. For those living in the home, the presence of a gun in the home increased the risk of a firearm homicide among those 35 years of age and older (Dahlberg et al., 2004).

Studies of guns in the home and suicides in the home consistently have found an association between the availability of the guns and the likelihood of suicide (Brent, 2001). In a case-control study, Kellermann and colleagues (1992) matched suicide victims who used a firearm with controls in the same community, matched for prescribed psychotropic medications, arrest record, abuse of alcohol or drugs, and education level. The researchers found that the presence of one or more guns in the home more than quadrupled (relative risk 4.8; 95% CI: 2.7% to 8.5%) the risk of suicide. In a case-control study of adolescents who committed suicide (Brent et al., 1993), the presence of any gun in the home quadrupled the likelihood of an adolescent suicide (95% CI: 1.1% to 7.5%), handguns increased the likelihood by a factor of 9.4 (95% CI: 1.7% to 53.9%), and loaded guns increased the likelihood by 32.3 times (95% CI: 2.5% to 413.4%).

Case-control studies by Wiebe (2003), Cummings and colleagues (1997), Kellermann and colleagues (1992), and Brent et al. (1993) have consistently demonstrated an association between the presence of a firearm in the home with increased risk of home firearm deaths by homicide and suicide. In the most recent study, Wiebe matched each home firearm homicide and suicide victim from the 1993 National Mortality Followback Survey with 10 control subjects matched by sex, race, and age. In this most recent study, the adjusted odds ratio for firearm homicide when a firearm was present in the home was 1.41 times (95% CI: 1.20% to 1.65%). The adjusted odds ratio for suicide was 3.44 (95% CI 3.06% to 3.86%).

If a nurse is the primary practitioner caring for a patient with a history of depression, alcohol or drug abuse, or violent behavior, or if there is such a history within the household, the nurse should discuss the risks of guns in the household and encourage the family to eliminate guns from the household. The nurse should ensure that parents are aware of the data regarding risks when a gun is in the home of an adolescent,

particularly if that adolescent has a history of depression or substance abuse. These risks are substantially increased when multiple guns are present in the home and when they are stored loaded or unlocked with ammunition (see next section).

HANDGUN STORAGE PRACTICES

It is estimated that one or more firearms are present in approximately one third of all homes in the United States. The percent of homes containing firearms is increased in the South and in rural areas. Of homes with firearms, 61% have handguns, and 60% of them have at least one automatic or semiautomatic firearm (Johnson, Coyne-Beasley, & Runyan, 2004). Even when questioned in pediatrician offices, only one third of parents reported storing firearms unloaded and locked (DuRant et al., 2007). Typically, at least half of firearms stored in home are reported to be stored unlocked (Grossman et al., 2005; Johnson et al., 2004).

A recent study compared the firearm storage practices in homes of guns used for child or adolescent suicide or unintentional shooting to the firearm storage practices of control households in the same county with guns that were not used in youth shootings (Grossman et al., 2005). The guns involved in suicides or unintentional shootings were more likely to be stored loaded and unlocked than were control firearms. The involved guns were typically stored with ammunition. The four practices of storing guns unloaded, locked, with ammunition locked, and ammunition stored in a separate location were associated with a decreased likelihood of the gun being involved in a youth suicide or unintentional shooting.

In a national survey based on data reported from the 1993 National Mortality Followback Survey (this survey gathers data from next of kin regarding lifestyle practices of those who died), those who stored firearms locked or unloaded or both were much less likely to commit suicide by firearms (locked odds ratio is 0.39 [95% CI: 0.24% to 0.66%]; unloaded odds ratio is 0.30 [95% CI: 0.18% to 0.49%]) (Shenassa et al., 2004).

Parents who do not have guns may fail to appreciate the risks of guns in homes where children live or visit. In data collected from telephone interviews of adults in more than 600 households with at least one child aged less than 6 years living in or visiting the home regularly, firearms were described as "present" in the household but unlocked in 33% of the homes where young children lived and in 56% of the homes where young children visited (Coyne-Beasley et al., 2005).

Another telephone survey of rural and urban households documented that overall 20% of the homes with or without children reported at least one firearm. The presence of children in the home was not associated with greater likelihood of safe storage; only 20% of gun-owning respondents who had children reported storing guns locked compared with 29% of those without children (Connor, 2005).

Parents appear to have unrealistic expectations regarding the actions of children when finding a gun. In a telephone survey, when asked what their child would do if their child found a gun, 87% of parents surveyed stated that their child would not touch a gun (Connor & Wesolowski, 2003). I have found this attitude when talking to parents after an unintentional firearm injury: parents reported that they hid the gun and did not realize that the child knew where it was.

These findings suggest that gun owners do not appreciate the risks that guns pose when children are in the house. The surveys also suggest that parents need reminders of the risks that guns pose in homes where children visit and in homes where children live. Parents would never hide Christmas presents in the same location every year, yet they often report hiding a gun in the same location for many years and are surprised that children in the home know the gun's location.

The challenges of studying injury prevention techniques were highlighted in a recent prospective, randomized study using a chronic care model to teach injury prevention (Sangvai et al., 2007). Of 908 families identified as eligible for the study, only 319 families agreed to the initial interview (169 were randomized to the intervention group and 159 to the control group). Researchers were able to visit homes of only 8.5% of the enrollees (17 homes in the intervention group and 10 homes in the control group), so the sample size was too small to support any conclusions. The small number of willing participants and the difficulties of home follow-up encountered in this study illustrate two of the most daunting challenges to the study of injury prevention efforts.

EDUCATION OF CHILDREN REGARDING GUN RISKS

A number of educational programs have been developed to attempt to reduce risks of unintentional gun injuries during childhood. However, as with other injury prevention programs, they have to do more than produce a change in knowledge; they must produce a change in behavior. In a small study of 6 year olds,

students who were taught the Emergency Nurses Association program "Gun Safety, It's No Accident" increased knowledge regarding gun safety compared with children not taught the course, but there was no attempt to assess behavior or a reduction in gun injuries (Howard, 2005).

The Eddie the Eagle Gun Safe Program, developed by the National Rifle Association, uses cartoon videos to tell children that if they find a gun, they should, "Stop, don't touch, leave the area, and tell an adult." In several small studies the Eddie the Eagle program combined with behavioral skills training (including role-play and modeling of safe behavior when supervised around guns) did appear to change behavior during role play and in supervised scenarios. These safety skills were demonstrated at follow-up assessments at 2- to 8-week intervals (Gatheridge et al., 2004; Himle et al., 2004a; Himle et al., 2004b). In a tiny pilot study (Jostad et al., 2008) peer-training (training of 6- to 7-year-old children who in turn taught 4- to 5-year-old children) was time consuming and did not change the behavior of young children.

COMMUNITY AND MEDIA ACTIVITIES

Trauma centers can join with community organizations and the media to promote safe gun storage. Trauma centers can identify parents of injured children who are willing to become advocates for safe gun storage. Appearance of these parents on news segments describing the importance of safe gun storage can provide powerful messages to parents and children alike.

SUMMARY

This chapter highlights the evidence available to support common interventions to reduce firearm injuries in children. Nurses have the opportunity to discuss home safety with parents during well-child checkups and other encounters with families. Although some parents will deny gun ownership if directly asked, the nurse may be most effective by talking about the fact that many homes in which children live or visit have guns and parents need to be aware of safe ways for guns to be stored. Nurses should encourage the four practices of storing guns unloaded, locked, with ammunition locked, and ammunition stored in a separate location. These factors consistently have been associated with decreased likelihood of a gun being involved in a youth suicide or unintentional shooting.

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Group Interventions with African American Women Survivors of Intimate Partner Violence

JANETTE Y. TAYLOR

Who, then, can I turn to when I hurt real bad? . . . I find myself at therapy's doorstep. Will this counselor usher me to insanity? Because if she does not openly deal with the fact that there is a very low premium on every aspect of my existence, if she does not acknowledge the politics of Black-womanhood, now that would surely drive me nuts.

Eleanor Johnson, *Reflections on Black Feminist Therapy* (1983, p. 320)

Eleanor Johnson (1983), the author of the epigraph, tells us that personal and social contexts are important to African American women seeking therapy. She encourages us to consider our individual perspectives and responses to the needs of African American women who arrive at “the door” for counseling and care. Locating Johnson’s statement (1983) within the context of intimate partner violence, nurses then must ask the following: How do nurses view African American women who come to health care providers seeking counseling for a range of issues including those with histories of intimate partner violence (IPV) (e.g., domestic violence)? What is the perception and reception given to women who have survived this experience? How do individual practitioners and institutions construct services to meet the needs of various women? What are appropriate therapeutic approaches and interventions for the care of African American women who are recovering from IPV? The purpose of this brief but cogent chapter is to outline why support groups as collective exchanges are culturally anchored approaches that can provide a therapeutic safe environment for African American women recovering from a variety of social, psychological, emotional, and physical traumas.

INTIMATE PARTNER VIOLENCE AND ABUSE

IPV is a major public health concern that disproportionately affects women. Among women ages 18 and older, over 5.3 million IPV victimizations occur each year

(Centers for Disease Control, 2006). Nationally representative studies conducted in the United States, indicate that black American women consistently reported higher rates of partner abuse when compared to white American women (West, 2004). African American women experience higher rates of intimate partner homicide (IPH) than white women. Specifically, black women comprise 8% of the U.S. population but in 2005 accounted for 22% of the IPH victims and 29% of all female victims of IPH (U.S. Department of Justice, 2007).

IPV significantly impacts women’s health and is linked to eight of the ten leading measures of health in the United States (Family Violence Prevention Fund, n.d.). Survivors of IPV experience immediate, often severe, mental and physical health consequences that last a lifetime. They have an increased risk for depression, anxiety, addiction, suicide attempts, and post-traumatic stress disorder (Campbell, 2002; Campbell & Lewandowski, 1997; Coker et al., 2000; Plichta, 2004; Tjaden & Thoennes, 2000; Woods, 2005). Similar to women of other racial/ethnic backgrounds, trauma and loss are important psychological contributors to the development of anxiety, depression, stress, and somatic complaints in African American women.

Because of the frequency, severity, and pervasiveness of IPV, IPH, and sexual abuse, the National Black Women’s Health Project identified violence and abuse as the number one health issue for Black women: “The number one issue for most of our sisters is violence—battering, sexual abuse . . . We have to look at how

violence is used, how violence and sexism go hand in hand” (Avery, 1994, p. 8). Meaningful work with African American women has to occur from perspectives that include the influence of larger social structures when addressing issues of violence (Taylor, 1998, 2004; U.S. Department of Health and Human Services, 2001). Social context matters.

Particular historical and social experiences influence the lives and health of African American women. To understand better the social context of women’s lives and to formulate strategies that facilitate recovery from IPV requires a womanist/black feminist conceptual framework. Womanist/black feminist conceptual frameworks attempt to explain how women’s lives are shaped by their race/ethnicity, socioeconomic class, and gender or sexuality. This helps nurses to understand the experiences of women in terms of their realities and to formulate appropriate and meaningful plans for care with victim-survivors. Womanist/black feminist frameworks provide significant insights into the lives and health of African American women (Banks-Wallace, 2000; Taylor, 1998).

SOCIAL CONTEXT AND THE DEVELOPMENT OF AN INTERVENTION FOR AFRICAN AMERICAN WOMEN

A significant component of understanding African American women and their response to domestic violence is embedded in the cultural components of their lives. Cultural and ideological barriers, such as racism, classism, and sexism, shape African American women’s experience and recovery from relationship violence differently from white women (Bent-Goodley, 2007; Collins, 2000; Gillum, 2008, 2009). Widely held images of African American women contribute to the lack of outreach efforts and resources available to them. Some images lessen the ability of health care providers to identify women as victim-survivors of IPV. West (2004) and others explain the connection between popular stereotypes, negative cultural ideas, and oppressive images and how they operate to facilitate lack of attention to the needs of African American women who are victimized:

These images, which are rooted in history, were often used to normalize violence against Black women . . . Rather than acknowledge this sexual victimization, slave owners portrayed enslaved women as promiscuous, immoral Jezebels who seduced their masters. Consequently, there were no legal or social sanctions against raping Black women. Even in contemporary times, these stereotypes may lead

some to believe that Black women are less credible rape victims and that domestic violence directed toward them is more justified (p. 1491).

Cultural and psychological realities often present a continuing challenge for African American women IPV survivors as they seek resources and services. Many African American women may want someone of a similar racial/ethnic background but live in an area where this not possible. Statistics show that African-American registered nurses represent 4.9% or 133,000 of the 2.2 million registered nurses employed in the United States (U.S. Department of Health and Human Services, 2000). Therefore, practitioners must have expertise in multicultural issues. This would include acquiring knowledge and skills necessary to develop and implement interventions that accommodate women’s perspectives and cultural background (Campbell & Gary, 1998; Gillum, 2008, 2009; Tripp-Reimer, 1999). Another frequently suggested alternative is to utilize community persons of the same culture to organize and provide services. Although this is a sound suggestion, unless the program or intervention is culturally grounded or developed within a framework that is relevant, an effective outcome is questionable. One therapeutic approach that is culturally anchored is support group or solution-focused group therapy.

Support groups and/or group therapy are increasingly embraced by growing numbers of African American women. Although there are no published statistics on the number of African American women participating in such groups, the increase in self-help book publications combined with statements from nurses, psychologists, and social workers indicate an upward trend. More women believe that they need to be replenished emotionally and spiritually and that this is best accomplished by being encircled by the strength of sisterhood.

AFROCENTRIC THERAPY: SUPPORT GROUPS AS COLLECTIVE HEALING EXPERIENCES FOR SURVIVORS

Support groups are valuable interventions for survivors of IPV because they can provide an effective healing environment. Groups as collective interventions are effective across a broad range of culturally diverse populations. In particular, group work with African American women frequently is viewed as an effective culturally anchored intervention because of a shared cultural perspective that includes groupness, sameness, and commonality as

psychobehavioral modalities. Collins (2000) succinctly summarizes the development of a collective experience when she asserts, "Historically, racial segregation in housing, education, and employment fostered group commonalities that encouraged the formation of a group-based, collective standpoint" (p. 24). Group work provides a natural form of assistance since African American women are group centered.

Group work provides an individual-collective approach that facilitates the validation and management of black women's lives (King & Ferguson, 1996; Neal-Barnett, 2003; Pack-Brown, Whittington-Clark, & Parker, 1998; Williams, 2008). Movement between the individual-collective experiences can produce healing encounters that facilitate individual growth beyond the trauma of IPV and the daily acts of racism that often inhibit self-recovery. In addition, groups provide an opportunity to talk about the experiences of partner violence. The subject of IPV continues to be a taboo topic in many African American communities; therefore, being able to discuss abuse and violence in an accepting group of other similar women fosters a sense of connection and self-empowerment. When considering the value and function of support groups for women recovering from IPV, it is important to structure such sessions in ways that facilitate the growth and comfort of the women.

STRUCTURING COLLECTIVE EXPERIENCES FOR AFRICAN AMERICAN WOMEN

The composition of the group members is important. Often, women who seek group encounters have had individual counseling/therapy with white therapists who did not understand their sense of oppression or struggle as an African American woman. Similarly, they are often disappointed with the racial/ethnic membership of available group sessions as well as the professionals leading the group. Because women become disillusioned and tired of explaining (read justifying) their feelings and experiences, they do not continue with services or experience benefits from the sessions (Donnelly et al., 2005).

Many African American women prefer working with individuals or support group members that have common or shared race, ethnicity, gender, and socioeconomic status. Racially homogeneous groups are preferred because for many women, this group environment (1) maximizes the comfort level; (2) provides more opportunities to disclose more fully the events in their lives (partner and cultural violence—such as racism and sexism); that is, to address issues in an environment

that is closer to their social realities and to discuss topics that are central to their life experiences; and (3) counters social isolation that is prevalent in abusive situations and in environments that foster discrimination and racism.

In planning support groups or modifying existing groups, the group facilitator must consider the multiple and diverse locations of African American women. These considerations are complicated. For example, would an African American woman of higher socioeconomic status prefer a racially diverse group in the same economic status or an African American women's group made up of members of a lower socioeconomic status? An additional consideration is the limited number of group facilitators who are culturally competent and engage in thinking through African American women's lives from a critical social theoretical perspective that understands the influence of race, class, and gender in shaping their recovery experiences. Pack-Brown and colleagues (1998) characterize essential qualities that culturally competent professionals must have in order to work with African American women: (1) awareness of personal biases, stereotypes, and prejudices; (2) knowledge about the clientele; and (3) ability to practice skills that are sensitive to client's life experiences.

Successful interventions with African American survivors of IPV often include group exploration of discrimination, racism, and sexism before truly productive discussions of the abuse can occur (Campbell & Gary, 1998; Gillum, 2009; Heron et al., 1997; Taylor, 2000). Conversations on racism may advance the therapeutic process just as discussions relative to other events block personal growth and healing. Such discussions may be initiated by the woman or the practitioner and have additional value when they occur in collective or group environments.

To broaden services to include the concerns of African American women is important. The intent is to offer options for African American women who are victim-survivors, as well as other women of color, so they do not constantly have to confront their minority status and the dynamics that thwart their journey to recovery. Additionally, the high cost of individual psychotherapy sessions exceeds many women's limited economic resources. All women need access to interventions that promote adaptive function.

Although, group identity is important, African American women also experience themselves as individuals and as members of a racial group (e.g., collective) (Kambon, 1996; McCombs, 1985, 1986; McNair, 1992; Taylor, 1998). Both social locations are crucial to African

American women's self-concept and must be addressed simultaneously for recovery from abuse to occur.

COMMUNITY BASED INTERVENTIONS AND RESEARCH

IPV is an issue that health care providers, therapists, and communities increasingly face as public attention focuses on the problem and more victim-survivors seek treatment. Much has been learned in recent years about the epidemiology of IPV and abuse, yet information about evidence-based approaches is lacking. Particularly noticeable is the absence of community-based culturally and linguistically specific intervention programs for a variety of women who are survivors of IPV. Currently, interventions for IPV survivors occur primarily in hospital settings, focusing on psychoeducation, medications for comorbid features, and cognitive therapy (Calvete, Corral, & Estevez, 2007; Katz, et al., 2008; Kubany & Watson, 2002; Zust, 2000, 2006). Cost for these interventions can be substantial, since they may expand over a significant time period. In general, most IPV survivors have few personal, psychological, and financial resources to address the issues, especially mental health sequelae.

Research indicates a need for culturally appropriate IPV interventions and that survivors prefer community-based services from organizations familiar with the unique circumstances women face as they reintegrate into community (Gillum, 2008, 2009; Taylor, 2004). Innovative, cost-effective, community-based programs are needed to service women from a variety of economic, cultural, and linguistic contexts/communities so that women may self-manage symptoms, positively engage their social environments, and hasten recovery to full and productive lives. Furthermore, the effectiveness of emerging interventions must be demonstrated through empirical research.

SUMMARY

Increasingly, nurses and other health care providers are asked to consider the implications of the changing demographics in their communities and to accommodate a variety of cultural experiences in their practice. Health care providers cannot continue to insert African American women into predominantly white groups and then wonder, Why is she silent? Why does she have so little to say or contribute to the group? Why did she stop coming? and Why is she not beginning to resolve many (or any) of the issues that I suspect are present? Critical to African American

women's healing is a thoughtfully constructed therapeutic environment. Because African American women form community through collective activities such as therapeutic support groups, groups can serve as social places where women build trusting relationships, talk about their experiences, and continue to heal and recover. Women create a healing community within a group arrangement.

This chapter opens with a quote by Eleanor Johnson (1983), who challenges therapists, advocates, practitioners, and researchers to understand the multilevel occurrences of violence in the lives of African American women. African American women encounter abuse in their intimate relationships, communities, and places of employment. Many critical questions regarding the realities of African American women need to be addressed in developing group interventions. Are there safe opportunities for women to share their stories? Are issues of social isolation addressed? Are efforts made to support familiar spiritual practices? Are there opportunities to develop healthier images of self and move toward self-determination? Are there appropriate opportunities for personal and political renewal? As you think about the conceptual framework and the complex context of African American women's lives, I encourage you to ask these additional questions:

- ◆ What are my images of and assumptions about African American women?
- ◆ What do I assume (and know) about the dynamics of domestic violence/IPV in African American communities?
- ◆ Where am I in relation to power and privilege with this clientele?
- ◆ How do I provide care and engage in therapeutic relationships with women so that they can thrive and move beyond their experience of abuse?
- ◆ Who should cofacilitate groups with African American women? Specifically, can non-African American (read white) women cofacilitate groups? If so, why? Why not?
- ◆ What can I do to advocate for change to services offered within my organization?

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WEB SITES

The following national organizations may be helpful in locating group-therapy circles. Other places to find help include listings in free or community papers, community colleges, health centers, and YWCAs.

<http://www.dvinstitute.org/>

IDVACC: Institute on domestic violence in the African American community

<http://www.nbna.org/>

National Black Nurses Association

<http://nabsw-osa.tripod.com/>

National Association of Black Social Workers

<http://www.abpsi.org/>

Association of Black Psychologists

Nursing Care: Victims of Violence—Elder Mistreatment

TERRY FULMER ♦ JAMIE L. BLANKENSHIP

CASE STUDY

Mrs. P. is a 75-year-old woman who has been living with her son, his wife, and their four children for the past year. Mrs. P.'s husband died 18 months ago. Her son, John, is a financial analyst, and her daughter-in-law, Mary, is a clerk at the community hospital. They work full time, and often the son is away on business. This is Mrs. P.'s second visit to the clinic in two weeks, complaining on both occasions of shortness of breath and bilateral chest pain. Upon examination, Mrs. P. reveals the following clinical data: vital signs show her oral temperature is 99.1° F, her pulse is 64 and regular, her respirations are 24, and her blood pressure is 118/78 while sitting. Mrs. P. is oriented to time, person, and place. A Mini-Mental State Examination shows a score of 27/30, which is excellent. She does not have any complaints of pain, other than chest pain, but a generalized, foul odor is present. Her skin is dry and intact and ecchymotic areas are observed bilaterally on her forearms. These bruises are multicolored, ranging from bluish-purple, to red and yellow. The nurse suspects elder mistreatment and conducts an elder mistreatment interview and assessment. The patient confides that her daughter-in-law has been abusive to her but that it is not her daughter-in-law's fault. "Mary is under a great deal of stress managing her household," she says. Mrs. P. states that she does not want to tell her son so as not to bother him. "They are busy and have been very supportive of me," she reports.

The Institute of Medicine (2008) has published an important report entitled, "Retooling for an Aging America: Building the Health Care Workforce." Once again, this report reminds us that we are woefully unprepared for the overwhelming number of Americans who will be 65 years of age or older in the next decade and beyond; this has long been anticipated in this country, and in some circumstances, around the world. With an

increase in older individuals comes an increase in elder mistreatment. It is widely anticipated that the caregiving needs will outstrip the caregiving capacity from professionals, paraprofessionals, and family caregivers around the country, which bodes poorly for the prevention of and intervention in cases of elder mistreatment. Protective service workers, one small subset of the health care workforce, continue to suffer from dramatic shortages and rapid turnover rates in this sector of the health care workforce. Now more than ever, nurses need to be increasingly alert to the possibility of elder mistreatment.

The Elder Justice Act (2007), a bill introduced to Congress aimed at amending the Social Security Act to enhance the overall well-being of older adults in the United States, was introduced by Democratic Senator John Breaux of Louisiana in February 2003 and was tabled in 2004. It was once again introduced in 2008 in both the Senate and House, without passage. The bill would have ensured adequate public-private infrastructure in order to resolve issues of prevention, detection, treatment, intervention, and prosecution of elder abuse, neglect, and exploitation.

While January 2009 brought a new president and a new administration, it is unclear how the overall dire economic forecast will affect the ability to make important strides in legislation that affects health care, and in particular, health care for older adults who are at risk for mistreatment.

In the public dialogue of domestic violence, elder mistreatment is considered a "late bloomer," only recently attracting national attention and gaining recognition as a critical problem. Domestic (family) violence, mainly child abuse and partner abuse, drew national attention in the 1970s with the Child Abuse Prevention and Screening Act of 1974 (Bonnie & Wallace, 2003; Otto, 2005). Substantive research and interventions for child

abuse and partner abuse were developed and examined in the 1980s. Mistreatment of children was medicalized readily, and screening was incorporated into the routine health assessment; mandated child abuse education has become a requirement for licensure in many states. In 1992, the American Medical Association finally established guidelines for the screening and referral of elder mistreatment, but adequate training of health professionals has yet to be implemented systematically, and the guidelines have not been updated since publication (American Medical Association, 1992). In the medical community, elder mistreatment has been labeled as a Pandora's box because many health care providers feel that they do not have adequate time to screen older adults for mistreatment or the necessary training to conduct such crucial evaluations.

News accounts of older adults who have been abandoned or abused by their families or battered in nursing homes are becoming more prevalent (Gross, 2006). A comprehensive review of the literature was conducted to inform the last Institute of Medicine panel on elder mistreatment and of the 144 controlled studies on family violence that were identified in this analysis; only two elder mistreatment studies were reviewed and considered substantive enough to be mentioned (Bonnie & Wallace, 2003).

All health professions must be involved in the detection and intervention of elder mistreatment, and nurses are key professionals for screening, assessment, and prevention of elder mistreatment (Dyer, Pickens, & Burnett, 2007; Fulmer, 2002, 2008; Fulmer et al., 2004). Isolated older adults may have limited connections with the outside world. Their only interaction might be with health care professionals during episodic visits or with daily caregivers. Nurses are in a unique position, given their presence across the health care continuum, and the public's overall trust and respect for the profession. According to a recent Gallup poll, nurses were ranked the number one most-trusted profession in America (Saad, 2008). The public trust, along with expert clinical assessment skills make nurses key members of the health care team to assess, document, and intervene in elder mistreatment cases. For example, busy emergency departments serve many thousands of older Americans every day. Each encounter is an opportunity to ask the older person whether there is any abuse or neglect he/she would like to discuss. Advanced practice nurses can model this behavior to staff nurses, new trainees, or new graduate nurses. Emphasizing the importance of screening for

elder mistreatment creates an environment where such screening becomes an expectation and a norm that then increases the awareness of this serious and potentially fatal public health problem.

Nurses are known for their interdisciplinary collaboration and that skill is essential for detecting and resolving elder mistreatment. A team approach to elder mistreatment has been successful in the health community (Fulmer et al., 2003; Mosqueda et al., 2004). The individuals needed at any given time will vary with the circumstances of the elder mistreatment case; however, law enforcers, attorneys, community professionals, and health professionals often are called upon to collaborate to prevent and intervene in elder mistreatment cases.

UNDERSTANDING THE PROBLEM

Estimates indicate that 1.2 million to 2 million older adults, or approximately 6% of older adults, are mistreated annually (Bonnie & Wallace, 2003; Pillemer & Finkelhor, 1988). According to the National Research Council (Bonnie & Wallace, 2003), elder mistreatment is the following:

1. Intentional actions that cause harm or create serious risk of harm (whether or not the harm was intended to a vulnerable elder by a caregiver or other person who stands in a trust relationship to the elder).
2. Failure by a caregiver to satisfy the elder's basic needs or to protect the elder from harm.

Five categories of elder mistreatment are (1) abuse, which encompasses physical abuse, psychological abuse, and sexual abuse; (2) neglect; (3) abandonment; (4) exploitation or financial abuse; and (5) self-neglect (Bonnie & Wallace, 2003).

As of 2006, approximately 12.4% of the more than 300,000,000 Americans were over 65 years of age, (more than 37 million people). This number is expected to reach and exceed 70 million people with the aging of the baby boomers by 2020. The older adult population is expected to double between 2000 to 2030, as baby boomers reach the age of 65, and then to plateau around 2050 (Figure 76-1). As the number of older adults increases, without the appropriate interventions, Americans can expect the incidence of elder mistreatment to grow proportionally (Federal Interagency Forum on Aging-Related Statistics, 2008). Quantification of elder mistreatment is difficult because many cases are not reported and resources for effectively documenting suspected and substantive cases are

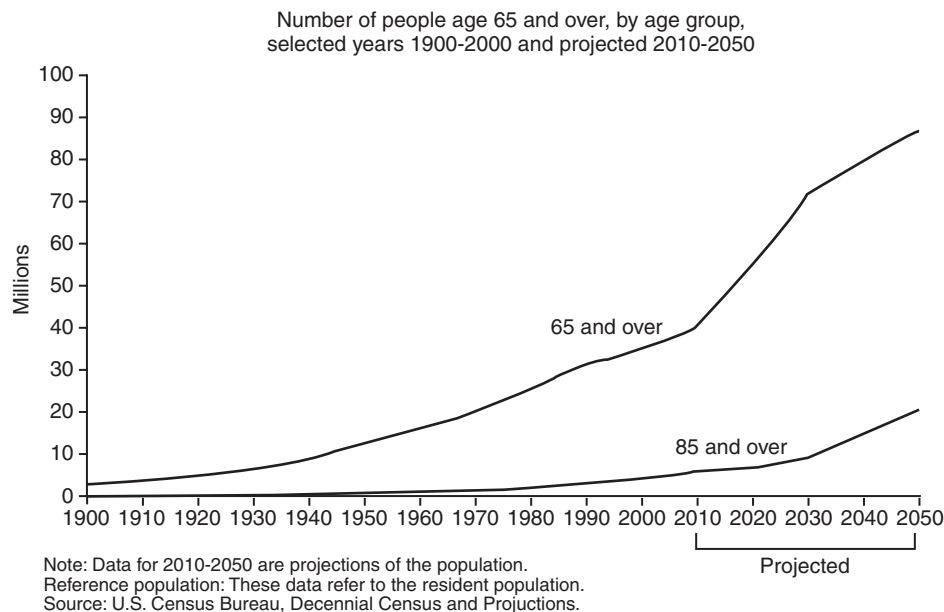


FIGURE 76-1 Census projection data for persons 65 and older. (From Federal Interagency Forum on Aging-Related Statistics (2004). *Older Americans: Key indicators of well-being*. Washington, DC: U. S. Government Printing Office.)

lacking. For health professionals, especially nurses who may be confronted with elder mistreatment, it is critical to understand why older adults might refuse help when confronted about their situations, reject an intervention, and even defend caregivers who are abusive or mistreating them. Older adults may be afraid of change or fear the repercussions of their decisions to take action (Harrell et al., 2002; Lachs & Pillemer, 2004). They may develop a tolerance for poor treatment, consciously or unconsciously, in an effort to protect themselves from further isolation or punishment from their caregivers should they report mistreatment (Fulmer et al., 2005). Older adults may feel undeserving of adequate care if they sense competing demands in a faulty or societal structure. They may not want to be considered as burdens or as overly demanding, they may have a sense of worthlessness and a self-view that they only cause harm or strain to their family members or caregivers.

A developing theory is that victims of elder abuse often have a history of childhood trauma, which may lead to an acceptance for low levels of care (Fulmer et al., 2005). Feelings and responses of the older adult who is mistreated often are complex. Through an elevated awareness of older adults and better communication and dialogue with older adults regarding their perceptions and reactions to their situations, the

advanced practice nurse can be more effective in recognizing and managing cases of elder mistreatment.

THE CAREGIVERS

Data suggest that those who mistreat older adults are the middle-aged adult children, followed by other family members (Pillemer & Wolf, 1986). This kind of caretaker may have a dependency on the older adult, usually financially, creating a situation of codependency. This description can conjure the image of a disrespectful or ungrateful child, even evoking the character of a criminal or a thief. However, in reality, this type of caretaker generally is a genuinely caring individual who may be a victim of substance abuse, mental illness, or the stress of day-to-day life. Nurses should be vigilant regarding family dynamics that may indicate elder mistreatment.

Several theories attempt to explain the occurrence of elder mistreatment. Ensel and Lin (2000) address the imperative to expand the biomedical model when understanding theories of elder mistreatment to include psychological and social components. The National Research Council (Bonnie & Wallace, 2003) further elaborates to include cultural and environmental contexts that explain the occurrence of elder mistreatment. These newer observations reflect developing theories of

elder mistreatment. One such theory is the caregiver stress theory, which evaluates the challenges of balancing a modern lifestyle, including working and rearing children, with the responsibilities of caring for an aging parent. The increased stress of an added dependent can diminish coping mechanisms that can lead to mistreatment (Glass, Laughon, & Campbell, 2004). Another leading theory is that the abuser has a psychopathology, is developmentally disabled, or has a substance abuse problem (Lachs & Fulmer, 1993). The transgenerational violence theory postulates that mistreatment is a cyclical phenomenon with the perpetrator abused as a child by his/her parents and then eventually becoming an abusive adult in taking on the caregiver role. Also, elder mistreatment often is associated with a web of dependency. For example, the caregiver may be emotionally and/or financially dependent on the older adult (Bonnie & Wallace, 2003). A thorough assessment of a caregiver's limitations enables a more thorough understanding of the caregiver/older adult dyad and assists in identification of appropriate interventions. For the nurse to remain nonjudgmental and to refrain from labeling perpetrators as criminals or delinquents is important as well. By passing quick judgments, nurses remove themselves from a level of understanding that can be helpful in creating solutions. Abusers commonly were or are victims themselves. As health care professionals, nurses can set the example throughout the health care system of intervening without judgment.

THE VICTIMS

Like a silent illness or an asymptomatic condition, elder mistreatment can be difficult to detect among older adults. Regardless of their appearances and initial impressions, older adults always should be assessed for elder mistreatment. Some shared characteristics of older adults who are mistreated pertain to sex, age, and low socioeconomic status. The most vulnerable population tends to be older adults who are female; over the age of 75; who have a low educational level; impaired functional/cognitive status; and a history of domestic violence, stressful events, and depression that may indicate an increased risk for elder mistreatment (Dyer et al., 2000; Pillemer & Finkelhor, 1989). Victims tend to be frail females (Dunlop et al., 2000) who live with their abusers (Lachs et al., 1997; Pillemer & Finkelhor, 1988). Usually, these women are dependent on their caregivers and/or are suffering from a chronic, disabling illness. These characteristics can create an increased dependency of the older adults on the caregivers. Often,

the caregivers will have untreated psychiatric problems or be cognitively impaired (Dyer et al., 2000; Pillemer & Finkelhor, 1989).

Even when older adults are fully mentally competent, they may deny that they are mistreated (Lachs & Pillemer, 2004). They deny the mistreatment for several reasons. They may be fearful of retribution by the abusers, or they may fear placement in a nursing home. The potential for nursing home placement can make them anxious, or they may have come to accept their status quo and do not expect anything better. Understanding these fears can help nurses personalize solutions. In one study that examined the use of behavioral health services between older adults who used a state-wide abuse hotline compared to nonusers, new evidence was provided to document that mistreated individuals experience a higher rate of behavioral health disorders. Further, data were provided that document the cost and personal suffering for these victims (Schonfeld, Larsen, & Stiles, 2006). Another barrier that leads to an elder's denial of mistreatment occurs when the abusing family member or caregiver accompanies the dependent adult to the health care setting. For the health care provider, this creates a challenge when attempting to elicit honest and accurate responses from the older adult regarding possible mistreatment. Given that the caregiver is close in physical proximity, even if he/she is waiting in a separate room, the older adult may still be more reluctant to provide truthful responses for fear of repercussions from the caregiver should he or she overhear any complaints.

KEY ASPECTS OF HEALTH ASSESSMENT FOR ELDER MISTREATMENT

The assessment and management of older adults who are mistreated is difficult and complex. Signs and symptoms of elder mistreatment may mimic normal signs of aging or a disease process (Fulmer, 2008; Lachs & Pillemer, 2004;). For example, bruising may be caused by anemia or intentional abuse. Fractures may be caused by osteoporosis, a fall, or intentional trauma. In health care settings, it may be difficult to spend time interviewing a reluctant patient and/or a caregiver. Consequently, the nurse misses important warning signs or evidence of elder mistreatment that can result in death.

In addition, when elder mistreatment is detected, often nurses feel they meet a brick wall in terms of creating successful solutions. Adult-protective services is a community-based state agency with the purpose of

intervening when mistreatment of disabled or older adults is suspected. The characteristics an older adult must possess to qualify for adult-protective services varies from state to state. It is not uncommon for adult-protective services to have burdened caseloads, and turnaround time for feedback can be excessive. As of this publication, no substantive evidence-based studies indicate how to intervene successfully when an older adult is mistreated. The complexities of assessment, diagnosis, and intervention can make the management of elder mistreatment a challenging and frustrating task.

PRACTICE: EVIDENCE-BASED SOLUTIONS

The empirical research base for interventions in elder mistreatment is limited and further research is needed. Most of the recommendations include reporting and referring, yet research is needed on the effectiveness of these interventions. New data from an international study suggests that greater social support can be a protective factor for the prevention of elder mistreatment and holds promise if it can be replicated across cultures and countries (Bonnie & Wallace, 2003; Dong & Simon, 2008).

Victim advocacy remains a problem for older and dependent adults. Similar to child abuse and partner violence, often victims are not able to advocate for themselves or they require assistance, protection, and empowerment. Older adults fear the repercussions of speaking out, such as further social isolation or punishment. As the key players in the reduction of elder mistreatment, older adults are not admitting or accepting the existence of the problem. Their denial paralyzes policy analysis and formation. Those involved need to speak out about these issues and health care professionals need to find appropriate, supportive measures that will help facilitate honest and accurate responses related to the elder's situation. An important concern, addressed by many older adults when revealing any level of mistreatment, is that of confidentiality and the involvement and control of possible repercussions from disclosing details of their personal situations.

These are some recommendations for managing elder mistreatment: first, always ensure the safety of the older adult. If a patient is reluctant to accept assistance while in the hospital or the health care system, the nurse should be sure the patient knows whom to contact if an emergency situation arises. Many older adults do not use the Internet and may have difficulty locating a telephone number or an appropriate agency. Second, inform patients of their rights. Many older adults fear

repercussions following elder mistreatment reporting, so nurses must let them know they have the right to dictate the level of care they receive. Older adults decide whether to press charges, and they can withdraw from treatment or an intervention plan at any time.

As nurses move forward in the development of effective intervention strategies to detect and intervene in elder mistreatment cases, it is important to maintain awareness of this grave public-health problem and to share concerns, successes, and progress with colleagues. A solution to ending widespread elder mistreatment is increasing both professional and public awareness in order to end denial and begin creating the empirical knowledge crucial to eradicating this public health problem.

MRS. P.: CASE SUMMARY

After a thorough health history and assessment, Mrs. P. stated to the nurse that her daughter-in-law, Mary, was overburdened because her husband was away often, that she works full time, and that Mrs. P. worried about the care of her four young grandchildren. This is an example of how caregiver stress can lead to mistreatment such as abuse and neglect. The hygiene neglect may have been unintentional, for Mary did not understand the needs or abilities of her mother-in-law, yet the physical abuse was a result of the escalating stress Mary was experiencing and maladaptive coping. The nurse notified adult-protective services and recommended three-week respite care for Mrs. P. and day care two times a week.

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Disaster Nursing During Terrorist Events

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Recent terrorist events have led to the formulation of a distinct public health perspective within the nursing discipline that defines the nurse's role, the stages of disaster response, and the emergency management paradigm. Over the past years this nation has experienced terrorism on both national and international fronts, making terrorism an adverse reality that must be addressed by families, communities, institutions, and government agencies. It is unreasonable to assume that future acts of terrorism will not occur; therefore, preparation, planning, and training for a terrorist attack must be an integral part of the education of future and current nurses and health care providers.

A RETROSPECTIVE OF CONTEMPORARY DISASTER NURSING

The history of disasters, epidemics, and war parallels the evolution of nursing. During the most difficult and hopeless times in our history, nurses have stepped forward to volunteer their services and address the needs of others. The historical images of nurses during the Spanish Influenza, the polio epidemic, and World War II are imbedded in our collective consciousness; as are the stories of Clara Barton and Florence Nightingale, both of whom cared for the sick and injured in the midst of war. Their wartime experiences informed their vision of the role of nurses and the duties that nurses should fulfill. Initially, nursing was a military profession, with many hospitals failing to include full-time nursing staff in their emergency rooms (Gebbie & Qureshi, 2006). Over time, emergency medicine became increasingly integrated into the standard care provided by hospitals and progressed to become a recognized specialty. Emergency nursing developed alongside emergency medicine as the unique skill requirements of this specialty were realized and appreciated.

The multifaceted professional role of nursing encompasses caregiver, leader, educator, and counselor. Today, many nurses are active participants in developing

terrorism education and safety programs in their local and regional communities. The curricula in health professions schools have expanded to include large-scale disaster preparedness, mitigation, and response (American Association of Colleges of Nursing, 2001). Disaster planning at the local, regional, and national levels benefits from the analysis of nurses who bring firsthand experience of working successfully and effectively in stressful conditions (Jakeway et al., 2008). The role of nurses as educators and counselors is now recognized as being instrumental in meeting the physical and psychological needs for the health of the public and is incorporated into disaster planning (Cox & Briggs, 2004).

Disaster response is always specific to the event. During a disaster, some nurses will serve as first responders, while others will assume leadership roles, setting up makeshift triage centers, and providing needed services to victims on the streets, at gymnasiums, churches, community centers, and hospitals. Many will spend days away from home, putting aside personal fears, concerns, and families, in order to meet and serve those who need physical and psychosocial support. Nurses, as a critical part of the public health workforce, are required to stay on site and practice during disasters even after their shifts have ended. In every disaster, there is evidence of nurses volunteering to help beyond all requirements in precarious and dangerous conditions. Unfortunately, despite years of exceptional service in a variety of diverse circumstances, it is only now that the contributions of the 2.5 million nurses in America during a terrorist attack or disaster are starting to be recorded and studied (Dickerson et al., 2002).

THE EVOLVING ROLE OF NURSING—LESSONS LEARNED

Nurses must always be prepared to make the best use of their knowledge and skills to help those in the community (local or global) who are in distress. Whether the disaster is a flood, hurricane, earthquake, fire, chemical

spill, train derailment, or terrorist attack, nurses are involved in the care of the physically and psychologically wounded (Donnellan, 2002; French, Sole, & Fowler-Byers, 2002; Riley, 2003). International nursing leadership is now facing a larger and more complex challenge than ever before—disaster that results from intentional terrorism. The nursing profession has always anticipated its role in disaster and war, but not intentional terrorism. Until the first bombing of the World Trade Center towers in 1993 and Oklahoma City in 1995, the nursing profession in the United States had not confronted the unique aspects of post-terrorist care (Anteau & Williams, 1997).

The key to disaster preparedness is ongoing disaster nursing education that reflects the lessons learned after each disaster. The first widely available disaster resource for nurses in the United States was created by Major Werley in 1956 and addressed the medical management of mass-casualties (Leifer & Glass, 2008). Since then, articles, papers, and books have addressed issues ranging from radiological exposure to bioterrorism. Articles following the bombings in London suggested having refreshments available for staff and patients, as well as making certain that adequate supplies are available (Harrison, 2006). Israeli nurses found that a “frequent review of standing protocols and emergency procedures during routine work-days” helped prepare them for emergency situations (Riba & Reches, 2002). Ultimately, a terrorist attack will force nurses and hospital staff to adapt to the limitations they face at that moment. Nurses will need to be flexible, adaptive, and creative (Jakeway et al., 2008). Clear leadership, skill competency, familiarization with standing disaster protocols, and adaptability will help young and veteran nurses prepare for a terrorist event.

MULTIDIMENSIONAL IMPACT OF TERRORISM

Even with the proliferation of articles following the attacks of September 11, there is still a dearth in the education, literature, and research examining models relating to nursing and emergency management (Fell-Carlson, 2003; Weiner et al., 2005; Littleton-Kearney & Slepiski, 2008). Some models have been derived from military perspectives, but there is concern that the scenarios in a civilian urban and suburban, non-militarized environment may prove to be too dissimilar and therefore ineffective for comparison (Garfield, Dresden, & Rafferty, 2003). International research

shows that terrorism jeopardizes the health of a population both directly and indirectly (Agency for Healthcare Research and Quality, 2004). Terrorist attacks like the train explosions in London, Madrid, Bali, and Mumbai will have permanent repercussions on families (Casal, 2004) and compatriots living abroad (Anteau & Williams, 1997), and will cause mass public health distress (Salisbury, 2001; Wenig, 2006). Mass casualties, resulting from use of chemicals, biologics, and explosives are no longer uncommon and highlight the need for effective education and deployment of a public health-based nursing and medical workforce.

Terrorism differs from natural disasters and other mass casualty incidents in a significant way—during a terrorist attack innocent civilians are the target (Bush, 2002). Nurses are trained to act quickly and efficiently when people are bleeding or have stopped breathing, but nurses have not had to prepare for the unexpected intentional infliction of human suffering, especially when they may be harmed in the process (American Psychological Association, 2004). In war zones, there is an expectation that others are trying to inflict injury or death. In terrorist attacks, there is no warning or expectation, and there are no rules or guidelines for how to prepare and how to react.

While there is not an accepted standardized model for responding to a disaster or terrorist event, and even fewer models focus on the role of nursing, most of the models available divide the disaster event into phases such as mitigation, preparedness, response, and recovery (Jakeway et al., 2008) or preparedness, response, recovery, and evaluation (Wynd, 2006).

PREPAREDNESS AND MITIGATION

Mitigation represents the time before the event where vulnerabilities are minimized and protective steps are taken to prevent a disaster. The Department of Health and Human Services and the Federal Emergency Management Agency have created a body of literature and guidelines addressing health care providers with information on how to approach the unique circumstances of terrorism such as surge, exposure, and mass casualties. These resources, *Training Manual for Mental Health and Human Services Workers in Major Disasters* (De Wolfe, 2000), *Guide for All-Hazard Emergency Operations Planning* (Federal Emergency Management Agency, 1996), and *Developing and Maintaining State, Territorial, Tribal, and Local Government Emergency Plans* (Federal Emergency Management Agency, 2009) are available online for professionals and

the public, along with up-to-date, hazard-specific guides and speak to preparedness versus the conventional response. From a mitigation point of view there is need of continuous updating of this literature, especially protocols focusing on population diversity and an all-hazard approach to disasters.

During mass casualty events, disaster-preparedness plans are put into effect. However, the enormity of the event, coupled with the number of fatalities, defines the risk and vulnerability of the location and the supporting medical system (Fendya, 2006; Hale, 2008; Vere-Jones, 2006). Furthermore, every disaster is unique, and it is unlikely that the events following a disaster will progress in a predictable way that matches the disaster plans and drills (Jakeway et al., 2008). There is a real need for regular and varied disaster drills and a reevaluation of current disaster plans. These drills need to include large-scale catastrophic disaster plans that incorporate a variety of injuries, exposure to chemical or biological toxins, and a diverse population that includes pediatric, elderly, and special needs patients. Traditionally, disaster plans and triage are implemented to maximize the number of survivors, determine severity of injury quickly and accurately, and prioritize care and support (Coyle, Sapnas, & Ward-Presson, 2007).

In "A Proposed Model for Military Disaster Nursing" (Wynd, 2006), a three-tiered system of preparedness is recommended. This includes "individual readiness training," which encompasses preparedness within the family and building support; "clinical skills training," including triage, use of equipment, development of procedure skills and physical assessment; and "unit/collective training," which focuses on understanding the mission, "leadership and administration skills, unit integration and identification," and familiarity with the operations of the institution. Gebbie and Qureshi (2002, 2006) make similar recommendations in their proposed model, which incorporates specific competencies for each phase of a disaster. Several proposals of the various models available overlap, such as cross-training of staff, organized disaster plans, disaster drills, clear institutional chain of command, and easy access to available resources. These are all ways nurses can work towards preparedness during the mitigation phase of a disaster.

THE EMERGENCY SETTING

Emergency (department) nurses are educated as triage personnel who categorize, tag, and filter patients for treatment based on strict criteria, ranging from critical

injuries requiring immediate intervention to the deceased/near death victims whose treatment would be incompatible with life (Riba & Reches, 2002). However, all nurses need to be comfortable triaging within this model because during a disaster, nurses from other departments and specialties will be called on to support the surge of patients, families, and volunteers in the emergency department. Training in disaster competencies cannot be limited to nurses practicing in the emergency department setting. When a catastrophic event of large magnitude occurs, additional measures must be instituted (Chaffee, Conway-Welch, & Sabatier, 2001). Examples include providing alternative sites for triage and medical care; providing emotional support to a population that witnessed and experienced the catastrophic event (Ihlenfeld, 2003); and most importantly, education of health care professionals and members of the community about what their roles would be if such an event were to happen again (Bradbury et al., 2005). These additional triage sites, medical care centers, and outreach stations will require additional staffing, and these staff need appropriate training.

RESPONSE AND RECOVERY

Nurses focus on safety as the most basic of physiological needs. In order for nurses to effectively reassure and inform the community and foster a safe environment (Ryles, 1999), they must be competent and knowledgeable about how to function during a mass casualty incident in which a significant number of lives are lost, and the usual community resources are ineffective to manage the response. Because of the increased awareness of this need, several resources are now available for nursing education on common biological and chemical warfare and terrorism. Future terrorist acts against the United States are no longer a passing concern, but an expectation. This shift requires that nurses be ready to continue to serve at the forefront of disaster preparedness, response, and recovery whatever their area of practice. Every nurse has the responsibility to be aware of these threats and to become educated to intervene appropriately in the event of a mass casualty incident.

LESSONS LEARNED AND LIVED EXPERIENCE

Nurses working in the wake of a terrorist attack need to be prepared not only to treat victims, but also to collect and store forensic evidence (Harrison, 2006). Tracking patients and writing detailed notes about patient

appearance and belongings also become especially important because many of the patients may be unconscious or unidentifiable, and family members will be seeking information (Harrison, 2006; Liebergall et al., 2007). There will also be pressure to see patients quickly as more casualties arrive. Starting in 2004, nurses in London emergency departments were required to meet a government target of 98% of patients "seen, treated, and admitted or discharged within four hours" of arrival. They reported that working to meet this target prepared them for the surge of patients they received on July 7, 2005 (Parish, 2005).

Nurses in Israel, where multicasualty terror attacks are routine, report concerns about their ability to function and a fear of inadequacy, but state that overtime, with more experience, their anxiety diminishes. During the process of caring for victims of the terror attack, the nurses explain that their actions are "goal-oriented," with a focus on the task and its execution instead of the emotions or events of the day. Many nurses describe working "on auto-pilot" (Riba & Reches, 2002). Nurses in London following the July 7 bombings expressed the same feeling of running on auto-pilot. Several nurses described being struck by the realization that "it could have been me." Communication with family was impossible from the hospital because of all of the phone calls coming into the hospital, and nurses were unable to get information about the situation outside of their hospital, which exacerbated the stress of the situation (Harrison, 2006). In some cases, nurses on July 7 learned about the bombings when the first patients arrived in their hospitals seeking medical attention (Parish, 2005).

Inadequate communication is a common problem during a disaster or attack. Even if communication lines are working properly, they may be overtaxed by individuals trying to communicate with family. In some cases, news is delayed because government agencies are trying to verify the accuracy of the information before releasing details to the media. The delays in information and the prevalence of inaccurate information following a disaster or attack prevent hospitals from accurately anticipating the number of victims and the severity of their injuries. Problems with communication during a disaster should be anticipated and contingency plans in place.

Another consideration following a disaster or terrorist event is crowd control. Experience teaches us to expect a surge of both patients and volunteers seeking to help after the event. In the cases of Oklahoma City (Anteau & Williams, 1997) and 9/11 members of the public responded and tried to participate in a

meaningful way. Thousands of concerned professional and nonprofessional citizens came to hospitals around the city to volunteer after 9/11, only to find there were no specific roles for them. Questions remain about the feasibility of assigning nonprofessional roles to volunteers in the midst of a disaster (Bonifazi, 2005), but the possibility of incorporating volunteers into a disaster plan should be considered. Nurses make up the majority of personnel in any hospital and are likely to be the first point of contact for the public. When hospitals are suddenly flooded with volunteers, nursing, as part of an active incident command structure, can help organize the public into important teams such as communications groups, facilitators for the walking wounded, runners, and assistants to support health care personnel (Bleich, Gelkopf, & Solomon, 2003). It takes skill and organization to support a public health infrastructure (Nyatanga & Dann, 2002). This is an important and new arena that deserves planning and well-thought orchestration (Polick & Ostopowicz, 2001).

Although mass casualty incidents receive the most media and public attention, these are not the only type of terrorist threats. In the months following 9/11, the emergency departments in central New Jersey treated dozens of postal workers from district post offices who handled mail that was possibly exposed to anthrax (Steeffel, 2001). Nurse practitioners in the urgent care units of the emergency departments were responsible for providing primary care to these postal workers. Initially, they were directed by the New Jersey State Health Department to obtain nasal smears for anthrax and to treat the postal workers with ciprofloxacin or doxycycline. After a few days, another directive asked the nurses to obtain nasal smears only and to refrain from treating the postal workers with antibiotics. These two groups of postal workers worked side by side with the other group and discussed the different medical care they received in the emergency department. Needless to say, the care delivered during this period was confusing, and there was uncertainty regarding the practice protocols (Kiesz, 2002). Although the public will understand and tolerate a certain amount of uncertainty, they will not do so for very long. For this reason, all nurses need to be educated in issues of terrorism and bioterrorism for the future because they will often be the point of contact for patients and the community and will be the best source of accurate information (Harrison, 2005). Nurses cannot be inconsistent in their treatment of a potentially lethal exposure; this causes undue anxiety to a public that is already anxious about

exposure to toxins. It is imperative that regulatory agencies such as the Centers for Disease Control and Prevention (CDC) and individual state departments of health develop consistent plans of care for any biochemical exposure. Nurses must avail themselves of education, training, and resources to ensure that they are knowledgeable about the most current and appropriate care protocols (Urbano, 2002, 2003).

In the midst of a terrorist event or a disaster, it is impossible to control everything that will happen. Nurses will face shortages of supplies; possibly staff (due to exhaustion); beds; space; and, in some cases, water or electricity. An important aspect of the response phase is awareness and evaluation, so that the lessons from each disaster can inform the preparedness plans for the next event.

THE PSYCHOSOCIAL RESPONSE AND SEQUELAE

During terrorist events, people lose their sense of security. Several studies looked at the effects of 9/11 from the mental health and general health perspectives at the local, national, and global levels (Bills et al., 2008; DiGrande et al., 2008; Farfel et al., 2008; Galea et al., 2002; Herman, Felton, & Susser, 2002; Ho, Paultre, & Mosca, 2002; Neria et al., 2008; Silver et al., 2002; Updegraff, Silver, & Holman, 2008; Vlahov et al., 2002; Wheeler et al., 2007). Preliminary findings indicate substantial anxiety related to future acts of terrorism and lifestyle changes resulting from increased levels of stress that potentially could lead to increased risk of cardiac events. Silver and colleagues (2002) noted that "actively coping in the immediate aftermath of the attacks was the only strategy that appeared to be protective against ongoing distress" (p. 1243). They describe active coping as planning or seeking support. They also point out that "potentially disturbing levels of trauma-related symptoms can be present even in individuals who are not directly exposed to a trauma, particularly when the trauma is a massive national tragedy such as the September 11 attacks (p. 1243)." The prevalence of symptoms in a "substantial proportion of individuals may in fact represent a normal response to an abnormal event" (Silver et al., 2002, p. 1243).

According to the National Center for Post-Traumatic Stress Disorder (2003), a common observation seen after all disasters is resilience. An individual is considered resilient if, after having faced adversity, he or she has a "sense of mastery or effective coping" (Kulig,

2000, p. 378). Critical attributes identified by Kulig include "rebounding and carrying on, having a sense of self and determination, and being prosocial" (p. 378). Resilience also can be described as positive growth in the face of adversity. Communities can be resilient as well. Kulig defines community resilience as "the ability of a community to not only respond to adversity but in doing so, reach a higher level of functioning (p. 375). Being prepared for a disaster, whether naturally occurring or an act of terrorism, can be empowering for the individual and the community (Herman, 1998; Lambert & Lambert, 1999). Preparedness can be an act of healing. Falk-Rafael (2001, p. 4) describes public health nurses, conceptualization of empowerment "as an active, internal process of growth that was rooted in one's own cultural/religious/personal belief systems, reached toward actualizing one's full potential, and occurred within the context of a nurturing nurse-client relationship." According to the American Psychiatric Association (2001a, 2001b, 2001c, 2003), participating in volunteer activities can be empowering and can help individuals develop resilience.

Nurses are in a unique situation because while they must consider the immediate psychological needs of their patients, they are also more likely to be exposed to traumatic images and stories as they work. Nurses become the witnesses for a community that has survived a terrorist attack, and in this role, they also bear the traumatic consequences of a normal stress response. Nurses not only must be prepared to help their patients and community, but also they must be prepared to help themselves.

PUBLIC HEALTH NURSING

The Micro (Family)-Level Context

The nursing role within a public health context is essential because nurses, who are mostly trained in primary care, know how to mobilize families in times of crises. Facilitating and supporting the development of family disaster plans with family, friends, and in the community is an excellent area for nurses to extend their involvement. Nurses can present basic preparedness information to parent-teacher associations, at health fairs, and to church groups. The necessary information can be found on the American Red Cross Web site and is also available at local, city, and state Office of Emergency Management Web sites. Nurses can anticipate an entirely new body of knowledge related to disaster preparedness over the next months and years. Nurses, by helping themselves and

others in developing a family emergency plan well in advance of a disaster, can minimize the “confusion and disorientation” that naturally occur during a disaster (Durham & Williams, 2002, p. 67) and can provide family members with a sense of control (American Psychiatric Association, 2003). Developing a plan for a run-through of a disaster drill at home to see what works best can help families to develop a sense of mastery and security that will decrease panic in the case of an actual event. Information on how to develop a family emergency plan can be found on numerous Web sites and has been distributed widely in American newspapers over the past years. Families with school-aged children need to know how to contact school officials to find out about the specific disaster plans for the school and school procedures in advance of any disaster (Pollock, 1999). Nurses can also help individuals to understand the importance of knowing what plans are in place at their places of work and can encourage advocacy in order to see plans created where none exist. Nurses especially need to have procedures in advance to ensure that their loved ones are safe. Nurses should also prepare a “go-pack” in case they are called unexpectedly to provide support during a terrorist event. Suggestions for a “go-pack” can be found in the Gebbie and Qureshi (2006) article cited at the end of this chapter.

The Macro (Community)-Level Context

Taking preparedness to the community level can begin within a neighborhood. As members of one of the most trusted professions in the United States, nurses are in a perfect position to disseminate accurate preparedness information (Cantrell, 2005) to those who live closest to them. Nurses are also in a position to identify persons at risk (children, the frail elderly, and adults or children with special needs) and to assist them to develop a needs-specific emergency plan. Even the retired health care practitioners in the neighborhood are a valuable resource that can be enlisted in disaster response and recovery (Persily & Hildebrandt, 2003). Churches, synagogues, mosques, senior citizen centers, parent-teacher associations, and community boards are forums in which nurses can provide disaster-preparedness education to the community. Nurses have always brought energy and creativity to whatever they do. Preparing themselves, their families, and their communities for a bioterrorism attack is a viable area for nurses to take the lead.

Municipalities must support this education by providing supplemental funds for such programs. In

August 2004, the Agency for Healthcare Research and Quality released a position statement stating that during a widespread terrorist attack, area hospitals would be overwhelmed by patients and that alternate care sites such as stadiums, schools, and recreation centers would be required to handle the overflow of victims. This plan would also necessitate community education so that the lay public, who work in these facilities, would be able to assist nurses and other health care providers in delivery of appropriate and timely care to any victims of a terrorist attack (Veenema, 2007). Adequate funding to high-risk municipalities for preparedness and response-related activities is essential but remains a problem (Godfrey & Hartley, 2005; Kuokkanen & Leino-Kilpi, 2000; Norris, 2005; Parish, 2005). In order for municipalities to educate their nurses, health care providers, and community, increased funding must be made available to provide the basic resources for these much-needed bioterrorism programs.

ACADEMIC NURSE'S ROLE

Nursing schools have important roles to play in delineating disaster plans and models and in preparing future nurses for leadership roles during a disaster. Furthermore, nursing faculty play an important leadership role as mentors to their students and within the community (Weiner et al., 2004, 2005). After the 9/11 terrorist attacks, nursing students from the area universities assisted in the care and support of victims and worked alongside experienced nurses, who, despite their own fears about the event, put the needs of the community first and functioned heroically in a chaotic environment (Eastwood, 2003; Fruiterman, 2006). It is true that credentialing issues will need to be worked out, and various city, state, and federal agencies have tried relentlessly to address this issue and catalogue health professionals, but issues such as credentialing seem trivial in light of the opportunities for using the passion and the energy of the public in terrorist times (Langan & James, 2005).

Schools around the country and abroad are beginning to include disaster and terrorism preparedness courses within their course offerings. In March 2001, the International Nursing Coalition for Mass Casualty Education, now the Nursing Emergency Preparedness Education Coalition, met to create a resource focused on educating “nurses to provide emergency care during bioterrorism-related mass casualty events” (American Association of Colleges of Nursing, 2001, ¶3). Since that

time, numerous courses have been established for nurses. The University of Texas at Austin School of Nursing has developed a Mass Casualty Disaster Nursing Course. This course includes active participation by the students in disaster planning and teaching community disaster education classes. In addition, the students become resources for their workplace, helping them to meet The Joint Commission's requirements for emergency planning in their individual institutions. Another resource is the U.S. Army Medical Research Institute of Chemical Defense, which offers classroom and satellite broadcasts on biological and chemical warfare and terrorism. This course focuses on pathophysiology and on diagnosis and treatment of casualties unique to chemical and biological weapons. The course includes emergency treatment, triage, decontamination, and evacuation of casualties. The Vanderbilt University School of Nursing program has developed DVDs and online courses to help in the teaching and development of appropriate curricula for the future. Courses such as these should be standard curriculum in undergraduate and graduate nursing programs, and health care institutions should also require mandatory training for current and future nursing staff (Walker-Cillo, 2006).

In addition to academic institutions, the American Red Cross provides excellent training on all aspects of disasters (logistics, mass care, sheltering, and damage assessment), which is useful for nurses. The federal government has established the Medical Reserve Corp for all health care providers who are willing to be called upon to participate in mass immunization programs or relief efforts in the event of a biological or chemical disaster. Disaster Medical Assistance Teams operate under the auspices of the National Medical Disaster System, a branch of the Department of Homeland Security. Regional Disaster Medical Assistance Teams are located in many parts of the country and are activated for national disasters.

Nurses also need to be involved in research related to terrorism and preparedness. Currently, the Department of Homeland Security is funding a series of Centers of Excellence to research what must be done in preparation for and following a terrorist attack (American Nurses Association, 2002). This includes how nurses will be involved in gathering data for research and the preparation of best practice protocols. Since terrorist events may involve chemical, biological, radiological, nuclear, and explosive incidents (American Nurses Association, 2004), a diverse knowledge and skill set will be required from nurses in their response to the incident and to the care of patients (Gaffke, 2002).

SUMMARY

After the Oklahoma City bombing on April 19, 1995, and the terrorist attacks on U.S. cities on September 11, 2001, and July 7, 2005, in London, nurses united and mobilized as a profession, despite their own fears and anxieties, to ensure the well-being of others. The nursing care they demonstrated proved them to be advocates for the community and leaders within their institutions. It would be unrealistic to think that these horrific events will never be repeated. As nurses plan for the future, nurses and nursing students must be educated properly in terrorism and bioterrorism to ensure that they can be even more effective in the face of a catastrophic event.

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Nursing Practice in Emergency Management and Disaster Preparedness*

MARY W. CHAFFEE

Nurses are particularly concerned with meeting the needs of “vulnerable” populations. Vulnerable groups are those that have limited resources and therefore are at high risk of morbidity, mortality, and reduced quality of life (Flaskerud, 1999). Populations generally identified as vulnerable include the elderly, children, and others who cannot meet their own needs. However, in a disaster, *everyone* is vulnerable, and the challenge for nurses is to best meet the needs of large numbers of people who may have:

- ◆ become acutely injured or ill,
- ◆ been displaced from their homes,
- ◆ had chronic care disrupted (e.g., renal dialysis),
- ◆ no access to health records or medications,
- ◆ lost loved ones or be experiencing great stress, or
- ◆ new educational needs.

A wide variety of opportunities have emerged for nurses interested in preparing the health system for effective response to disasters, mass casualty events, and widespread crises. Nurses, by virtue of their position in every part of the health system, from rural clinics to homecare to sophisticated urban medical centers, have become critically needed leaders in emergency management and disaster preparedness. The types of positions will likely continue to grow as local, regional, and national efforts to enhance preparedness and response evolve.

WHAT IS A DISASTER?

A disaster is a nonroutine event or agent that disrupts a complex human social system that has inherent vulnerabilities (Chaffee, 2008). Though there is some

disagreement about the exact definition of disaster, there is agreement that it is a social phenomenon, not a destructive external agent (Quarantelli, 1998). This means a tornado is not a disaster until it encounters an inhabited area and causes damage to physical structures, disruptions in services like water and power, and results in harm to people. The frequency of disaster is increasing in the United States and around the world. In 2007, 414 natural disasters (only one type of disaster) killed almost 17,000 people and affected more than 200 million others (Scheuren et al., 2008). Vulnerability to disaster has increased as global populations have increased, especially in disaster-prone locations.

Health Consequences of Disaster

Most disasters result in injuries or illness and can result in the need for hospitals to rapidly expand their care capacity. This increased demand for care is likely to exceed available resources (Kaji, Koenig, & Bey, 2006). In addition to the surge in the number of patients needing care, disasters can cause damage to hospitals and other health facilities, further degrading a community’s ability to provide care. The type of health issues that emerge in a disaster will depend on the specific situation. A bombing will likely result in traumatic injuries, a chemical spill will cause respiratory injuries, and a biologic outbreak (natural or intentional) could cause a great demand for antibiotics. The need for mental health services cannot be underestimated in all types of disasters. Disaster responders themselves may be affected. For example, in the sarin gas attack on the Tokyo subway in 1995, Japanese emergency medical technicians wore conventional work clothing instead of protective equipment. Of 1363 emergency medical technicians who responded, 135 became sick from secondary sarin contamination and became victims themselves (Tokuda et al., 2006).

*The views expressed in this chapter are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, the Department of Defense or the U.S. government.

Nursing Roles in Disaster and Emergency Management

There are many ways nurses can actively participate in—and lead—emergency management and disaster preparedness efforts. Individual preparedness is essential. Nurses are encouraged to prepare themselves and to know exactly what their organizational response role is.

Individual Nurse Preparedness. Personal emergency preparedness is critical for nurses on several levels. As role models, nurses can exemplify responsible personal disaster preparedness. If nurses do not prepare, it may impact their ability to perform their professional duties. Nurses who have not made disaster plans for themselves and their families may be less able to get to work

and care for disaster casualties. Many resources are available to guide individual and family disaster preparedness activities. (Table 78-1).

Emergency Nurses. Emergency nurses have a foundational role in emergency response. Their experience and skills, especially in triage, will be critical in a hospital's effective response to disaster. Emergency nurses can play important roles not only in response but also in preparing for effective response by leading change that supports response, ensuring equipment and supplies that may be needed are stockpiled, participating on committees involved in organizational preparedness, and mitigating problems in advance of disaster. It is extremely important to recognize though that emergency nurses are only one group of nurses with a vital role in response. In a major disaster, every nurse will be

TABLE 78-1 Personal Disaster Preparedness Resources

Resource	Source/Sponsor	Contents	Website Address
Ready.gov	U.S. Department of Homeland Security	<ul style="list-style-type: none"> • Guidance for making plans • Checklist • Information on planning for pets • Information for older people • Information for people with disabilities 	www.ready.gov
Are You Ready? An In-depth Guide to Citizen Preparedness	Federal Emergency Management Agency	<ul style="list-style-type: none"> • Step-by-step approach to disaster preparedness • Local emergency plans • How to identify hazards • Evacuation • Emergency public shelters • Animals in disaster 	www.fema.gov/areyouready
Emergency Preparedness and You	Centers for Disease Control and Preparedness	<ul style="list-style-type: none"> • Building a disaster kit • Creating a family disaster plan • Shelter in place • Quarantine and isolation • Keeping a healthy state of mind 	www.bt.cdc.gov/preparedness
Preparedness Information	American Red Cross	<ul style="list-style-type: none"> • Terrorism—preparing for the unexpected • Food and water in emergencies • Family disaster planning • Power outages 	www.redcross.org/services/disaster

needed to contribute to an organization's and community's efforts.

Nurse Managers and Administrators. Nurse managers have an important role in ensuring their staff members have made adequate individual preparation for disaster and that their organizational unit is highly prepared. This may include ensuring that staff are able to attend training and that unit policies concerning disaster and emergency response are evaluated and updated annually. Managers should ensure all staff are familiar with their specific roles in disaster response as described in their facility's emergency management plan. Managers can play an important role by actively participating in disaster exercises and treating the exercise as an important training opportunity.

Nurse Executives. Nurses who serve in executive positions in hospitals and health systems can drive organizational commitment to disaster preparedness. The Joint Commission emergency management standards must be achieved to ensure a basic level of preparedness, but nurse executives can advocate for more sophisticated preparedness. A critical aspect of organizational leadership is ensuring that nursing staff are able to report to work in disasters. This may

mean developing alternate transportation plans to pick-up employees if public transportation is unavailable or roads are blocked. Another issue that has emerged that will influence a hospital's ability to function in a disaster is the willingness of nurses and other employees to work. One Florida hospital, faced with frequent hurricanes, found that clearly explicating hospital policies about working in disaster on an annual basis reduced problems they previously encountered with staff not working during hurricanes (McCoy & Stackpoole, 2006).

Service in Federal Agencies. At the federal level, there are opportunities for nurses to lead national preparedness efforts. Currently, nurses serve in several federal agencies involved in disaster preparedness and homeland security, including the Department of Homeland Security, the Department of Health and Human Services, and the Department of Defense. The roles in the federal agencies include positions filled by active duty and reserve military nurses, U.S. Public Health Service officers, and civilian nurses.

Volunteer Opportunities. Nurses can provide critical support in a disaster through volunteer efforts. It is extremely important for nurses who are interested in volunteering to ensure that their volunteer roles do

TABLE 78-2 Disaster Volunteer Opportunities for Nurses

This table displays some opportunities for nurses to serve as volunteers, but it is not all inclusive. Nurses are encouraged to seek out opportunities in their communities and states. For example, a number of states have volunteer programs – two are offered here as examples.

Volunteer Opportunity	Type of Service	For More Information
Disaster Medical Assistance Teams (DMAT)	Teams deployed to disaster sites to provide care; a component of the National Disaster Medical System	www.hhs.gov/aspr/oepo/ndms
Community Emergency Response Teams	Volunteers trained to respond to disaster in their community	http://www.citizencorps.gov/cert/
American Red Cross	Multiple disaster volunteer opportunities and training programs	www.redcross.org Use the "Volunteer Match" link to identify training and volunteer opportunities in your area.
Maryland Professional Volunteer Corps	State level volunteer corps sponsored by the Maryland Board of Nursing	www.mbon.org
Medical Reserve Corps	Teams of local volunteer health care and public health professionals	www.medicalreservecorps.gov
California Medical Assistance Teams	State-sponsored teams that provide rapid response to disasters	www.medicalvolunteer.ca.gov

not conflict with any employment obligations. Before any type of volunteer position is accepted, nurses should discuss the requirements with their employer (if employed). Retired nurses may have more flexibility in regard to volunteering in disasters and can use the expertise they developed during their career to assist when greatly needed (Table 78-2).

Emergency Management. Nurses may pursue a career as an emergency management professional in a position such as a hospital emergency manager/disaster coordinator or a community emergency manager (Box 78-1). The International Association of Emergency Managers offers certification training programs and guidance on how to complete the certification process at www.iaem.com. Nurses can obtain certification as a Certified Emergency Manager (CEM) (International Association of Emergency Managers, 2008).

THE ROLE OF PROFESSIONAL ORGANIZATIONS IN EMERGENCY AND DISASTER PREPAREDNESS

Nursing and health care organizations are supporting the efforts of nurses in the area of disaster preparedness and response through education and policy. Members of nursing associations have been active in disaster response. For example, a number of Minnesota Nurses Association members responded to the Minnesota bridge collapse on August 1, 2007 (Trossman, 2007). Organizations involved in improving nursing response to disaster include:

- ◆ *The American Nurses Association (ANA)* held a policy conference focused on nursing care in disasters titled “Nursing Care in Life, Death and Disaster” in June 2007. The conference focused on issues related to

BOX 78-1 Four Nurses Lead Pioneering Disaster Response Partnership in the National Capital Area

Washington, DC, is recognized as an area that is vulnerable to disaster. The district is the nation’s concentration of political power and is thereby a target for enemies. The potential for wind damage and flooding is possible in the area each Atlantic hurricane season and hazardous chemicals are transported through and near Washington. A direct attack or natural disaster could cause destruction of the major hospitals in the downtown area (“urban packing” of hospitals increases hospital bed loss in a disaster) (Perrow, 2007). Computer models of the potential effects of disasters show that the demand for hospital beds and health care services in the national capital region could be extensive (Bell & Dallas, 2007).

Bethesda, Maryland, is a community that neighbors Washington, DC, to the north and is located just inside the Capital Beltway, a heavily used highway that circles the district. In 2004, the leaders of three hospitals in Bethesda joined forces in an effort to strengthen their ability to meet the needs of their community in a disaster. The leaders of the hospitals (the National Naval Medical Center, the National Institutes of Health Clinical Center, and Suburban Hospital) saw how their facilities could be overwhelmed in a major mass casualty event in Washington, DC, or in the national capital region, and they recognized the potential advantages of coordinating their efforts.

There are two especially noteworthy aspects of this effort that came to be known as the Bethesda Hospitals’ Emergency Preparedness Partnership (BHEPP). This collaboration is the first time that hospitals from three different sectors (federal, military, and private) engaged in a hospital disaster preparedness partnership. Additionally, in each of the three partnership hospitals, the leaders of the emergency management and disaster preparedness activities were all nurses.

Christopher Gillette, RN, BSN, has served as the National Naval Medical Center’s Emergency Manager since shortly after 9/11. Laura Lee, RN, BSN, is the Special Assistant to the Deputy Director for Clinical Care at the National Institutes of Health (NIH) Clinical Center. Suburban Hospitals’ emergency management program is led by two nurses, Patricia Hawes, RN, BSN, COHN, Emergency Management Specialist, and Cindy Notobartolo, RN, BSN, who serves as Corporate Director for Emergency/Trauma, Safety, and Security Services.

The hospital partnership is focused on creating a sustainable infrastructure to support local and regional disaster response (Suburban Hospital, 2007). Gillette, Hawes, Lee, and Notobartolo have worked toward this goal by focusing their efforts on enhancing communications, improving surge capacity and transportation, credentialing providers in disaster, and sharing resources (Malanoski, 2007). Combining three organizational cultures and administrative environments is not an easy process. But these nurses are committed to meeting the needs of patients in their community and are demonstrating the great influence that nurses can have in improving disaster preparedness.

standards of care in disaster. ANA indicated they would develop guidance on care in disaster, based on input during the conference (ANA, 2007).

- ◆ *The World Health Organization* considered the role of nursing in emergency preparedness and response and published recommendations. They encourage preparing student nurses, teaching emergency care, holding organizational exercises, and promoting the role of nurses in emergency response (Garfield, 2007).
- ◆ *The World Association for Disaster and Emergency Medicine (WADEM)* established a nursing section. Its mission is to foster collaboration among nurses involved in research, education, management, and practice in prehospital, emergency, public health, and/or disaster health care (Daily, 2008).
- ◆ *The World Society of Disaster Nursing* was established in 2008 by 40 founding member organizations from seven countries. The society will promote international academic exchange, collaborative research, and organized knowledge and practice in disaster nursing (World Society of Disaster Nursing, 2008).
- ◆ *The Nursing Emergency Preparedness Education Coalition (NEPEC)* (formerly the International Nursing Coalition for Mass Casualty Education) is composed of members representing federal agencies, the academic community, professional associations, and others. NEPEC advocates for best practices in disaster nursing education. The group seeks to increase awareness and the effectiveness of nurses in disaster through education and research (NEPEC, n.d.).

DISASTER AND EMERGENCY MANAGEMENT EDUCATION FOR NURSES

A growing number of education programs exist that can prepare nurses for effective response to disaster. Study findings have identified learning needs of nurses, including infection control, communication with the public, and decontamination (Rebmann, Carrico, & English, 2008). Specific professional competencies needed by nurses have been identified. These include understanding the Incident Command System, conducting a rapid assessment of an event, performing triage, mass medication administration, personal protective equipment, modifying disaster plans, and assessing psychosocial response (Polivka et al., 2008).

Self-directed learning using textbooks, the current literature, and online training programs may be a convenient and practical method for many nurses.

BOX 78-2 Recommended Books on Disaster Nursing and Related Topics

- Langan, J. C., & James, D.C. (2005). *Preparing nurses for disaster management* (1st ed). Upper Saddle River, NJ: Prentice-Hall.
- Adelman, D. S., and Legg, T. J. (2009). *Disaster nursing: A handbook for practice*. Sudbury, MA: Jones and Bartlett.
- Veenema, T. G. (Ed.). (2007). *Disaster nursing and emergency preparedness for chemical, biological and radiological terrorism and other hazards* (2nd ed.). New York, NY: Springer.
- McGlown, K. J. (Ed.). (2004). *Terrorism and disaster management: Preparing healthcare leaders for the new reality*. Chicago, IL: Health Administration Press.
- Landesman, L. Y. (2005). *Public health management of disasters: The practice guide* (2nd ed.). Washington, DC: American Public Health Association.
- Phillips, S. J., & Knebel, A. (Eds.). (2007). *Mass medical care with scarce resources: A community planning guide*. Rockville, MD: Agency for Healthcare Research and Quality.

Recommended books on disaster nursing and related topics appear in Box 78-2.

A limited number of undergraduate and graduate nursing programs offer disaster content including elective courses, internship opportunities, and specialty tracks (Table 78-3). Nurses are encouraged to seek out degree programs, electives, and continuing education programs in their communities as well as Web-based training.

CARING FOR EACH OTHER

One important aspect of disaster response involves caring for colleagues. Exposure to disaster and the stresses of caring for disaster victims can lead to compassion fatigue and post-traumatic stress (Pfifferling, 2008). It is critical that nurses monitor themselves and colleagues during disaster response and that managers ensure responders receive adequate rest, nutrition, and support during response. Nurses may have a role in conducting debriefing following response to a disaster. Importantly, nurses who recognize that they themselves or their colleagues are exhibiting signs of dysfunction following a disaster can identify a plan for appropriate action.

TABLE 78-3 Examples of Education Opportunities in Disaster and Emergency Management

Sponsor/School	Course/Program	Type of Training/Course	More Information
American Red Cross	Introduction to Disaster Services Foundations of Disaster Mental Health Fundamentals of Disaster Assessment Mass Care Overview Mass Casualty Disaster Orientation to Disaster Response Psychological First Aid Staff Health: Working on Disaster Relief Operations Weapons of Mass Destruction/Terrorism: An Overview	Online and classroom	www.redcrosslv.org/disaster/disasterclass.html
Adelphi University School of Nursing	Emergency Nursing/Disaster Management	42-credit graduate program	http://nursing.adelphi.edu/graduate/emergencydisaster.php
Citizen Corps, U.S. Department of Homeland Security	Community Emergency Response Team (CERT) Training	Basic disaster response skills for nonprofessionals	www.citizencorps.gov/cert/
Emory University, Nell Hodgson Woodruff School of Nursing	Public Health Preparedness and Bioterrorism Disaster Nursing	2-credit course 2-credit course	http://www.nursing.emory.edu/nursing/
National Disaster Life Support Foundation	Basic Disaster Life Support Advanced Disaster Life Support Core Disaster Life Support Decon Disaster Life Support e-Basic Disaster Life Support e-Core Disaster Life Support Advanced Disaster Life Support Instructor	8-hour classroom 2-day classroom and practical experience 4-hour awareness 2-day classroom and practical experience Online Online 4-hour instructor training	www.ndlsf.org
National Nurses Emergency Preparedness Initiative	Nurses on the Front Line: Preparing for Emergency and Disaster	Web-based training program	www.nnepi.org
Sigma Theta Tau	Disaster Preparedness and Response	2-contact hour online	www.nursingknowledge.org/stti_ce/SP0004/sp0004_index.html

Continued

TABLE 78-3 Examples of Education Opportunities in Disaster and Emergency Management—cont'd

Sponsor/School	Course/Program	Type of Training/Course	More Information
University of Rochester School of Nursing	Leadership in Health Care Systems Masters Degree Program in Disaster Response and Emergency Preparedness	Graduate program	www.centerfordisastermedicine.org/disaster_nursing.html
University of Texas at Austin School of Nursing	Disaster Nursing Elective	3-credit course open to undergraduate and graduate students	www.utexas.edu/nursing
Yale Center for Public Health Preparedness	Public Health Management of Disasters	Master of Public Health (MPH) program	http://info.med.yale.edu/eph/ycphp/projects/curriculum.html

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More Nurse Involvement Needed in Infectious Disease Disaster Preparedness

TERRI REBMANN

DISASTERS AND THEIR IMPACT

The impact of natural and man-made disasters has been on the rise in the United States. Between 1991 and 2005, the United States has had damages in excess of \$364 billion due to natural disasters (International Strategy for Disaster Reduction, 2006). In 2005 alone, Hurricane Katrina resulted in over \$100 billion in damages, displaced over 200,000 individuals who needed to be housed in evacuation shelters, and caused 1016 deaths (Associated Press, 2006; Centers for Disease Control and Prevention [CDC, 2005a]; National Weather Service, 2006). Man-made disasters have also had a major impact in the United States. The terrorist events of 9/11 resulted in almost 3000 deaths and cost the U.S. economy about \$83 billion (National Commission on Terrorist Attacks upon the United States, 2001; United States General Accounting Office, 2002). In addition, the 2001 anthrax bioterrorism attack killed 5 people, injured 22, and cost over \$1 billion (Federal Bureau of Investigation, 2005; Lengel, 2005).

Disasters can be divided into categories that describe the event, such as natural versus man-made. Natural disasters consist of events such as hurricanes, earthquakes, and floods, whereas, man-made disasters consist of unintentional and intentional events that are caused by humans, such as terrorist activity and industrial accidents. Man-made intentional disasters are described by the acronym CBRNE. Box 79-1 describes the acronym CBRNE and each type of intentional man-made disaster. Another way of categorizing disasters is by the nature of the event in terms of whether or not it involves an infectious disease. Noninfectious disease disasters include all natural and man-made events that do not have an infectious agent as the source of the incident. Infectious disease disasters include all events that involve a biological agent/disease, such as a bioterrorism attack, a pandemic, or outbreak of an emerging

infectious disease. Much has been written about the role of nurses in preparing for and responding to natural disasters; this chapter focuses on the importance of preparing for infectious disease disasters.

INFECTIOUS DISEASE DISASTERS

Infectious disease disasters, such as a bioterrorism attack, an outbreak of an emerging infectious disease, or a pandemic, have a great potential for causing morbidity and mortality and a major strain on health care and public health systems. Infectious disease-related events have increased in the recent past and remain a current threat. In 2000, the CDC asserted that bioterrorism had become the most imminent threat to American national security (CDC, 2000). In the fall of 2001, the threat of bioterrorism became reality when a terrorist sent anthrax-laden letters to members of the media and government officials. Since that time, numerous outbreaks of emerging infectious diseases have occurred in the United States, including West Nile virus, monkeypox, mad cow disease, Norwalk virus, and severe acute respiratory syndrome (SARS). In addition, the United States is faced constantly with the potential of new infectious disease threats, such as avian influenza, which could develop into a pandemic.

Emerging pathogens are particularly challenging for health care because so little is known about the clinical description and epidemiology of each disease, such as the route of infection, transmission, or possible treatment options. When these pathogens surface, health care providers are forced to make medical decisions without the luxury of years of research or epidemiological data about how to treat and isolate infected patients safely. Bioterrorism-related diseases are also challenging because the illnesses occur so rarely, if at all, that making diagnoses and managing patients is

BOX 79-1 Man-Made Disasters: CBRNE

The acronym CBRNE describes the types of terrorism and/or man-made disasters.

C: *Chemical terrorism* is the use of chemicals to kill or injure to inflict harm or death. The Federal Emergency Management Agency classifies chemicals into five classes: nerve agents (that disrupt the transmission of nerve impulses), blister agents (that cause severe burns), blood agents (that interfere with the blood's ability to transport oxygen), choking agents (that cause respiratory distress or failure), and irritating agents (that cause incapacitation). Examples of chemical agents include chlorine, organophosphates, ammonia.

B: *Biological terrorism* is the use of biological agents to inflict harm, illness, or death. The Centers for Disease Control and Prevention categorizes biological agents based on the likelihood of their use, with Category A agents being the most likely to be used in a biological attack. The CDC Category A agents include anthrax, smallpox, tularemia, plague, botulism, and viral hemorrhagic fever agents (e.g., Ebola virus, Marburg virus).

R: *Radiological terrorism* is the use of a conventional explosive device that incorporates radioactive materials to inflict harm, illness, or death. This is commonly referred to as a "dirty bomb."

N: *Nuclear terrorism* is the use of a thermonuclear weapon to inflict harm, illness, or death.

E: *Explosives (high yield)* refers to the use of an explosive device to inflict harm or death. This category includes bombs or the use of items to cause mass destruction such as the events of 9/11.

Source of data: Erickson, P. A. (2006). Terrorism. In P. A. Erickson (Ed.), *Emergency Response Planning* (2nd ed.). Burlington, MA: Elsevier.

more difficult. The threat of emerging pathogens and bioterrorism-related agents has had a major impact on health care and public health systems in the United States and has illustrated the need for additional planning and response capabilities to respond to potential future events.

Agents that could result in an infectious disease disaster pose a major threat to the health and safety of U.S. citizens. In today's society that allows easy and frequent travel, diseases have the potential of spreading rapidly. Germs live and travel with people; thus, anywhere that people live or can travel, diseases can as well. Public health professionals have long recognized that crowded or highly populated environments contribute

to the spread of infectious diseases (Evans & Brachman, 1989). Previous outbreaks have shown that germs also travel with people. The 2003 outbreak of SARS illustrated the speed with which diseases can spread around the world. The SARS outbreak is believed to have begun in the Metropole Hotel in Hong Kong by a single visitor. This initial or primary SARS case is postulated to have infected at least 12 others staying at the hotel and to have exposed countless others (CDC, 2003b). These secondary cases then returned home, carrying and spreading SARS to six other countries. From only a single initial case, SARS spread around the world in less than 48 hours (Figure 79-1). Within months, SARS became a global infectious disease emergency. Because infectious diseases share the same principles of transmission, a bioterrorism attack using an infectious agent, such as variola (the virus that causes smallpox) or *Yersinia pestis* (the bacteria that causes pneumonic plague when inhaled), has the same potential. Whether the event is natural (an outbreak of an emerging infectious disease) or manufactured (a bioterrorism attack) does not matter. Outbreaks of infectious diseases pose a serious threat to the health of citizens around the world.

Impact of Infectious Disease Disasters

Quantifying the potential implications of a bioterrorism attack or outbreak of an emerging infectious disease is difficult because the outcome depends on many variables, including the size of the release, the nature of the agent used, weather and other environmental conditions, and how quickly the affected community recognizes and responds to the event. The 2001 anthrax bioterrorism attack used only a small amount of a weaponized noninfectious agent (approximately 2 to 3 oz of anthrax) and a relatively ineffective dissemination device (letters), and resulted in only 22 cases of anthrax and 5 deaths (United States General Accounting Office, 2003). As was mentioned previously, total costs to the United States were in excess of \$1 billion despite the small size of the event (Lengel, 2005). If more agents had been used, a contagious organism had been chosen, or the powder had been aerosolized, there likely would have been much more associated morbidity, mortality, and cost.

In 1997 a group of researchers calculated the potential economic impact of a bioterrorism attack using mathematical modeling. This research project modeled the aerosol release of three agents (causing brucellosis, anthrax, and tularemia) and found that costs from such an attack could range from \$477.7 million per 100,000 persons exposed (for a release of the brucellosis agent)

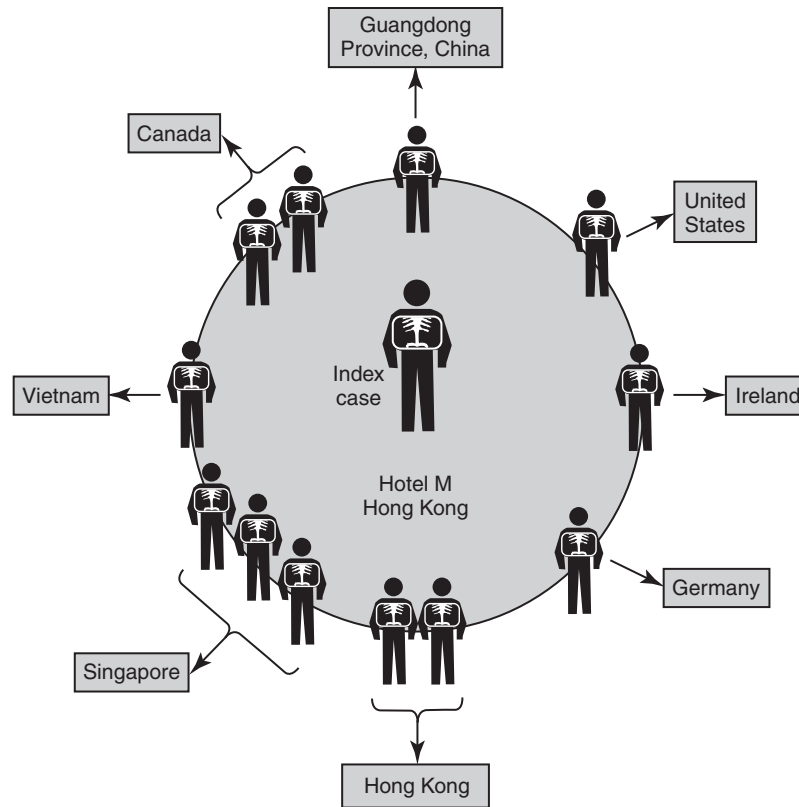


FIGURE 79-1 Global Spread of SARS from Hotel M in Hong Kong, 2003. This figure illustrates the chain of infection transmission from the index case to 12 other guests at Hotel M in Hong Kong. This incident is believed to have been the start of the global outbreak of SARS. Figure adapted from Figure 1 in the following article: Centers for Disease Control and Prevention (2003b). Update: Outbreak of Severe Acute Respiratory Syndrome—Worldwide, 2003. *Morbidity and Mortality Weekly Report*, 52(12), 241-248.

to \$26.2 billion per 100,000 persons exposed (when the anthrax agent is disseminated) (Kaufmann, Meltzer, & Schmid, 1997). Another model on which to base estimates of the potential costs associated with a bioterrorism attack involves the actual outbreak of SARS in Canada. In a 2003 report, the SARS outbreak that lasted less than a year in Canada was estimated to have resulted in a net cost to the national economy between \$1.5 billion and \$2.1 billion (Health Canada, 2003b). One feasibly may assume that an outbreak of an infectious disease resulting from a biological weapons attack in the United States would result in similar economic devastation. Of all infectious disease disasters, pandemics pose the largest risk of morbidity, mortality, and cost. The 1918 Spanish influenza pandemic caused 40 to 50 million deaths worldwide (CDC, 2005b). It has been estimated that a future pandemic could cost between

\$71 and \$166 billion, require the need for between 865,000 to 9,900,000 hospitalizations, and result in 89,000 to 207,000 deaths (Meltzer, Cox, & Fukuda, 1999; Trust for America's Health [TFAH], 2007).

The effectiveness of a response to an infectious disease disaster depends on the speed with which health care professionals recognize and respond to such an event, which in turn depends upon their level of preparedness. The speed with which health care professionals need to respond depends on many factors, including the incubation period of the causative agent, the availability of an effective prophylactic therapy or vaccine, and the amount of agent released (if the event is bioterrorism). For example, antibiotic distribution sites must be established rapidly (in less than 72 hours) for agents with a short incubation period, such as anthrax, tularemia, or avian influenza

(Kaufmann et al., 1997; Rebmann, 2008). Following the release of agents for which antibiotics are ineffective prophylaxes, such as for smallpox, vaccination clinics must be instituted rapidly to decrease the risk of infection transmission (CDC, 2002). Failure of rapid implementation can result in higher morbidity, mortality, and costs.

A mathematical modeling study calculating the cost of early versus late intervention following a bioterrorism attack using tularemia found that there would be a net loss of \$10.7 million to \$115.1 million if a post-exposure prophylaxis program were not begun until 6 days after exposure. When this same model examined anthrax, a net loss of \$13.4 million to \$283.1 million was estimated if postexposure prophylaxis were not started until 4 to 6 days after the initial exposure. Obviously, a rapid response is preferred because it would result in better outcomes in terms of physical (lower morbidity and mortality) and financial (associated costs) measures (Kaufmann et al., 1997). This is true for pandemics as well as bioterrorism attacks. A 2007 study found that hospitals that had developed standard operating procedures for a pandemic influenza situation had a significantly better response during simulated drills than hospitals that did not have such procedures (Adini et al., 2008). A rapid response requires not only effective facility and community disaster plans but also a prepared workforce that is able to respond appropriately and rapidly. Without prepared individuals, an effective response cannot be mounted.

Based on projections of the potential consequences of an infectious disease disaster and the actual reality of the immense impact of the small-scale bioterrorism incident using anthrax in 2001 and the SARS outbreak in 2003, the need for infectious disease disaster preparedness has become a national priority. This has been well established in the scientific literature of a variety of professions (American Academy of Pediatrics, 2000; Rebmann, 2008; Rolfsen, 2008). Despite this, many facets of health care and public health still are not engaging in infectious disease disaster preparedness activities. The anthrax incident of 2001 illustrated just how truly unprepared America is as a nation to respond adequately to a bioterrorism attack of any size and experts warn that the U.S. health care system is not prepared for any type of infectious disease disaster (TFAH, 2007).

Although the possibility of a large-scale bioterrorism attack is low, the potential for an outbreak of an emerging infectious disease or pandemic is feasible (CDC, 2007). The United States has encountered five outbreaks

of emerging infectious diseases in the past few years alone, and the risk of a pandemic remains a threat (CDC, 2007). In addition, the consequences if Americans are not prepared for any type of infectious disease disaster are staggering. The large number of victims quickly would exceed the existing capacity of the health care system, and the financial impact could reach the billions of dollars (TFAH, 2007).

The good news is that the response to bioterrorism, an outbreak of an emerging infectious disease, or a pandemic is similar. An epidemiological investigation, institution of appropriate infection prevention measures, and large-scale medication or vaccination distribution are imperative to an effective outcome from any of these events. Since the response to bioterrorism, emerging infections, and pandemics is similar, becoming prepared for one enhances readiness for the others.

NURSES' ROLE IN PREPARING FOR AND RESPONDING TO INFECTIOUS DISEASE DISASTERS

Composing the largest group of health care providers, nursing is poised to be at the forefront in managing an infectious disease outbreak, regardless of whether the outbreak is naturally occurring or manufactured. The American Nurses Association (2008) has asserted that it is the responsibility of every professional to maintain a state of professional readiness for emergencies. In addition, bioterrorism preparedness has been identified as a necessity for nurses in all areas of expertise and practice (Rebmann, 2006). If an infectious disease disaster occurred, nurses in all settings and specialties would be needed to help manage the emergency situation. In the acute care setting, nurses would be required to help triage and treat the large influx of patients likely to arrive. This includes not only nurses working in emergency departments but also nurses from all areas of the hospital. The initial influx of patients quickly could overwhelm the ability of emergency department personnel to handle the situation. Alternative care sites may be arranged, and these will require staffing by nurses.

Many hospitals in the United States currently are planning how to juggle a potentially large influx of patients. Disaster plans often include provisions for temporarily halting some procedures and services, such as nonemergency surgeries, and pulling staff from those areas to help triage and treat the incoming patients (Rebmann, 2008). Nurses who usually work in operating rooms, outpatient treatment centers, and other

nonemergency settings may be relocated from their daily duties to fill in during the crisis. This shifting of staff likely will burden nurses in nonacute care settings as well. As the crisis subsides and hospitals revert from emergency procedures back to day-to-day operations, long-term nursing care still will be required for the patients infected during the outbreak. This will put an added stress on nonacute care nurses, such as those working in outpatient settings, clinics, and home health care. Nurses in all areas and specialties will be affected by a bioterrorism attack or outbreak of an emerging infectious disease in their community.

As such, the nursing profession must embrace fully its responsibility in infectious disease disaster preparedness. Despite the fact that nurses will play a crucial role in recognizing and responding to a bioterrorism attack or outbreak of an emerging infectious disease, nursing as a profession has been slow to respond to the need for emergency preparedness for infectious diseases. Bioterrorism articles began appearing in nursing journals around 1998, although they had been published by medicine and other health care disciplines since the early 1990s. In addition, many more bioterrorism-related articles were published in medical journals than in nursing journals (Figures 79-2 and 79-3). Pandemic

preparedness articles are also much more prevalent in medical journals than nursing journals (Figure 79-4).

Nursing must evaluate what factors have affected its slow acceptance of the need for emergency preparedness. The profession's hesitation to embrace fully this new area of study likely has affected the individual nurse's decision to engage in infectious disease preparedness initiatives. However, there are likely other influencing factors that affect nurses' decisions to become better prepared for bioterrorism or an outbreak of an emerging infectious disease.

NURSES' PARTICIPATION IN EDUCATION RELATED TO INFECTIOUS DISEASE DISASTERS

Research conducted soon after the terrorist events of 2001 indicated that the majority of infection control and public health professionals (many of whom are nurses) had received some bioterrorism preparedness education (Shadel et al., 2003, 2004). Nurses working in other settings were not asked about their participation in bioterrorism education at this time, so it is impossible to know how prepared they were. However, it is likely that infection control and public health nurses had more access to bioterrorism education due to the nature of their job duties; therefore, it is probable that they received more bioterrorism education than nurses working in other settings (Rebmann & Mohr, 2008). A 2005 study conducted by Mosca and colleagues found that many school nurses lack confidence in their preparedness for bioterrorism and have a strong desire for more training in this focused area of emergency readiness. A more recent study conducted in 2006 with Missouri nurses found that most had not received any bioterrorism-related education, including reading journal articles about bioterrorism (Rebmann & Mohr, 2008; under review). Of those who had received bioterrorism-related education, most had participated in three or fewer programs and had read three or fewer bioterrorism-related journal articles, indicating that nurses are still not receiving much education related to one aspect of infectious disease disaster planning (Rebmann & Mohr, 2008; under review). Nurses' involvement in preparing for other infectious disease disasters, such as pandemics, has not been assessed.

In addition to traditional education, infectious disease disaster preparedness involves participation in drills or exercises that assess the disaster plan of their facility using an infectious disease scenario and having a personal/family response plan for disasters

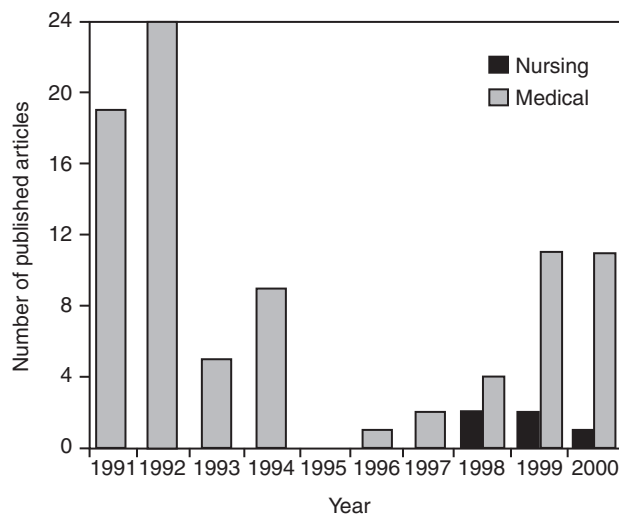


FIGURE 79-2 Number of Bioterrorism Articles Published in Nursing and Medical Journals 1991-2000. There is some overlap between the two categories when the journal is written for both a nursing and physician audience. Two examples of such journals include the *American Journal of Public Health and Infection Control and Hospital Epidemiology*. The articles from these journals are included in the numbers for both nursing and medical categories.

FIGURE 79-3 Number of Bioterrorism Articles Published in Nursing and Medical Journals 2001-2007. There is some overlap between the two categories when the journal is written for both a nursing and physician audience. Two examples of such journals include the *American Journal of Public Health* and *Infection Control and Hospital Epidemiology*. The articles from these journals are included in the numbers for both nursing and medical categories.

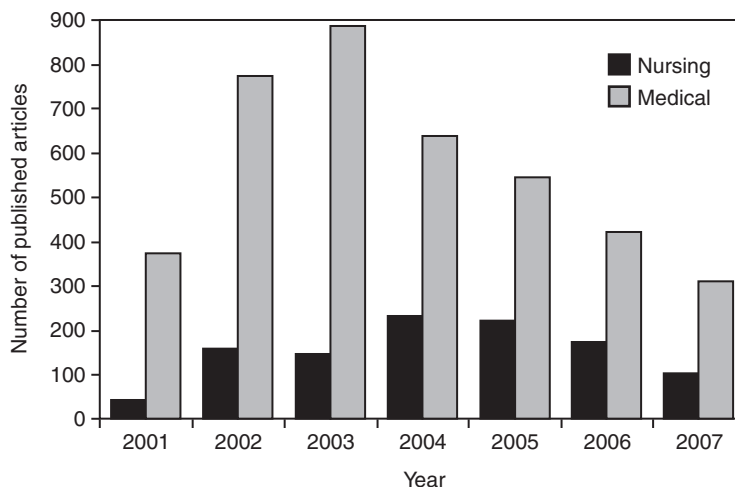
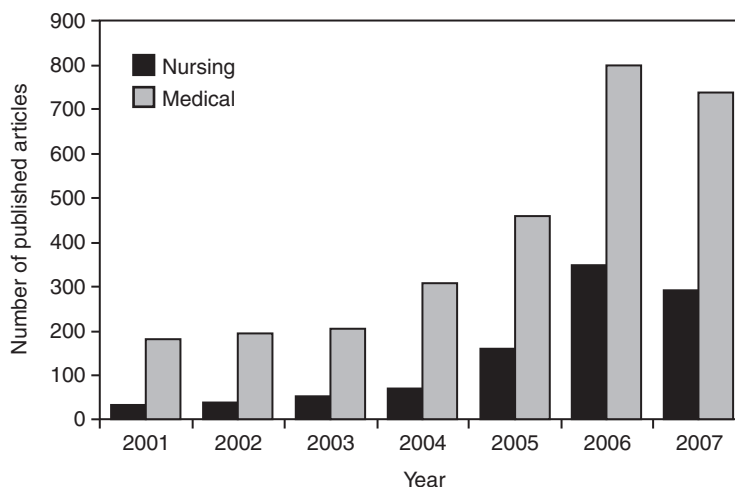


FIGURE 79-4 Number of Pandemic Preparedness Articles Published in Nursing and Medical Journals 2001-2007. There is some overlap between the two categories when the journal is written for both a nursing and physician audience. Two examples of such journals include the *American Journal of Public Health* and *Infection Control and Hospital Epidemiology*. The articles from these journals are included in the numbers for both nursing and medical categories.



(Rebmann, 2006; Rebmann & Mohr, 2008). Every study conducted examining nurses' involvement in disaster drills found that nurses' participation in these exercises has been poor (Henning et al., 2004; Rebmann & Mohr, 2008; Weil, 2003). Furthermore, the only study that assessed nurses' personal readiness for emergencies in the form of a personal/family disaster plan found that almost no nurses had such a plan (Rebmann & Mohr, 2008).

WHAT DO NURSES KNOW ABOUT INFECTIOUS DISEASE DISASTERS

Before the terrorist events of 2001, very few educational programs existed on bioterrorism preparedness or pandemic planning. It is not surprising, therefore, that

nurses' knowledge of these topics was limited. A study conducted in 2002 by Rose and Larrimore assessed nurses' preparedness for a chemical and/or biological terrorism attack and found that the vast majority of nurses could not name two potential biological weapons and less than half knew the transmission method of anthrax. Two studies of Hawaiian nurses found that most had very little knowledge of the clinical manifestations of bioterrorism-related illnesses, although nurses who had received more bioterrorism preparedness education had higher knowledge than nurses who had received less education (Katz et al., 2006; Lanzilotti et al., 2002). Similar results were reported from a 2003 study of nurses in Vermont: nurses had very little knowledge of managing patients with bioterrorism-related illnesses (Grace et al., 2005). A 2006 study of

Missouri nurses found that most had very little knowledge about nondisease-specific aspects of bioterrorism preparedness, such as reporting an incident, instituting infection prevention measures, and environmental decontamination strategies (Rebmann & Mohr, under review). Most recently, a study of nursing students in Italy used a combination of clinical-based questions and general bioterrorism preparedness items to assess nurses' bioterrorism knowledge and found that knowledge levels were very low in this population (De Felice et al., 2008). Only one study examined nurses' knowledge of emerging infectious diseases, and it found that half could not identify symptoms of SARS, and many could not name the appropriate infection prevention strategies to control the spread of SARS (Tice et al., 2006). Nurses' knowledge about pandemic preparedness has not been assessed.

Nurses' preparedness for infectious disease disasters is imperative, yet ongoing research indicates that most nurses are not involved in emergency preparedness activities, have little confidence in their ability to respond to an infectious disease disaster, have low knowledge of bioterrorism and pandemic planning, and do not have a personal/family disaster plan. Engagement in these activities is essential to having a prepared nursing workforce for infectious disease disasters. What factors influence nurses' decisions to engage in infectious disease simulation exercises, receive the education they need to feel adequately prepared for an infectious disease disaster, and develop a personal/family disaster plan?

FACTORS THAT INFLUENCE NURSES' INVOLVEMENT IN INFECTIOUS DISEASE DISASTER PREPAREDNESS

Little research has been done to determine why nurses are not very involved in infectious disease disaster preparedness. Research conducted soon after the terrorist events of 2001 indicated that the majority of infection control and public health professionals (many of whom are nurses) reported that a lack of training opportunities was their primary barrier to receiving bioterrorism education (Shadel et al., 2003). A more recent study found that the most frequently cited barriers to receiving bioterrorism education by nurses included not knowing where to get bioterrorism training, no administrative financial support for bioterrorism preparedness training from employers, and lack of awareness or access to bioterrorism-related disaster exercises (Rebmann & Mohr, under review).

Nurses' Education Related to Infectious Disease Disaster Preparedness

One factor that may affect nurses' decisions to become prepared for infectious disease disasters is the misdirected education that thus far has been provided to nurses. In the nation's rush to become better prepared to respond to a bioterrorism attack, a paradigm for bioterrorism preparedness had to be developed rapidly. In response, an efficient, standardized approach was adopted that used a medical model as its foundation. Most articles lump bioterrorism or pandemic influenza preparedness for nurses with all other health care providers. Early bioterrorism and pandemic preparedness education used the medical model and taught all professions how to identify, diagnose, and treat victims of bioterrorism or avian influenza. Some researchers even assessed how well nurses could diagnose these diseases (Katz et al., 2006). However, these are tasks of primary care providers, such as physicians and nurse practitioners; they do not apply to the vast majority of nursing specialties. Although this efficient approach has served better to prepare many health care and public health professionals in a relatively short period of time, it may have done so at the expense of the nursing profession.

The medical model is essential to infectious disease disaster management and should be incorporated into emergency management theories for all health care professions, including nursing. However, using only the medical model approach discounts the unique input and contribution of other human sciences and may lead to the neglect of critical components of infectious disease disaster management. Many nursing-specific issues have been neglected, including potential implications of long-term care for survivors, the mental health impact on health care workers and their families, and therapeutic communication for grieving victims' families. Nurses must investigate and address the profession-specific barriers to infectious disease disaster preparedness to ensure the best response to such a future event. Additionally, infectious disease disaster preparedness educational needs that are specific to the profession of nursing, such as those described by Steed, Howe, Pruitt, and Sherrill (2004), must be defined clearly.

Personal, Facility, and Community Preparedness for Infectious Disease Disasters

In addition, many articles describe infectious disease disaster preparedness for nurses in relation to hospital or community preparedness (American Academy of

Pediatrics, 2000; CDC, 2000; Gwerder, Beaton, & Daniell, 2001; Morse, 2002; O'Connell, Menuet, & Foster, 2002; Peralta, 2000; Salazar & Kelman, 2002; Shadel et al., 2001). Although this applies to a small subset of the discipline, it does not apply to the vast majority of nurses. Hospital and community bioterrorism preparedness are broad tasks that are the responsibility of only a few individuals rather than the responsibility of the profession of nursing as a whole.

For example, a large hospital in an urban setting most likely will have an emergency planning committee composed of individuals from numerous departments. This committee requires at least one nursing member to ensure that nursing needs are addressed in the response plan of the facility. In some hospitals, an infection control or environmental health nurse may even be the leader or coordinator of this committee. However, not all nurses employed at this facility will be members of the emergency planning committee, nor should they be.

Hospital or health care facility infectious disease disaster preparedness requires multidepartmental and multiagency coordination and cooperation. Not every nurse has the responsibility to assume this role. However, the majority of infectious disease disaster preparedness literature in nursing journals seems to imply that taking on this larger role is the responsibility of every nurse in becoming better prepared to respond to these events (American Academy of Pediatrics, 2000; CDC, 2000; Gwerder et al., 2001; Morse, 2002; O'Connell et al., 2002; Peralta, 2000; Salazar & Kelman, 2002; Shadel et al., 2001). This task can be overwhelming to nurses who already are overworked, underpaid, and undervalued.

Target Audience for Early Infectious Disease Disaster Preparedness Education

Another reason that nurses may have been slow to accept the need for emergency preparedness is the misdirected focus of early infectious disease disaster education efforts. When the threat of bioterrorism first reemerged in the 1990s, education was targeted at the traditional first responders: police and fire and emergency service personnel (Jones, 2002). As more groups joined in preparedness efforts, it became clear that health care and public health would be the "first responders" to a bioterrorism attack or an outbreak of an emerging infection (CDC, 2000; Gwerder et al., 2001). Following the 1998 Presidential Decision Directive 62, federal agencies were mandated to coordinate planning efforts with health care and public health

rather than only with traditional first-responder groups (CDC, 2000).

These events resulted in a shifting of priority for infectious disease disaster education from traditional first responders to health care and public health (infectious disease disaster "first responders"). However, even when health care became the focus of these new infectious disease disaster preparedness initiatives, nursing was neglected. Physicians were the first group to be prioritized for infectious disease disaster education. Physicians probably were targeted first because many experts postulate that primary care providers most likely will be the first to identify a bioterrorism attack or outbreak of an emerging infectious disease in the community (American Academy of Pediatrics, 2000; Gerberding, Hughes, & Koplan, 2002; Meyer & Morse, 2002; Patt & Feigin, 2002). This implies, however, either that nurses are not considered primary care providers or that their infectious disease disaster preparedness is less important than physicians'.

The fact that nurse practitioners function as primary care providers has not been addressed in the literature; physicians still are considered frontline in health care infectious disease disaster preparedness by most planning agencies (American Academy of Pediatrics, 2000; Gerberding et al., 2002; Meyer & Morse, 2002; Patt & Feigin, 2002). No articles specifically address the role of nurse practitioners in bioterrorism preparedness, and only a few articles use the broad term *primary care provider* or *clinician* that would encompass nurse practitioners (Bernardo, 2001; CDC, 2000; Schultz, Mothershead, & Field, 2002). Furthermore, it was not until 2006 that researchers published an article about pandemic planning that specifically targeted nurse practitioners (Lugo, 2006).

Other subsets of nursing also were excluded from the designation *primary care provider* or *frontline workers* for bioterrorism preparedness. This was demonstrated during Phase I of the smallpox vaccination that took place in winter and spring of 2003. The primary groups targeted in Phase I were hospital emergency department and public health department employees (CDC, 2002; Wharton et al., 1990). Although this group includes emergency department nurses, it still excludes other nursing primary care providers such as those in occupational health departments, schools, and physician's offices. Although experts have long asserted that a bioterrorism attack or outbreak of an emerging infectious disease is most likely to be identified by a primary care provider who encounters a patient who has suspicious symptoms, nursing has not been

included in these categories of primary care provider or frontline worker.

Funding for Nurses' Infectious Disease Disaster Preparedness Education

In addition to the late inclusion in targeted infectious disease disaster education, another disadvantage to not being considered primary care providers or frontline workers in the infectious disease disaster preparedness battle is that nursing has been excluded from the majority of funding opportunities. As mentioned previously, the original funding for bioterrorism preparedness was aimed at traditional first responders. As the political climate evolved and health care and public health became the primary focus for bioterrorism education, funding shifted to public health and hospital preparedness (Fee & Brown, 2001; Sidel, Cohen, & Gould, 2001). Of the funding allotted for primary care provider education, little or none targeted the profession of nursing. This lack of financial support may be another influencing factor for the early reluctance of nurses to join infectious disease disaster preparedness efforts. Indeed, a lack of administrative support and funding were identified as major barriers to Missouri nurses' involvement in bioterrorism preparedness education (Rebmann & Mohr, 2008).

Nurses' Perceived Risk Related to Infectious Disease Disasters

Another potential influencing factor on nurses' decisions to become better prepared for infectious disease disasters is a lack of personal perceived risk. Two articles presenting the findings from a national needs assessment and risk perception survey (Shadel et al., 2003, 2004) found that although the majority of infection control and public health professionals (many of which are nurses) reported that they believed that a bioterrorism attack was likely to happen somewhere in the United States within the next 5 years, few reported that they believed it was likely to occur in their community. A similar study conducted in 2006 with Missouri nurses found the same thing: nurses feel that a bioterrorism attack is likely to happen somewhere in the United States, but few believe it will occur in their community (Rebmann & Mohr, 2008). This research suggests that although nurses have an increased risk perception of bioterrorism, they do not perceive it as a legitimate threat to their own community. Whether health care professionals recognize the potential global threat of a bioterrorism attack using an infectious disease, regardless of the where the attack is originated,

is not known. It appears as though they perceive other communities to be at risk but do not realize the potential impact on their own community if infected individuals visit their area or if community members are exposed to infectious disease when traveling.

Nurses' perceptions about the threat of emerging infectious diseases are different from those related to the risk of bioterrorism. There is more perceived risk of emerging infectious diseases than bioterrorism. Nurses in Hong Kong were asked about their perceived risks related to an avian influenza outbreak and about half reported that they believe that there will be an avian influenza outbreak in their community (Tam, Lee, & Lee, 2007). It appears that perceived risk of infectious disease disasters varies by the type of event, and this may have an influence on nurses' level of involvement or interest in preparing for various types of infectious disease disasters.

In addition to perception of risk about an event occurring, nurses may also have a perceived risk of becoming infected during an infectious disease disaster that might influence their willingness to get involved in preparing for infectious disease disasters. For instance, Tam and colleagues (2007) reported that the majority of nurses surveyed in Hong Kong accepted a personal risk of avian influenza as part of their job and reported that they were afraid of contracting the disease if they were assigned to care for a patient with this illness. However, the researchers did not assess these nurses' interest or participation in infectious disease disaster preparedness, so it is difficult to determine if this perceived risk translates into an interest to be better prepared.

Although linking perception of exposure/disease risk to involvement in education has not been studied, researchers have looked at the link between perceived exposure risk and willingness to report to work. A 2006 study by Balicer and colleagues examined public health professionals' risk perception related to pandemics and reported that about half of all public health professionals are not willing to work during a pandemic, although clinical public health staff (whom are likely nurses) are more likely to report to duty than nonclinical workers. Qureshi and colleagues (2005) reported similar findings when examining health care workers from the New York City area. Health care workers reported being less willing to report to duty during a disaster involving an infectious disease (such as a pandemic or a smallpox bioterrorism event) than during a severe snowstorm, natural disaster, or chemical terrorism event (Qureshi, et al., 2005). While these studies examine workers' perceptions of risk related to becoming exposed or

becoming ill while working during a disaster, they do not assess risk perception in relation to getting involved in infectious disease disaster preparedness. Therefore, it is difficult to tell if nurses' risk perceptions have any influence on their participation in infectious disease disaster preparedness.

Although hard evidence is lacking because the topic has not been studied, adult learning theory seems to support the hypothesis about the positive relationship between risk perception and engaging in preparedness efforts. This theory has asserted, "Adults will commit to learning when the goals and objectives are considered realistic and important to them. Application in the 'real world' is important and relevant to the adult learner's personal and professional needs" (Speck, 1996, p. 1). In other words, adults do not learn topics that they do not perceive to be personally relevant. Because research has indicated that nurses do not believe that bioterrorism is likely to affect their community, one can deduce from adult learning theory that this means that these nurses will not voluntarily seek out education on bioterrorism preparedness or participate in bioterrorism simulation exercises (Helget & Smith, 2002; Rose & Larrimore, 2002; Shadel et al., 2001). Because nurses' risk perceptions related to an outbreak of an emerging infectious disease or pandemic has not been assessed, it is impossible to know how interested nurses are in receiving education related to preparing for these events.

Other Factors that Influence Nurses' Involvement in Infectious Disease Disaster Preparedness

Other potential influencing factors include a lack of motivation, time, or administrative support. Do nurses believe emergency preparedness is important but relegate it as a lower priority than more tangible, pressing issues, such as preparing for a Joint Commission survey? Perhaps nurses consider infectious disease disaster preparedness essential but lack the time or financial and administrative support to participate in such endeavors. These are potential factors that may affect nursing infectious disease disaster preparedness negatively, but they have never been studied.

On the opposite end of the spectrum are the potential influencing factors that may result in nurses' decisions to engage in infectious disease disaster preparedness initiatives rather than to avoid them. One such example is the political pressures applied by regulatory agencies. Many health care facilities have been threatened with the "stick" of being cited for deficiencies by

regulatory agencies, such as the Joint Commission, if compliance is not met (American Hospital Association, 2000). Infectious disease disaster preparedness in the form of revised Joint Commission standards has occurred in response to social and political pressures to prepare U.S. health care facilities to respond effectively to an influx of potentially infectious patients. From a nursing administrator perspective, adherence to these new standards may be a potential threat, or stick, if compliance is not met.

Although some specialties of nursing, such as administrators, may view regulatory mandates as a stick, others consider it an incentive, or "carrot." Some departments, such as infection control, may benefit from the addition of infectious disease disaster standards. This assumes, of course, that hospital administrators financially support the development of these infectious disease disaster preparedness strategies in order to meet the new Joint Commission standards. This could result in additional funding for infection control and other nursing departments. Whether a carrot or a stick, regulatory mandates of preparedness efforts should result in better infectious disease disaster preparedness for nurses.

Unfortunately, all of the aforementioned potential influencing factors that may affect a nurse's decision to become better prepared for infectious disease disasters are simply educated guesses. Little empirical data exist on which to base these assumptions. The reasons nurses choose not to engage in infectious disease disaster preparedness activities must be discovered so that they can be addressed. It is unfortunate that these questions are not being studied, because answering these questions is critical to determine why subsets of nurses are not pursuing preparedness initiatives.

Despite these potential influencing factors, or perhaps because of them, nursing as a profession has embraced the need for infectious disease disaster preparedness slowly. In the process, nursing professional organizations, conferences, and journals have begun addressing bioterrorism and emerging infections preparedness issues. Although the profession of nursing as a whole has taken on the challenge of infectious disease disaster preparedness, many individual nurses still are not participating in a full range of infectious disease disaster preparedness initiatives.

The problem with this is that nurses do not function in a vacuum. The preparedness of a facility or community depends on its employees' and members' level of preparedness. Emergency preparedness for bioterrorism, emerging infections, or other disasters is a

cooperative initiative. All health professions will be required to work together if they hope to mount an effective response to a bioterrorism attack or outbreak of an emerging infectious disease. Furthermore, health care and public health will be required to work collaboratively with outside agencies, such as local, state, and federal law enforcement; fire protection; emergency medical services; and a host of other responding agencies.

NURSES' ROLE IN INFECTIOUS DISEASE DISASTER PREPAREDNESS

Nurses will play an integral role in the response to a bioterrorism attack or outbreak of an emerging infection. Nurses must take responsibility for becoming better prepared. This is important not only to protect the safety of patients, patients' families, visitors, and staff but also to protect nurses' families and themselves. Past disasters have illustrated the need for more involvement of nurses in responding to the infectious disease-related consequences of emergencies (Rebmann, Carrico, & English, 2008; Rebmann, English, & Carrico, 2007). This is true for both hospital settings and community settings, such as evacuation centers for displaced individuals (Rebmann, et al., 2008).

The SARS outbreak emphasized the need for nurses to become prepared for major outbreaks of infectious diseases. Severe acute respiratory syndrome spread rapidly through households and health care settings, most notably hospitals (CDC, 2003a; Grow & Rubinson, 2003). In Canada, 40% of SARS infections occurred in health care workers, and nurses were one of the most frequently affected groups (Health Canada, 2003a). Experts postulate that nurses' SARS infections were related to two factors: (1) nurses' frequent and prolonged contact with infected patients and (2) the lack of or improper implementation of infection control procedures (Farquharson & Baguley, 2003; Health Canada, 2003a). To some extent, nurses cannot control the amount of time they spend with infectious patients, but they can protect their families and themselves by becoming familiar with proper infection control procedures and strictly adhering to them.

Infection Prevention as Part of Infectious Disease Disaster Preparedness for Nurses

More stringent adherence to basic infection control practices is a necessity for all nurses, during day-to-day duties and following an outbreak of an infectious

disease. Research has indicated that most health care providers, including nurses, are lax when it comes to following proper infection control. Proper hand hygiene is the single best infection control practice for controlling the spread of infectious diseases in any health care setting, yet many nurses do not do it sufficiently or often enough. Hand hygiene studies report bacterial counts ranging from 40,000 to 4.6 million on health care worker's hands, indicating that current hand-washing practices are not adequate (Boyce & Pittet, 2002).

Poor hand washing is but one example of poor compliance with basic infection control procedures that prevent the spread of disease. Another practice, respiratory hygiene, is especially important for preventing the spread of diseases in the health care setting and protecting oneself from illness. Respiratory etiquette consists of a series of infection control measures that are implemented as soon as a potentially infectious patient is encountered. Examples of respiratory etiquette interventions include covering one's nose and mouth when sneezing or coughing, the wearing of masks, and hand hygiene after contact with such a patient.

Appropriate hand hygiene and respiratory etiquette are but two components of proper infection control. Other important infection control procedures include rapid recognition of potentially infectious patients and immediate placement in appropriate isolation. Infection control and prevention strategies are critical components of preparedness for bioterrorism and emerging infections. Strict adherence to infection control will protect nurses from infectious diseases and decrease the spread of illness in all health care settings.

SUMMARY

Every nurse must accept the personal responsibility of becoming better prepared to recognize and respond to a bioterrorism attack or outbreak of an emerging infectious disease. A better response to such an attack will result in better outcomes, including decreased morbidity, mortality, and associated costs. Infectious disease disaster preparedness is the responsibility of all nurses, and nurses must embrace this area of study as they have all other components of nursing science. This not only will enhance hospital and community preparedness but also will contribute to the protection of nurses' families and themselves.

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Compassion Fatigue in Nursing

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“**T**his woman’s situation broke my heart . . .” These were the words of “Jackie,” a registered nurse (RN) specializing in bone marrow transplants cited by writer Carla Joinson in an historic article in *Nursing Magazine*. This nurse, Jackie, was talking about a patient of hers who died under her care and who reminded her of herself. Joinson (1992) was the first to introduce the concept of “compassion fatigue” that now is widely applied not only to nurses but also many others—both professionals and volunteers—who work with the suffering. Joinson used the term in a generic way and not for the purpose of classification. Figley (1995a) defined the concept more precisely as a secondary traumatic stress reaction that is sufficiently similar to vicarious trauma (McCann & Pearlman, 1990) for the purpose of this review.

The purpose of this chapter is to provide a comprehensive review of the literature regarding compassion fatigue (CF) in nursing in order to better prepare nurses for the challenges as well as the joys of nursing practice. Secondly, the purpose here is to stimulate interest—theory, research, and intervention—to notice and care for nurses now suffering from the symptoms of or the full syndrome of CF. We hope that this chapter will lead to greater appreciation for the emotional power and impact of nursing for the practitioner not just the patients.

NURSING STRESS

Qualitative studies revealed themes of stress for nurses who were exclusively involved with caring for terminal patients and experienced a true sense of loss when their patients died (Gray-Toft & Anderson, 1986; Maytum, Heiman, & Garwick, 2004). Findings in Maytum and colleagues’ study (2004) reported a host of symptoms and triggers associated with burnout and CF. The majority of the 32 triggers were work related and were

grouped into four major categories: work overload, system issues, professional roles, and caring for children with chronic conditions and their families. Other triggers included dealing with very emotional families with unreasonable expectations and seeing repeated painful procedures and treatments performed on children. The most common personal trigger was becoming overly involved with patients or families and crossing professional barriers (Maytum et al., 2004).

Findings of studies focusing on nursing in emergency room settings and psychiatric units find that stress is most often associated with those engaged in trauma work (Chase, 2005; Clark & Gioro, 1998; Schwam, 1998). A physical and emotional burden could be apparent among emergency room nurses who empathetically care for dying or trauma victims on a routine basis (Schwam, 1998). An especially or potentially burdened at-risk nursing group is the emergency room nurses who empathetically care for dying or trauma victims on a routine basis.

BURNOUT

Burnout, originally suggested by Freudenberg (1974) is a global description of worker dissatisfaction. The most commonly invoked definition of burnout is that developed by Maslach and Jackson (1981), “burnout is a syndrome of emotional exhaustion and cynicism that occurs frequently among individuals who do ‘people work’ of some kind. A key aspect of the burnout syndrome is increased feelings of emotional exhaustion” (p. 99). More recently Maslach (2003) has suggested that burnout is a function of work overload, lack of control and rewards, unfair treatment as an employee, workplace social support, and conflicting values that result in (1) emotional exhaustion, (2) depersonalization, and (3) reduced personal accomplishment from long-term involvement in a demanding situation. As a

consequence, the characteristic symptoms of burnout include exhaustion, cynicism, inadequacy, depression, emotional stress, and detachment. Burnout results in workload and institutional stress. Figley has suggested that burnout is a process that begins gradually and progressively intensifies (Figley, 1995b).

Burnout in Nursing

In 2004, the national average age of all RNs was 46.8 years of age as compared to 45.2 years in 2000, and 44.3 years in 1996 (Health Resources and Services Administration [HRSA], 2006). Approximately 50% of nurses cited burnout and a stressful work environment as the reason for no longer working in the nursing profession (HRSA, 2006). Thus, factors such as general population growth, the aging nursing workforce, and work-related stress may lead to factors in future nursing shortages (HRSA, 2006).

The results of quantitative studies noted that high education levels, stress from continuously being faced with difficult family dynamics, and multiple patients' dying within a short period of time were related to high burnout scores. Additionally, these factors had a cumulative effect on nurses' coping abilities (Adams, Hershatter, & Moritz, 1991; Dean, 1998; Gray-Toft & Anderson, 1986; Keidel, 2002; Masterson-Allen et al., 1985) as well as patient satisfaction (Leiter, Harvie, & Frizzell, 1998). Studies have been conducted on stress and burnout that may have been precursors to the concept of CF in many professions, including hospice nursing (Bene & Foxall, 1991; Dean, 1998; Payne, 2001).

Barriers that could increase the emergency room nurses' risk for burnout are lack of diversity and workforce shortages (Price, 2001). Nursing shortage by-products consist of short staffing and extended overtime demands that add additional stress factors causing psychological illnesses such as burnout, resulting in nurses leaving the profession to pursue other careers (Atencio, Cohen, & Gorenberg, 2003).

COMPASSION STRESS IN NURSING

In addition to the daily grind of nursing are the requirements to be compassionate—to listen to patients with the mind and with the heart to better serve them. Through the lenses of a CF model to be discussed later, it is easy to see why the emotional toll of nurses was missed until recently. Compassion stress is the pressure to be empathic and sensitive to the emotional needs of patients.

According to the Department of Health and Human Services, the number of RNs licensed in the United States is between 2,897,467 and 2,921,467. Of these, 58.3% are working full-time, 25% work part-time, and 16.8% are not employed in nursing (Health Resources and Services Administration, 2006).

According to the American Hospital Association (2006), "By all accounts, the United States is in the midst of a significant shortage of registered nurses, one which is projected to last well into the future. Nationally, hospitals report an average vacancy of approximately 8.5%" (p. 1).

According to Hecker (2005), the Bureau of Labor Statistics has predicted that by 2014, more than 1.2 million additional nurses must be hired to keep up with the nation's health care needs, and the supply of RNs will be 64% of the demand by 2020. The effects of the nursing shortage are primarily in the hospital specialty areas of emergency, telemetry, and critical care (Albaugh, 2003).

Behaviors emanating from occupational stress and trauma revealed a central theme of empathy in nursing. Riggio and Taylor (2000) identified that empathy is an essential aspect of nursing when it takes the form of "perspective taking" and "empathic concern"; however, once empathy becomes unhealthy it leads to "personal distress," thus adding to the compassion stress of nursing.

COMPASSION FATIGUE

Compassion stress, without proper management, leads to CF. Compassion fatigue is an extreme state of tension and preoccupation with the suffering of those being helped to the degree that it is traumatizing for the helper (Figley, 1995a; 2002). More specifically, Figley (1995a) defined compassion fatigue as "the natural and consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other—the stress resulting from helping or wanting to help a traumatized or suffering person" (p. 7).

Like burnout, CF symptoms are associated with emotional exhaustion, but in addition, the condition is also similar to post-traumatic stress disorder in that nurses with CF are traumatized by their work in treating the suffering. Pearlman & Saakvitne (1995), however, have pointed out that the concept of burnout fails to incorporate the interaction of the context of trauma work with the individual. CF is the condition of being overwhelmed and unable to effect positive change

(Figley, 2002; Collins & Long, 2003a, 2003b; Sabo, 2006). CF is also associated with a sense of confusion, helplessness, and a greater sense of isolation from supporters than is seen with burnout (Figley, 1995a, 2002).

In a recent study of hospice nurses, Abendroth (2005) found that 17% ($n = 37$) of the nurses indicated that they received no support from their own defined professional support system (i.e., peers, supervisors, administrators) after a patient's traumatic death. Eighty-three percent ($n = 31$) of those participants were in the moderate-to-high risk CF category. An inability to debrief after a traumatic event resulted in diminished internal coping mechanisms (Abendroth & Flannery, 2006). This finding confirms the results of earlier studies (Dean, 1998; Mallet et al., 1991), which demonstrated that lack of support after experiencing a patient's traumatic death had an impact on these nurses. More generally, the literature supports the belief that lack of support during occupational stress and trauma leads to psychological distress (AbuAlRub, 2004; Olofsson, Bengtsson, & Brink, 2003).

Findings in Chase's qualitative study (2005) of CF risk in emergency department nurses revealed that themes such as feeling overwhelmed or abandoned, having a loss of control, and anxiety were supported by their scores on the Compassion Fatigue Self-Test for Helpers (Figley, 2002). The results of the studies revealed that emergency department nurses' experiences with CF and work-related stress affect patient care and nurses' physical and mental well-being. Little points out that emergency room nurses ought to note that experience is not a guard against reactions and responses (2002).

CF risk in public health nurses has come to the forefront with the increased incidence of hurricane relief efforts in the south. Frank and Adkinson (2007) studied a sample of public health nurses ($n = 55$) and revealed that 76% were at low risk for CF; however, they noted that this percentage may have been due to several factors including (1) a single, 2-week deployment; (2) no prior disaster relief experience; and (3) being surveyed 3 to 4 months after their experience. It was further noted that the majority of nurses did feel a sense of disruption to their lives and felt they could not contribute more than they did, which could suggest a vulnerability to CF (Frank & Adkinson, 2007).

Compassion Fatigue in Other Professions

Similarities between nurses and other professions have been noted in the literature regarding CF risk (Salston & Figley, 2003). Boscarino, Figley, & Adams (2004), for

example, studied 236 social workers who were random sample of members of the National Association of Social Workers working in New York City following the 9/11 terrorist attack. It was the first study that conclusively demonstrated the existence of CF, apart from burnout. They found that controlling for demographic factors, years of counseling, and personal trauma history, CF was positively associated with terrorist attack victims ($p < .001$) and negatively associated with having a supportive work environment ($p < .01$). In contrast, job burnout was negatively associated with having a supportive work environment ($p < .01$), but not associated with working with terrorist attack victims.

The same research team (Adams, Boscarino, & Figley, 2006) has conducted a validation study focusing on psychological distress and CF among 233 social workers who worked with traumatized clients. The authors took into account several factors such as the following: (1) recent negative life events, (2) lifetime trauma, (3) social support, (4) work environment, and (5) sense of mastery. The authors argue that the results of the study indicate "that therapists can suffer from CF, which contains two components, secondary trauma and job burnout" (p. 108).

CF risk among chaplains and other respondents after the September 11, 2001, New York Twin Towers disaster was studied, and it was reported that 55% of the sample ($n = 403$) were in the moderate-to-high CF risk category (Roberts, Flannely, Weaver, & Figley, 2003). Another finding of the study noted that workplace proximity to Ground Zero, and length of time volunteering for a relief agency, had no effect on CF risk (Roberts et al., 2003). These findings were similar to Abendroth and Flannery's study of hospice nurses (2006), which reported that demographic and work-related variables did not have a major discriminating value on CF risk; however, 79% ($n = 170$) of the total participants ($n = 216$) in this study had a higher percentage of being in the moderate-to-high risk category than the ones in the aforementioned study. The nurses in this study were exposed to ongoing career stressors, such as patient death and family crisis, on a continuous basis, making these factors some of their daily work stressors; whereas, the participants in the previous study had a controlled period of episodic acute stress.

Figley and Roop (2006) using standardized measures of CF in a large-scale study of 780 animal care workers (i.e., those who work in shelters, animal rescue, and veterinary offices) report that CF risk was very high (53.1%), in contrast to burnout being extremely low (45.6%), and

CF satisfaction ranged from good (43%), to high (21.4%), and extremely high (3.9%).

In a study of 132 marriage and family therapists (MFTs) Lee (1995), found a statistically significant relationship ($r = .20$) between CF scores and caseload dissatisfaction. However, MFT professionals, as a group, are experiencing only a moderate level of CF, as measured by the Impact of Event Scale (IES). More recently, Gentry (2005) in a study of 82 MFTs, made a startling discovery. It was found that the only factor that significantly predicted violations in their code of ethics was the presence of CF ($r = .40$; $p = .002$). Similar presence of CF was found among a wide variety of caregiving professions, including first responders (Salston, 2000), child protection workers (Bride, Radey, & Figley, 2007; Myers & Cornille, 2002; Nelson-Gardell & Harris, 2003), military veteran counselors (Munroe et al., 1995), mental health counselors (Brady et al., 1999; Pearlman & Mac Ian, 1995), domestic violence counselors (Bell, 2003), sexual assault counselors (Ghahramanlou & Brodbeck, 2000; Schauben & Frazier, 1995), and various health care services (Cunningham, 2003; Dane & Chachkes, 2001). This research clearly indicates that caregivers of the traumatized are at risk of experiencing symptoms of traumatic stress, disrupted cognitive schema, and general psychological distress as a result of their work (Bride et al., 2004).

Compassion Satisfaction in Nursing

Compassion satisfaction serves to counterbalance compassion stress. Nurses feel pleasure and gratification from helping others and being an effective caregiver. Nurses may implement a mechanism that will

produce motivation and support well-being as an essential element in caring for people (Collins & Long, 2003b). Blegen (1993) conducted a meta analysis of variables reported in 48 separate studies of job satisfaction; his work revealed that job satisfaction was most strongly (and reversely) associated with stress ($-.609$) and organizational commitment (.526). Yet, the sense of pride in being a nurse and the sense of satisfaction derived from being appreciated by suffering clients is rarely studied but widely assumed. Compassion satisfaction is one of the key factors in managing and mitigating CF.

CONCEPTUAL MODEL OF SECONDARY TRAUMATIC STRESS

Figure 80-1 provides a graphical representation of important factors in the development of CF (Figley, 2001) that was originally called the trauma transmission model (Figley, 1995b). It reads from left to right and predicts that each of the eleven factors accounts for or facilitates the transmission of trauma that results in CF. It suggests that nurses, in order to provide the proper empathic response to their patients must first have the ability to be empathic, be sufficiently concerned to be empathic, and then actually be exposed to the patient. The model then suggests that compassion stress that leads directly to CF is modulated by two important factors, disengagement strategies and skills, which are indicated by the success with which nurses manage their stress and disengage from work, and patient care during and following their shifts. Three other factors determine CF in addition to compassion stress: (1) prolonged

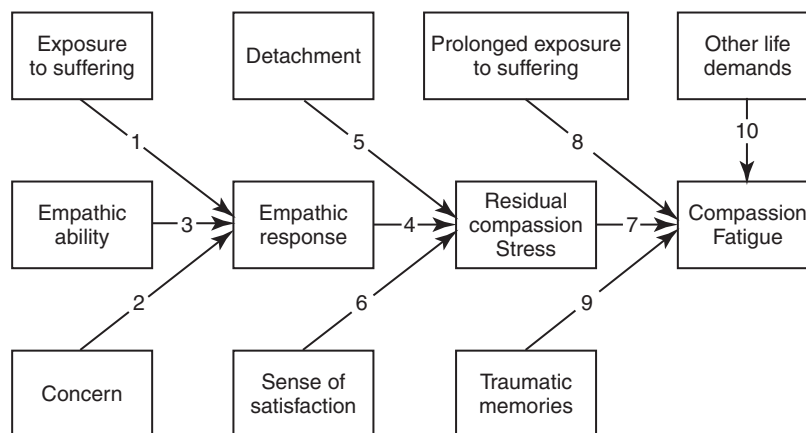


FIGURE 80-1 The Compassion Fatigue Model.

exposure to the demands of patient care (e.g., extended shifts, additional shifts, no vacation), (2) previously unresolved traumatic experiences that are triggered by certain patient care contexts, and (3) various life disruptions that can happen to anyone at any time. Badger, Royse, and Craig (2008) recently reported the predictive ability of empathy, emotional separation, occupational stress, and social support on CF in 121 trauma center hospital social workers. The variables of emotional separation and occupational stress explain 49% of the variance in CF scores.

Abendroth (2005) combined Figley's model of CF (1995b; 2002) with Neuman's (1995) Systems Model, and Selye's (1956, 1976) stress theory to provide the conceptual framework that guided a study on CF risk among hospice nurses (Abendroth, 2005). This framework presented a better understanding of the relationship between various nurse characteristics and CF risk from a system's perspective. Figley's model contributed strongly to a social science framework that led to an understanding of emotional and situational factors that were instrumental in predicting the risk of CF, and thus aids in preventive efforts. His conceptual model provided a belief that empathy and emotional energy were essential to establish an effective therapeutic relationship; however, prolonged exposure to suffering without respite increased CF risk. In addition to work-related variables, such as lack of support after traumatic events, nurses exhibited behaviors resulting from exposure to traumatic events, such as being on edge due to helping, and being preoccupied with thoughts of their patients (Abendroth, 2005).

The results of the study reinforced the combined theorists' model that depicted the human self as a holistic being who lives in a multidimensional system that is constantly inundated by various stressors such as trauma, life demands, and factors that cause a blurring of professional boundaries, such as excessive empathy. The themes of trauma, excessive empathy, and life demands were found to be key stressors which lead to CF risk (Abendroth, 2005).

Helping Nurses with Compassion Fatigue

Aided with the Compassion Fatigue Model, the first step in preventing or ameliorating CF is to recognize the signs and symptoms of its emergence. Being aware of these factors can help nurses both prevent and recover from CF by (1) being aware of the costs of empathic responses; (2) more effectively managing the cumulative effects of compassion stress; (3) engaging in self-care and stress management strategies that

increase caring disengagement at work and at home; (4) being more aware on a daily basis of the satisfactions of dispensing compassion to patients and fellow staff members; (5) not overextending and overworking; (6) being aware of and processing any unwanted traumatic memories, and (7) being aware, patient, and accepting of various life disruptions.

Pfifferling & Gilley (2000) have offered a useful list of "warning signs" of CF. These include abusing drugs, alcohol or food; anger; blaming; chronic lateness; depression; diminished sense of personal accomplishment; exhaustion (physical or emotional); frequent headaches; gastrointestinal complaints; high self-expectations; hopelessness; hypertension; inability to maintain balance of empathy and objectivity; increased irritability; less ability to feel joy; low self-esteem; sleep disturbances; and workaholicism. Another more rigorous method is utilizing one or more tools available to measure CF (see Bride, Radey, & Figley, 2007 for a review). Three in particular are the most widely used in the ongoing monitoring of CF. The first is the Secondary Traumatic Stress Scale (STSS) (Bride et al., 2004). Each of the 17 items of the STSS are designed to tap one of the DSM-IV-TR (APA, 2000) criteria for post-traumatic stress disorder, but are worded in such a way that they assess symptoms due to indirect exposure to traumatic events through clinical work with traumatized populations. The second is the Compassion Fatigue Short Scale (Adams et al., 2006), which has evolved from Figley's (1995a) original Compassion Fatigue Self-Test. The Compassion Fatigue Short Scale is a 13-item measure that is comprised of an 8-item burn-out subscale and a 5-item secondary trauma subscale. Both instruments have documented evidence of reliability and validity (Adams et al., 2006, 2008; Bride et al., 2004; Ting et al., 2005). The third is the Professional Quality of Life (ProQOL): Compassion Satisfaction and Fatigue Subscales, R-IV (Stamm, 2005). It is a 30-item measure designed to determine estimates of CF, compassion satisfaction, and burnout. In addition to ongoing monitoring of secondary traumatic stress (STS) reactions, caregivers can implement a number of strategies in their personal and professional lives to reduce the impact of CF.

In their personal lives, nurses should strive to maintain a balance between their professional and personal lives by engaging in methods of self-care. Self-care includes stress management activities, such as engaging in leisure activities, exercise, sleep, adequate nutrition, meditation, spending time with loved ones, and seeking personal psychotherapy as needed. Other ways to bolster resistance to STS reactions

include nurses being able to recognize their tendency to ignore their stress level and learn to accept their professional and personal limitations (Badger, 2001). Certain work situations may warrant an extended vacation, which can help the nurse gain perspective and a renewed sense of self. Others find that journaling may be a way to ease stress and communicate tense feelings. Maintaining a sense of humor is also an important technique to manage the stressors at work as well as at home. Dean and Major (2008) found that humor is associated with enhancing humanity in that it increases teamwork, eases tension, increases emotional flexibility, and enhances the connection between nurses and their patients. Professional coping strategies include: (1) balancing a clinical caseload with other professional activities, (2) developing realistic expectations for working with traumatized clients, (3) engaging in advocacy activities for traumatized populations, and (4) being aware of unresolved personal trauma issues (Pearlman & Saakvitne, 1995).

Organizations must take responsibility for their part in preventing and ameliorating CF. Alert administrators must be observant of nurses who exhibit signs of CF risk. Nurses who often define themselves as "being their job" may be at particular risk because they may easily begin to blur the professional/personal boundaries with their patients. Administrators must also be open to listening to the voices of nurses when they say things like "... no relief when you have multiple deaths in a day or week, not recognizing the nurse needs time to refill the well" (unsolicited comment from a survey instrument) (Abendroth, 2005). The research literature repeatedly suggests that a supportive organizational culture is essential in order to help nurses validate their feelings through supervision. To readily have access to support teams is essential for nurses to feel safe, supported, and understood (Gellar, Madsen, & Ohrenstein, 2004). Nurses may leave the profession if a supportive organizational culture is absent. The financial cost and cost effectiveness of having to continually train new nurses may be easily measured and should be of concern to organizations. More difficult to measure is the loss when an experienced nurse leaves the profession. Many nurses have highly trained skills that encompass in-depth knowledge of complex symptoms of multiple diseases that affect the body, mind, and spirit. Not only is there a financial impact to an organization when they leave the profession, there is a huge loss of mentorship to newer nurses, as well as a loss of established relationships with physicians.

SUMMARY

Compassion fatigue is a natural consequence of providing care to sick and needy patients. Recognizing STS as an occupational hazard of nursing is the first step in organizational prevention. Flemister (2006) concluded her guest editorial with her wisdom of a 20-year wound, ostomy and continence nursing veteran:

... I have watched too many gifted, caring nurses just walk away. Would they have walked away if we had been aware of their needs? Could we have helped them to recharge and renew their passion for nursing? With the support of each other, we can empathize with our patients without risking ourselves (p. 466).

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SECTION 11

Global Nursing Considerations

Issues Abroad

PERLE SLAVIK COWEN ♦ SUE MOORHEAD

Nurses have long been concerned about how they can best serve disadvantaged populations around the world. As the 21st century unfolds, global activism has become popular, with nurses desiring an experience with a humanitarian organization. We are fortunate to have an elite community of international nurses who can provide insight into the many global health issues of concern to nursing and to provide insight into the many issues at this level. We would like to thank Dr. Barbara Anderson and Dr. Katherine Camacho Carr for their guidance in designing this section and in assisting us in selecting nurse experts who could launch this topic in a meaningful and meticulous fashion. This section does not have a debate chapter; it provides a spotlight on nursing's many leadership and clinical roles in providing care to at-risk populations on an international basis: global nursing.

Much of the world today lacks the ability to provide the basic necessities of food, clean water, sanitation, decent shelter, and clothing. Wealth and income comparisons among countries are startling: The least developed countries, with the poorest health indicators, have average national incomes of \$438 annually, compared with over \$37,000 in the industrialized countries (UNICEF, 2008). As a result, an estimated 1.4 billion people—over one-fifth of the world's population—live in extreme poverty, spending less than \$1.25 a day for all of their needs (Chen & Ravallion, 2008). As you read the chapters in this section, we urge you to keep this in mind and to identify some of the broader issues that seem to be recurring themes within the chapters.

In the opening chapter, Barbara Anderson and Katherine Camacho Carr raise the issue of the global nursing shortage with its underpinnings in the current and projected shortage of American nurses. At present, in U.S. hospitals, there are 126,000 vacant nursing jobs, estimated to rise to 400,000 by 2016 and to 1 million

by 2020. There is general agreement that the source of the nursing shortage lies in the inadequate numbers of new graduates to keep pace with the growing health care needs of the nation and the aging of the current nursing workforce and that on the root level there is a severe shortage of prepared and available nursing faculty. The authors note that the United States is not the only nation experiencing a severe nursing shortage; the shortage is global, with most of this deficiency in the poorer nations of the world. The immediate "quick fix" to the problem has been to recruit nurses from other countries to fill the staffing needs in U.S. and European health care facilities. This house of cards is examined in a precise manner, including the impact of the nursing migration on the closing of health facilities in poor nations. The ethical and social justice issues are painstakingly explored in this excellent chapter.

Richard Garfield and Anne-Marie Rafferty provide a compelling discussion of the conflicting values and roles that nursing faces in global conflicts. They first present a solid framework in evolving terminology, epidemiology, and the nature of war, conflict, and violence. They cite grim statistics, noting the following:

The 40-fold rise in the number of deaths among soldiers in the 20th century greatly exceeded a doubling of the globe's mid-century population. Military deaths per million population rose 18-fold from the 19th to the 20th century. Genocide and democide-related deaths also rose in the 20th century as the centralization of large political and economic systems and the emergence of new technologies made mass killings possible.

They bring forth an objective worldwide view of world violence trends, and it is disturbing. They also deliver an engrossing review of the roles for nursing in a world of conflict, noting that nursing has remained largely invisible in the accounts of organizations asso-

ciated with war, relief, and humanitarian assistance. They state, “Today, among nongovernmental organizations like Save the Children and Doctors without Borders, few know that there are as many nurses as doctors serving in crisis areas around the world” Garfield and Rafferty advocate for research that focuses on civilian women, who are frequently the “forgotten victims” in conflict, and better training for nurses to deal with the harsh realities of global conflict. This is an extraordinary chapter, and it delivers many important messages.

Marjorie Muecke provides new and insightful findings related to the politically forced “invisibility” of chief nurses at the World Health Organization from 1951 to 2009. She details the history of the World Health Organization (WHO), which was established with a constitution in 1948 as an intergovernmental agency charged with serving as the health arm of the United Nations. She notes that “by 1948 it already had a history,” and we are off and running through the first directors, the conditions they worked under, strategic alliances, the “golden age” of nursing at the WHO, and beyond. This is a fascinating read, and you will not be able to put it down.

Mary Anne Mercer contributes an elegant chapter that identifies the global health needs and priorities in developing countries. She provides an excellent review of health disparities, clearly detailing the base problems of poverty and inequality. Mercer delivers an insightful section on developmental paradigms that provides many views to the issues. Her analysis of the Structural Adjustment Program was remarkable, and it convinced me to send a copy of this book to President Barack Obama. In her discussion of the role of health services, she provides hope in noting that “experience in a few unusual settings has shown that even in places with very low levels of resources, health and general prosperity can rise if those resources are shared equitably.” This comprehensive chapter is a must read.

Katherine Camacho Carr and Barbara Anderson provide a thought-provoking final chapter and question whether nursing and midwifery are responding to the global health agenda. They note that there are many

significant differences in health outcomes between developed and developing countries, including a shortened life span; an increased risk of contracting HIV/AIDS, malaria, tuberculosis, and other diseases; an increased risk of dying from pregnancy-related causes; and an increased risk of dying in infancy or childhood. They provide an excellent detailed analysis of the UN Millennium Developmental Goals (MDGs) and the United States’ impact on global health, including three key U.S. policies that have had a negative effect on the MDGs: the global gag rule (formally known as the Mexico City Policy), the cessation of support to the United Nations Population fund, and the support of abstinence-only funding. They posit that as largely female professions throughout the world, nursing and midwifery can provide strong role models for other women, especially when they are included, rather than ignored, in the decision-making and policy processes, particularly in male-dominated cultures. This is a truly essential and critical chapter to understanding the international issues of health care.

The reader is urged to review these chapters often. They involve nursing researchers whose work you will want to follow and watch for, and perhaps join. These are global health wizards who should be tapped for think tanks and upper-level government advisors. They are extraordinary nurses. The impact of conflict across the globe is addressed by the chapter focused on nursing in wars. Garfield notes, “Our ideas of nursing are shaped by images of nurses in war. It was war, after all, which brought Florence Nightingale into public prominence and provided her with a powerful platform for military and social reform. But therein lies the paradox. For although war may shine a light on nursing, it can often blind the observer to what nurses actually do.”

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The Global Nursing Shortage—An Issue of Social Justice

BARBARA ANDERSON ♦ KATHERINE CAMACHO CARR

When the U.S. Bureau of Labor Statistics announced in November 2007 that nursing is the top-growth occupation through 2016, the president of the American Association of Colleges of Nursing (AACN), Fay Raines, stated that this was good news for the nurses and nursing students. She also pointed out the bad news: the critical shortage of practicing nurses and lack of adequate numbers of students currently undergoing preparation for the profession (Raines, 2008). In U.S. hospitals today, 126,000 nursing jobs have not been filled, and the number is estimated to rise to 400,000 by 2016 and to 1 million by 2020 (Chaguturu & Vallabhaneni, 2005; Kuehn, 2007; Spacracio, 2003).

The nursing profession represents the largest cadre of health professionals in America: 2.4 million strong (American Association of Colleges of Nursing, 2008b). The current and projected shortage of American nurses is a national crisis in light of the essential role that nurses play in protecting patients and sustaining the health care system. Inadequate staffing ratios, high acuity, the aging of both the general population and the nursing workforce, and the increasing numbers of adverse outcomes due to medical errors all combine to create a “perfect storm” (AACN, 2008b; Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Buerhaus et al., 2007; Hinshaw, 2008; Institute of Medicine, 2001; Page, 2004; The Joint Commission, 2008).

An inadequate nursing workforce is symptomatic of deeper issues. Overall, job satisfaction among nurses in clinical settings is very low (Christmas, 2008; Press Ganey Associates, 2008; Hinshaw, 2008; TJC, 2008). Retention of newly graduated nurses is a major issue (Oulton, 2006). Likewise, nursing educators express frustration and dissatisfaction with faculty shortages and poor employment conditions (Allen, 2008; Malone, 2007; National League for Nursing-Carnegie Foundation, 2007). There is general

agreement that the source of the nursing shortage lies in the inadequate numbers of new graduates to keep pace with the growing health care needs of the nation and the aging of the current nursing workforce. Further, this shortage is rooted in the severe shortage of prepared and available nursing faculty (Aiken, 2007; Allen, 2008; TJC, 2008). Contributing to the faculty shortage are low salaries for educators compared to clinicians; the age-delayed trajectory of nurses obtaining higher levels of education; the late point in career development for entering educative roles; the inability to fill open faculty lines; limited preparation of young nurses for educative roles; and the looming retirement of large numbers of currently employed nursing educators (AACN, 2008a, 2008c; American Academy of Nursing, 2006; International Council of Nurses, 2006; Kuehn, 2007; Ross, Polsky, & Sochalski, 2005; Yordy, 2006).

Consequently, admissions to many nursing education programs are capped due to lack of professors to provide the requisite high-intensity instruction. Yet, many students in America desire to enter the field of nursing, and the applicant pool is large. For those qualified applicants with adequate grade point averages and good grades in prenursing courses, it is very frustrating to be rejected in the admission process. The rejection of qualified applicants is directly linked to the lack of faculty and institutional resources (Ross, Polsky, & Sochalski, 2005). In 2005, 150,000 qualified applicants were turned away from all levels of nursing programs (Dugger, 2006; ICN, 2006; Yordy, 2006). In 2007, 40,285 qualified applicants were denied admission to baccalaureate and graduate-level programs due to these factors (AACN, 2008c). This high rate of denials has a profound effect not only on staffing hospitals with BSN and graduate level nurses but also on the development of nursing leadership in the nation. To counteract this social phenomenon, hopeful students with

adequate financial resources seek nursing education through “outsourcing”: entering programs in other nations—often poor, developing countries. A number of nations, especially those that desperately need hard currency cash flow, are offering admission to for-profit schools (Kingsbury, 2007). Currently, the nursing situation in United States is characterized by (1) not enough nurses to staff the hospitals at a safe level, (2) not enough professors to teach the large pool of interested students, and (3) increasing complexity of patient care. And there is no end in sight.

The United States is not the only nation experiencing a severe nursing shortage. The shortage is global. The World Health Organization (WHO) estimates that the world lacks more than 4 million health care professionals across 57 nations. Most of this deficiency in human resources is in the poorer nations of the world. For example, Sub-Saharan Africa, with 11% of the world’s population and shouldering 24% of the world’s illnesses (including the greatest burden of HIV/AIDS) has only 3% of the world’s health professionals (Chaguturu & Vallabhaneni, 2005; Garrett, 2007; ICN, 2006; “Poaching nurses,” 2006). In this region, there is a deficit of 620,000 nurses, leaving huge vacancies and gaps in care. In Kenya and Ghana alone, 50% of all nursing positions are unfilled (Chaguturu & Vallabhaneni, 2005). The nurses are not staying in this region of the world. Annually, according to the World Bank, 23,000 African health professionals, mostly nurses, migrate to affluent nations (Cholanda, 2005).

THE IMPACT OF NURSING MIGRATION ON GLOBAL HEALTH

There are many compelling reasons for the extensive migration of nurses around the world. While a few nurses migrate for the broadening experiences of travel and cross-cultural interaction, most nurses leave their less affluent homelands to improve their personal and family economic security, to improve basic working conditions, to seek opportunities for promotion, or to have a voice in health care policy and management. Remittances from their work in high-paying positions sustain their families left behind and provide a huge cash flow of hard currency to their poor nations. Further, migration may occur simply to stay alive when nurses are caught in areas of insecurity, conflict, or working conditions that lack basic protection from hazards, like HIV/AIDS (Aiken, 2007; Anderson & Isaacs, 2007; Cholanda, 2005; World Health Organization, 2006).

While migration may provide a positive good for individuals, families, and even economically for some nations, it also creates serious nursing workforce shortages in poor nations with high burdens of disease. The nurses are “simply not there” (Anderson & Isaacs, 2007, p. 392), undermining the delivery of health care in poor nations and contributing to closure of health care facilities (Cholanda, 2005; Dugger, 2006; ICN, 2006; Ross, Polsky, & Sochalski, 2005; Spacracio, 2003). In the Philippines, nursing leaders predict the collapse of the health care delivery system if the current nursing migration pattern continues, in spite of the nation’s efforts to balance national needs and the export of nurses to affluent regions (“Migration,” 2003; Spacracio, 2003).

Public health programs are highly impacted by the migration of nurses from poor nations. Community-based prevention programs, such as vaccination campaigns, and secondary intervention programs, such as administration of antiretroviral drugs, depend on skilled human resources. When the shortage of nurses is acute, public health programs languish, in spite of record high levels of external funding (Anderson & Isaacs, 2007; Buchan, 2006; Clark, Stewart, & Clark, 2006; Dugger, 2006; ICN, 2006; Kamal-Yanni, 2006).

As the “perfect storm” (Hinshaw, 2008, p. 4) of the U.S. nursing shortage has been brewing, the immediate “quick fix” to the problem has been to recruit nurses from other countries to fill the staffing needs in our health care facilities (Aiken, 2007). The United States is not alone. This is a common practice among some other affluent nations, such as the United Kingdom, which also has nursing shortages. Corporations from affluent nations actively recruit, using aggressive marketing campaigns, making promises that are not always kept. This recruitment strategy, without remuneration to the poor nations preparing these nurses, places a huge strain on health care delivery systems. When the recruitment is targeted toward a single facility, especially in a poor nation, the effect may be the collapse of the local health care system (ICN, 2006; Mensah, Mackintosh, & Henry, 2005; Oulton, 2006). The first author has personally witnessed the closure of a large pediatric hospital in a poor English-speaking nation subsequent to such a campaign. The Joint Commission (2008), in describing the nursing workforce as the most “in-demand health care resource across the globe” (p. 29), also points out that English-speaking nurses in poor nations are in especially high demand.

ETHICAL CONSIDERATIONS IN GLOBAL RECRUITMENT OF THE NURSING WORKFORCE

Hinshaw (2008) poses the question “What are the ethics of driving another country’s health care system into trouble due to the nursing shortage because nurses are being drawn to a country that pays higher salaries and has better working conditions?” This question has been raised extensively in the international community (Clark, Stewart, & Clark, 2006; Eastwood et al., 2005; Green, 2006; McElmurry et al., 2006; ICN, 2006; WHO, 2006; Xu & Zhang, 2005). This global conversation will be addressed in this chapter in the context of five premises about the serious and deepening global shortage of the nursing workforce and its impact on the health of nations (Table 81-1).

TABLE 81-1 Ethical Frameworks: The Global Nursing Shortage

Premise	Ethical Framework
A	Insofar as rogue nations or failed states have neglected to protect the citizens and have abandoned nation building and the collective actions of citizens have been unsuccessful in changing untenable situations, individual citizens may serve their nation better by leaving areas of insecurity, conflict, and oppression.
B	Every nation has the responsibility for building and planning for the future of its people.
C	Citizens who have been nurtured by their nation have a responsibility to contribute to the development of their nation and the protection of their people.
D	Human resources are a treasure for the nation, and all nations should respect the integrity of other nations to retain adequate human resources for the development and sustainability of their countries.
E	National planning should not be held hostage by unfair advantage or lack of planning by other nations. Justice demands that collaboration, capacity building, and planned migration are necessary in order to avoid structural violence against less economically powerful countries.

Premise A

Insofar as rogue nations or failed states have neglected to protect the citizens and have abandoned nation building and the collective actions of citizens have been unsuccessful in changing untenable situations, individual citizens may serve their nation better by leaving areas of insecurity, conflict, and oppression.

The ICN Code of Ethics (ICN, 2006) and WHO (2006) defend the right of nurses to practice their profession and to seek livelihood and personal security across the globe. When the environment is so insecure and the state has failed to protect its citizens, nurses may effect more positive changes by migrating from life-threatening situations. An example is Zimbabwe in southern Africa, where the nursing workforce has left en masse to protect their lives in the midst of social chaos (Cholanda, 2005).

Premise B

Every nation has the responsibility for building and planning for the future of its people.

The WHO has declared this decade “the decade of workforce shortage,” a call for investigation into the issues driving both the health care workforce shortage and the nursing migration to affluent nations. In the report “Why the Workforce Is Important,” the WHO has called for nations to identify strategies for a balanced distribution of workforce and for collaborative planning in the education and retention of the workforce. They have proposed a three-point plan addressing adequate nursing education, fair and reasonable working conditions, and management of migration (WHO, 2006). Many nongovernmental agencies and governments around the world have responded in kind and have identified ways to stem the hemorrhage of the workforce (Kamal-Yanni, 2006). Yet, the problem remains, largely due to inadequate planning and resource allocation by governments. Poor nations are admonished to increase the numbers of students in preservice education—basic nursing programs usually funded by the Ministries of Health.

They are also encouraged to develop retention plans, implement migration restrictions, and provide better job conditions for the workforce (Abyad, 2003; Kamal-Yanni, 2006; McElmurry et al., 2006; Padilla, 2006; Ross, Polsky, & Sochalski, 2005; Xu & Zhang, 2005). Xu and Zhang (2005), in a provocative paper in *Nursing Ethics*, called upon governments in developing countries to develop the political will to improve

the social and economic conditions of their nurses if they want to stem the migration. The problem of adequate allocation of resources is well recognized by leaders in poor nations. In an August 7, 2006, interview, Dr. Rudolph Cummings, the chief medical officer of the Guyana Ministry of Health, stated, “Unless we have remuneration and other services which give them a comfortable livelihood in the countries of their births, we are going to have this problem of migration” (Anderson & Isaacs, 2007, p. 394).

Affluent nations have not done much better in their planning. The United Kingdom has developed a code of recruitment ethics similar to the ICN code, but adherence to the code has been poor (ICN, 2006; “Poaching nurses,” 2006). Various nursing organizations in the United States have mounted intense advocacy campaigns and lobbied for a plethora of legislation at state and national levels. These efforts have targeted support for nursing education, faculty development, scholarships, and employment-retention strategies (AACN, 2006; Klestzick, 2007). Yet, the United States, which continues to be the number one recruiter of nurses globally, has no national nursing workforce policy. Further, it has cut funding to domestic nursing programs, does not subsidize domestic nursing education at the same level as many poor nations, and continues to tolerate the denial of large numbers of qualified applicants to American educational institutions (Aiken, 2007; Klestzick, 2007). This lack of planning has resulted in “outsourcing” a substantial portion of hospital staffing and nursing education to the developing world, largely without remuneration or participation in workforce capacity building in these nations.

The United States has the capacity to develop a self-sufficient nursing workforce similar to the pattern seen in a number of other affluent nations, such as Sweden. It has the authority to call for ethical standards in recruitment. Yet, it has not done so. It has no national plan for stabilizing or sustaining the domestic nursing workforce. It continues to recruit nurses externally, especially from poor nations where English is widely spoken. “The biggest challenge to nursing care is the inadequacy of staff. Guyana and the other Caribbean countries continue to be feeders to the nursing services to the North of us,” stated Dr. Cumming, Guyana Ministry of Health (Anderson & Isaacs, 2007, p. 392). What would Xu and Zhang (2005) have to say about political will, national responsibility, and planning within this affluent nation?

Premise C

Citizens who have been nurtured by their nation have a responsibility to contribute to the development of their nation and the protection of their people.

The concept of national service is not a new idea. It has been employed routinely across the world for many years. Health professionals in the developing world are often required to provide at least one to two years of service following their education. This does provide health services in rural areas, albeit by the least experienced workforce, often without much supervision. Yet, it is a way to give back to the nation that has nurtured and educated its citizens. In an interview on August 7, 2006, Sister Charan of the Guyana Public Health Hospital Corporation in Georgetown reflected, “The nurses and midwives could give at least five years. . . . Remember these people in Guyana are ours” (Anderson & Isaacs, 2007, p. 396). Even if national service retains nursing personnel for a period of time, it does not address the larger issue of long-term retention and nation building.

In an inspirational call, John F. Kennedy challenged Americans to consider their responsibility for the land that has sustained them: “Ask not what your country can do for you; ask what you can do for your country.” Americorps, the Peace Corps, and the U.S. National Health Service are all responses to Kennedy’s challenge, ways to give back and strengthen America domestically and globally. If America can provide these stellar programs calling for national service, why does the nation not ensure a sustainable, domestic source of that cadre of workers that is critical to protecting its health? Why are so many qualified students who want to be nurses denied admission to educational institutions? Why is the dropout rate of practicing nurses so high? There are immediate and pragmatic answers to these questions, mostly focusing on allocation of resources. One “quick fix” is to outsource staffing and nursing education, mostly from poor nations.

These short-term answers, focusing on lack of resources in affluent America, beg for deeper reflection and critical thinking. The issues, at a deeper level, are political will, national responsibility for the future of America’s health care, the ethics of recruitment, and the moral imperative to build capacity and partnerships if we are going to benefit from the labor of the developing world. One consequence of abdicating responsibility to reflect and act upon these issues is the potential collapse of the nursing workforce in America.

Another consequence—covert, unseen, out of the vision of most Americans—is the denial of health care to the peoples of the Third World in regions where there is heavy recruitment of nursing personnel. The Joint Commission (2008) addressed this later point:

According to the WHO, because of the shortage of health care workers, at least 1.3 billion people around the world have no access to basic health services. In response, the WHO is pressing countries across the globe to address the ethical and financial impacts of worker migration, as well as efforts to retain workers within their country of origin. (p. 29)

Premise D

Human resources are a treasure for the nation, and all nations should respect the integrity of other nations to retain adequate human resources for the development and sustainability of their countries.

The strength of a country lies in the talents and dedication of its people. Nations need to recognize that human resources are national treasures. As such, each nation has the responsibility to create conditions that allow for the expression of talent, the acquisition of skills, and the inclusion and affiliation that nurture civil loyalty. Rogue nations are characterized by a lack of respect for their people, often driving them from their homelands. However, most nations treasure their people, profess an *a priori* claim on their talents, and expect other nations to respect this value. In reality, respecting the national boundaries of talent is often violated. In July 2005 in Bellagio, Italy, a world conference on international nurse migration captured global attention. One of the recommendations of this conference was the development of a global health and nursing equity index, aiming for transparency and recruitment guidelines addressing the real impact of nurse migration on poor nations (Arias, 2005). In Kenya, where 50% of the nursing positions are unfilled (Chaguturu & Vallabhaneni, 2005), a recent study reported, “The overwhelming majority of nurses interested in out-migration are those most qualified” (Riley et al., 2007, p. 1399). The treasures of the nation are lost to the people of the nation.

Planned exportation of nursing skills, considered a national treasure for nation building, has been a national policy in the Philippines for over 60 years. Through centralized planning, deliberate efforts have been made to overproduce the needed number of nurses, expecting to provide an adequate source of nursing talent for both the domestic health care needs and the international market. Remittances have been a large

economic stimulus, injecting \$8 billion annually into the Philippines economy (Brush & Sochalski, 2007). This exportation policy has now backfired in the Philippines and the nation is now reaching critical levels of shortage. “The sole country with an explicit nurse export policy and the world’s leading donor of nurse labor—the Philippines—is itself facing serious provider maldistribution and countrywide health disparities” report Brush and Sochalski (2007, p. 37).

Pacquiao (2004) reported that in the Philippines, the balance of local nursing workforce supply and demand has shifted with high migration currently among the most experienced clinical nurses and nursing faculty. George Cordero, president of the Philippine Nurses Association, expressed his concern for the well-being of the Filipino population: “The Filipino people will suffer because the United States will get all our trained nurses. But what can we do?” (Dugger, 2006, p. A1).

Planned exportation has largely been replaced by aggressive marketing. Moderate to affluent nations recruit in poor nations, and poor nations recruit in even poorer nations once their nurses have left for more affluent regions (Anderson & Isaacs, 2007; Brush & Sochalski, 2007). The nature of recruitment has changed from bilateral collaboration between single nations and a nation with a planned exportation policy (e.g., the Philippines) to an accelerated and widening unregulated net (Brush & Sochalski, 2007). While the effects have been slowly evident in the Philippines, in Sub-Saharan Africa, with high burdens of disease and few health care workers, the effects have been immediate and devastating to the local health care systems (Mensah, Mackintosh, & Henry, 2005). Recruitment of nurses from poor nations has become the end game in a global treasure hunt for highly prized skills. As the world faces growing populations, aging, high rates of chronic illness, and emerging infectious diseases, the need for nurses will escalate. Respect for the integrity of nations and the treasure of their human resources is at risk.

Premise E

National planning should not be held hostage by unfair advantage or lack of planning by other nations. Justice demands that collaboration, capacity building, and planned migration are necessary in order to avoid structural violence against less economically powerful countries.

Kingma (2007) argues that nursing recruitment only becomes an issue for “donor” nations when there are local workforce shortages or when exploitation occurs. This position supports the right-to-migrate position of

the ICN (2006) and is ethically tenable in an environment of plenty. However, nurses are among the scarcest resources on the planet, and they are most scarce where vulnerability is the greatest. The health care systems of poor nations are frequently devastated by rapid outmigration. Ministries of Health are in a constant reactive planning mode. One strategy is to increase the number of students in preservice education, almost always at national government expense, to account for the expected losses. The first author has observed this phenomenon across the English-speaking Caribbean, in Africa, and in the Indian Ocean region.

Dr. Sarah Gordon, former director the Health Sciences Education Unit, Guyana Ministry of Health, noted, "We developed a lot of training because of high attrition. Over the last three years we have attempted to increase the intake of nurses—300 to 400 per year. However, attrition is very high. We have had 30% to 40% attrition. One of the main challenges is obtaining nursing tutors" (Anderson & Isaacs, 2007, p. 394). Four pertinent facts emerged in this interview:

1. The Ministry of Health attempts to compensate for its own national needs by training more of its own people at the expense of this poor nation.
2. Increasing 300-400 students per year is huge in a nation with 500,000 people.
3. Nursing faculty are scarce everywhere.
4. Increasing the number of students in preservice education, at government expense, deflects from investment, employment, and development in other areas of the health sector.

Dr. Sarah Gordon, Dr. Cummings (chief medical officer, Ministry of Health), and Grace Bond (chief nursing officer, Georgetown Public Hospital) all spoke to the impact on eroding public health programs, such as HIV/AIDS education (Anderson & Isaacs, 2007). The preceding situation, which is common around the world, is an example of structural violence by affluent nations who have failed to develop a strong, sustainable domestic workforce.

An example of unfair advantage is the aggressive recruitment of doctors-cum-nurses. It is not uncommon, with a robust global market for nurses, for physicians in poor nations to retrain as nurses (Aiken, 2007; Brush & Sochalski, 2007). This is a double loss to poor nations that now have fewer physicians as well as doubly trained health professionals who leave the nation. Finally, another reactive stance assumed by poor nations is capping available employment because salaries are not available. The cycle of overproduction at the preservice level, lack of investment at the employment

level, and cutting public health programming creates a high-risk situation for collapse of health care delivery in poor nations. It further creates conditions for migration. Meanwhile, some affluent nations, like the United States, have not invested in a sustainable domestic workforce or supported the infrastructure necessary for nursing education. This lack of investment necessitates the need for outsourcing, both at the basic preservice nursing education level and at the practice level. Outsourcing is most easily accomplished where poverty drives the dynamics.

SUMMARY

Justice demands that collaboration among nations, capacity building, and planned migration are necessary to avoid structural violence against less economically powerful countries. If affluent countries wish to offer employment to the nursing workforce from poor nations, then there is a moral imperative to participate in capacity building, including subsidizing nursing education and offering compensation to poor nations that are losing their workforce. Oxfam and Physicians for Human Rights are two leading organizations that have strongly advocated this position (Kamal-Yanni, 2006).

Poor nations have the sought-after nursing workforce. In fairness to their people, they need to adopt a proactive planning stance and negotiate migration from the position of strength that they have. Affluent nations, in fairness to their own people and to the peoples of the world, need to take steps toward developing a sustainable, domestic workforce. "By developing and implementing an action plan to ensure the availability of enough nurses to meet future needs in the United States, we will ensure access and quality of care for our own citizens in addition to making a very important contribution to global health" (Aiken, 2007).

When the nurses are "simply not there," patients suffer, babies are born unattended, families are unsupported at critical periods, and people die alone. Nurses are critical to the health of nations. "Simply not there" is simply not fair.

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Nursing in Wars

RICHARD GARFIELD ♦ ANNE-MARIE RAFFERTY

Crisis reveals the fault lines in society, but they also bring out sources of solidarity and provide an opportunity to review resilience, resources, and capacity to respond. What implications do conflicts around the world hold for nursing?

Modern nursing, since its inception, has been involved in issues of war, peace, and protection of noncombatants. War has helped to define nursing in the modern era and has sometimes been a vehicle for the advancement of nursing's status and skill. But the values of national patriotism and international humanism have often come into conflict. Are nurses supposed to "cheer our troops on" or denounce military tactics that place civilians in harm's way? Before discussing these issues, we provide an orientation to the evolving terminology and epidemiology of war and collective violence.

Collective violence is the use of force by groups to achieve political, economic, or social objectives (Zwi, Garfield, & Loretti, 2002). A "classic" expression of collective violence is conflict within or between states (Figure 82-1). The character of conflicts has changed significantly since the end of the Cold War two decades ago. Specific characteristics of recent conflicts are detailed below:

- ♦ Conflicts entail an element of "identity politics," the claim to power on the basis of a particular nation, clan, religion, or linguistic identity.
- ♦ Conflicts employ attempts to control the population by eliminating those with a different identity through forced resettlement, mass killings, and/or intimidation.
- ♦ Conflicts link local concerns with a "globalized war economy," interacting through trade or ideology with people at the global level.

GLOBAL BURDEN OF CONFLICT

The World Health Organization estimates that about 588,000 people died in wars in 1998 (Krug et al., 2002). That made war the fourth most common type of injury

death in that year, after unintended injuries, suicides, and homicides. Deaths from war varied from less than 1 per 100,000 population in high-income countries, to 12 per 100,000 in low/middle income countries. The rate varied by region from near zero in China, India, and the Americas, to 33 per 100,000 in the eastern Mediterranean and 51 per 100,000 in Africa. Across the globe, war ranked as the thirteenth most common cause of death for 0 to 1 year olds, fifth for 5 to 14 year olds, and fifth for 15 to 44 year olds in 1998. Since that time, rates have declined a great deal, reaching an annual estimated 50,000 battle deaths in state-based conflicts over the last 5 years. Since 1998 mortality from conflict is widely believed to have declined (Harbom & Wallenstein, 2008; Human Security Report Project Research Team, 2007), but undercounting and bias in reporting make precise figures elusive (Geneva Declaration, 2008; Obermeyer, Murray, & Gakidou, 2008).

An estimated 5% of all deaths during the twentieth century were due to the immediate or secondary impact of such collective violence. This was higher than in the seventeenth through the nineteenth centuries, in which 2% of deaths are estimated to have resulted from collective violence. The fortyfold rise in the number of deaths among soldiers in the twentieth century greatly exceeded a doubling of the world's midcentury population. Military deaths per million population rose eighteenfold from the nineteenth to the twentieth century (Table 82-1 and Figure 82-2). Genocide- and democide-related deaths also rose in the twentieth century as the centralization of large political and economic systems and the emergence of new technologies made mass killings possible.

The number of direct deaths in war peaked in 1994 (Harbom & Wallenstein, 2007). While direct deaths have declined, indirect deaths are claiming a growing proportion of all conflict-related deaths. Laying siege, destroying essential goods and services, poisoning water supplies, or enslaving the defeated often accompanied warfare in premodern times. In European war since

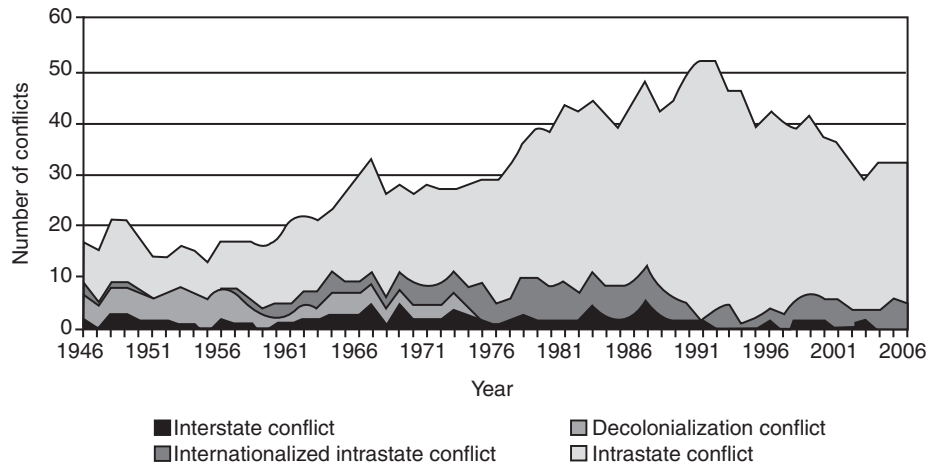


FIGURE 82-1 Conflict Trends, 1946-2006. (From Buhaug et al., 2007.)

TABLE 82-1 Estimated Average Annual Military Deaths in Wars, Worldwide, by Century

Century	Average Annual Military Deaths	World Midcentury Population in Millions	Average Annual Military Deaths per Million Population
Seventeenth	9500	500	19.0
Eighteenth	15,000	800	18.8
Nineteenth	13,000	1200	10.8
Twentieth	458,000	2500	183.2

From Garfield & Nuegut, 1991.

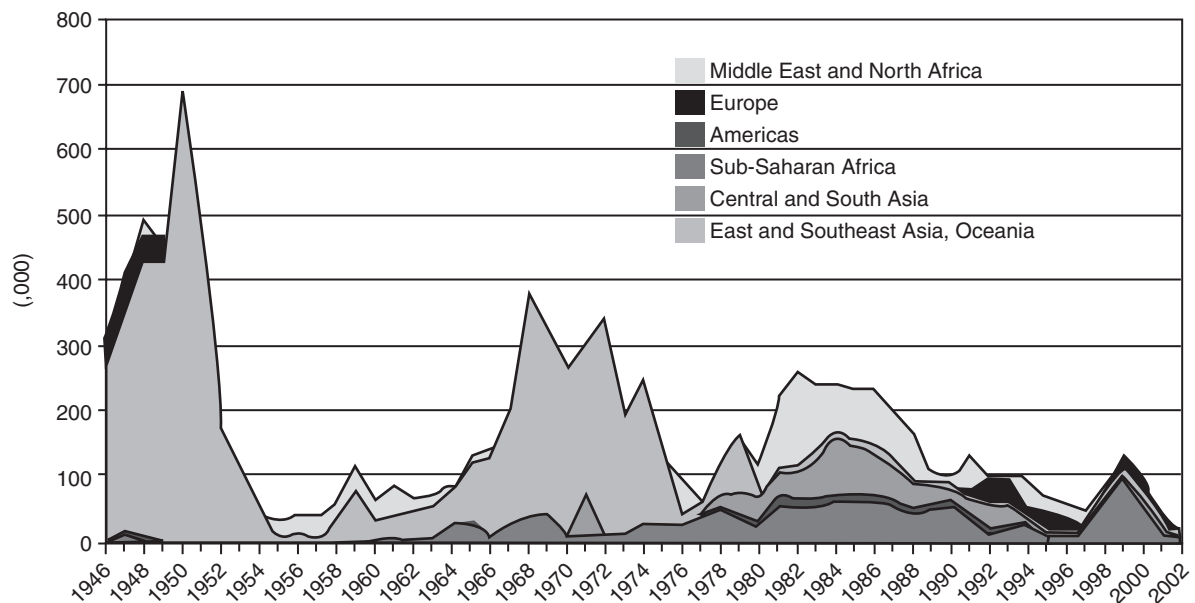


FIGURE 82-2 Battle Deaths by Year, 1946-2002. (From Human Security Report Project Research Team, 2008.)

the establishment of nation-states in the seventeenth century, soldiers of one nation engaged in direct battle almost exclusively with soldiers of a rival nation. Anti-colonial wars, often based on guerilla warfare, blurred the distinction between the military and civilians. This distinction was further eroded with the breakdown of national states since the end of the Cold War. In many internal conflicts that often pitted the state against a section of the civilian population, torture, disappearances, and other forms of repression have been practiced in pursuit of political and ideological objectives.

The move from international to internal wars has had important implications for nursing. More and more, troops are irregular, representing a political faction or social group rather than a national army with accountability structure. Their targets, also, are more often civilians, who may be irregular troops or simply the “other” social group (Table 82-2). Targeting civilians, or the infrastructure upon which their daily lives depend, has become more common, and leverage points to redress this have been lost. The most severe situation of excess death now is in the eastern Democratic Republic of Congo, where there have been tens of thousands of combatant deaths and around 2.5 million additional deaths among noncombatants (Coghlan et al., 2006).

Terrorism can be defined as an act of violence employed by clandestine individuals. The purpose is not to target an individual but to disrupt “life as usual” among the resident population of which they are part. Terrorism can be referred to as the peacetime equivalent of a war crime because the targets of terrorist acts are most often neither combatants nor political leaders of the opposition.

During the Cold War most conflicts, especially conflicts causing the most noncombatant deaths, occurred

in wars between countries. Internal conflict was suppressed as part of super-power rivalry. The potential for international conflict has not disappeared, but the military, political, and informational gaps between possible foes within countries has widened. The end of the Cold War unleashed the use of increasingly available small arms (Lumpe, 2000) in local conflicts. Under the Geneva Conventions of 1949, the rules of war require the application of principles of proportionality and distinction in the choice of targets. Proportionality involves an assessment of ways to minimize likely civilian casualties when a military objective involves targeting that is not exclusively military. Distinction focuses on avoiding civilian targets wherever possible. Attempts to regulate the brutality of conflicts have not kept pace with the evolving forms of conflict (Robertson, 1999). Most importantly, international humanitarian law and the Geneva Conventions are focused on states waging war and thus have limited ability to address conflicts within states or among multinational coalitions against a single state.

Depersonalized high-tech weaponry; fighting among informal, nonstate actors; and the use of indiscriminant weapons in terror attacks increase the chance of injury or death among large groups of the population. Along with an increasing number of natural disasters and economic disruptions around the world, the number and severity of humanitarian crises and the populations affected by them have risen. Globalization has also contributed to economic disruption since the end of the Cold War. For the first time in the modern era, some states are experiencing sustained economic declines. Of the 10 countries with the highest under-5 mortality rates in the world, 7 have experienced recent civil conflict (Black, Morris, & Bryce, 2003).

TABLE 82-2 Battle Deaths Versus All Conflict-Related Deaths, Selected Conflicts

Country	Years	Battle Deaths	War-related Deaths	Implied Ratio
Angola	1974-2002	160,475	1.5 million; 50% after 1992	8.3
DRC*	1998-2001	145,000	2.5 million (includes 350,000 violent)	16.2
Ethiopia	1976-1991	16,000	1984-1985: 1-2 million	62.0
Liberia	1989-2001	24,099	150,000-200,000	5.2
Mozambique	1976-1992	174,599	500,000-1,000,000	1.9
Nigeria (Biafra Rebellion)	1967-1970	75,000	500,000-2,000,000	5.7
Sierra Leone	1991-2000	12,997	1991-1995: 30,000	1.3
Somalia	1981-1996	67,250	1988 to mid-1990s: 250,000-350,000	2.7
Sudan	1983-2002	55,500	2 million	35.0
Sudan (Anya Nya rebellion)	1963-1973	20,000	250,000-750,000	11.5

From Geneva Declaration, 2008.

*DRC, Democratic Republic of the Congo.

Most new wars and economic decline are occurring in Africa, but every country is affected by these events, including the United States. The attacks of September 11 made clear we can no longer be comforted in the belief that we are immune from conflict. Indeed, the disruptions caused by those terror attacks, the arbitrary nature of civilian victims, and the lasting impact on vulnerable groups— including women and children, those with heightened anxiety, and those who lost employment— is part of a worldwide trend toward an increasing impact of conflict on daily life (Human Security Report Project Research Team, 2008).

THE ROLES FOR NURSING IN A WORLD IN CONFLICT

Our ideas of nursing are shaped by images of nurses in war. It was war, after all, which brought Florence Nightingale into public prominence and provided her with a powerful platform for military and social reform. But therein lies the paradox, for although war may shine a light on nursing, it can often blind the observer to what nurses actually do. Nursing remains largely invisible in the historical and contemporary accounts of organizations associated with war, relief, and humanitarian assistance. Only in the decades after the end of the Vietnam War were the sacrifices of U.S. military and civilian nurses in that country honored (Freedman & Rhoads, 1987). Today, among nongovernmental organizations like Save the Children and Doctors Without Borders, few know that as many nurses as doctors are serving in crisis areas around the world.

The history of nursing in conflict can be considered as the history of the displaced person. Often nursing has no natural home or refuge within such environs. That is not to say that the record is void; only that it tends, with notable exceptions, towards a celebration of individual humanistic leaders like Jane Delano and Clara Barton rather than an awareness of the profession.

Including nurses only as part of a wider civic movement reduces history to heritage. Moreover, focusing on the individual can eclipse the political, the institutional, and the environmental context. In fact, war has in some ways served nursing. Nurses have often improved their professional image and practice privileges and expanded their role and influence when they were needed in the public sphere during war.

Nursing's involvement in war is a double-edged sword, one that ultimately threatens the heart of humanitarianism. Nursing is often identified with the

national, patriotic interests of each warring power. It is also characterized as humanist and having a non-nationalistic ethic of social reform as represented by nursing leaders Lavinia Dock of the American Nurses Association and Ethel Fenwick of the International Council of Nurses. Both threads were represented by Nightingale, who worked to improve the fighting capacity of the British army. At the same time she opposed the formation of the International Committee of the Red Cross as she feared it would relieve individual governments of the responsibility to protect noncombatants (Garfield, 2005). Ironically, national Red Cross associations may have done more to advance the role of nursing in the public's eyes than professional nursing organizations. Throughout the history of nursing's involvement in conflict, we see contradictions and tensions in our own understanding of a nurses' role:

- ◆ Ethically in favor of care for all, but demonstrating patriotism for one's own country and its interests
- ◆ Trying to promote humanism in the care of all, while strengthening the fighting capacity of one's side
- ◆ Struggling to strengthen professionalism in nursing, while acting docile under the command of doctors and political leaders

NURSING'S STRENGTHS

The profession of nursing is well placed to contribute to the global arena of humanitarian policy and research. We bring a wealth of experience and a strong historical grounding in situations of conflict and crisis. To fulfill our potential, nursing must include, but go beyond, a clinical response to the individual patient.

First we need to recognize and acknowledge our strengths and resources to expand research and policy that can work to better treat, mitigate, and prevent such crises. A strength of nursing lies in our ability to engage in advocacy in the public's interests. Both inside and outside areas of conflict, in most countries, there are more nurses than any other kind of health professional. Nurses are accessible because we work with at-need groups almost everywhere and in close proximity with those in need. In both times of stability and times of conflict, nurses are there to provide care. From our close relations with individuals, families, and communities, we become aware of the strengths and needs of our clients. This privileged glimpse into others' realities allows us to holistically assess and respond. After the September 11th attack on the World Trade Center in New York, for example, nurses led community-based activities to

reestablish community psychological health, provided assistance to harmed individuals in recovery, and dealt with many other “alterations in daily function” that did not necessitate a physician encounter or hospital visit.

The practice of nursing includes an enormous range of skills, settings, and preparation. Because of this diversity, nurses work in many roles and in multidisciplinary teams. But common to the many types and roles of nurses is a wide recognition of the humanistic core of nursing values and practice. Nurses, even more than physicians, are trusted to have the public’s best interests in mind, to be honest, open, neutral, and disinterested agents in mending the social fabric. This trust and legitimacy are resources in rallying for a public policy agenda.

We can build on these strengths and contribute to an effective agenda for humanitarian research and policy. We can serve as the eyes and ears of those in need without effective voice and representation. Nurses who are practicing in such environments can work to identify the gaps, while nurses in other areas can advocate for change, influence policy, and research these gaps. For example, interventions in crisis situations focus mainly on needs and have not taken full consideration of local capacities. Colleges of nursing and professional organizations across nations, cultures, and borders can partner to assess and research these individual and community capacities to design appropriate programs and mitigate further crises.

A RESEARCH AGENDA

The effects of conflict reach beyond the wounded and dead. Many others may be affected by conflict, which has many secondary and indirect effects. This is especially apparent in terrorism, where the social impact may affect millions of people, though the number of deaths is few. Family competence, psychological recovery, and reestablishing normalcy in the community are all areas in need of research from a nursing perspective. Indeed, the psychological impact and response to conflict is a unifying need among the full range of injuries, whether provoked or natural or individual or collective.

A country is at greatest risk to fall into conflict after having recently emerged from conflict. Most peace-building efforts have, at best, limited effectiveness, and those countries emerging from conflicts often languish for years before stability and rebuilding occurs. Involving women in making peace and involving nursing in reestablishing health systems can help speed a return to normalcy and development.

Much of this research should focus on women, who frequently are the “forgotten victims” in conflict. As the “family health worker,” women are frequently involved in defining and responding to the recovery needs of the entire family. They must be enlisted to promote health, including their own, in time of crisis. In humanitarian crises in developing countries, it is only recently that physical abuse of women, problems of unaccompanied children, and child soldiers have begun to receive attention. Nurses are often on the front lines dealing with women and families in both environments and need better training to do so. This training and practice needs to include care for their own potential needs as well.

Funds in the United States are now being directed to readiness, training for emergency response, improved communications, and upgrading of biological detection capacity. Important as these foci are, they fail to pull in the full range of nursing capacities. With a humanist perspective and a presence in key environments, nurses can do more. For example, early detection of many biological threats may occur among young people in schools. We have a long way to go to fully incorporate school nurses into systems for early detection and public health promotion. Nurses are frequently involved in assisting survivors to grieve and recover; far more preparation needs to go into developing their skill base to do this well. We need to specify which of these skills is generic to all nursing and which should be developed at the specialty level.

To do population-oriented work, nurses need further integration into mass emergency response systems. They need training and practice to apply their logistical and organizational skills as well as their clinical skills. Communication strategies for nurses to serve in mass casualties need to be developed. We further need evaluation tools and templates to learn from and improve our systems. Each new mass casualty experience is an opportunity for systems development and improvement.

In developing countries, many of those working in health are nurses from developed countries. We need workforce studies to identify where they are and what roles they play. Where does service in humanitarian crises fit into nurses’ career paths? What skill levels are needed? How and when can they be better prepared to serve in these roles? What kinds of training work best, both for nurses from developed countries and those serving in humanitarian crises in their home countries?

SUMMARY

Too often, nurses' approaches to ethical issues are based on individual motivation, without examination of the wider issues or systems to which the individual response contributes. Too often, nurses take on the attitudes and assumptions of other responders, like the police or military. Like other areas of health care practice, examination of the evidence for practice in this area is needed. It is this examination that will significantly contribute to the international agenda for humanitarian practice, policy, and research. War has significantly shaped nursing over the decades. Nursing should contribute to the global arena of humanitarian policy and research and provide leadership in these initiatives. It is essential that nursing have a broader view than just the clinical response to the individual patient.

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Nursing at the World Health Organization: The (In)Visibility of Chief Nurses 1951-2009

MARJORIE A. MUECKE

A BRIEF HISTORY OF NURSING AT THE WHO

The World Health Organization (WHO) was established with a constitution in 1948 as an intergovernmental agency charged with serving as the health arm of the United Nations (WHO, 2006a). However, by 1948 it already had a history. The WHO evolved from the Pan American Sanitary Bureau, which was founded in 1902 to systematize documentation of sanitary conditions and communicable diseases in seaports of the Americas, with special focus on yellow fever and bubonic plague. After World War I, the Bureau's mission was expanded to the promotion of health through national legislation, monitoring of communicable diseases, and the study of tropical diseases. With the infusion of needed funding from the U.S. government and private foundations (mainly Kellogg and Rockefeller) during World War II (Cueto, 1994; Lynaugh et al., 2007), the Bureau grew to such importance that the WHO agreed to give it independent status simultaneously with WHO Regional Office status in 1948. The Bureau was renamed the Pan American Health Organization (PAHO) in 1958 (Kiernan, 2002). While nurses must have been involved in the Bureau's health promotion and disease surveillance efforts, and although nurses have been supported by the Kellogg and Rockefeller Foundations in Latin America, identifying the roles of nursing in the Bureau requires detailed study by historians because nursing roles are hidden from view in the summary literature on the Bureau.

The invisibility versus the visibility of nursing in the WHO is the central theme of my analysis in this chapter because a lack of visibility of nursing belies the fact that they outnumber all health professions as providers of health care in most regions of the world and provide or supervise most of the formal health care worldwide

(WHO, 2006b). I will explore the question of invisibility versus visibility by taking a historical perspective on the evolution of nursing at the WHO since its inception, identifying what contributed to nursing's voice being heard and responded to appropriately during the tenure of each successive chief nurse in the WHO headquarters in Geneva, 1949-2009 (Table 83-1). The chief nurse holds the highest administrative position in nursing at the WHO. Her (to date all have been women) primary responsibilities are to plan and mobilize nurse constituencies to interpret nursing's contributions to WHO programs (Ohlson & Styles, 1994).

CHIEF NURSES AT WHO 1951-2009

Each of the following chief nurses strove to advance the participation of informed and qualified nurses in WHO policy and programs. They faced many challenges and opportunities specific to their particular eras and an overview of their trials and successes are recounted here.

The Golden Age of Nursing at the WHO, 1951-1973

The first two chief nurses of the WHO were both Canadians and highly respected advocates of nursing and nursing education. They presided over what has been called the "golden age" of nursing in WHO. Splane and Splane (1994a) state the following:

This period, extending from 1948 to the mid-1970s, was a time when nursing, though facing immense problems, enjoyed a high status within WHO and was encouraged to function at its full potential. (p. 13)

The high status of nursing at the beginning of the period in part reflects "the highly credible record of nurses and nursing leadership in World War II and in

TABLE 83-1 Chief Nurses at WHO 1949-2009

Name	WHO Title and Highest Degree	Country	Years
Olive Baggallay	Chief Nurse (educational background unknown)	United Kingdom	1949-1954
Lyle Creelman	Chief Nurse MA, Columbia University	Canada	1954-1968
Lilian Turnbull	Chief Nurse (educational background unknown)	Canada	1968-1975
Amelia Maglacas	Chief Scientist for Nursing PhD	Philippines	1976-1989
Miriam Hirschfeld	Chief Scientist for Nursing & Midwifery DNSc, University of California at San Francisco	Austrian-born Israeli	1989-1999
Naeema Al-Gasseer	Senior Scientist for Nursing & Midwifery DSc, University of Illinois-Chicago	Bahrain	1999-2004
Jean S. Yan	Chief Scientist for Nursing & Midwifery, and Coordinator, Health Professions Networks PhD, University of Southern California	Philippines	2004-present

the postwar rehabilitation Programmes,” the first two WHO director generals’ high esteem for nursing, and “the readiness of nursing leaders of the highest caliber to serve in the organization” (Splane & Splane, 1994a, pp. 114-115). Director generals are elected by the World Health Assembly and have always been medical doctors. Among their authorities is the power to appoint chief nurses at WHO headquarters in Geneva.

Olive Baggallay. Director General Chisholm of Canada appointed Olive Baggallay as the first chief of the Nursing Section when that Section was established in 1951. Baggallay served to her retirement in 1954, during which time the British Empire was decolonizing itself. As a Canadian, Baggallay was attuned to the role of Britain in much of Africa, and she followed this history of relationship by working to enhance the capacity of nursing in Africa through education. In 1953 she had the breadth of vision and concern to convene a meeting of 23 African countries that she charged to envision the future of nursing education in the continent (Mackie & Baggallay, 1954).

Lyle Creelman. Director General Candau of Brazil appointed Lyle Creelman as WHO’s chief nurse in 1954. Creelman was a highly respected voice for nursing for 14 years, 1954-1968. Creelman brought a strong educational and professional background to her position. She had earned a baccalaureate degree in nursing at the University of British Columbia and a master’s degree from Teachers College, Columbia University. Her professional achievements included co-authoring

a study that became “the main reference for public health professionals in Canada”; working for the United Nations Relief and Works Agency for Palestinian refugees (UNWRA) in the Middle East; and serving as the chief nurse for the British Occupied Zone of Berlin (Armstrong-Reid, 2009).

Creelman had political savvy and experience, and she used them effectively at the WHO, “developing and innovating nursing standards and practice that would ensure many countries’ ability to achieve and maintain a self-sufficiency in health care” (Armstrong-Reid, 2009, p. 10). Her interpretations of nursing at the WHO were grounded in local context, whether surveying local needs and resources or collaborating with nurses in WHO’s six regional offices to strategize actions to respond to their needs. She supported hundreds of nurse consultants and advisors to help newly independent countries establish their own hospital nursing and public health nursing services and incorporate nursing positions in their ministries of health. Historian Susan Armstrong-Reid, currently writing a biography on Creelman, sees her as “a visionary,” focusing upon a variety of key innovations that are highly relevant today: “Her work on public-private partnerships is just what we need now. . . . She felt strongly that cultural sensitivity is essential, that a clean technological fix without taking local values into account cannot be sustainable.” Creelman’s concern with cultural sensitivity foreshadowed the transcultural nursing movement a decade or two later (Armstrong-Reid, personal communication, March 31, 2009).

Lilian ("Lily") Turnbull. Upon Creelman's retirement from the WHO in 1968, Director General Candau appointed Lilian ("Lily") Turnbull chief of WHO's Nursing Section. Turnbull continued Creelman's policy of keeping a small nursing unit in Geneva while enhancing capacity of the senior nurses in the six WHO regional offices and working to create and upscale nursing positions in the ministries of health. The golden age of nursing at the WHO was highly productive. Highlights include offering fellowships for advanced studies abroad to prepare for leadership positions; providing consultants to ministries of health to identify their needs for and provide resources for strengthening nursing education and research at the country level; and publishing reports of five WHO expert committees on nursing.

Nonetheless, nursing abruptly lost favor within the WHO in 1972, coinciding with the arrival of a new director general of the WHO, Dr. Halfdan Mahler. Reportedly, senior officials at the WHO and influential physicians in national ministries of health felt that the voice of nursing had become too strong, so they quieted it (Holleran, personal communication, April 1, 2009). The position of the chief nurse and its associated Nursing Unit were summarily eliminated, Lily Turnbull's position was moved to the Health Manpower Division, where it has remained to this day (with some variation in the name of the division over time), and nurses in the Nursing Unit were transferred to program areas (such as maternal and child health, immunizations, and employee health).

This structural downgrading of nursing in WHO headquarters also weakened nursing in the regional offices, as it provided authoritative precedent for senior regional staff to eliminate regional chief nurse officer positions as well (Splane & Splane, 1994b). It wasn't until 1985 that Mahler admitted to having perpetrated widespread doubt that nurses could be more than assistants to physicians (Mahler, 1985a; Splane & Splane, 1994a). Some think that nursing is today once again trying to find a voice in a physician-centered WHO.

Restoration of Nursing's Voice in the WHO

Strategic alliances among nursing leaders worldwide and public pressure gradually succeeded in restoring a senior nursing position within WHO headquarters in Geneva. The International Council of Nurses (ICN) had, since its founding in 1899, advocated through its member national nursing organizations for nurses to participate in public policy development and to obtain senior positions in national ministries of health. The

ICN also was one of the first nongovernmental organizations (NGO) to be officially recognized by the WHO. In that capacity it may speak at WHO executive board meetings. Over the years, its leaders have been in close communication with WHO's chief nurses and often have provided essential external leverage to mobilize secretariat and assembly support for nursing initiatives within WHO.

ICN's political leverage comes from representing nurses in countries' ministries of health. For example, the ICN rallied its might to lobby for senior nursing positions at the WHO by launching a "storm of criticism" at the WHO that gained wide media coverage during the 1977 ICN Congress. Weeks later, the position, which became Chief Scientist for Nursing (CSN), was established (Splane & Splane 1994a). Since then, the CSN reports to the director general through the assistant director general and also to the director of the Human Resources division (its title has varied somewhat over time).

Dr. Amelia Mangay Maglacas. Director General Halfdan Mahler appointed Dr. Amelia Mangay Maglacas of the Philippines as Chief Scientist for Nursing, a position she held with distinction for 14 years, 1976-1989. She was the first top nurse at WHO with a doctoral degree, and like Creelman, she brought extensive international experience and a strong track record in nursing education, administration, and research to her post. One of her closest nurse collaborators was Connie Holleran, executive director of the ICN from 1981 to 1996. Since the headquarters of both the ICN and the WHO are in Geneva, the two nurses took advantage of their proximity. According to Holleran, they strategized together through daily telephone calls to build nursing influence at the WHO. For example, Holleran invited all of the WHO regional office nurses to the ICN, regularly kept them posted of opportunities for advancing issues, and supported them in meetings (Holleran, personal communication, April 2, 2009).

Holleran praises Maglacas for getting nurse input into her decision making at the WHO. Maglacas also collaborated closely with the International Council of Midwives (ICM) and the Federation of Red Cross and Red Crescent Societies (IFRC) with top nurses who had large networks who could be mobilized for leveraging political stances that favored the promotion of quality health care by nurses worldwide. Maglacas had a number of nurse advisory groups, pushed to get nurses on national delegations to the annual World Health Assembly (WHA) meetings, and represented nursing worldwide (WHA is the governing body of the WHO,

and its highest policy-making body, with each member country having one vote). She was equally highly respected by the WHO regional offices and by her boss at the WHO, Thomas Fülöp. Maglacas had a direct line to the WHO director general for nursing, and Fülöp had one for health manpower concerns (Holleran, personal communication, April 2 and 19, 2009).

Significant events also contributed to the resurgence of nursing at the WHO. By their participation at the Alma Ata Conference, sponsored by the WHO and UNICEF in 1978, WHO and ICN nurse leaders mobilized wide recognition of the capabilities of nursing to improve health worldwide (Maglacas, 1988). The chief strategy of the Alma Ata Declaration of Health for All was primary health care (PHC), which was defined as “essential health care . . . made universally accessible to individuals and families in the community.” PHC “addresses the main health problems in the community, providing promotive, preventive, curative, and rehabilitative services,” including health education, nutrition, safe water, sanitation, family planning, maternal child health care, immunizations, treatment of common diseases and injuries, and the provision of essential drugs (WHO, 1978).

Nursing’s assertive support of and contributions to PHC apparently helped Director General Mahler change his mind about nursing. In 1985 he wrote, “It was now time that nurses were brought in much more than hitherto . . . as leaders and managers in the Primary Health Care/Health for All team” (Mahler, 1985b; Splane & Splane, 1994a, p. 126). He also referred to nurses as “a powerhouse for change,” urging that they be trained “to assume a greater managerial role and to participate in developing policy with assurance and confidence” (Mahler, 1985b; Splane & Splane, 1994a, pp. 126-127).

Having won new feasibility for nursing to exercise leadership in world health through the WHO, Dr. Maglacas acted strategically and innovatively. Of her many accomplishments, one that is influential to the present was her establishment in 1987 of a Global Network of WHO Collaborating Centres (WHOCC) in nursing. The WHA had set a policy in 1949 that the WHO would not establish research institutions but rather coordinate and use the research resources of existing institutions by designating them as WHOCC. This strategy of technical cooperation for research or education was seen as a means to promote national participation in WHO activities, as well as to maintain cost efficiency (Manfredi, 1998).

The first two WHOCC in nursing had been established in 1980 in Denmark and France; today, there

are 45 WHO Collaborating Centres for Nursing and Midwifery (WHOCCNM), with 11 in the United States and Canada. WHOCCNM are academic units recognized by the WHO for their potential for implementing WHO policies and objectives from the national to the global levels. Although the Global Network is not an administrative unit of the WHO, WHO facilitates its work by fostering information sharing and exchange of expertise across Network member institutions. This coordinating function supports WHOCCNM in improving the quality of nursing education, practice, research, and leadership to better meet the health care needs of the people.

Dr. Miriam Hirschfeld. In 1989, Dr. Hiroshi Nakajima, who was elected director general of the WHO in 1988, appointed Miriam Hirschfeld, PhD, of Israel as successor to Dr. Maglacas upon the latter’s retirement. Dr. Nakajima, like his predecessors of the early 1970s, sought a nurse who would collaborate rather than shake the walls. While Hirschfeld had had no significant international experience, she brought a strong background in nursing education and research to her post as CSN. She pursued actions “to have nursing within WHO recover the status, resources, and mandate for worldwide service that it possessed from 1948 to 1972” (Splane & Splane, 1994b, p. 55). Noting a report from the director general that a 1989 WHA resolution entitled “Strengthening Nursing and Midwifery in Support of Strategies for Health for All” (WHO, 1992) had not been acted upon, Hirschfeld collaborated with CNOs and ICN executive director Constance Holleran, who spoke strongly in favor of the Resolution to the WHO Executive Committee (Holleran, 1992) and mobilized the ICN’s national nursing associations to convince the World Health Assembly of the need to adopt the resolution. As a result, 20 country delegations of nurses presented at the Assembly and discussed what nurses had already done to promote health for all. Their impact was dramatic: The WHA adopted the Resolution (WHA45.5) and established a Global Advisory Group on Nursing and Midwifery (GAG/NM), with Hirschfeld as its secretary, to report directly to the WHO director general on nursing and midwifery (Ohlson & Styles, 1994). Significantly, the GAG added midwifery to WHO’s purview and to the WHOCC in nursing, so the WHOCC has since been called WHOCC in Nursing and Midwifery.

GAG/NM serves as a strategic, action-oriented body providing policy advice to the director general and the WHO cabinet to strategically enhance the contributions of nursing and midwifery within the context of all WHO priorities and programmes. The group’s geographically balanced membership comprises professionals with a wide range of

expertise and personal attributes that result in policy advice that ensures the primacy of global health in all matters. A minimum of 50% of the members are nurses and midwives. (WHO, 2009)

Hirschfeld also carried out a WHO Study Group on *Nursing Beyond the Year 2000* (WHO, 1994) and negotiated successfully for an Expert Committee on Nursing Practice (Splane & Splane, 1997). The WHO's expert panels serve as advisory bodies to the organization and as such are the most influential type of committee at the WHO. When an expert panel on nursing is convened, a report of its work and recommendations is published and made available to interested parties inside and beyond the WHO.

When she left the CNS position in 1999, Hirschfeld had been nominated as the first nurse director of Human Health Resources for Health and took the post of acting director of Health Systems. In this role she established a new WHO initiative on long-term care. She retired from WHO in 2003.

Nursing's Voice Quietened

Dr. Naeema Al-Gasseer. Director General Gro Harlem Brundtland selected Naeema Al-Gasseer, DSc, of Bahrain to succeed Miriam Hirschfeld in 1999. There was action on numerous fronts at the WHO during Al-Gasseer's tenure, including responding to the United Nations' adoption of the Millennium Development Goals (MDGs) in 2000. WHO's role in working to achieve the goals was at the time, and continues to be, to enhance the capacity of national health systems/ministries of health in order to scale up efforts to address the major diseases and poor health outcomes associated with poverty. While health is fundamental to the achievement of all eight of the MDGs by the target year of 2015, it is primary in three of them: #4 Reduce child mortality: reduce the under-5 mortality rate by two-thirds; #5 Improve maternal health: reduce the maternal mortality ratio by three-quarters; and #6 Combat HIV/AIDS and other diseases: halt and begin to reverse the spread of HIV/AIDS (United Nations, 2008). Al-Gasseer interpreted strengthening nursing and midwifery services as a primary platform for scaling up health interventions to achieve these goals (WHO, 2002). However, "The scarcity of healthcare professionals, including nurses, [has been] . . . one of the biggest obstacles to achieving the UN's MDGs," according to International Council of Nurses (as cited in Kirk, 2007, p. 26). The fact that the nursing shortage was growing worldwide has continued to be a strain on efforts to achieve the MDGs.

Another major event during her tenure was the WHA 54.12 Resolution on Strengthening Nursing and Midwifery that the ministers of health adopted as guiding policy. The Resolution placed nurses and midwives at the core of health policy, saying that they should be involved "in the framing, planning and implementation of health policy at all levels"; and that WHO member states are to "ensure healthy workplaces and quality of the work environment for nurses and midwives" and "to establish comprehensive programmes for the development of human resources which support the training, recruitment, and retention" (WHO, 2002, pp. 45-47).

While these activities at WHO favored nursing and midwifery, Al-Gasseer reportedly was not happy in her post because of tension with her director, who offered little support for nursing. Boggled down by physician chauvinism, in 2004, Al-Gasseer left her senior scientist position to take on the post of WHO Representative for Iraq, a position she holds to this day (Constance Holleran, personal communication, April 1, 2009; Jean Yan, personal communication, April 5, 2009).

Nursing's Voice Heard through Strategic Collaborations

Dr. Jean S. Yan. Director General Lee Jong-wook appointed Dr. Jean S. Yan, the current Chief Scientist Nurse, to a dual position at WHO headquarters in 2004: Chief Scientist for Nursing & Midwifery, and Coordinator, Health Professions Networks. Both positions are within the Department of Human Resources for Health, the head of which reports to the director general. As Coordinator of Health Professions Networks, Yan is responsible for all ($n = 76$) health professions except medicine at WHO (compared to only two—nursing and medicine—in 1980) (Jean Yan, personal communication, April 5, 2009). An advantage of this situation is that it places nursing at the helm of the other health professions, but a disadvantage, some say, is the concomitant reduced emphasis of her role upon nursing per se at WHO. However, given the current emphasis upon interprofessionalism within the WHO and upon transdisciplinary and intersectoral collaboration in academic, corporate, governmental and nongovernmental spheres, nursing's leadership of the health professions sector at the WHO seems a step forward for nursing.

Up until the time that Yan assumed the positions, the Nursing and Midwifery unit had neither a budget nor a direct line to the director general. Comparing this situation to the large numbers of physicians in control of various budgets within the WHO indicates the structural subservience of nursing and midwifery within the

physician and male-led organization. Yan is the first chief nurse to have made progress in correcting these inequities. She has strategized successfully to share her department's budget equally across the four units within it. And she has secured a direct liaison link to the director general (Jean S. Yan, personal communication, April 5, 2009).

Yan's political effectiveness within the WHO reflects both her academic background (a PhD in public administration with specialization in policy analysis and organizational development) and her prior experience internationally (managing projects to improve the quality and safety of patient care in Central and Eastern Europe, the Kingdom of Saudi Arabia, and the New Independent States of the former Soviet Union, when she was associate director of Joint Commission International) and her experience in the WHO as PAHO's Health Systems and Human Resource Development Advisor for 10 countries in the Caribbean.

Yan herself sees her daily strategizing to meet challenges as the key to her achievements, which she enumerated briefly as the following (personal communication, April 5-6, 2009):

1. Mobilizing increased representation and influence of nurses and midwives in WHO headquarters, such that there currently are 18 nurses in various offices plus several volunteer expert nurse consultants a year through a new Scholars Program, and the assistant director general for Family and Child Health is a nurse. In addition nurses in the Geneva office are leading in implementing major WHO initiatives such as Making Pregnancy Safer and Primary Health Care.
2. Securing a liaison to mediate between her Nursing and Midwifery unit and the director general's office: hers is the only WHO unit to have such access to the director general.
3. Negotiating successfully to secure a budget for the Nursing and Midwifery office.
4. Mobilizing higher-level representation of nurses and midwives at the country level, where nurses now head three WHO offices (Barbados, Guyana, and Iraq), and are ministers of health in four countries (Finland, Grenada, South Sudan, and the United Kingdom).
5. Mobilizing strategic collaborations among key nurse leaders (nurses and midwives in WHO headquarters, the six regional advisors in nursing, chief nurse officers in ministries of health, the Global Network, and the GAG/NM). Leveraging the political power of this network resulted in the WHA accepting a 2002

resolution that nursing be an agenda item at the WHA every two years starting in 2008. To achieve this end, Yan revived the GAG/NM, as it had not met for several years before she took office as CSN.

6. Establishing a Global Alliance for Nursing and Midwifery (GANM) Communities of Practice that links over 13 million nurses and related health professionals in networks of interest areas.

SUMMARY

The visibility of nursing in a predominantly male and physician-led organization such as the World Health Organization is a matter of power and inter- and intra-professional respect. While the first two chief nurses enjoyed both power and respect, that very power and respect perhaps subsequently became the undoing of nursing's visibility in the WHO when the leadership shifted from physician friends of nursing to physicians who viewed nursing as handmaids to physicians.

Each of the chief nurses in this chapter has striven to advance the participation of informed and qualified nurses in WHO policy and programs. They have faced challenges and opportunities specific to their particular eras. Nonetheless, three factors emerge as enabling/explaining success in advancing the influence and participation of nursing within WHO headquarters in Geneva. I see the factors as the following:

1. Strategic alliances and collaboration of key nursing leaders, within and beyond the WHO (currently regional advisors; CNOs, the GAG/NM, the GANM; heads of the ICN; International Confederation of Midwives (ICM); International Labor Organization (ILO); International Federation of Red Cross and Red Crescent Societies; United Nations Children's Fund (UNICEF); United Nations Population Fund (UNFPA); Sigma Theta Tau International (STTI); Global Network of WHOCC in Nursing and Midwifery). Collaboration among these nursing groups is particularly effective in influencing the World Health Assembly to adopt resolutions that nursing supports, but it is also necessary to promote nursing representation in ministries of health at the country level. Having a "common cause has strengthened the international cohesiveness of the nursing community to focus on the formation of partnerships with groups to promote health and prevent disease" (Manfredi, 1998, p.75).
2. The chief nurse/chief nurse scientist has advanced degrees; a broad background in nursing practice, education, administration, and research; varied experiences in public/government roles at the national and

international levels; a reputation for carrying out leadership roles with distinction; vision and the passion to realize it; and keen analytic and strategic skills for mobilizing collaborative investments in nursing

3. WHO physician leadership respects nursing and encourages nursing expression and leadership. As can be seen from the preceding examples, the rise and fall of nursing visibility within WHO-Geneva is closely associated with the type and degree of interprofessional regard that the physician director general and head of department, and ministers of health hold for nursing. It is thus crucial that nurses' voices be expressed at World Health assemblies, as there they can influence the WHA's election of director generals.

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Global Health Needs and Priorities in Developing Countries

MARY ANNE MERCER

As the 21st century unfolds, the desire to gain a better understanding of the rest of the globe grows among people of the “developed” countries. This increased interest is particularly true for nurses and others working in the health care field. This chapter reviews the state of health, illness, and medical care today in the global South—the underdeveloped world—and suggests priority approaches to meeting health needs in those regions.

The title of the chapter itself can serve as a useful starting point for concepts that should be addressed. Why do we talk about “developing” countries? This commonly used term is often a misnomer, since many of the most resource-strapped countries, particularly those in Africa, have seen declines in many measures of economic development over the last decade or two, rather than growth or development (Gershwin & Irwin, 2000). The topic of global health “needs and priorities,” however, does imply a useful distinction between what is required for the health of a given population—its needs—and the specific aspects of the problem that are priorities for decision makers.

GLOBAL HEALTH NEEDS

Global health needs are typically defined in biomedical terms as the levels of health and illness in given settings. A needs assessment includes the extent and causes of illness or death, which are recorded and described for most countries, albeit with varying degrees of accuracy. The field of epidemiology studies the distribution of health and disease in populations, and the World Health Organization and other agencies publish annual updates on the most current figures provided by national governments. Numerous publications methodically track the progress, or lack of progress, in global health indicators, and some speculate as to priority approaches to improving them.

UNICEF’s annual report, *The State of the World’s Children*, publishes estimates of key maternal and child health indicators for 189 countries and is a useful source of information about progress in that critical area. We know from this document that as of 2008, the proportion of infants born who die by age 5 in the world ranged from 0.3% to 0.4% in the highly developed countries of Europe and Scandinavia to 27% in the Sub-Saharan African country of Sierra Leone. The lifetime risk of dying from pregnancy-related conditions, given the most recent maternal mortality and fertility rates, ranged that year from 1 in every 47,600 women in Ireland to 1 of every 7 women in Niger, which is also in Sub-Saharan Africa. These differences are staggering: a 90-fold differential in child deaths between the best-off and worst-off, and a 6800-fold difference in mortality risk for women (United Nations Children’s Fund, 2008). The term *inequality* does not even begin to describe the magnitude of these differences.

Even if we compare entire regions rather than best- and worst-case countries, average child mortality in West and Central Africa is more than 20 times that of the industrialized countries, with a nearly 500-fold greater lifetime risk of a maternal death between those same sets of countries (UNICEF, 2008). Rates for many diseases that affect the general population are similarly unequally distributed, such as tuberculosis with a prevalence in the United States and Canada of 3 or 4 per 100,000 population, compared with countries such as Swaziland and South Africa, with rates of around 1000 per 100,000 population. Again, the health disadvantage is 200 to 300 times greater in the worst settings (World Health Organization, 2008a).

HEALTH DISPARITIES

Setting priorities for the very complex problems of global health requires at least a basic understanding of the nature of the problems. After noting the general

magnitude of health disparities among countries, a logical next question—and one that is not asked often enough—is to inquire as to the reasons for such vast differences. What could explain them?

The automatic first reaction for many is to point to differences in health care: the life-saving interventions that we have been told will “make the difference” between life and death, between health and illness, for millions of people. What evidence do we have that health services are the key factor in explaining the dramatic health gradient among different populations around the globe? Preventive health services spring first to mind: immunizations, prenatal care, health education about personal behaviors. But while they certainly have a role, it is difficult to find evidence that the most common “preventive” services bring about major changes in health at the population level. Immunization against specific childhood diseases is a commonly cited preventive measure, and it also can be seen as an indicator of access to other preventive services, but evidence of the large-scale benefits associated with immunization is not strong. Afghanistan, for example, ranks third in the world in mortality under age 5, but it also

has 90% coverage with basic immunizations, such as the first diphtheria, pertussis, and tetanus (DPT1) vaccines. Average DPT1 coverage among developing countries overall is 88%, but their under-5 mortality rates are still 10 times that of the industrialized countries (UNICEF, 2008). A comprehensive study of the immunization program in Nigeria between 1970 and 2003 could not demonstrate that it had a significant effect on reducing under-5 mortality (Ngowu, Larson, & Kim, 2008).

There are other reasons to question the key role of individual preventive services. We have historical evidence that communicable diseases that were highly prevalent—and deadly—in the now-industrialized countries declined well before modern immunizations or drugs were available. Figure 84-1 shows that deaths from measles, for example, had fallen to very low levels in England and Wales before measles immunization was available (McKeown, 1980). The likely explanation for this phenomenon lies in the many improvements in living standards that occurred around the same time as the mortality changes. Although the rates are decreasing, measles continues to kill over 300,000 children every year in poor countries

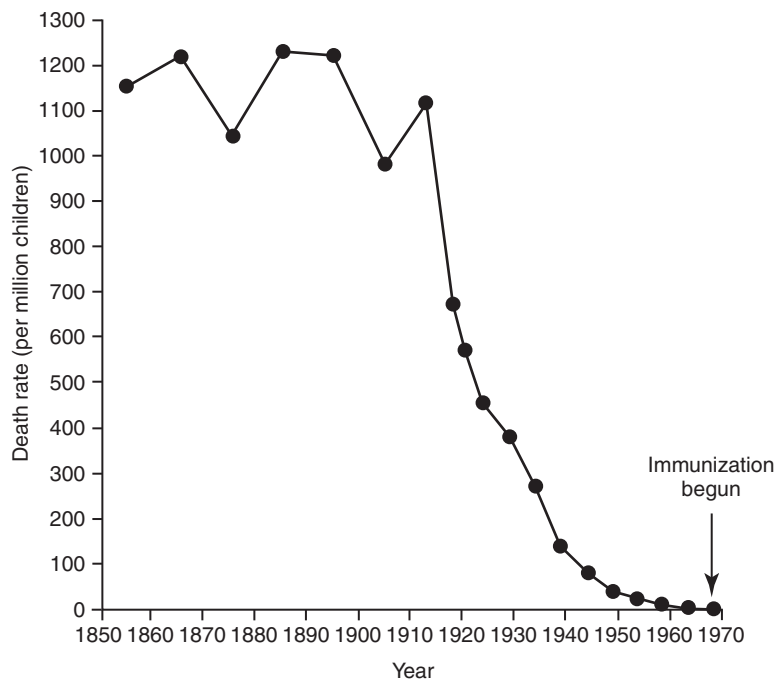


FIGURE 84-1 Measles death rates of children under age 15: England and Wales. (Source: McKeown, T. (1980). *The role of medicine: Dream, mirage or nemesis?* Princeton, NJ: Princeton University Press.)

today, despite the availability of an effective, heat-stable vaccine (Moszynski, 2007).

If not preventive services, perhaps curative medical care explains the health disparities between the North and South. Medical and surgical treatment for illness is widely inaccessible and of varying quality in many poor countries, so it is difficult definitively to assess what potential benefit it would have if well implemented. In the Nigeria study just noted, the percent of GDP spent on the health care system did have a significant positive association with under-5 mortality. However, the child death rates for Nigeria remain extremely high, with nearly one of every five infants dying by age 5—the 12th highest rate of all countries. Even if Nigeria's spending on health care was beneficial, it was not nearly enough to offset other factors that lead to the deaths of thousands of children there annually, and this seems to be the case for most countries.

To the extent that medical care makes a difference—as it probably does for specific problems such as TB, AIDS treatment, and access to skilled birth attendants

for women—its effects on the health of most populations are not so clear. In the United States, death rates from a wide range of conditions had fallen dramatically to very low levels before effective medical treatment was available, as seen in Figure 84-2 (McKinlay & McKinlay, 1977). If the level of national health expenditures is any indication of levels of curative care provided, the association is even more suspect, at least in the industrialized countries. Those countries that have shorter average life expectancies spend *more* on health care than do countries where the average length of life is longer (Institute for Health Economics, 2007; Organization for Economic Cooperation and Development, 2006). The United States is the best example, spending almost half of the world's entire health care budget, yet ranking behind 30 other rich countries in life expectancy (Bezruchka and Mercer, 2004). It is at least highly unlikely that a lack of health services is a major *cause* of the poor health in the global South. To paraphrase a common observation, that would be akin to blaming a lack of aspirin for causing a headache.

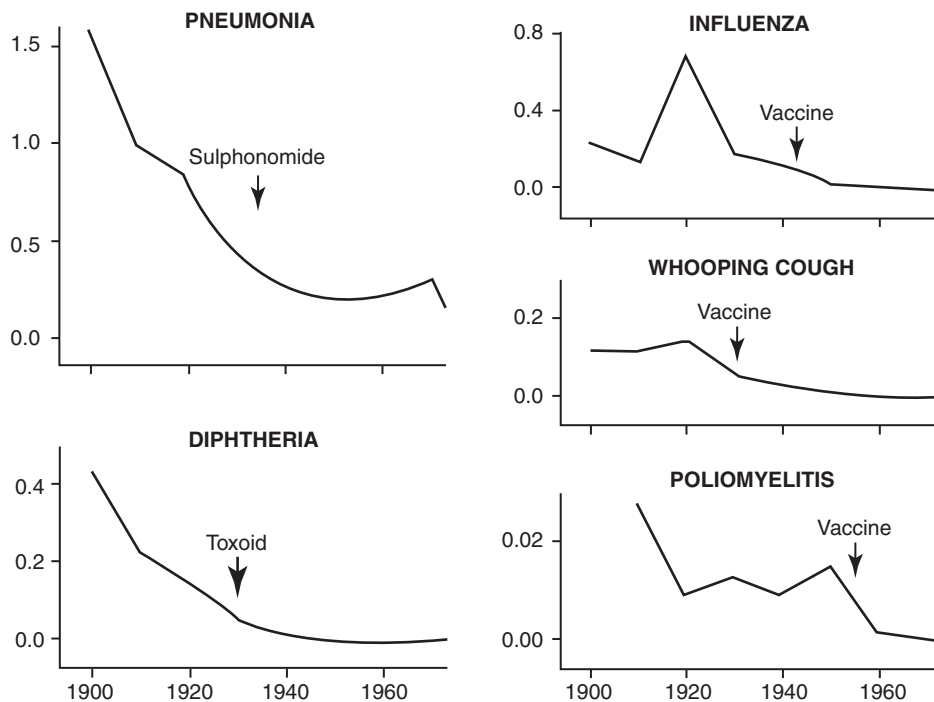


FIGURE 84-2 Fall in the standardized death rate per 100,000 population for nine common infectious diseases in relation to specific medical measures, for the United States, 1900-1973. (Source: McKinlay, J. B., & McKinlay, S. M. (1977). The questionable contribution of medical measures to the decline of mortality in the United States in the twentieth century. *Milbank Memorial Fund Quarterly. Health and Society*, 55(3), 405-428.)

THE BASIC PROBLEMS: INEQUALITY AND POVERTY

What else could explain these staggering health differences? Or to put the question somewhat differently, what would bring about “health” in any setting, if not health care? Clearly the lack of basic resources is a key factor. Anyone who has spent time in one of the resource-poor countries has seen the stark poverty of these settings. Much of the world today lacks the ability to provide the basic necessities of food, clean water, sanitation, decent shelter, and clothing. Wealth and income comparisons among countries are startling: The least developed countries, with the poorest health indicators, have average national incomes of \$438 annually, compared with over \$37,000 in the industrialized countries (UNICEF, 2008). As a result, an estimated 1.4 billion people—over one-fifth of the world’s population—live in extreme poverty, spending less than \$1.25 a day for all of their needs (Chen & Ravallion, 2008).

Many observers would thus identify poverty as the basis for the tremendous health problems that are the norm in today’s global South, and this is backed up both by common sense and a huge range of health indicators that are highly correlated with poverty. What is less well recognized is the growing body of work that points to the role of inequality—even in countries with the same average level of resources—in producing health disparities (Wilkinson & Pickett, 2009). The consensus is growing that once basic needs are met, the gap between the rich and the poor in a specific country or setting is a strong predictor of the health of that population.

Sadly, the gross imbalance in resources between rich and poor countries is accompanied by an even greater level of internal inequality in most poor countries. The Gini coefficient, a standard measure of the level of inequality in a population, is in rough terms around twice as high in the less developed world as in the European countries (UNICEF, 2008). People in poor countries are thus at a double disadvantage, living under conditions of both very limited average resources and extreme inequality in their distribution.

SETTING PRIORITIES FOR GLOBAL HEALTH

In the last few decades, international agencies have produced countless reports and held numerous meetings to address both poverty and health disparities in the resource-strapped countries of the global South. Colonial-era health efforts emphasized a model that exported medical technologies and approaches from the ruling

countries to the poor colonies. Then, in September 1978, a WHO conference on international primary health care in Alma-Ata, in the former USSR, called for world leaders to press for universal coverage with broadly defined primary health care to achieve “health for all by the year 2000.” Primary health care as envisioned included clean water, sanitation, and adequate nutrition as essential to achieving health, but it also emphasized community participation and equity as necessary elements of the process. This focus represented a major shift in thinking, promoting those living in the poor countries as key decision makers in finding solutions to their health problems. Not long after the “Health for All” slogan was adopted, however, the emphasis shifted back to a more “realistic” approach, termed “selective primary health care.” At that point, the disease-focused approach to setting needs and priorities in health assistance returned to the forefront for most international development efforts (WHO, 2008b).

A second major global effort to define health priorities came in September 2000, when the General Assembly of the United Nations unanimously passed the Millennium Declaration, a statement of development goals for the planet. The Millennium Development Goals (MDGs) were adopted as a “road map” to implementing that declaration. The eight MDGs include three that are specifically health-focused: cutting child mortality by two-thirds, reducing the number of women dying in childbirth by three-quarters, and combating HIV/AIDS, malaria, and other diseases by the year 2015 (UN Millennium Project, 2005). Others are clearly health-related, such as the goals to eradicate extreme poverty and hunger, achieve universal primary education, and promote gender equality. The MDGs appeared to present a hope of reducing the dramatic inequalities in health resource distribution that are so well understood and documented.

However, with a target date of 2015, it is clear that although there was some progress in most of the MDG targets, most countries of the world were veering far off that road. The reduction in maternal deaths, for example, was only one-fifth of what would be needed to achieve the goal of cutting them by 75%. If current rates of improvement continue, the goal of halving the number of people without adequate sanitation will not be achieved until the year 2108 (Elliot, 2008). The World Bank estimated that 1.4 billion people still lived in poverty in 2005, a number that was substantially higher than previous estimates (Chen & Ravallion, 2008). We also know that the wide range of causes attributed to the persistence of poverty (drought, food shortages, international financial crises, and HIV/AIDS) were even

more devastating after 2005, the last year included in that dismal World Bank report. Yet again, a laudable set of health and development aims by the international community was sidetracked by reality.

DEVELOPMENT PARADIGMS

It is widely accepted that development of the poor countries—that is, economic strategies that would result in substantial increases in material well-being for the entire population—would improve health. The preceding observations might lead us to ask another very basic question: After decades of international aid and loans for “development” and health, why do these vast disparities persist? Although the question may be a simple one, the answers are not. Much has been written about the basic causes of the underdevelopment of the global South, contrasted with what might be called the “overdevelopment” of many countries of the North. Geography, climate, “backward” social and economic structures, limited market and investment opportunities, undervaluing of individual entrepreneurialism, economic dependence on the rich countries, and many other theories have been set forth (Kuhnen, 1987). The exploitation of most countries of the South by their colonizers remains a key element of explanations for their slow or stagnant economic progress during earlier parts of the last century (Hiatt, 2007).

But perhaps as important as the historical factors that have led to the profound poverty of today's world is an examination of current global macroeconomic policies as they affect the so-called developing countries. One such policy, which has been enforced since the early 1980s by international economic institutions such as the International Monetary Fund, is described by the term *structural adjustment program* (SAP). Structural adjustment came about as a result of the massive national debts taken on by poor countries during the 1970s. These debts in turn came about when a range of global economic forces, sometimes abetted by corrupt dictatorial rulers (who were many times supported by the United States or the former colonial powers), pressured newly emerging colonies to borrow huge sums of money to “modernize” their economies (Gloyd, 2004).

Over time, it became clear that many of these fledgling countries were overwhelmed by the interest payments alone, with no hope of paying off the main loan amounts. The response of the lending institutions was to reschedule the debt payments in return for the country's acceptance of draconian austerity measures that were designed to release public funds

for debt repayment and increase the export to rich countries of local goods. The result was even greater poverty and suffering by the already impoverished populations of the South. In Africa, home of the poorest of the poor, countries spent on average four times more for repayment of national debts than they spent on health and education overall (Gershwin & Irwin, 2000). Health budgets were cut; subsidies for education, food, and other basic commodities were curtailed; unemployment grew; and the value of local currencies dropped (Gloyd, 2004). In effect, SAPs brought about the exact opposite of what genuine development would bring, which is an increase in material well-being that is distributed equitably across the population. The economic programs designed to “shock” the country into economic prosperity instead served to further damage the integrity and viability of these newly independent nations (Klein, 2007). Conditions that would have promoted health—including access to quality health care—suffered in the process.

Today's global economy features a host of economic approaches that are presented as efforts to aid the development of poor countries. They have shown varying degrees of success, but many seem primarily designed to allow the already-wealthy countries to continue to profit from the raw materials and labor-power of the South. The so-called “free trade” agreements promoted by recent U.S. administrations, which give the United States unfettered access to the resources of countries in the agreement, is just one example of the many ways that poor countries are prevented from healthy development of their economies (Klein, 2007). Sweatshops, free trade zones, and “aid” that is tied to restrictive conditions similar to those of SAPs are other examples of current policies that have the effect of making poor countries even poorer (Easterly, 2006; Prashad, 2007). As a result, the richest 20% of individuals in the world had 74 times the income of the poorest fifth in 1997, while in 1960 that ratio was only 30:1, and in 1913 it was only 11:1 (United Nations Development Programme, 1999). The global economic crisis of 2008, while serious for the industrialized countries, is an economic disaster for people in the poorest countries, who were already living on the edge of survival.

THE ROLE OF HEALTH SERVICES

Will improvements in the health of populations in the poorest countries only come with economic “growth”—that is, with increased national wealth? Experience in a few unusual settings has shown that even in places with very low levels of resources, health and general prosperity

can rise if those resources are shared equitably. Sri Lanka, Kerala state in India, Cuba, and Costa Rica are all well-studied cases in which health status is dramatically higher than would be expected given the level of average incomes. Among the many common characteristics for those settings was a well-developed, accessible primary health care system that included mechanisms for popular participation and widespread commitment to achieving health equity (Halstead, Walsh, & Warren, 1985). Income distribution in each of those settings was far more equitable than in neighboring countries (or states, in the case of Kerala) that had similar average incomes. Other studies have shown similar benefits on health of equitable spread of resources, such as occurred in Cuba (Spiegel, 2006). It might be concluded that although health care alone will not substantially improve health in the very poorest of countries, appropriate primary care services will be part of any system that aims to ensure an acceptable basic standard of living and essential services for all families, all communities—everyone.

GLOBAL HEALTH PRIORITIES TODAY

Epidemiological data provide a reasonably clear picture of the main causes of death and ill health in the world today. These are the “needs” prioritized by international organizations wishing to have an impact on high mortality and morbidity rates. It might be noted, however, that it is not at all clear that, given the chance, communities or even political leaders in the poorest countries would choose these as the highest-priority problems. Some would argue, for example, that part of the reason for the lack of health progress for many conditions is due to the low priority accorded that “problem” by those holding power in the countries concerned—generally older men.

The limited progress in reducing maternal mortality, for example, has been blamed on the low status of women. At the community level, women’s status affects their ability to access care without support from their husbands or partners, who are usually the decision makers in how family resources are spent; those same attitudes are often reflected at the national level. A different example of community priorities being virtually ignored by international funders but valued by local populations is the problem of infertility, a devastating condition in societies where a woman’s primary worth lies in her ability to reproduce. However, in part because “overpopulation” is still considered an obstacle to development (even in areas where population density is rather sparse), very few global health programs address

this vital concern of women in poor countries. Clearly, it is important in using the term *health priorities* to clarify whose priorities are being addressed.

BIOMEDICAL PRIORITIES

There is, at least, widespread agreement as to the biomedical issues that are the main causes of death and illness in the developing world. One is *maternal and child health* (MCH). Mothers and young children have been recognized for many years as the most vulnerable populations for health and nutritional concerns. They are more susceptible to illness and death both for biological reasons and because they are typically the least powerful groups in a community and thus often overlooked when resources (food, medical care) are allocated. The main causes of maternal death and illness are hemorrhage, obstructed labor, eclampsia, postpartum infection, and septic abortion (McDonagh, 1996). The main killers of children are diarrheal disease, pneumonia, perinatal causes, malaria, measles, and HIV/AIDS. The need to space or limit births is also recognized as an important approach to reducing both maternal and child deaths. A critical element in many MCH problems—and more than half of all child deaths—is underlying malnutrition, either from a lack of overall calorie intake or from specific micronutrient deficiencies (Black, Morris, & Bryce, 2003).

An examination of the prevailing MCH problems shows that virtually all are problems of poverty. Nearly all of the causes of death and severe illness in mothers and children would be dramatically reduced with improvements in conditions of daily life. More and better food, a clean environment, adequate water and sanitation, less of the endless grind of physical work that is the lot of women in poor countries—all of these would improve the health of mothers and children. Many child health problems, in particular, have been found often to be amenable to community-based interventions, including improved sanitation and locally based treatment. However, at least one category is set apart from the others: complications of pregnancy or delivery, which can arise for women of any socioeconomic status, even though they are more prevalent among women from disadvantaged settings. Deaths from postpartum hemorrhage and obstructed labor, for example, will only be controlled when access to quality emergency obstetric services are available to women everywhere (Campbell & Graham, 2006).

Another biomedical issue is *infectious diseases*. Infections are a widely recognized threat to health in poor countries. Tuberculosis is a major killer at all ages, while

malaria primarily is fatal for young children, although affecting large proportions of the population. An estimated 1.7 million people die from TB every year (WHO, 2008a), and at least 1 million from malaria, with a child death from malaria every 30 seconds (WHO, 2008c). HIV/AIDS is a condition mostly of infancy/early childhood (through mother-to-child transmission) or of the sexually active years, and the death toll from AIDS is mounting even as antiretroviral drugs become available to larger populations. Again, nutritional deficiencies occur concurrently with many infectious conditions and reduce the ability of the body to mount an effective defense against infections. As just noted, most of the deadly infectious diseases ceased being major threats in the now-developed countries with improvements in living conditions. HIV/AIDS is a major exception to this observation, although it is likely that the greater prevalence of infections and undernutrition hastens deaths from AIDS in developing country populations once HIV infection is contracted (Fawzi, Msamanga, Spiegelman, & Hunter, 2005).

Finally, there is the *increase in diseases of the affluent world* as countries become more developed, such as in many of the Latin American economies. Cancer and cardiovascular diseases are rising globally. Smoking rates are rising as tobacco companies reach out to new targets, and concurrently lung cancer and other health problems related to smoking are on the rise. By the year 2015, tobacco-related conditions are projected to kill more people than HIV/AIDS and be responsible for 10% of all deaths globally (Mathers & Loncar, 2006). Obesity, sometimes in the same country flanked by pockets of undernutrition, and associated conditions such as diabetes are both new threats. Yet, as the diseases of the affluent nations spread around the world, patterns already established continue. Poorer populations in any setting will suffer the most. The stress of coping with poverty appears to exacerbate many biomedical causes of ill health—in any setting (Sapolsky, 2004).

PRIORITY APPROACHES

The widespread agreement on the main biomedical causes of illness unfortunately has not led to a common understanding of the best approaches to addressing them. The litany of development paradigms has been accompanied by a long list of health care strategies that have been the subject of billions of dollars in aid funding but patchy success. Every few years, a new aid strategy is born that will surely lift the terrible burden of death and illness that is suffered by one group or

another—massive use of insecticides to eradicate malaria, training traditional midwives, promoting condoms to prevent HIV/AIDS, integrated management of childhood illness. Many of these “priority” interventions are medically shown to be effective, but when the time comes to implement the programs on a large scale, barriers arise. A major obstacle to the implementation of clinical approaches is the dismal state of the health care system in many countries of the South, particularly in Sub-Saharan Africa. Structural adjustment and other economic pressures on developing country governments have led to dramatic reductions in health budgets, leading to a decaying infrastructure and decimated health staff. A devastating result has been the “brain drain” of nurses and other health professionals from their countries of origin to the rich countries of the North. In some countries, such as Uganda, as many of 70% of new nursing graduates expect that within five years of graduation, they will leave the country to work—and many do (Nguyen et al., 2008).

In many cases, donor policies that emphasize quick, measurable results have led to short-sighted programs that are neither sustainable nor effective in the long term. Funding nongovernmental organizations (NGOs) rather than governments has produced a range of small-scale programs that may be “effective” in the short-term but are not sustained when the NGO’s funding runs out. Meanwhile, the infant who as a result of chance and circumstance was born in the poorest country in the Americas—Haiti—has a 13 times greater risk of dying by age 5 than if he or she had been born 2000 miles to the north in Canada (UNICEF, 2008).

Clearly, global health needs are great. Given limited resources, prioritization of approaches to address those needs must be based on a more equitable distribution of the resources that are available. The World Health Organization’s 2008 World Health Report called for a recommitment to primary health care as part of a response to the challenges to poor countries brought by globalization (WHO, 2008b). In August 2008, a three-year effort by the WHO’s Commission on the Social Determinants of Health produced a detailed report declaring that addressing health inequalities is a critical need for future efforts. The report’s summary concluded, “Achieving health equity within a generation is achievable, it is the right thing to do, and now is the right time to do it” (Commission on Social Determinants of Health, 2008). The unanswered question continues to be “Is there the political will to reverse the ever-increasing gap between the rich and poor that threatens the health of the entire planet?” (Box 84-1).

BOX 84-1 World Health Organization Report: Closing the Gap in a Generation

KEY PRINCIPLES OF ACTION TO ADDRESS HEALTH EQUITY

1. Improve the conditions of daily life—the circumstances in which people are born, grow, live, work, and age.
2. Tackle the inequitable distribution of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally.
3. Measure the problem, evaluate action, expand the knowledge base, develop a workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health.

Source: Commission on Social Determinants of Health (CSDH). (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health*. Geneva, Switzerland: World Health Organization.

SUMMARY

This chapter highlights the importance of global health needs around the world with a special emphasis on developing nations. The main biomedical causes of illness unfortunately have not provided a common understanding of the best approaches to addressing global health issues. Nurses need to continue to strive to address these issues and help clarify priorities of care across the globe. As communication technologies increase the global issues are “closer to home” than ever before. Nurses have an important role to play in these efforts.

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The Global Health Agenda: Are Nursing and Midwifery Responding?

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The state of global health is visible daily on our television screens, on the Web, in the newspaper, and sometimes right in front of us. We see extreme poverty, starvation, homelessness, disease, environmental degradation, war, and displacement on a regular basis. Human rights abuses are also widespread throughout the globe even six decades after the adoption of the Universal Declaration of Human Rights in 1948 and include intolerance, inequality, racism, discrimination, and xenophobia (United Nations, 2007). There are many and significant differences in health outcomes between developed and developing countries, including a shortened life span; an increased risk of contracting HIV/AIDS, malaria, tuberculosis and/or other diseases; an increased risk of dying from pregnancy-related causes; and an increased risk of dying in infancy or childhood. How has the world responded to this global crisis? What is the impact of recent U.S. policy? Have the nursing and midwifery communities in the United States responded adequately?

THE UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS

The United Nations Millennium Development Goals (MDGs) are eight goals to be achieved by 2015 in response to the world's main development challenges, including issues related to global health. At the United Nations (UN) Millennium Summit in September 2000, 189 member nations adopted the *Millennium Declaration*, out of which the MDGs were formulated (United Nations Development Programme, 2006). The eight MDGs are broken down into quantifiable targets and measureable indicators (Table 85-1).

The MDGs are significant because they synthesize many of the commitments already made by governments

and others at various conferences and summits in the 1990s, and they help to focus all of these efforts for the betterment of all, especially the disadvantaged. Goal number 8, the development of global partnerships for development, brings together the commitments of developed countries with the needs and responsibilities of developing countries through global partnerships, envisioning a world where countries work together. The MDGs also recognize the interdependence of health with other key factors, including poverty reduction, peace and security, respect for human rights, reasonable governance, maintenance of the earth's ecosystem, as well as resource development and its equitable distribution.

The UN secretary general presented a *Road Map Towards Implementation to the United Nations Millennium Declaration* (United Nations, 2001), which outlined a plan to accomplish the goals by 2015 and identify some potential strategies. Every year there is an annual report

TABLE 85-1 The United Nations Millennium Development Goals

Goal 1	Eradicate extreme poverty and hunger
Goal 2	Achieve universal primary education
Goal 3	Promote gender equality and empower women
Goal 4	Reduce child mortality
Goal 5	Improve maternal health
Goal 6	Combat HIV/AIDS, malaria, and other diseases
Goal 7	Ensure environmental stability
Goal 8	Develop a global partnership for development

United Nations Development Programme (UNDP). (2006). *About the MDGs: Basics*. Retrieved January 1, 2009, from <http://www.undp.org/mdg/basics.shtml>

evaluating the progress on attainment, or lack of attainment, of the MDG goals and the measureable indicators.

THE UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS REPORT 2008

The Millennium Development Goals Report 2008 (United Nations, 2008) provides a detailed analysis of progress at the more than halfway point to the target date of 2015, when the MDGs are to be attained. The report highlights the commitment and cooperation to the implementation, monitoring, and attainment of the MDGs by the international community, including developed and developing countries, the private sector and nongovernmental organizations, as the greatest success to date. Some progress has been made on many

of the goals. Successes have been identified and are summarized in Table 85-2 (United Nations, 2008).

Along with the successes are a number of goals and their indicators that have fallen short at this halfway point and will require greater and more sustained effort, including “countrywide systems of qualified and adequately equipped personnel and an effective institutional infrastructure, political commitment, development assistance and adequate funding” (United Nations, 2008). More effort or corrective action is needed to address some of the MDGs and their targeted goals in a number of regions. A notable lack of progress is identified on MDG 5, including a key indicator to reduce maternal mortality. There has been no progress or deterioration in maternal mortality statistics in Sub-Saharan Africa and Southern Asia. Table 85-3 summarizes the areas that require greater effort if the MDGs are to be attained

TABLE 85-2 Millennium Development Goals Progress Report 2008—Successes

Goal 1	Eradicate extreme poverty and hunger	<ul style="list-style-type: none"> ► Reduction of absolute poverty by one-half is within reach by 2015 for the world as a whole. ► The external debt of developing countries fell from 12.5% in 2000 to 6.6% in 2006, allowing these countries to allocate more resources to poverty reduction.
Goal 2	Achieve universal primary education	<ul style="list-style-type: none"> ► In all but 2 of 10 regions, primary school enrollment is at least 90%.
Goal 3	Promote gender equality and empower women	<ul style="list-style-type: none"> ► The gender parity index in primary education is 95% or higher in 6 of 10 regions.
Goal 4	Reduce child mortality	<ul style="list-style-type: none"> ► Death from measles fell from 750,000 in 2000 to <250,000 in 2006. ► 80% of children in developing countries now receive a measles vaccination.
Goal 6	Combat HIV/AIDS, malaria, and other diseases	<ul style="list-style-type: none"> ► Death from AIDS fell from 2.2 million in 2005 to 2.0 million in 2007. ► The number of new infections with HIV declined from 3.0 million in 2001 to 2.7 million in 2007. ► Malaria prevention is expanding with widespread increases in the use of insecticide-treated bed nets, especially in Sub-Saharan Africa. ► The incidence of tuberculosis is expected to begin to decline before 2015. ► The private sector has increased availability of some critical drugs and has spread mobile phone technology throughout the developing world.
Goal 7	Ensure environmental stability	<ul style="list-style-type: none"> ► 1.6 billion people have gained access to safe drinking water since 1990. ► The use of ozone-depleting substances has almost been eliminated, and this has contributed to the effort to reduce global warming.
Goal 8	Develop a global partnership for development	<ul style="list-style-type: none"> ► A global collective composed of developed and developing countries, the private sector, and nongovernmental organizations are working together and advocating for the attainment of the MDGs.

Developed based on United Nations. (2008). *The millennium development goals report 2008*. Retrieved January 1, 2009, from <http://mdgs.un.org/unsd/mdg/Default.aspx>

TABLE 85-3 MDG Progress Report 2008—Goals/Regions in Need of Greater Effort

Goal 1	Eradicate extreme poverty and hunger	►A large proportion of peoples in Sub-Saharan Africa live on < \$1/day.
Goal 2	Achieve universal primary education	►Only 18 of 113 countries are likely to achieve gender parity in primary and secondary schools.
Goal 3	Promote gender equality and empower women	►Almost two-thirds of employed women in the developing world (all regions) are in vulnerable jobs or are unpaid family workers. ►In one-third of developing countries women account for <10% of parliamentarians.
Goal 4	Reduce child mortality	►One-quarter of the children in developing countries in all regions are underweight and subject to the effects of long-term undernourishment.
Goal 5	Improve maternal health	►More than 500,000 prospective mothers in developing countries (all regions) die annually in childbirth or of a complication from pregnancy.
Goal 7	Ensure environmental stability	►More than one-third of the growing urban population in developing countries live in slums. ►2.5 billion people, almost half of the developing world's population, live without improved sanitation. ►Carbon dioxide emissions continue to increase despite an international timetable to address the problem.
Goal 8	Develop a global partnership for development	►Developed countries' foreign aid expenditures declined for the second consecutive year in 2007 and are at risk of falling short of 2005 commitments. ►International trade negotiations are years behind schedule and make a development-oriented outcome unlikely for poor countries.

Developed based on Statistics Division, Department of Economic and Social Affairs, United Nations. (2008). *The millennium development goals report 2008*. Retrieved January 1, 2009, from <http://mdgs.un.org/unsd/mdg/Default.aspx>

(Statistics Division, Department of Economic and Social Affairs, United Nations, 2008).

Progress toward the attainment of the MDGs is variable within the ten regions of the world, as well as within various countries of a region, and the synthesis of data in the 2008 report masks significant differences among regions in the attainment or lack of progress on the MDGs (Box 85-1).

A more detailed analysis of key indicators by region is available on the Web at http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/MDG_Report_2008_Progress_Chart_en_r8.pdf. The MDGs are global in focus and are meant to address all segments of society in every country. However, the *Millennium Development Goals Report 2008* indicates that the focus needs to be on the most vulnerable, the poor, those most at risk for poor health outcomes, and those who are deprived of the most basic human needs of food, health, education, and other aspects of well-being, if we are to make progress (United Nations, 2008). It is clear that many inequities remain, and some are increasing. Attainment of the MDGs and social justice for the most vulnerable will

BOX 85-1 Regions Identified by the United Nations

Asia
Commonwealth of Independent States
Eastern Asia
Europe
Latin America and the Caribbean
Northern Africa
Oceania
South Eastern Asia
Southern Asia
Sub-Saharan Africa
Western Asia

only be served by addressing the many determinants of ill health and premature mortality, including poverty, gender inequity, weak health care systems, the health care worker crisis, reformation of payment systems, increased funding, and changes in governmental policies.

THE CHALLENGE OF GLOBAL HEALTH

While the results-based management and annual progress reports of the MDGs have helped to stimulate development in the health sector by bringing together many stakeholders, identifying how funding should be allocated, and generally making it easier for stakeholders, including governments, nongovernmental organizations, and even the World Bank, to identify the impact of their projects, interventions or funding, it has resulted in some unanticipated consequences (Franklin, 2008). Donor countries or organizations usually “cherry-pick” a target or goal, focus on short-term results or even narrow, time bound interventions, as well as management and organizational efficiency, rather than improving the general conditions of all people in a poor country. For example, this vertical programmatic funding improves health care only for those who have HIV or malaria. While this approach has merit, it may not reach the extreme poor or extremely vulnerable, marginalized people in the community or assist countries in developing a much-needed public health care system. It is not surprising that countries find it difficult to meet the MDGs when although they receive millions of dollars in vertical project funding, it is directed at very specific diseases with little left in the budget for basic health care services in maternal child health care.

Garrett (2007) points out that the last decade has seen an overall rise in public and private support for global health initiatives, but it has been aimed at “high-profile diseases” rather than at public health issues in general. While billions of dollars are available for specifically targeted diseases, especially HIV/AIDS, much more is needed to address the public health needs and the long-neglected infrastructure in the developing world, including hospitals, clinics, laboratories, universities, and health professions education facilities, as well as the human resource crisis among health care professionals, most notably nurses, midwives, doctors, and public health workers (Garrett, 2007; World Health Organization, 2006). Compounding the global shortage of nurses and midwives, developed countries have been recruiting or accepting their migration from the developing world (Buchan & Sochalski, 2004; Garrett, 2007; Green, 2006). The World Health Organization (2006) reports that 57 countries, most of them in Africa and Asia, face a severe health workforce crisis, making prevention, treatment of disease, and advances in health very difficult. While Sub-Saharan Africa faces the greatest deficiency of health care workers, the Americas have 14% of the world’s population, 10% of the global

burden of disease, 42% of the world’s health workers, and more than 50% of the global health dollars (World Health Organization, 2006).

In addition, racial intolerance, based on gender, race, ethnicity, religion, language, or other factors, fuels widespread human rights abuses, including genocide, such as that occurring in Darfur. Conflict and war, social exclusion, racism, discrimination, economic inequality, abuse, and marginalization are still widespread throughout the globe (United Nations, 2007). The World Health Organization is calling for a new global agenda for health improvement and health equity, recognizing that health equity cannot be delivered by the health sector alone (“Addressing the inequities,” 2008). Governments and society must also respond in order to address the social determinants of health.

THE IMPACT OF UNITED STATES POLICY ON GLOBAL HEALTH AND THE MDGS

The decisions and policies of many countries have an impact on global health, but none are more influential than the United States, especially with MDG number 5 (improve maternal health) (Kelly & Geller, 2008). Historically, the U.S. federal and nongovernmental sources have provided millions to improve global health, especially maternal child health. Most notably the Bill & Melinda Gates Foundation, the Buffett Foundation, and the Program for Appropriate Technology in Health (PATH) have funded billions into reproductive health care and other global initiatives to improve health. However, recent governmental policies, adhering to “faith-based values,” have led to reduced or no funding for reproductive-related services that relate to the reduction of maternal and infant morbidity and mortality. Kelly and Geller (2008) cite three key U.S. policies that have had a negative effect on the MDGs: the global gag rule (formally known as the Mexico City Policy), the cessation of support to the United Nations Population fund, and the support of abstinence-only funding. The global gag rule prohibits U.S. family planning and State Department financial aid to be awarded to foreign entities that provide any kind of abortion-related services (or to refer clients to services), even if they are legal services in that country (Kelly & Geller, 2008). Loss of this funding may result in a country losing all funding for contraceptive services and supplies, even if it has a comprehensive reproductive health program that includes much more than abortion-related services. The loss of support to the United Nations Population Fund, which the United States helped to

establish in 1969, has resulted in fewer training programs to prepare trained birth attendants and also decreases funds for population assistance to more than 140 countries (Kelly & Geller, 2008). The reduction of maternal mortality is largely dependent on the availability of skilled birth attendants, as well as the prevention of unplanned pregnancies and the associated maternal illnesses and deaths (Green, 2006).

Postabortion care is also a critical need in many countries in order to prevent complications and maternal disability and death. Therefore, this policy has a direct and negative impact on MDG number 5. The U.S. Congress and the State Department's Global AIDS Coordinator have ruled that \$133 million, or one-third of the HIV/AIDS prevention funds from the U.S., must only be used to promote the abstinence-only projects, despite a growing body of research that shows the ineffectiveness of abstinence-only programs (Kelly & Geller, 2008). These three policies are not evidence-based and may add to the increasing problems of HIV/AIDS and maternal and infant morbidity and mortality. U.S. policies of recent years have limited women's (and men's) reproductive choices, failed to recognize the value of women's (and their infants') lives, and may have caused unnecessary illness and death (Kelly & Geller, 2008). Reducing maternal mortality is one of the key MDGs and has remained far too low on the United States' and the international community's list of global priorities (Rosenfield & Schwartz, 2005). Nurses and midwives must act not only as care providers and teachers but as political advocates for women in the developing world, as well as at home.

THE ROLE OF NURSING AND MIDWIFERY IN GLOBAL HEALTH

Should nursing and midwifery leaders become more involved in global health issues? Smith (2006) states that "globalization is impacting not only our economy but also the profession of nursing and health care." She asks the question "Should we [*sic*] become more involved in the health of our global community?" (p. 309). Both the International Council of Nurses (ICN) and the International Confederation of Midwives (ICM) focus their efforts and invest their resources on the development of nursing and midwifery and the development and support of nursing and midwifery professional organizations in order to improve global health through the appropriate provision of care, increased access to nursing and midwifery services, and advocacy and

policy change to reduce health inequalities (ICM, 2002; ICN, 2000). The ICM supports security and peace, health as an international responsibility and as a right for all human beings in order to support human dignity at the international level (International Confederation of Midwives, 2008).

The World Health Organization (WHO), the major constituent of the UN's focus on global health, has developed three important networks to advance nursing and midwifery to improve global health across all WHO regions (Thompson, 2002; WHO, 2009). The WHO has facilitated the development of the Global Advisory Group for Nurses and Midwives (GAGNM), the Global Task Force for Strengthening Nursing and Midwifery Services, and the Global Network of WHO Collaborating Centres for Nursing and Midwifery Development (WHOCCs) (WHO, 2009). GAGNM provides "policy advice to the director general of the WHO and the WHO cabinet in order to enhance the contributions of nursing and midwifery in all WHO priorities and programmes" (WHO, 2009). The GAGNM is charged with implementing and monitoring the Global Agenda for Nursing and Midwifery (Fleming, 2008). The Global Task Force for Strengthening Nursing and Midwifery Services is a task force that provides technical support to the GAGNM in order to assist with implementation and resource mobilization. There are over 1000 WHO Collaborating Centres, with 40 specifically focused on the worldwide development of the nursing and midwifery professions. The WHO Nursing & Midwifery Collaborating Centres (WHOCC) work in partnership with WHO and also with key partner organizations: the ICN and ICM (Fleming, 2008; Thompson, 2002). A list of the collaborating centers is available online at http://www.whooc.gcal.ac.uk/about/collaborating_centres.html.

The vision of the WHOCCs is "health for all through excellence in nursing and midwifery" (Global Network of WHO Collaborating Centres, 2008). In March 2007, the WHO Assembly endorsed Resolution WHA59.27, the *Islamabad Declaration on Strengthening Nursing and Midwifery*, which reaffirmed the critical role of nursing and midwifery in the maintenance and improvement of global health (WHO, 2007). The Declaration states that "efficient, effective nursing and midwifery services are critical to achieving the Millennium Development Goals, country priority programmes including primary health care, health system strengthening, and the general health of all nations" (WHO, 2007). The Declaration identifies three key areas that need urgent attention: scaling up

nursing and midwifery capacity, attention to the skill mix of existing and new cadres of workers, and the creation of positive workplace environments. In light of the global nursing and midwifery practitioner and faculty shortage, continued poor work environments in many countries, and the ongoing recruitment and migration of nurses and midwives from resource-poor countries, it is doubtful that these goals can be accomplished unless each country establishes priorities and practices to accomplish them (Green, 2006).

A well-educated, adequate nursing and midwifery workforce should have a strong priority and urgent attention by every country because these professions have a profound impact on local and global health. Nurses and midwives comprise the largest proportion of the global health workforce—more than 80% of worldwide health workers—and together make a major contribution to the attainment of the MDGs (Green, 2006; WHO, 2007). As largely female professions throughout the world, nursing and midwifery can provide strong role models for other women, especially when they are included, rather than ignored, in the decision-making and policy processes, particularly in male-dominated cultures.

INTEGRATING GLOBAL AND NATIONAL EFFORTS

Although policy makers and politicians in the United States are well aware of the contributions of nurses and midwives to global and U.S. health care systems and health care, they have failed to develop or implement a plan, or supply the necessary funding, to ensure that the U.S. has an adequate supply of nurses, let alone meet global needs (Aiken, 2007). Nursing education in the United States has not been a priority, despite a well-documented and growing nursing shortage. Midwifery education in the United States has never been well funded, and the role of the well-educated midwife in global reproductive and child health may not be well understood.

Kennedy and Shawn (2008) point out that U.S. nurses and midwives are seeking to increase their role in global health. Currently, a number of national nursing and midwifery organizations, frequently working in collaboration with ICN, the ICM, and WHO, have focused attention on global health. Sigma Theta Tau International (STTI), based in Indianapolis, Indiana, is a worldwide nursing organization with a mission to improve nursing care worldwide through knowledge.

STTI has established alliances with international health care organizations, supports global nursing initiatives, collaborates with nurses worldwide, and connects with members on an international level.

Global collaborations are ongoing and include the WHO and the World Health Professions Alliance (WHPA), as well as ICN. The American Academy of Nursing (AAN) convened an expert panel on global health, which examined the critical issues in international nursing, including the worldwide shortage of nurses, midwives, and faculty; recruitment and retention issues; the effects of U.S. immigration laws; and the laws governing nursing practice (Rosenkoetter & Nardi, 2007). Recommendations were made to address these issues, and the AAN plans to take a leadership role, along with ICN, in working with nurse leaders worldwide to develop realistic solutions. Table 85-4 lists some of the recommendations made by the AAN.

The American College of Nurse-Midwives (ACNM), headquartered in Silver Spring, Maryland, through its Global Outreach Department, established in 1982, has been instrumental in implementing projects and providing technical assistance in over 30 developing countries. The ACNM Department of Global Outreach (DGO) has received numerous grants and contracts from the U.S. Agency for International Development (USAID), private foundations, and corporations (see <http://www.searo.who.int/EN/Section1243/Section2167/Section2172.htm>).

The staff of the ACNM DGO have been instrumental in developing and evaluating two highly successful core programs (Home-Based Life Saving Skills and Life Saving Skills) to address the direct causes of maternal and infant mortality in developing countries. They have also trained government and private sector midwives, provided technical assistance with protocol and policy development, conducted community assessments, and helped to institutionalize evidence-based practices in maternal child health care.

Another core function of the ACNM DGO includes development and support of midwifery organizations in the developing world, most recently in Afghanistan. The midwifery organizational work focuses on the development of in-country resources to develop training capacity, service delivery, and quality assurance by developing standards for education and practice. In response to national needs, ACNM has recently partnered with a number of U.S. nursing organizations to request an additional \$200 million for nursing and midwifery

TABLE 85-4 Recommendations by the AAN to Address Global Health Issues

Global Health Issue	Recommendations
Recruitment and retention	<p>Support improvements in working conditions, salaries, prestige, and respect of nurses in their home country</p> <p>Encourage and facilitate bilateral, country-to-country managed or regulated flow of nurses</p> <p>Create arrangements where direct and/or indirect financial compensation flows from the recruiting country back to the course country in the form of better educated nurses</p>
Legal and ethical issues related to the international nursing workforce	<p>ICN suggests 13 key principles to implement in country, including effective human resource planning and development; nursing regulation; access to full employment; freedom of movement and association; freedom from discrimination; good-faith contracting; equal pay for equal work; access to grievance procedures; a safe work environment; effective orientation/mentoring/supervision; employment trial periods; and regulation of recruitment.</p>
Faculty shortages	<p>Increase salaries to be comparable to clinician salaries</p> <p>Raise salaries of part time and nontenure track faculty</p> <p>Increase funding for advanced nurse education</p> <p>Support research that enhances the educational preparation of nurses</p> <p>Create more full-time tenure track nursing faculty positions rather than hiring several part-time or adjunct faculty when a full-time faculty retires or leaves</p>
Creating a cohesive, collaborative plan to address global health	<p>Continue to collaborate with national and international organizations on global issues</p> <p>Create faculty exchanges; solicit models to address global nursing recruitment and faculty exchange</p> <p>Develop a database for consultations and technical assistance</p> <p>Encourage all countries, including the United States, to develop national policies of self-sufficiency regarding the health care workforce</p> <p>Move nursing curricula from a focus on international nursing to a focus on global nursing, midwifery, and health</p> <p>Increase nursing faculty to accommodate more qualified nursing school applicants</p> <p>Support the integration of technology and distance learning to facilitate education nationally and globally</p> <p>Take an active role in policy and legislation in support of health care research funding</p>

Rosenkoetter, M., & Nardi, D. (2007). American Academy of Nursing Expert Panel on Global Nursing and Health: White paper on global nursing and health. *Journal of Transcultural Nursing*, 18(4), 305-315. Copyright © 2007 SAGE Publications. Reprinted with permission of SAGE Publications.

education in the Public Health Service Act—Title VIII from the 111th Congress to assist with increasing the workforce.

There are many other American nursing organizations working toward the improvement of global health and the accomplishment of the MDGs (see www.nursetogether.com for a list of global nursing organizations). However, there is no cohesive, comprehensive plan of action to address national or global health, nor is much funding directed at increasing the pipeline of nurses and midwives to meet national or global needs.

SUMMARY

As we face enormous local and global health challenges, a global shortage of nurses and midwives, we may react with frustration about our country's policies and funding priorities or despair when we see the numbers of women and children across the globe dying from preventable causes. If we, as nurses and midwives, continue to hope and to make a commitment to expand our clinical skills, research expertise, and leadership abilities, we can influence health policy and redirect federal and non-governmental funding. Through forming partnerships

with the ICN, ICM, the WHO Collaborating Centres for Nursing and Midwifery, and our national nursing and midwifery organizations, we can move toward MDG number 8 and be instrumental in developing a coordinated global strategy to accomplish health for all.

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