Professional Nursing

Concepts & Challenges

Ninth Edition

Beth Perry Black

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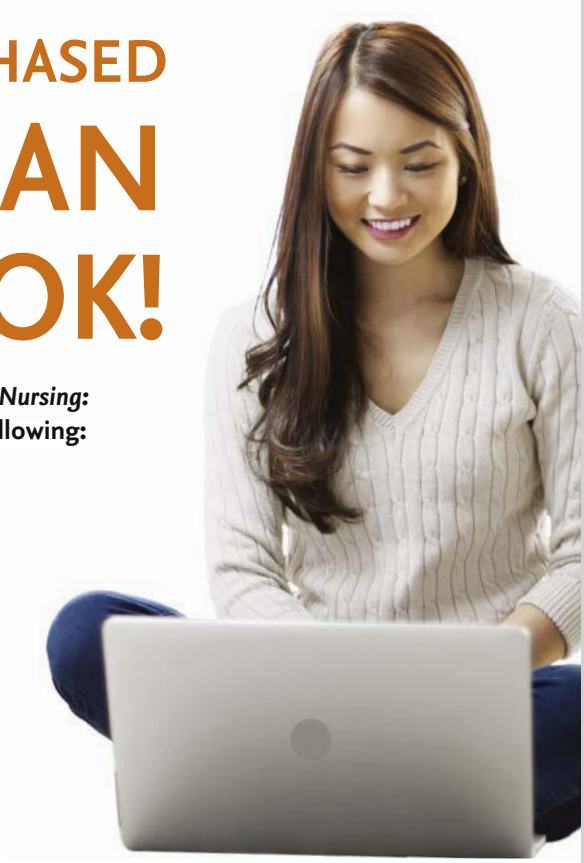

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Ninth Edition

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I dedicate this edition to my smart, funny, and spirited daughters, Amanda and Kylie, who, like their mom, chose their life partners well. Thank you, Hudson and Pierce, for becoming family.

—BPB

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PREFACE

Nursing is evolving, as is health care, in the United States. With the debates and discussions, lawsuits, and legislation that surround the Affordable Care Act (ACA), health care has become a flashpoint in American political and social discourse. With the increasing response to calls to advance their education and with their strong record of safety and quality care, nurses are well situated to be leaders in the provision of health care in the United States.

To be effective leaders, nurses must master knowledge about health and illness and human responses to each, think critically and creatively, participate in robust interprofessional education and collaborations, be both caring and professional, and grapple with complex ethical dilemmas that challenge providers in a time when health care resources are strained. As leaders, nurses should understand their history because the past informs the present; vision for the future builds on the lessons of today.

The ninth edition of *Professional Nursing: Concepts & Challenges* reflects my commitment to present current and relevant information. Since the last edition, the ACA has been subject to attempts to defund it, destabilize the insurance markets, and change key components of this important legislation, including doing away with protections of persons with preexisting conditions. By the time this edition is published, the 2018 midterm elections will have taken place and some of the questions that now trouble the ACA and health care in general are likely to have been resolved in one way or another. Although at the time of this writing the future of the ACA is unclear, what is clear is that questions of health care as a human right and how health care is best delivered and paid for will continue to spark lively debate in America.

In this edition, the order of the chapters has remained the same as in the eighth edition, based on generous feedback from faculty that this order provides a cohesive view of nursing; its history, education, and conceptual and theoretical bases; and the place of nursing in the U.S. health care system. Faculty are encouraged, however, to use the chapters in any order that reflects their own pedagogic and theoretical approaches. By using contributors with content expertise, this edition remains fresh and up-to-date. The effects of social media on nursing are addressed extensively regarding the legal and ethical implications of their use by nurses and their role in professional socialization and communication. With the easy and free availability of health-related statistics from .gov and other websites, I and the contributors decided to continue with the plan that was successful in the eighth edition: more narrative and fewer statistics. I have rarely met an engaged nurse who didn't start a story with, "I had a patient once who…" These narratives teach us about what is important in nursing.

Throughout the book, we have been very careful to be inclusive, to avoid heteronormative and ethnocentric language, to use examples that avoid stereotypes of all types, and to include photographs that capture the wonderful diversity of American nursing.

A note about references: older references refer to classic papers or texts. There are a few references that do not reach the level of "classic" texts, but the author turned a phrase in a clever or elegant way that needed to be cited. No manner of updated paper could replace these interesting comments or points of view. Research and clinical works are relevant and contemporary.

As with the last four editions, the ninth edition is written at a level appropriate for use in early courses in baccalaureate curricula, in RN-to-BSN and RN-to-MSN courses, and as a resource for practicing nurses and graduate students. An increasing number of students in nursing programs are seeking second undergraduate degrees, such as midlife adults seeking a career change and others who bring considerable experience to the learning situation. Accordingly, every effort has been made to present material that is comprehensive enough to challenge users at all levels without overwhelming beginning students. The text has been written to be engaging and interesting, and care has been taken to minimize jargon so prevalent in health care. A comprehensive glossary is provided to assist in developing and refining a professional vocabulary. As in previous editions, key terms are highlighted in the text itself. All terms in color print are in the Glossary. The Glossary also contains basic terms

that are not necessarily used in the text but may be unfamiliar to students new to nursing.

I hope that the ninth edition continues to meet the high standards set forth by Kay Chitty, who edited the first four editions of this book. I hope that students and faculty will find this edition readable, informative, and thought provoking. More than anything, I hope that *Professional Nursing: Concepts & Challenges,* Ninth Edition, will contribute to the continuing evolution of the profession of nursing and, ultimately, to the excellent care of patients, their families, and their communities.

Beth Perry Black

ACKNOWLEDGMENTS

With each new edition of *Professional Nursing: Concepts & Challenges,* I find myself increasingly in awe of the intelligence, creativity, humility, and work ethic of the nurses who continue to inspire me.

I am grateful to the many people whose support and assistance have made this book possible, each in different ways:

- To faculty who used earlier editions and shared their helpful suggestions to make this book better.
- To students who sent e-mails, expressing their gratitude for an interesting and readable textbook while offering ideas for improvement.
- To the contributors in this edition—Anita, Bev, Maureen, Janna, Kimberly, Maxine, Heather, Josie—whose expertise and commitment to excellence has made working on this edition particularly enjoyable.
- To my colleagues in the School of Nursing at the University of North Carolina at Chapel Hill, and to our extraordinary nursing students and alumni, who make us proud.
- To the faculty and students at Guangzhou (PRC) University School of Nursing and Traditional Chinese Medicine, especially Jiagen Xiang, whom I am proud to have as my colleague and friend.
- To Claudia Christy, my friend and traveling companion across the years, whose common sense and keen intelligence are a formidable combination.
- To Bonnie Barbour, whose friendship in our childhood and now again as (not-quite!) seniors is a treasure.
- To my brothers Dennis, David, and Mike Perry, because I would be lost without my bros.
- To my nieces Kelsey and Olivia. You are lights in my life, girls.

I am so lucky to have each of you grace my life with your unique gifts. I can't thank you enough.

CONTENTS

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Nursing in Today's Evolving Health Care Environment

Heather Moulzolf, DNP, MA-N, BA-N, ARNP-BC, CNP-BC,
Josie K. Christian, DNP, MSN, BSN, RN, PHN

To enhance your understanding of this chapter, try the Student Exercises on the Evolve site at http://evolve.elsevier.com/Black/professional.

LEARNING OUTCOMES

After studying this chapter, students will be able to:

- Describe the demographic profile of registered nurses today.
- Recognize the wide range of settings and roles in which today's registered nurses practice.
- Identify evolving practice opportunities for nurses.
- Consider nursing roles in various practice settings.
- Explain the roles and education of advanced practice nurses.

Nurses comprise the largest segment of the health care workforce in the United States and have increasing opportunities to practice in a wide variety of settings. In fact, nurses specialize in 104 areas: 34 specialties are outside the hospital, 68 are research oriented, 37 are managerial, and 92 are **patient facing** (see the Campaign for Nursing Explore Specialties at https://www.discovernursing.com/explore-specialties#.WhXOF0qnE2w). More than ever, the profession requires a well-trained, flexible, and knowledgeable workforce of nurses who can practice in today's evolving health care environment. Recent legislation, demands of patients as consumers of health care, and the need to control costs while optimizing outcomes have had a great influence on the way that health care is delivered in the United States. Nursing is evolving to meet these demands.

One of the most notable influences on today's health care environment is the Affordable Care Act (ACA), passed in 2010 by the 111th Congress and signed into law by President Barack Obama. The ACA is actually two laws—the Patient Protection and Affordable Care Act (PL 111-148) and the Health Care and Education Affordability Reconciliation Act (PL 111-152). These laws provide for incremental but progressive change to the way that Americans gain access to and pay for their health care. Although likely to be revised to some extent by Congress, the ACA has nonetheless provided increased opportunities for nurses: the Committee on the Robert Wood Johnson Foundation (RWJF) Initiative on the Future of Nursing at the National Academy of Medicine (formerly the Institute of Medicine [IOM]) noted, "Nurses have a considerable opportunity to act as full partners with other health professionals and to lead in the improvement and redesign of the health care system and its practice environment" (Institute of Medicine, 2010, pp. 1–2). This important initiative continues to have a profound influence on the evolution of nursing and nursing education since its publication.

Writing about "nursing today" poses a challenge, because what is current today may have already changed by the time you read this. What does not change, however, is the commitment of nurses to what

Rosenberg (1995) referred to as "the care of strangers"—professional caring, learned through focused education and deliberate socialization (Storr, 2010). In other words, you will be taught to think like a nurse and to do well those things that nurses do. You will become a nurse. Importantly, some of you are already nurses and are returning to school to further your education. Thank you for your commitment to the profession and to your own professional development! You have experienced firsthand the shifting needs of the profession in response to an evolving health care system in a changing world and are poised to move nursing forward with your knowledge from both your education and your wide variety of experiences.

In this chapter you will learn some basic information about today's nursing workforce: who nurses are, the settings where they practice, and the patients for whom they are providing care. You will also be introduced to some nurses who have had intriguing experiences and opportunities that you may not know are even possible. Your nursing education will provide you with a flexible set of skills and opens to you a wide variety of experiences that await you as you begin—or continue—your career as a professional registered nurse (RN).

NURSING IN THE UNITED STATES TODAY

High-quality, culturally competent nursing care depends on a culturally diverse nursing workforce (American Association of Colleges of Nursing [AACN], 2014a). The need to enhance diversity in nursing through the recruitment of underrepresented groups into the profession is a priority (AACN, 2014b). Understanding the composition of the nursing workforce is necessary to identify underrepresented groups and to recognize workforce trends such as the age of nurses in practice and the percentage of licensed nurses holding jobs in nursing.

The U.S. Department of Health and Human Services responded to this need by conducting a comprehensive survey of the nursing workforce every 4 years, beginning in 1977. Known as the National Sample Survey of Registered Nurses (NSSRN), this effort gave policymakers, educators, and other nurse leaders data about the workforce, allowing them to make informed decisions about allocation of resources, development of programs, and recruitment of nurses. The final NSSRN was conducted in 2008, and results were published in 2010. The federal government has since discontinued this very useful survey. The final version of the 2008 federal nursing workforce survey, *The Registered Nurse Population: Findings from the 2008 National Sample Survey of Registered Nurses* (U.S. Department of Health and Human Services, 2010), is available as a .pdf file in a direct link: https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/rnsurveyfinal.pdf.

In response to the discontinuation of the NSSRN and the ongoing need to understand the nursing workforce, in 2013 the National Council of State Boards of Nursing (NCSBN) and the Forum of State Nursing Workforce Centers (FSNWC) combined efforts to conduct a comprehensive national survey of RNs (Budden et al., 2013). In this chapter, data from the 2015 NCSBN and FSNWC survey are presented in conjunction with other sources of workforce data, including the final 2008 NSSRN data, to provide you with a thumbnail sketch of nursing, specifically focusing on the number of nurses in the workforce, as well as their gender, age, race, ethnicity, and educational levels.

Nurses in the Workforce

RNs are the largest group of health care providers in the United States and in the 2000s grew by 24.1% (Health Resources and Services Administration, 2013). More than 4 million individuals held licenses as RNs in 2016 (National Council of State Boards of Nursing, 2016). In 2013 approximately 2.8 million nurses were currently working (Health Resources and Services Administration, 2013). In the 2015 NCSBN and FSNWC National Workforce Survey of RNs, the majority (91%) of nurses younger than age 50 are employed in nursing. A significant number of survey respondents (82%) were actively employed in nursing, with 63% reporting working full time. Respondents worked an average of 36.6 hours per week (one position), and RNs with two or more positions worked an average of 42.2 hours per week.

Gender

Nursing remains a profession dominated by women; however, the percentage of men in nursing increased by 50% between 2000 and 2008 (U.S. Department of Health and Human Services, 2010). Among NCSBN/FSNWC 2015 survey respondents, 8% were men compared with 7% in the 2013 survey. In 2014 men comprised 15% of students in entry-level bachelor of science in nursing (BSN) programs (National League for Nursing [NLN], 2014). According to the AACN (2015a), data obtained

from nurses in practice showed that male and female RNs were equally likely to have a bachelor's or higher degree in nursing or nursing-related fields (49.9% and 50.3%, respectively). Men, however, were more likely than women to have a bachelor's or higher degree in nursing and any nonnursing field (62% vs. 55%). A higher percentage of the men work in hospitals (76% vs. 62%). At 41%, men are overrepresented in the advanced practice role of certified registered nurse anesthetists. Among all other job titles held by men, staff nurse and administration have proportional representation, with about 7% of these positions held by men. Nurse practitioners and positions designated as "other" (e.g., consultant, clinical nurse leader, informatics, researcher) are slightly less proportional, with 6% of these positions held by men. Men hold only about 3.8% of faculty positions.

Age

The future of any profession depends on the infusion of youth, and the steady increase in the age of the nursing workforce has been a concern. Earlier data indicated that the rate of aging has slowed in the nursing workforce as a result of the increased number of working RNs younger than age 30, which offsets the increasing number of nurses aged 60 or older who continue to work (U.S. Department of Health and Human Services, 2010). The rise in the number of nurses younger than age 30 is attributed to the increased number of BSN graduates, who tend to be younger than graduates from other types of nursing programs. Since 2005, the average age of graduates from all nursing programs has been 31 years old. BSN graduates, at an average age of 28 years old, are 5 years younger than graduates of associate degree and diploma (hospital-based) programs, who are on average 33 years old.

The median age is that point at which half of the nurses are older and half are younger, and it provides a more useful metric of the workforce than does calculating a mean age. Since 1988, when the median age was 38, the median age of nurses rose by 2 years between each survey, so that by 2004, the median age was 46, a worrisome figure that meant the nursing workforce was continuing to age. The increasing number of nurses aged 60 and older who are still in the workforce may reflect economic conditions requiring older nurses to remain employed rather than retiring. Nursing is reasonably protected from the layoffs and downsizing experienced in other professions.

This stabilization of the aging pattern seen in the final NSSRN survey is an optimistic sign that nursing is seen as an option for younger people entering the workforce and that nursing will not face a shortage as older nurses age out of the workforce in a few years. However, with approximately one-third of the current nursing workforce older than age 50 (Health Resources and Services Administration, 2013), the profession of nursing must continue to recruit and educate younger nurses to prevent a nursing shortage as older nurses move toward retirement.

Race and Ethnicity

Racial and ethnic minorities comprise 37% of the U.S. population today but only 19% of the RN population, an underrepresentation by about 50% in 2013 (Budden et al., 2013). This is similar to the findings in 2008 in the NSSRN (Fig. 1.1). Although troublesome, the number is an improvement from 2004, when only 12.2% of RNs had racial/ethnic minority backgrounds. Detailed data from the NSSRN showed that the largest disparity between the U.S. general population and the RN population is seen with Hispanics/Latinos of any race. Although this group forms about 15.4% of the U.S. population, they make up only 3.6% of RNs. Black/African American, non-Hispanics also have a significant disparity; now constituting 12.2% of the U.S. population, this group makes up just 5.4% of RNs. The only group that exceeds its representational percentage in the general population is the Asian or Native Hawaiian/Pacific Islander, non-Hispanic group. Comprising 4.5% of the general population, this group makes up 5.8% of the RN population, possibly because a substantial number of RNs practicing in the United States received their nursing education in India or the Philippines, thus contributing to their overrepresentation (U.S. Department of Health and Human Services, 2010). In 2014 a biennial survey of nursing schools by the NLN demonstrated promise that the diversity of the profession is improving. In 1995 fewer than 18% of students enrolled in a professional nursing program were from underrepresented racial or ethnic minority groups, in contrast to more than 35% in 2014 (NLN, 2014).

Despite efforts to recruit and retain racial/ethnic minority women and men to the profession, nursing still has a long way to go before the racial/ethnic composition of the profession more accurately reflects that of the United States as a whole. This situation is improving,

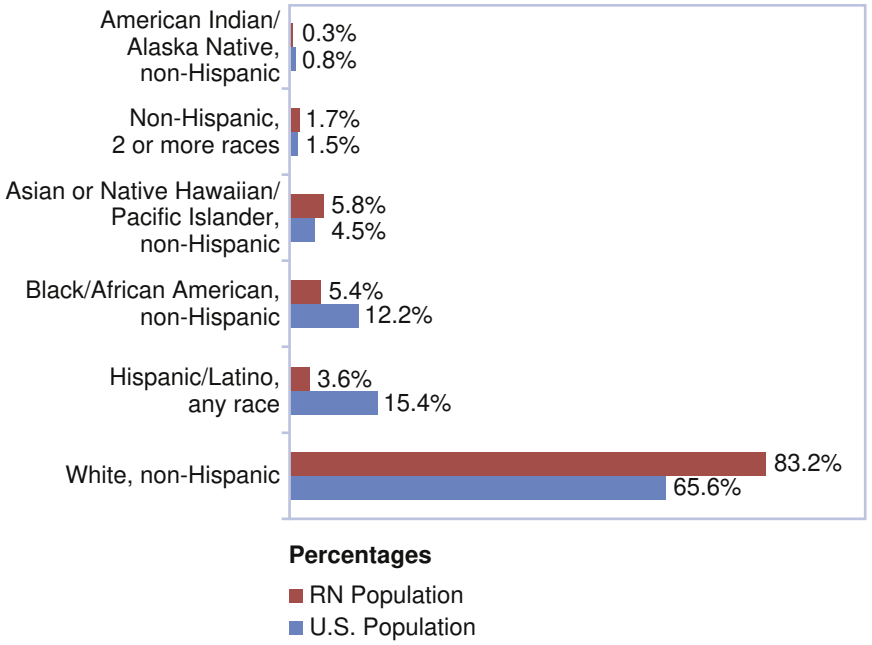

Fig. 1.1 Registered nurse (RN) and U.S. populations by race/ethnicity, 2008. The proportion of nurses who are White, non-Hispanic is greater than their proportion in the U.S. population. (Data from U.S. Department of Health and Human Services, Health Resources and Services Administration: *The Registered Nurse Population: Findings from the 2008 National Sample Survey of Registered Nurses,* Washington, DC, 2010, U.S. Government Printing Office, p. 7-7.)

however. In a recent report on enrollment and graduation in bachelor's and graduate programs in nursing, the AACN (2015a) found that 30.1% of nursing students in entry-level BSN programs were from underrepresented backgrounds.

Education

The basic education to become a nurse is referred to as the *entry level* into practice. Successful completion of your basic education, however, does not qualify you to become a nurse. Once you have graduated from a school of nursing approved by your state, you are qualified to take the National Council Licensure Examination for Registered Nurses, known as the NCLEX-RN®. Once you have passed the NCLEX-RN®, you can be licensed as an RN if you meet other requirements by your state board of nursing, such as passing a background check.

Nursing has three mechanisms by which you can get basic nursing education to qualify to take the NCLEX®: (1) a 4-year education at a college or university conferring a BSN degree; (2) a 2-year education at a community college or technical school conferring an associate degree in nursing (ADN); and (3) a diploma in nursing, awarded after the successful completion of a hospital-based program that typically takes 3 years to complete, including prerequisite courses that may be taken at another school.

According to the National League for Nursing (NLN), the number of diploma programs educated only 3% to 4% of all new RNs in between 2003 and 2014 (NLN, 2014) as nursing education has shifted to colleges and universities (AACN, 2011). The majority of nurses (53%) in the United States get their initial nursing education in ADN programs (RWJF, 2013); in the NCSBN/FSNWC (2013) survey, 39% of the 41,823 respondents reported having an ADN as their first degree or credential, and 36% reported having a BSN as their first degree or credential.

Many ADN-prepared RNs eventually return to school to complete a BSN degree. Between 2004 and 2012, the number of RNs enrolled in BSN programs almost tripled, from 35,000 to slightly fewer than 105,000 (RWJF, 2013). Currently, approximately 55% of RNs have BSN or higher degrees (Health Resources and Services

Administration, 2013). Many colleges and universities offer BSN programs, often online, to accommodate RNs in practice who want to work toward a BSN degree as a supplement to their basic nursing education at the ADN or diploma level. Nursing education is discussed in greater detail in Chapter 4.

Globalization and the international migration of nurses have increased internationally educated nurses (IENs) practicing in the United States by 40% between 2006 and 2015, and in 2016 approximately 15% of all RNs in the United States were educated in other countries (World Education Service, 2018). The recruitment of IENs to the United States has been a strategy to expand the nursing workforce in response to the recent nursing shortage. This strategy, however, may result in nursing shortages in their own countries. IENs face challenges as they join the workforce in the United States, including English as a second language and problems with their peers who may not perceive them as knowledgeable (Thekdi et al., 2011). Deep cultural differences may further separate the IENs from their American peers. Thekdi and colleagues (2011) noted that IENs might have views of gender, authority, power, and age that vary from those of Americans, and which may affect their communication styles.

Sigma Theta Tau International (STTI) published a position paper on international nurse migration. Although this paper was published in 2005, it reflects STTI's current, ongoing position regarding international nurse migration (STTI, 2005). STTI recognizes the autonomy of nurses in making decisions for themselves about where to live and work, noting that "push/pull" factors shape nurse migration. Push factors include poor compensation and working conditions, political instability, and lack of opportunities for career development that drive (push) a nurse to seek employment in another country. Factors that pull nurses to emigrate include opportunities for a better quality of life, personal safety, and professional incentives such as increased pay, better working conditions, and career development. STTI calls for further exploration of the issue with a focus on identifying "solutions that do not promote one nation's health at the expense of another's" (p. 2). Furthermore, STTI endorsed the International Council of Nurses position in calling for a regulated recruitment process based on ethical principles that deter exploitation of foreign-educated nurses and reinforce sound employment policies (p. 4).

Practice Settings for Professional Nurses

As members of the largest health care profession in the United States, nurses practice in a wide variety of settings. The most common setting is the hospital, and many new nurses seek employment there to strengthen their clinical and assessment skills. Nurses practice in clinics, community-based facilities, medical offices, skilled nursing facilities (SNFs), and other long-term settings. Nurses also provide care in places where people spend much of their time: homes, schools, and workplaces. In communities, nurses work in the military, community and senior centers, children's camps, homeless shelters, and, recently, in retail clinics found in some pharmacies. Nurses also provide palliative care (i.e., symptom management to improve quality of life) and end-of-life care, often in the homes of patients who are terminally ill or in inpatient hospice homes or facilities. Increasingly, nurses with advanced degrees, training, and certification are working in their own private practices or in partnership with physicians or other providers. This expansion of practice holds promise for nurses to widen their roles in health care, especially as the American health care system continues to evolve.

Hospitals remained the primary work site for RNs, with 63.2% of nurses employed by hospitals in either inpatient or outpatient settings, an increase of 25% in the past decade (Health Resources and Services Administration, 2013). Most of these nurses (39.6%) work in inpatient units in community hospitals, whereas others work in specialty hospitals, long-term care hospitals, and psychiatric units. The federal government employs nurses, generally in the U.S. Department of Veterans Affairs (VA) hospitals, where 1.1% of RNs work.

Ambulatory care settings, such as nurse-based practices, physician-based practices, and free-standing emergency and surgical centers, accounted for 10.5%, the second largest segment of the nurse workforce. Public and community health accounted for 7.8% of employed nurses, and an additional 6.4% worked in home health. Skilled nursing facilities (SNFs), or **extended care** facilities, employed 5.3% of nurses in the workforce. The remainder of employed RNs worked in settings such as schools of nursing; nursing associations; local, state, or federal governmental agencies; state boards of nursing; or insurance companies (U.S. Department of Health and Human Services, 2010, pp. 3–9).

Not all nurses provide direct patient care as their primary role. A small but important group of nurses spend

the majority of their time conducting research, teaching undergraduate and graduate students in the classroom and in clinical settings, managing companies as chief executives, and consulting with health care organizations. Nurses with advanced levels of education, such as master's and doctoral degrees, are prepared to become researchers, educators, and administrators. Nurses can practice as advanced practice nurses (APNs), including a variety of types of nurse practitioners (NPs), clinical nurse specialists (CNSs), certified nurse-midwives (CNMs), and certified registered nurse anesthetists (CRNAs). These advanced practice roles are described later in this chapter.

Nurses have much to consider in deciding where to practice. Some settings will not be immediately open to new nurses because they require additional educational preparation or work experience. Importantly, nurses entering the workforce need to consider their special talents, likes, and dislikes—neither the nurse nor patients benefit when a nurse is working with a population for which he or she has little affinity. A nurse who enjoys working with children may not feel at ease in caring for elderly patients; on the other hand, a nurse who loves children may find that caring for sick children is emotionally stressful. A nurse with excellent communication skills may find that a postanesthesia care unit (PACU) does not allow the formation of professional relationships with patients that this nurse might appreciate in a psychiatric setting. Nursing school offers the chance to experience a wide variety of settings with diverse patient populations. At the end of your studies, you may be surprised by the skills you have developed and populations that appeal to you (Fig. 1.2).

Fig. 1.2 Although most nurses work in hospitals, nurses in home health settings often enjoy long-term relationships with their patients. (Photo used with permission from iStockphoto.)

Health care reform and the push to transform the health care system are moving nurses into new territory. Numerous new opportunities and roles are being developed that use nurses' skills in innovative and exciting ways. In the following section, you will be introduced to a range of settings in which nurses practice. These areas are only a sample of the growing variety of opportunities available to nurses entering practice today.

Nursing in Hospitals

Nursing care originated and was practiced informally in home and community settings and moved into hospitals only within the past 150 years. Hospitals vary widely in size and services. Certain hospitals are referred to as medical centers and offer comprehensive specialty services, such as cancer centers, maternal-fetal medicine services, and heart centers. Medical centers are usually associated with university medical schools and have a complex array of providers. Medical centers can have 1000 or more beds and have a huge nursing workforce. Medical centers are often designated as level 1 trauma centers because they offer highly specialized surgical and supportive care for the most severely injured patients. The patients at community-based hospitals usually are less severely ill than those needing comprehensive care or trauma care at a medical center. However, if a patient becomes unstable or if the patient's condition warrants, he or she can be transported to a larger hospital or a medical center. Nurses play an important role in identifying very ill patients, assisting in stabilizing their conditions, and preparing them for transport.

In general, nurses in hospitals care for patients who have medical or surgical conditions (e.g., those with cancer or diabetes, those in need of postoperative care), children and their families on pediatric units, women and their newborns, and patients who have had severe trauma or burns. Specialty areas are referred to as "units," such as operating suites or emergency departments, intensive care units (e.g., cardiac, neurology, medical), and step-down or progressive care units, among others. In addition to providing direct patient care, nurses are educators, managers, and administrators who teach or supervise others and establish the direction of nursing on a hospital-wide basis.

Various generalist and specialist certification opportunities are appropriate for hospital-based nurses, including medical-surgical nursing, pediatric nursing, pain management nursing, informatics nursing, genetics nursing–advanced, psychiatric–mental health nursing,

nursing executive, nursing executive–advanced, hemostasis nursing, and cardiovascular nursing, among others. *Certification* means that nurses have demonstrated their expertise in a particular area of care and have passed rigorous credentialing testing offered by the American Nurses Credentialing Center (ANCC), one of three entities comprising the ANA Enterprise. No other health care facility offers such variety of opportunities for practice as hospitals offer.

The educational credentials required of RNs practicing in hospitals can range from associate degrees and diplomas to doctoral degrees. In general, entry-level positions require only RN licensure. Many hospitals require nurses to hold bachelor's degrees to advance on the clinical ladder or to assume management positions. A **clinical ladder** is a multiple-step program that begins with entry-level staff nurse positions. As nurses gain experience, participate in continuing education (CE), demonstrate clinical competence, pursue formal education, and become certified, they become eligible to move up the clinical ladder. There is no single model for clinical advancement for nurses across hospitals and other health care agencies. When exploring work settings, nurses as prospective employees should ask about the clinical ladder and opportunities for career advancement.

Most new nurses choose to work in hospitals as staff nurses initially to gain experience in organizing and delivering care to multiple patients. For many, staff nursing is extremely gratifying, and nurses continue in this role across their careers. Others pursue additional education, sometimes provided by the hospital, to work in specialty units such as neonatal intensive care or cardiac care. Although specialty units often require clinical experience and additional training, some hospitals allow new graduates to work in these units.

Some nurses find that management is their strength. **Nurse managers** are in charge of all activities on their units, including patient care, continuous quality improvement (CQI), personnel hiring and evaluation, and resource management, including the unit budget. Being a nurse manager in a hospital today requires business acumen and knowledge of business and financial principles to be most effective in this role. Nurse managers typically assume 24-hour accountability for the units they manage and are often required to have earned a master's degree.

Most nurses in hospitals provide direct patient care, sometimes referred to as bedside nursing. In the past, becoming administrators or managers was often necessary for nurses to be promoted or receive salary increases, which removed them from bedside care. Today, in hospitals with clinical ladder programs, nurses no longer must make that choice; clinical ladder programs allow nurses to progress professionally while staying in direct patient care roles.

At the top of most clinical ladders are **clinical nurse specialists** (CNS), who are APNs with master's, post-master's, or doctoral degrees in specialized areas of nursing, such as oncology (cancer) or diabetes care. The CNS role varies but generally includes responsibility for serving as a clinical mentor and role model for other nurses, as well as setting standards for nursing care on one or more particular units. The oncology clinical specialist, for example, works with the nurses on the oncology unit to help them stay informed regarding the latest research and skills useful in the care of patients with cancer. The clinical specialist is a resource person for the unit and may provide direct care to patients or families with particularly difficult or complex problems, establish nursing protocols, and ensure that nursing practice on the unit is evidence based. **Evidence-based practice (EBP)** refers to nursing care that is based on the best available research evidence, clinical expertise, and patient preference. More details about EBP are found in Chapter 10.

Salaries and responsibilities increase at the upper levels of the clinical ladder. The clinical ladder concept benefits nurses by allowing them to advance while still working directly with patients. Hospitals also benefit by retaining experienced clinical nurses in direct patient care, thus improving the quality of nursing care throughout the hospital. Research has demonstrated that patient outcomes are more positive for patients cared for by RNs with a bachelor's or higher degree. Linda Aiken, PhD, RN, FAAN, is a leader in nursing who has conducted important research documenting the positive impact of adequate RN staffing on patient outcomes. More than a decade ago, Aiken and colleagues (2003) published a groundbreaking study in which they found that patients on surgical units with more BSN-prepared nurses had fewer complications than patients on units with fewer BSN nurses. Aiken has published widely on nurse staffing and safety since publishing this landmark study. In 2010 Aiken and colleagues reported on a comparison of nurse and patient outcomes among hospitals in California, which has state-mandated nurse-to-patient ratios, and in Pennsylvania and New Jersey, neither of which has state-mandated nurse-to-patient

ratios. Furthermore, concern about patient quality and safety is an international issue. In 2012 Aiken and colleagues led a very large team in examining nurse and patient satisfaction, hospital environments, quality of care, and patient safety across 12 European countries and the United States. Again in 2014, Aiken et al. conducted a retrospective observational study of nine European countries analyzing 422,730 patient records. They found the proportion of nurses with a baccalaureate education is associated with significantly fewer deaths after surgery: Every 10% increase in baccalaureate-prepared nurses is associated with a 7% reduction in mortality. See Evidence-Based Practice Box 1.1 for a description of these landmark studies.

Rigid work scheduling was one of the greatest drawbacks to hospital nursing in the past. These schedules usually included evenings, nights, weekends, and holidays. Although hospital units must be staffed around the clock,

EVIDENCE-BASED PRACTICE BOX 1.1

The Evidence: Better Professional Nurse Staffing Improves Quality and Safety of Patient Care

Linda Aiken, PhD, RN, FAAN, Professor of Nursing and Professor of Sociology at the University of Pennsylvania School of Nursing, is the director of the Center for Health Outcomes and Policy Research. She is an authority on causes, consequences, and solutions for nursing shortages both in the United States and worldwide. Dr. Aiken has published extensively. She and her colleagues noted growing evidence suggesting "that nurse staffing affects the quality of care in hospitals, but little is known about whether the educational composition of registered nurses (RNs) in hospitals is related to patient outcomes" (Aiken et al., 2003). They wondered whether the proportion of a hospital's staff of bachelor's or higher degree–prepared RNs contributed to improved patient outcomes. To answer this question, they undertook a large analysis of outcome data for 232,342 general, orthopedic, and vascular surgery patients discharged from 168 Pennsylvania hospitals over a 19-month period. They used statistical methods to control for risk factors such as age, gender, emergency or routine surgeries, type of surgery, preexisting conditions, surgeon qualifications, size of hospital, and other factors. Their findings were very important:

To our knowledge, this study provides the first empirical evidence that hospitals' employment of nurses with BSN and higher degrees is associated with improved patient outcomes. Our findings indicate that surgical patients cared for in hospitals in which higher proportions of direct-care RNs held bachelor's degrees experienced a substantial survival advantage over those treated in hospitals in which fewer staff nurses had BSN [bachelor of science in nursing] or higher degrees. Similarly, surgical patients experiencing serious complications during hospitalization were significantly more likely to survive in hospitals with a higher proportion of nurses with baccalaureate education (p. 1621).

Noting that fewer than half of all hospital staff nurses nationally are prepared at the bachelor's or higher level, and citing a shortage of nurses as a complicating factor, this group of researchers recommended "placing greater emphasis in national nurse workforce planning on policies to alter the educational composition of the future nurse workforce toward a greater proportion with bachelor's or higher education as well as ensuring the adequacy of the overall supply" (p. 1623). They concluded that improved public financing of nursing education and increased employers' efforts to recruit and retain highly prepared bedside nurses could lead to substantial improvements in quality of care.

More recently, California became the first state to enforce state-mandated minimum nurse-to-patient ratios. Much commentary about the pros and cons of these types of mandates has been generated. To determine whether nurse and patient outcomes were different in California than in two states without mandated staffing, Aiken and colleagues (2010) analyzed survey data from 22,336 hospital staff nurses in California, Pennsylvania, and New Jersey, as well as state hospital discharge databases. From this highly complex analysis they determined the following:

> *When we use the predicted probabilities of dying from our adjusted models to estimate how many fewer deaths would have occurred in New Jersey and Pennsylvania hospitals if the average patient-to-nurse ratios in those hospitals had been equivalent to the average ratio across the California hospitals, we get 13.9% (222/1598) fewer surgical deaths in New Jersey and 10.6% (264/2479) fewer surgical deaths in Pennsylvania (p. 917).*

In addition, the nurses in California experienced lower levels of burnout (a condition associated with intense and prolonged stress in work settings) and were less likely to report being dissatisfied with their jobs. These important findings can inform ongoing debates in other states regarding legislation regulating nurse-patient ratio or mandatory reporting of nurse staffing. Aiken and colleagues (2010) concluded, "Improved nurse staffing, however it is achieved, is associated with better outcomes for nurses and patients" (p. 918).

EVIDENCE-BASED PRACTICE BOX 1.1—cont'd

The Evidence: Better Professional Nurse Staffing Improves Quality and Safety of Patient Care

Quality and safety of patient care are of international concern. In 2012 Aiken and a team of researchers from the United States and Europe published findings from a very large, cross-sectional study of 488 general acute care hospitals in 12 European countries and 617 similar hospitals in the United States. Despite deficits in the quality of care present in all countries, Aiken and colleagues found that hospitals providing good work environments and better staffing by professional nurses had nurses and patients who were more satisfied with care. Furthermore, their findings suggested that good work environments and better professional nurse staffing resulted in improving quality and safety of care. The implication of these findings is that improvement of hospital work environments could be an affordable strategy to improve both patient outcomes and retention of professional nurses who provide high-quality care.

In 2014 Aiken et al. published seminal research assessing the impact of nursing patient ratios and educational qualifications in 300 hospitals in nine European countries. They reviewed more than 422,730 patient records of patients who underwent common surgeries and surveyed 26,516 nurses practicing in the study hospitals to gather data on nurse staffing and education. The researchers identified that an increase of 10% of nurses holding a baccalaureate degree in the hospital setting is associated with a 7% reduction in mortality. Also, an increase of a nurse's patient load by one patient increased the likelihood of an inpatient dying within 30 days of admission by 7%. In other words, cutting nurse staff to reduce the nursing budget may adversely affect patient outcomes. Also, increasing the number of baccalaureate-prepared nurses may prevent hospital deaths.

In 2018 New York became the first state to require that new RNs obtain their baccalaureate degree within 10 years of graduation. Much of the evidence presented to back this legislative bill came from the pivotal work done by Aiken and colleagues. The bill is located here: https://www.nysenate.gov/legislation/bills/2017/s6768.

Resources

Aiken LH, Clarke SP, Cheung RB, Sloane D, Silber JH: Educational levels of hospital nurses and surgical patient mortality, *Journal of the American Medical Association* 290(12):1617–1623, 2003.

Aiken LH, Sermeus W, Van den Heede K, Sloane DM, Busse R, McKee M, Kutney-Lee A: Patient safety, satisfaction, and quality of hospital care: cross sectional survey of nurses and patients in 12 countries in Europe and the United States, *British Medical Journal* 344:1717, 2012.

Aiken LH, Sloane DM, Bruyneel L, Van den Heede K, Griffiths P, Busse R, Sermeu W: Nurse staffing and education and the hospital mortality in nine European countries: a retrospective observational study, *Lancet* 383(9931):1824–1830, 2014.

Aiken LH, Sloane DM, Cimiotti JP, Clarke SP, Flynn L, Seago JA, Spetz J, Smith HK: Implications of the California nurse staffing mandate for other states, *Health Services Research* 45(4):904–921, 2010.

flexible staffing is more common now, a process by which nurses on a particular unit negotiate with one another and establish their own schedules to meet personal and family responsibilities while ensuring that appropriate staffing for high-quality patient care is provided. Staffing needs may be predictable, such as in the emergency department or surgical units when times of high use can be anticipated. Accordingly, some units may decrease staffing over major holidays because numbers of admissions are known to be low during certain days of the year when elective procedures are not routinely scheduled.

Each hospital nursing role has its own unique characteristics. In the following profile, an RN discusses his role as a nurse in a neonatal intensive care unit (NICU):

> *Many people are surprised when I tell them that I work in a NICU. They don't seem to expect that a man might enjoy working with the tiniest patients in the hospital. But I appreciate the technical challenges of providing care for an infant born very prematurely or that has a serious congenital condition. The biggest challenge for me though is working with a full-term baby that had some kind of unexpected trauma at birth. These babies can be very, very sick, and their parents need a lot of support and information. I take care of my little patients the same way I would want someone to take care of my own child. I can only imagine how terrifying it is for the parents for their baby to be so sick. I know that some of the procedures that I have to do are painful, so I make sure that I talk to a baby while I am doing a procedure and try to provide comfort the best I can. Sometimes, when it is possible, I'll wrap a baby in a blanket and rock him or her for a while when things are quiet in the unit. The only thing better than that is the day the parents take the baby home.*

When the "fit" between nurses and their role requirements is good, being a nurse is particularly gratifying, as an oncology nurse demonstrates in discussing her role:

> *Being an oncology nurse and working with people with cancer that may shorten their lives brings you close to patients and their families. The family room for our patients and their families is much like someone's home. Families bring in food and have dinner with their loved one right here. Working with terminally ill patients is a tall order. I look for ways to help families determine what they hope for as their loved one nears the end of life. It varies. Sometimes they hope for a peaceful death, or hope to make amends with an estranged family member or friend or hope to go to a favorite place one more time. The diagnosis of cancer is traumatic, and patients may struggle to cope, especially if their cancer is very advanced or untreatable. I love getting to know my patients and their families and feel that I can be helpful to them as they face death, sometimes by simply being with them. They cry, I cry—it is part of nursing for me, and I would have it no other way.*

These are only two of the many possible roles nurses in hospital settings may choose. Although brief, these descriptions convey the flavor of the responsibility, complexity, and fulfillment to be found in hospital-based nursing (Fig. 1.3).

Fig. 1.3 Hospital staff nurses work closely with the families of patients, as well as with the patients themselves. (Photo used with permission from Photos.com.)

Nursing in Communities

Lillian Wald (1867–1940) is credited with initiating community health nursing when she established the Henry Street Settlement in New York City in 1895. Community health nursing today is a broad field, encompassing areas formerly known as public health nursing. Community health nurses work in ambulatory clinics, health departments, hospices, homes, and a variety of other community-based settings.

Community health nurses may work for either the government or private agencies. Those working for public health departments provide care in clinics, schools, retirement communities, and other community settings. They focus on improving the overall health of communities by planning and implementing health programs, as well as delivering care for individuals with chronic health problems. Community health nurses provide educational programs in health maintenance, disease prevention, nutrition, and child care, among others. They conduct immunization clinics and health screenings and work with teachers, parents, physicians, and community leaders toward a healthier community.

Many health departments also have a home health component. Over the past several decades an increasing number of public and private agencies provides home health services, a form of community health nursing. In fact, home health care is a growing segment of the health care industry.

Home health care is a natural fit for nursing. Home health nurses across the United States provide quality care in the most cost-effective and, for patients, most comfortable setting possible. Patients cared for at home may face significant health challenges because of management of chronic illnesses or early hospital discharges in efforts to control costs. As a result, technological devices such as ventilators and intravenous pumps, and significant interventions such as administration of chemotherapy and total parenteral nutrition, are encountered in home health care. Wound care is another domain of home health nursing. Wounds managed in the patient's home can be extensive, and home health nurses providing wound care can assess the patient's home environment for factors that help or hinder healing.

Home health nurses must possess up-to-date nursing knowledge and be secure in their own nursing skills because they do not have the expertise of more experienced nurses quickly available, as they would have in a hospital setting. Strong assessment and communication skills are essential in home health nursing. These nurses

must make independent judgments and be able to recognize patients' and families' learning needs. Home health nurses must also recognize the limits of their education and experience and seek help when the patient's needs are beyond the scope of their abilities. An RN working in home health care relates her experience:

> *I have always found home care to be very rewarding. I get to know patients in a way I could never have if I had continued to work in a hospital. One of my favorite success stories involved a man with a long history of osteomyelitis—an infection in the bone—resulting from a car wreck 18 years earlier. He had a new central line and was going to get 6 months of intravenous antibiotics. If this treatment didn't work, he was facing an above-the-knee amputation. I taught his wife how to assess the dressing and site, how to change the dressing, and how to infuse the antibiotics twice a day. At my once-a-week visits to draw blood, I counseled the patient about losing weight and quitting smoking because these measures would help in his healing. He lost 80 pounds, quit smoking completely, and at the end of 6 months, he had no signs of infection. He described himself as "a new man." I was so happy for him and his wife. Holistic nursing care in his own home made a huge difference for the rest of his life.*

Some nurses are certified as community health or home health nurses by the ANCC. The examinations for these two specialties have now been retired, but nurses certified before this can have their credentials renewed. The ANCC does have an examination for certification as a public health nurse–advanced. The demand for nurses to work in a variety of community settings is expected to continue to increase as care moves from hospitals to homes and other community sites.

Nursing in Medical Offices

Nurses who are employed in medical office settings work in collaboration with physicians, NPs, and their patients. Office-based nursing activities include performing health assessments, reviewing medications, drawing blood, giving immunizations, administering medications, and providing health teaching. Nurses in office settings also act as liaisons between patients and physicians or NPs. They expand on and clarify recommendations for patients, as well as provide emotional support to anxious patients. They may visit hospitalized patients, and some assist in surgery. Often, RNs in office practices supervise other care providers, such as licensed practical/vocational nurses, nurse aides, and, depending on the size of the practice, other employees of the practice such as assistants who schedule patient appointments and manage patient records.

An RN who works for a nephrology practice with three nephrologists describes a typical day:

> *I first make rounds independently on patients in the dialysis center, making sure they are tolerating the dialysis procedure and answering questions about their treatments and diets. I then make rounds with one of the physicians in the hospital as she visits patients and prescribes new treatments. The afternoon is spent in the office assessing patients as they come for their physician's visit. I might draw blood for a diagnostic test on one patient and do patient teaching regarding diet with another. No two days are alike, and that is what I love about this position. I have a sense of independence but still have daily patient contact.*

RNs considering employment in office settings need good communication skills because many of their responsibilities involve communicating with patients, families, employers, pharmacists, and hospital admissions offices. Nurses should be careful to ask prospective employers the specifics of the position because nursing roles in office practices can range from routine tasks to challenging responsibilities requiring expertise in a particular practice setting, such as that described by the nurse in the nephrology practice. Educational requirements, hours of work, and specific responsibilities vary, depending on the preferences of the employer. Some nurses find a predictable daily schedule with weekends and holidays off to be an advantage in working in an office practice. An important advantage of employment in an office setting is that over time, nurses get to know their patients well, including several members of a family, depending on the type of practice.

Nursing in the Workplace

Many companies today employ **occupational and environmental health nurses** to provide basic health care services, health education, screenings, and emergency treatment to employees in the workplace. Corporate executives have long known that good employee health reduces absenteeism, insurance costs, and worker errors, thereby improving company profitability. Occupational health nurses (OHNs) represent an important investment by companies in the health and safety of their employees.

They are often asked to serve as consultants on health matters within the company. OHNs may participate in health-related decisions, such as policies affecting health insurance benefits, family leaves, and acquisition and placement of automatic external defibrillators. Depending on the size of the company, the OHN may be the only health professional employed in a company and therefore may have a good deal of autonomy.

Being licensed is generally the minimum requirement for nurses in occupational health roles. The American Association of Occupational Health Nurses (AAOHN) recommends that OHNs have a bachelor's degree. OHNs must possess knowledge and skills that enable them to perform routine physical assessments (e.g., vision and hearing screenings) for all employees. Good interpersonal skills to provide counseling and referrals for lifestyle problems, such as stress or substance abuse, are a bonus for these nurses. At a minimum, they must know first aid and basic life support. If employed in a heavy industrial setting where the risk of burns or trauma is present, OHNs must have special training to manage those types of medical emergencies.

OHNs also have responsibilities for identifying health risks in the entire work environment. They must be able to assess the environment for potential safety hazards and work with management to eliminate or reduce them. They need in-depth knowledge of governmental regulations, such as those of the Occupational Safety and Health Administration (OSHA) and must ensure the company complies. They may instruct new workers in the effective use of protective devices such as safety glasses and noise-canceling earphones. OHNs also understand workers' compensation regulations and coordinate the care of injured workers with the facilities and providers who provide care for an employee with a work-related injury. Some injuries may be life threatening; others may be chronic but clearly related to work, such as musculoskeletal injuries from repetitive motion or poorly designed workspaces.

Nurses in occupational settings have to be confident in their nursing skills, be effective communicators with both employees and managers, be able to motivate employees to adopt healthier habits, and be able to function independently in providing care. The AAOHN is the professional organization for OHNs. The AAOHN provides conferences, webcasts, a newsletter, a journal, and other resources to help OHNs stay up-to-date (website: www.aaohn.org). Certification for OHNs is available through the American Board for Occupational Health Nurses (ABOHN).

Nursing in the Armed Services

Nurses practice in both peacetime and wartime settings in the armed services. Nurses serving in the military ("military nurses") may serve on active duty or in military reserve units, which means that they will be called to duty in the case of an emergency. They serve as staff nurses and supervisors in all major medical specialties. Both general and advanced practice opportunities are available in military nursing, and the settings in which these nurses practice use state-of-the-art technology.

Military nurses often find themselves with broader responsibilities and scope of practice than do civilian nurses because of the demands of nursing in the field, on aircraft, or onboard ship. Previous critical care, surgery, or trauma care experience is desirable but not required. Military nurses are required to have a BSN degree for active duty. They enter active duty as officers and must be between the ages of 21 and 46½ years when they begin active duty. Professional Profile Box 1.1 is a profile of the work of Lt. Joseph Biddix, BSN, RN, a nurse in the Navy who was stationed on a hospital ship.

A major benefit of military nursing is the opportunity for advanced education. Military nurses are encouraged to seek advanced degrees, and support is provided during schooling. The U.S. Department of Defense pays for tuition, books, moving expenses, and even salary for nurses obtaining advanced degrees. This allows the student to focus on his or her studies. Nurses with advanced degrees are eligible for promotion in rank at an accelerated pace.

Travel and change are integral to military nursing, so these nurses must be flexible. Military nurses in the reserves must be committed to readiness; they must be ready to go at a moment's notice. All military nurses may be called on for active wartime duty anywhere in the world.

In 2011 Lieutenant General (Lt. Gen.) Patricia Horoho was nominated and confirmed to become the Army Surgeon General, the first nurse and the first woman to serve in this capacity. Horoho had previously commanded the Walter Reed Health Care System and was serving in the Pentagon on September 11, 2001, where she cared for the wounded after terrorists crashed a plane into the building. Lt. Gen. Horoho is an experienced clinical trauma nurse (*National Journal,* 2011).

PROFESSIONAL PROFILE BOX 1.1 MILITARY NURSE

My nursing path was untraditional. I graduated from college in 2005 with an Arts degree in Media Studies and Production and immediately began an internship with the entertainment industry in Los Angeles. I eventually worked for a top talent management firm, yet after 4 successful years in the business, something was missing. I kept asking myself, "Why doesn't this feel more rewarding?"

I began exploring other options in search of professional gratification, and the idea of military service kept popping into my head. I questioned what the military would do with a film major whose only job experience was working in Hollywood. While deciding options, a close friend told me that he was planning to return to school for a second-degree nursing program. It didn't sound like a bad idea and this would be a perfect career for the military. My internal wheels were spinning, so I called my mom for advice about what I should do, because she was a nurse of 30 years. She said, "I've always thought you would make an excellent nurse, but I never wanted to push it. I figured I would let you find your path on your own."

That was all the encouragement I needed. Once accepted into a nursing program, I contacted the local Navy recruiter. After a rigorous application process, I was accepted into a program to become a Nurse Corps Officer, and on graduation, I was commissioned as an ensign in the United States Navy.

Nearly 3 years later, I have found military nursing to be a phenomenal experience. I have the opportunity to provide nursing care to active duty and retired service members and their families. Additionally, it is my responsibility to train our hospital corpsmen who regularly care for our forward deployed sailors and marines. These young men and women carry a heavy responsibility to provide first responder care to our warfighters. As a Navy nurse, I have a direct role in mentoring them. There is no greater reward than training newly enlisted corpsmen and seeing their faces light up when they "get it." Whether we're discussing the physiology of hypertension or how to treat for shock after a blast injury, you know when the lightbulb turns on and your sailor has added another layer to his or her knowledge base.

Earlier in my career, I was stationed aboard the USNS Comfort (T-AH 20) hospital ship for 6 months in support of Continuing Promise 2015. This mission allowed me to provide humanitarian assistance alongside partner nation and civilian experts to patients in 11 countries in Central and South America and the Caribbean. As a Navy nurse, I spent 10 days in Belize providing nursing care and education to patients and helped provide nursing assistance to our Seabees construction crew while painting buildings in Panama. In between providing care to thousands of patients in other nations, I was a postoperative nurse on a hospital ship. This all is a world away from my old life in Hollywood, but I wouldn't trade anything for my time at sea with my fellow Navy nurses and corpsmen and helping those in need.

Lt. Joseph Biddix, USN
U.S. Navy Medical Center, Camp Lejeune, NC

Note: The views expressed in this article 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 United States government.
Reference: Courtesy Lt. Joseph Biddix.

Nursing in Schools

School nursing is an interesting, specialized practice of professional nursing. In 2017 the National Association of School Nurses (NASN) defined school nursing as "a specialized practice of nursing [that] protects and promotes student health, facilitates optimal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders who bridge health care and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potential" (NASN, 2017). To that end, school nurses facilitate positive student responses to normal development; promote health and safety, including a healthy environment; intervene with actual and potential health problems; provide case

management services; and actively collaborate with others to build student and family capacity for adaptation, self-management, self-advocacy, and learning.

School nurses are in short supply. Very few states achieve the federally recommended ratio of 1:750 (a recommended minimum number of 1 school nurse for every 750 students). In 2016 only 8 states had set a nurse-to-student ratio; however, these ratios were not necessarily consistent with the guidelines set by the Centers for Disease Control and Prevention (CDC) and NASN. For instance, Pennsylvania's ratio was set at 1 nurse per 1500 students, twice the prescribed ratio (Camera, 2016). This poses a serious problem for children with disabilities, for those with chronic illnesses in need of occasional management at school, and for children who become ill or are injured at school. With higher than recommended ratios of students per RN, children may lack the substantial health benefits of having a school nurse available to them during the school day.

School nursing has the potential to be a significant source of communities' health care. In medically underserved areas and with the number of uninsured families increasing, the role of school nurse is sometimes expanded to include members of the student's immediate family. This requires many more school nurses—requiring willingness of state and local school boards to hire them. Without adequate qualified staffing, the nation's children cannot receive the full benefits of school nurse programs.

Most school systems require nurses to have a minimum of a bachelor's degree in nursing, whereas some school districts have higher educational requirements. Prior experience working with children is also usually required. School health has become a specialty in its own right, and in states where school health is a priority, graduate programs in school health nursing have been established. The National Board for Certification of School Nurses (NBCSN) is the official certifying body for school nurses.

School nurses need a working knowledge of human growth and development to detect developmental problems early and refer children to appropriate therapists. Counseling skills are important because many children turn to the school nurse as a counselor. School nurses keep records of children's required immunizations and are responsible for ensuring that immunizations are current. When an outbreak of a childhood communicable illness occurs, school nurses educate parents, teachers, and students about treatment and prevention of transmission. For children with special needs, school nurses must work closely with families, teachers, and the students' primary providers to care for these children while at school—and these needs can be significant. Management of the health of children with diabetes and serious allergies is important in the daily life of school nurses.

School nurses work closely with teachers to incorporate health concepts into the curriculum. They endorse the teaching of basic health practices, such as handwashing and caring for teeth. School nurses encourage the inclusion of age-appropriate nutritional information in school curricula and work with children to make healthful food choices in the cafeteria and when choosing snacks. They conduct vision and hearing screenings and make referrals to physicians or other health care providers when routine screenings identify problems outside the nurses' scopes of practice.

School nurses must be prepared to handle both routine illnesses of children and adolescents and emergencies. One of their major concerns is safety. Accidents are the leading cause of death in children of all ages, yet some accidents are preventable. Prevention includes both protection from obvious hazards and education of teachers, parents, and students about how to avoid accidents. School nurses work with teachers, school bus drivers, cafeteria workers, and other school employees to provide the safest possible environment. When accidents occur, first aid for minor injuries and emergency care for more severe ones are additional skills school nurses use (Fig. 1.4). Detection of evidence of child neglect and abuse is a sensitive but essential aspect of school nursing. School violence or bullying can also result in injury, absenteeism, and anxiety. In the wake of school violence involving guns and the possibility of experiencing a natural disaster, the NASN has made disaster preparedness a priority.

The mission of NASN is "advancing school nurse practice to keep students healthy, safe, and ready to learn" (www.nasn.org). This underscores their commitment to both the health and education of schoolchildren across the United States. The NASN 2013–2014 annual report noted that sensitivity to the cultural needs of students is important in assisting with a child's health and to that end created a section on their website focusing on cultural competence. An important recent initiative by the NASN has been to address the epidemic of childhood obesity, creating a CE program for school nurses to provide them with resources and skills to address the

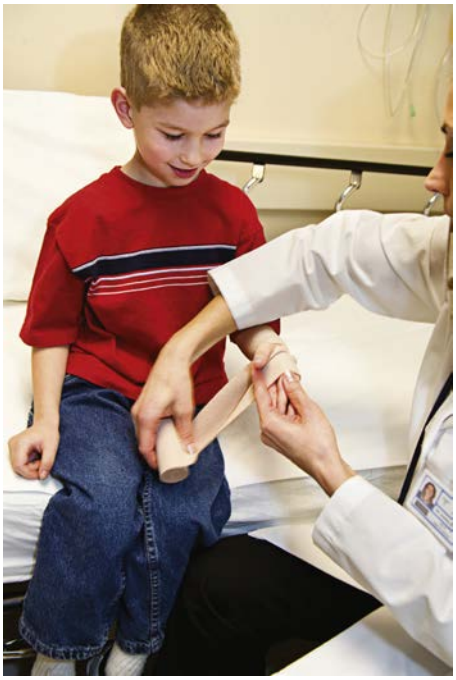

Fig. 1.4 School nurses manage a variety of students' health problems, from playground injuries to chronic illnesses such as asthma and diabetes. (Photo used with permission from iStockphoto.)

problems and challenges of overweight and obese children (NASN Annual Report, 2014).

Nursing in Palliative Care and End-of-Life Settings

Hospice and palliative care nursing is a nursing specialty dedicated to improving the quality of life of patients who are seriously or terminally ill and their families. The World Health Organization (WHO) defines *palliative care* as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual" (WHO, 2018). Hospice care is "the model for quality, compassionate care for people facing a life-limiting illness or injury" and involves an interdisciplinary approach to symptom management, including pain management and emotional and spiritual support shaped to the specific needs of the patient and family as the patient approaches the end of his or her life (National Hospice and Palliative Care Organization, 2018).

In the past decade, schools of nursing and other nursing organizations have increased attention to this important realm of care. According to the American Nurses Association (ANA) document *Hospice and Palliative Care Nursing: Scope and Standards of Practice,* "Hospice and palliative care nursing reflects a holistic philosophy of care implemented across the lifespan and across diverse health settings. The goal of hospice and palliative nursing is to promote and improve the patient's quality of life through the relief of suffering along the course of the illness, through the death of the patient, and into the bereavement period of the family" (ANA, 2007, p. 1). Three major concepts are foundational to end-of-life care (ANA, 2007):

1. Persons are living until the moment of death.
2. Coordinated care should be offered by a variety of professionals, with attention to the physical, psychological, social, and spiritual needs of patients and their families.
3. Care should be sensitive to patient and family diversity (or cultural beliefs).

In 1986 the Hospice and Palliative Nurses Association (HPNA) was established, and it is now the largest and oldest professional nursing organization dedicated to the practice of hospice and palliative care. HPNA has a journal, *JHPN—Journal of Hospice and Palliative Nursing,* a peer-reviewed publication that promotes excellence in end-of-life care, which is published six times each year and can be followed on Twitter at @JHPN_online. HPNA's website is https://advancingexpertcare.org/ and can be followed on Twitter at @HPNAinfo. In addition to HPNA, two other organizations are central to supporting this domain of nursing: the Hospice and Palliative Nurses Foundation (HPNF) and the Hospice and Palliative Credentialing Center (HPCC). In 2014 these three organizations adopted shared mission and vision statements, in addition to pillars of excellence held in common. The shared mission is "advancing expert care in serious illness" and the shared vision is "transforming the care and culture of serious illness." The pillars on which these organizations base their work are education, competence, advocacy, leadership, and research (HPNA, 2015).

Because nursing curricula traditionally have not included extensive content to prepare nurses to deal effectively with dying patients and their families, the AACN developed *CARES: Competencies and Recommendations for Educating Undergraduate Nursing Students Preparing*

Nurses to Care for the Seriously Ill and Their Families. This document provides palliative care competencies for the undergraduate nursing student and may be viewed online at http://www.aacnnursing.org/Portals/42/ELNEC/PDF/New-Palliative-Care-Competencies.pdf.

In 2000 End-of-Life Nursing Education Consortium (ELNEC) was funded by the Robert Wood Johnson Foundation, and it has since received additional funding by a variety of organizations. The foundation for the ELNEC project reflects the core areas identified by the AACN in the *CARES* document. As of 2015, more than 19,500 nurses and other providers had received ELNEC education in "train the trainer" symposia. These new ELNEC trainers then returned to their communities and institutions and have educated more than 600,000 other nurses and providers in end-of-life care. Currently there are seven available curricula: core, pediatric palliative care, critical care, geriatric, advance practice registered nurse, international, and veterans (AACN, 2018). To expand the reach of *CARES* and ELNEC, AACN launched six interactive online modules for undergraduate nursing students. The online ELNEC modules had more than 200 schools and more than 7000 users enrolled in its first year. For more information see http://elnec.academy.reliaslearning.com.

Hospice and palliative care nurses work in a variety of settings, including inpatient palliative/hospice units, free-standing residential hospices, community-based or home hospice programs, ambulatory palliative care programs, teams of consultants in palliative care, and SNFs. Both generalists and APNs work in palliative care.

Information Technologies in Nursing: Telehealth and Informatics

Telehealth is the delivery of health care services and related health care activities through telecommunication technologies. **Telehealth nursing** (also known as *telenursing* or *nursing telepractice*) is not a separate nursing specialty, because few nurses use telehealth systems exclusively in their practices. Rather, it is most often found as a part of other nursing roles. Current technology includes bedside computers, interactive audio and video links, teleconferencing, real-time (synchronous) transmission of patients' diagnostic and clinical data, and more. The fastest growing applications of these technologies are phone triage, remote monitoring, and home care. Some aspects of patient health can be monitored from a distance via remote patient monitoring (RPM) and include physiologic data (e.g., blood pressure, blood glucose, oxygen levels) (healthit.gov, 2017). The use of telehealth devices expands access to health care for underserved populations and individuals in both urban and rural areas. Telehealth can also reduce the sense of professional isolation experienced by those who work in such areas and may assist in attracting and retaining health care professionals in remote areas.

Technologies available for telehealth nurses include remote access to laboratory reports and digitalized imaging; counseling patients on medications, diet, activity, or other therapy on mobile phones or by voice-over-Internet (VOI) protocol services (e.g., Skype; FaceTime); or participating in interactive video sessions, such as an interdisciplinary team consultation about a complex patient issue. Although the fundamentals of basic nursing practice do not change because of the nurse's use of telehealth technologies, their use may require adaptation or modification of usual procedures. In addition, telehealth nurses must develop competence in the use of each new type of telehealth technology, which changes rapidly.

Numerous legal and regulatory issues surround nursing care delivered through telehealth technologies; for instance, care of patients across state lines may require licensing in the state not only where the nurse is employed but also where the patients reside. The Robert J. Waters Center for Telehealth and e-Health Law (www.ctel.org) (2018) is a clearinghouse organization for information about legal and regulatory issues related to telehealth, including nurse licensure, credentialing, Medicare and Medicaid reimbursement, and other issues related to the provision of health care from a distance. You can learn more about telehealth, an area of growing interest in nursing and other health professions, as well as some controversy, from the Association of Telehealth Service Providers (www.atsp.org), from the American Telemedicine Association (www.americantelemed.org), and from the American Academy of Ambulatory Care Nursing (www.aaacn.org).

Nursing informatics (NI) is a rapidly evolving specialty area defined by the Nursing Informatics Nursing Group as "the science and practice [integrating] nursing, its information and knowledge, with management of information and communication technologies to promote the health of people, families, and communities worldwide" (American Medical Informatics Association, 2015). **Informatics nurses** (also known as *nurse informaticians*) were well positioned to assist in the implementation of the 2009 American Recovery and

Reinvestment Act and the Health Information Technology Act. This legislation contained federal incentives for the adoption of electronic health records (EHRs) with criteria known as meaningful use. To qualify for Centers for Medicare and Medicaid Services (CMS) incentive payments, health care organizations had to select, implement, enhance, and/or measure the impact of EHRs on patient care. **Meaningful Use (MU)** was a three-stage initiative implemented in 2011–2016. MU focused on the use of technology to improve patient outcomes through the engagement of patients and families, improved care coordination, and increased privacy and security of patient information. MU is now included as part of the Medicare Access and Chip Reauthorization Act, which focuses on merit-based incentives and the use of EHR technology for multiple purposes, including quality care (HealthIT.gov, 2017).

Because they are nurses themselves, nurse informaticians are best able to understand the needs of nurses who use the systems and can customize or design them with the needs, skills, and time constraints of those nurses in mind. In contrast to computer science systems analysts, nurse informaticians must clearly understand the information they handle and how other nurses will use it. According to the 2017 Healthcare Information and Management Systems Society Nursing Informatics Work Survey, nurses in this field were overall satisfied with their work. Their two main job responsibilities included systems implementation and utilization/optimization, suggesting that their role is imperative in the effective use of electronic medical and health records (EMR/EHR) (2018).

As health care organizations continue to adopt and implement EHRs, nurse informaticians will be in increasing demand.

At a minimum, nurses specializing in informatics should have a BSN and additional knowledge and experience in the field of informatics. An increasing number of nurse informaticians have advanced degrees, including doctorates. Certification as an informatics nurse is available through the ANCC. The American Medical Informatics Association (AMIA; www.amia.org) and the Health Information and Management Systems Society (HIMSS; www.himss.org) sponsor the Alliance for Nursing Informatics (ANI), whose mission is to "advance nursing informatics practice, education, policy and research through a unified voice of nursing informatics organizations" (ANI, 2015). The ANI website is www.allianceni.org.

Thede (2012) published an interesting retrospective on NI, describing the developments that she has seen in this field over the past 30 years, reporting that basic computer skills, informatics knowledge, and information literacy are three "threads" of importance to nursing. She noted that one of the failures of "early dreamers" in informatics was not considering the cultural changes that would be required to move into a multidisciplinary perspective regarding the use of information in health care settings, including "abandonment of the paper chart mentality." With the incentives from CMS driving the widespread adoption of EHR, nurse informaticians will be instrumental in moving the development of these technologies into clinical usefulness with the goal of improving the population's health.

Nursing in a Faith Community

Interest in spirituality and its relation to wellness and healing in recent years prompted the development of the rapidly growing practice specialty of **faith community nursing (FCN)**, previously known as *parish nursing*. "FCN is a nursing practice specialty that focuses on the intentional care of the spirit, promotion of an integrative model of health, and prevention and minimization of illness within the context of a faith community" (ANA, 2017). FCN takes a holistic approach to healing that involves partnerships among congregations, their pastoral staffs, and health care providers. Since its development in the Chicago area in the 1980s by a hospital chaplain, Dr. Granger E. Westberg, FCN has spread rapidly and now includes more than 15,000 nurses in paid and volunteer positions in a variety of religious faiths, cultures, and countries.

The FCN reclaims the historical custom of health and healing found in many faith traditions. The spiritual dimension is central to FCN practice with a focus on the intentional care of the spirit while assisting individuals and faith-based communities to regain wholeness in body, mind, and spirit (Westberg Institute for Faith Community Nursing, 2018). FCNs are instrumental in connecting individuals disconnected from the health care system with preventative services and local health care resources, can clarify provider orders, and identify and recommend needed medical care (Schroepfer, 2016). Research with small FCN projects and partnerships demonstrates the benefits of the combined health and spiritual ministry; however, follow-up research that can more broadly address the impact of the FCN is needed (Schroepfer, 2016).

Since 1997 the ANA (2017) has recognized FCM as a specialty nursing practice within diverse faith communities. The Health Ministries Association Inc. and the ANA in their third edition of *Faith Community Nursing: Scope and Standards of Practice* collaboratively define six standards of practice for FCN and 11 standards of professional performance (ANA, 2017). Faith community nurses serve as members of the pastoral team in a faith community. The practice of FCN is governed by the nurse's state nurse practice act, *Nursing: Scopes and Standards of Practice* (ANA, 2015a), *Faith Community Nursing: Scope and Standards* (ANA, 2017), and the *Code of Ethics for Nurses with Interpretive Statements* (ANA, 2015b). FCNs work as health educators and counselors, advocates for health services, referral agents, and coordinators of volunteer health ministers. Faith community nurses often sponsor health screenings and facilitate support groups while integrating the concepts of health and spirituality.

Many FCNs work independently and benefit from networking with other FCNs. Throughout the United States, many local and regional FCN organizations support FCN networking and collaboration, providing grant opportunities and even specialized training in the ministry of FCN practice. Nurses interested in FCN may pursue specialized training with a local or regional FCN organization. According to the Westberg Institute for Faith Community Nursing (2018), an FCN should (1) maintain an active nursing license in the state of practice; (2) have a baccalaureate degree in nursing with experience in community nursing; (3) have completed an educational course to prepare for FCN practice; (4) have specialized knowledge of the spiritual beliefs and practices of the faith community; (5) reflect personal spiritual maturity in his or her practice; and (6) be organized, flexible, a self-starter, and an excellent communicator.

Nurses in Business: Entrepreneurs

Some nurses are highly creative and are challenged by the risks of starting a new enterprise. Such nurses may make good nurse entrepreneurs.

Similar to an entrepreneur in any field, a **nurse entrepreneur** identifies a need and creates a service to meet the identified need. Nurse entrepreneurs enjoy the **autonomy** derived from owning and operating their own health-related businesses. Groups of nurses, some of whom are faculty members in schools of nursing, have opened nurse-managed centers to provide direct care to clients. Nurse entrepreneurs are self-employed as consultants to hospitals, nursing homes, and schools of nursing. Others have started nurse-based practices and carry their own caseloads of patients with physical or emotional needs. They are sometimes involved in presenting educational workshops and seminars. Some nurses establish their own apparel businesses, manufacturing clothing for premature babies or for persons with physical challenges. Others own and operate their own health equipment companies, health insurance agencies, and home health agencies. Still others invent products such as stethoscope covers that can be changed between patients to prevent the spread of infection. Here are a few comments from one such entrepreneur, the chief executive officer of a privately owned home health agency:

> *I enjoy working for myself. I know that my success or failure in my business is up to me. Having your own home health agency is a lot of work. You have to be very organized, manage other people effectively, and have excellent communication skills. You cannot be afraid to say no to the people. There is nothing better than the feeling I get when a family calls to say our nurses have made a difference in their loved one's life, but I also have to take the calls of complaint about my agency. Those are tough.*

Increasingly, nurses are entering the business of health care, finding increasing opportunities to create their own companies. One such company offers nursing care for mothers, babies, and children. This company's emphasis is the care of women whose pregnancies may be complicated by diabetes, hypertension, or multiple births. The RN who founded this company described the services offered by her company:

> *Our main specialty is managing high-risk pregnancies and high-risk newborns. Home care for these individuals is a boon not only to the patients themselves but also to hospitals, insurance companies, and doctors. Now with shorter hospital stays, risks are minimized if skilled maternity nurses are on hand to provide patients with specialty care in their homes.*

As with almost any endeavor, disadvantages come with owning a business, such as the risk of losing your financial investment if the business is unsuccessful. Fluctuations in income are common, especially in the early months, and regular paychecks may be somewhat rare, at least in the beginning. A certain amount of pressure is created because of the total responsibility for meeting deadlines and paying bills, salaries, and taxes, but there is great opportunity as well.

In addition to financial incentives, there are also intangible rewards in entrepreneurship. For some people, the autonomy and freedom to control their own practice are more than enough to compensate for the increased pressure and initial uncertainty.

With rapid changes occurring daily in the health care system, new and exciting possibilities abound. Alert nurses who possess creativity, initiative, and business savvy have tremendous opportunities as entrepreneurs. The website www.nursingentrepreneurs.com provides a long list of categories of businesses operated by nurse entrepreneurs, the variety of which is extensive (e.g., movie set nurses, holistic life change strategists, medical bill auditing, nurse poet, nursing business startup coaching). In Professional Profile Box 1.2, you can read a description of the career of Kay Wagoner, PhD, RN,

PROFESSIONAL PROFILE BOX 1.2 NURSE ENTREPRENEUR

It is my belief that everyone should go to nursing school, because it prepares one for diverse professional opportunities and life in general. My life has taken several tumbles and turns, careening forward, backward, up, and down. At each point along the way, there were reasons to be forever grateful to nursing. Nursing taught me to look in more detail at incongruences, to seek the essence of each dilemma, while keeping a holistic perspective. I have been a consistent collector of data, be it from direct patient experience, from educational endeavors, or from scientific experimentation. Although the data always molded my thinking, final decisions were based on a desire to do something that made a difference in health and health care.

I cherished my time in intensive care nursing, one of my first careers, because it was there that I began to appreciate the need to better understand organ systems and cellular interactions to intervene with the critically ill on a moment-to-moment basis. My desire to learn more about how one responds to a variety of health challenges and life crises propelled me to advance my nursing education at the master's level.

With my newly minted master's degree and a specialty in cardiovascular nursing, I was challenged to teach undergraduate nursing students that which I strove hardest to understand: how organ systems and the cells that comprised them functioned and malfunctioned. While learning through teaching, my nursing practice shifted to cardiovascular disease prevention and rehabilitation. I founded my first company, which provided a new treatment paradigm for individuals attempting to stave off or repair from cardiovascular disease. This combination of teaching and practice provided great growth opportunities for me, including the confidence to delve deeper into the science of health and disease.

I went back to the classroom and completed doctoral and postdoctoral studies in physiology and pharmacology. I gained a more complete understanding of how cells, organ systems, and the human body works and fails. I also came to realize that many of the available treatments were too little too late and many of the available medications woefully inadequate in terms of efficacy and safety.

Thus for the next 20 years, I explored the discovery and development of new treatments and medications by founding the science-based drug discovery company Icagen, Inc., which was sold to Pfizer, Inc., in 2011. As the CEO and president of Icagen, I used my nursing background to provide focus on truly unmet medical needs such as new treatments for sickle cell disease, arrhythmias, epilepsy, and pain. We sought to make data-driven decisions by asking and answering the question, "What are the most efficacious and safe mechanisms to target for new treatments to improve patient outcomes?"

Today I am working with nurse educators and entrepreneurs and can be often heard asking, "How can we innovate to make a difference?" Our great nursing profession can lead us down many different career paths, some clearly more direct than mine. Along the way we can let nursing help drive evidence-based decision making to make a positive difference in health and health care.

Kay Wagoner, PhD, RN
(Cardiovascular Nurse Specialist)

Reference: Courtesy Kay Wagoner.

whose career in nursing gave her expertise in cardiovascular nursing; using her knowledge from nursing, she founded her own drug development company.

NURSING OPPORTUNITIES REQUIRING ADVANCED DEGREES

Many RNs choose to pursue careers that require a master's degree, doctoral degree, or specialized education in a specific area. These roles include clinical nurse leaders, nurse managers, nurse executives in hospital settings, nurse educators (whether in clinical or academic settings), nurse anesthetists, nurse-midwives, clinical nurse specialists, and advanced practice nursing in a variety of settings. Some of these careers are described next.

Nurse Educators

In 2008, 98,268 RNs reported working in academic education programs (U.S. Department of Health and Human Services, 2010). Since 2005, more than 5300 nurse educators have achieved specialty certification as certified nurse educators through the National League of Nursing (Simmons, 2017). Nurse educators teach in licensed practical nurse/licensed vocational nurse programs, diploma programs, associate degree programs, bachelor's and higher degree programs, and programs preparing nursing assistants. Nurse educators in accredited schools of nursing offering a bachelor's or higher degree must hold a minimum of a master's degree in nursing. The NLN (2015) in their 2014–2015 faculty census survey identified 1072 full-time nursing faculty vacancies, with approximately one-third of the vacancies at the baccalaureate level. The NLN (2015) found that a lack of qualified candidates and an inability to offer competitive salaries as the main difficulties in recruiting new nurse educators. Concerns about a critical shortage of nursing faculty in the future continue.

Clinical Nurse Leaders

One of the newer credentials approved by the AACN is the **clinical nurse leader** (CNL). This designation was intended as a means of allowing master's-prepared nurses to oversee and manage care at the point of care in various settings. CNLs are not intended to be administrators or managers but are clinical experts who may, on occasion, actively provide direct patient care themselves. The CNL is a generalist providing and managing care at the point of care to patients, individuals, families, and communities and is prepared to facilitate a culture of safety for specific groups of patients with the goal of improving patient outcomes (Rankin, 2015).

The role of CNL was not without controversy and objections from CNSs, who are APNs and who saw the proposed role as duplicating and potentially disenfranchising CNSs. Currently, 117 schools affiliated with AACN offer CNL programs. More information can be found on the AACN's website: http://www.aacnnursing.org/CNL/About.

Advanced Practice Nursing

Advanced practice nursing is a general term applied to an RN who has met advanced educational and clinical practice requirements beyond the 2 to 4 years of basic nursing education required of all RNs. Advanced practice nursing has grown since it evolved more than 40 years ago. The 2017 workforce data reports that more than 250,000 nurses are practicing in advanced practice roles, and the projected demand for these roles will increase by over 30% in the next 10 years (Bureau of Labor Statistics, 2018; National Association of Clinical Nurse Specialists, 2018). Increased demand for primary care coupled with increased specialization of physicians and heightened demand for efficient and cost-effective treatment mean that advanced practice poses excellent career opportunities for nurses. The implementation of the Affordable Care Act stimulated even greater interest and growth in the numbers of APNs. Patient acceptance of APNs is high, and the evidence consistently demonstrates that APNs provide high-quality, cost-effective care that can reduce the burden of the growing shortage of primary care providers (Swan et al., 2015). There are four categories of APNs: nurse practitioner, clinical nurse specialist, certified nurse-midwife, and certified registered nurse anesthetist.

Nurse Practitioner

Opportunities for nurses in expanded roles in health care have created a demand in **nurse practitioner** (NP) education. These programs grant master's degrees or post-master's certificates and prepare nurses to sit for national certification examinations as NPs. The length of the programs varies, depending on the student's prior education. Programs of study leading to the doctor of nursing practice (DNP) degree have been implemented in schools of nursing across the country in response to the AACN member institution's endorsement of a clinical doctorate

for advanced practice. The DNP is consistent with other health professions that offer practice doctorates, including medicine (MD), dentistry (DDS), pharmacy (PharmD), physical therapy (DPT), and psychology (PsyD), among others. There are currently 303 DNP programs actively enrolling students across all 50 states, and another 124 programs in the planning stages, which demonstrates the rapid growth of this degree path (AACN, 2017).

States vary in the level of practice autonomy accorded to NPs. NPs beginning practice in a new state should check the status of the advanced practice laws in that state before making firm commitments, because some states still place limitations on NP independence. These barriers to practice include the variation of scope of practice across states (with implications for practice opportunities); lack of physician understanding of NP scope of practice (limits successful collaboration); and payer policies that are linked to state practice regulations (Hain and Fleck, 2014).

NPs work in clinics, nursing homes, their own offices, or physicians' offices. Others work for hospitals, health maintenance organizations, or private industry. Most NPs choose a specialty area such as adult–gerontology, psychiatric–mental health, family, or pediatric care. They are qualified to handle a wide range of health problems in primary or acute care settings. These nurses can perform physical examinations, take medical histories, diagnose and treat common acute and chronic illnesses and injuries, order and interpret laboratory tests and x-ray films, and counsel and educate patients. Despite the restrictions on practice in some states, in other states, NPs are independent practitioners with full prescriptive authority and can be directly reimbursed by Medicare, Medicaid, and military and private insurers for their work.

In Professional Profile Box 1.3, Sebastian White, MSN, FNP, BC-ADM, RN, describes his work as an NP providing diabetes care in partnership with a physician in Bozeman, Montana.

Clinical Nurse Specialist

Clinical nurse specialists (CNSs) are APNs who work in a variety of settings, including hospitals, clinics, nursing homes, their own offices, industry, home care, and health maintenance organizations. These nurses hold master's or doctoral degrees and are qualified to handle a wide range of physical and mental health problems. They are experts in a particular field of clinical practice, such as mental health, gerontology, cardiac care, cancer care, community health, or neonatal health, and they perform health assessments, make diagnoses, deliver treatment, and develop quality control methods. In addition, CNSs work in consultation, research, education, and administration. Direct reimbursement to some CNSs is possible through Medicare, Medicaid, and military and private insurers.

Certified Nurse-Midwife

Certified nurse-midwives (CNMs) provide well-woman care and attend or assist in childbirth in various settings, including hospitals, birthing centers, private practice, and home birthing services. By 2010 all CNM training programs were required to award a master's of science in nursing (MSN) degree. CNM programs require an average of 1.5 years of specialized education beyond basic nursing education and must be accredited by the Accreditation Commission for Midwifery Education (ACME).

CNMs are licensed, independent health care providers who can prescribe medications in all 50 states, the District of Columbia, and most U.S. territories. Federal law designates CNMs as primary care providers. More than half of CNMs identify reproductive care as their main responsibility rather than attending births. According to the National Center for Health Statistics, CNMs attended 332,107 births in 2014, representing more than 8% of the total births in the United States in 2014 (American College of Nurse-Midwives, 2016). Historically, births attended by CNMs have had half the national average rates for cesarean sections and higher rates of successful vaginal births after a previous cesarean, both considered measures of high-quality obstetric care. Karen Sheffield, MSN, CNM, describes her work as a certified nurse-midwife in Professional Profile Box 1.4.

Certified Registered Nurse Anesthetist

In 2015 there were approximately 48,000 **certified registered nurse anesthetists** (CRNAs) and CRNA students in the United States (American Association of Nurse Anesthetists [AANA], 2015). Nurse anesthetists administer approximately 43 million anesthetics each year and are the only anesthesia providers in nearly one-third of U.S. hospitals (AANA, 2016). Collaborating with physician anesthesiologists or working independently, they are found in a variety of settings, including operating suites; obstetric delivery rooms; the offices of dentists,

PROFESSIONAL PROFILE BOX 1.3 DIABETES NURSE PRACTITIONER

I am a nurse practitioner who specializes in the care of persons with diabetes. I am also a father, a husband, and an endurance athlete. My path to nursing started as a young boy being raised by my mother, Angela Willett-Calnan, RN, and later, my maternal grandparents. My mother's mother is also a nurse, Mary Grace Willett, RN. Several other family members are health care professionals.

As an undergraduate student, I graduated with a bachelor of science degree in biology and a minor in psychology while leading my college's soccer team as captain for 2 years. After college I moved to Bozeman, Montana, falling in love with the high peaks of the Rocky Mountains. My original intent was to spend a summer in Montana and then attend physical therapy school. That summer ended much too quickly! After 2 years of trying my best to be a ski bum, I realized that I didn't have much bum in me, so I attended an emergency medical technician training course and became a member of the Big Sky Professional Ski Patrol. There I was back in my element: helping people.

My search for the next step began. I volunteered at our local community health center, asking many questions of the providers there. I knew I wanted a role in primary care, so medical or nursing school would be my next step. The final decision was inspired by my uncle, Dr. Michael Willett, who said to me, "Sebastian, I have worked with and trained many nurse practitioners and physicians. You are meant to be a nurse." At that point, I really had no idea what he meant—I was just relieved to have a plan.

Energized, I enrolled in a nursing school offering an accelerated bachelor of science in nursing for students who already had a college degree. In my first nursing position, I became interested in diabetes. After completing my master of science in nursing degree, I was recruited back to Montana by a large multispecialty clinic—the Billings Clinic—where I was welcomed into their department of endocrinology. I was integral in the establishment of a comprehensive inpatient diabetes management program. Soon I was recruited by the hospital in Bozeman to start a diabetes center with an internist who is now my partner in practice. Back to the mountains I love! I am now the only National Committee for Quality Assurance diabetes nurse practitioner in the Pacific Northwest.

Nursing is the greatest gift we can offer patients. Our health care system in the United States is broken—costs spiraling and measures of health worsening every year. As a nurse, I am trained to focus on the missing element in our health care system: the patient. I am trained to treat my patients, not their disease; I am trained to listen to their concerns and focus my interventions on helping them improve their lives. I am a nurse.

To my wife, my mother, my grandmother, my uncle, and the high mountains of Montana: All the credit belongs to you. Thank you.

Sebastian White, MSN, FNP, BC-ADM, RN

Reference: Courtesy Sebastian White.

podiatrists, ophthalmologists, and plastic surgeons; ambulatory surgical facilities; and military and governmental health services (AANA, 2015).

To become a CRNA, nurses must complete 2 to 3 years of specialized education in a master's program beyond the required bachelor's degree; 32 nurse anesthesia programs are approved to award doctoral degrees for entry into CRNA practice, which is likely to be the requirement in the near future (AANA, 2015). In 2014 there were 114 accredited nurse anesthesia programs in the United States, ranging from 24 to 36 months in length. Nurse anesthetists must also meet national certification and recertification requirements. The safety of care delivered by CRNAs is well established. Anesthesia care today is safer than in the past, and numerous outcome studies have demonstrated that there is "no difference in the quality of care provided by CRNAs and their physician counterparts" (AANA, 2015).

PROFESSIONAL PROFILE BOX 1.4 CERTIFIED NURSE-MIDWIFE

Being a nurse-midwife is at the core of who I am, not just what I do. I decided to become a nurse-midwife after working as a chemist for many years and recognizing that my true passion resided in all aspects of women's health care. After the birth of two of my children, one by a physician and one by a nurse-midwife, I realized that I was "called" to the profession of nurse-midwifery and the philosophy of care that nurse-midwives provide. Delivering comprehensive, holistic wellness care to women throughout their life span is one of the most rewarding and inspirational aspects of my profession. I feel privileged and honored to share in the important and often life-changing decisions that women make during the many transitions that occur during the years between puberty and menopause and beyond.

I have a bachelor of arts in physics and received a master's degree in nursing from Yale University in 2005 with a specialty in nurse-midwifery. Additionally, I am certified in nurse-midwifery by the American Midwifery Certification Board (AMCB). Certification by the AMCB is considered the gold standard in midwifery and is recognized in all 50 states. As a nurse-midwife, I must also complete the requirements of the Certification Maintenance Program through AMCB by completing continuing education units every 5-year certification cycle. Maintaining competence in evidence-based, up-to-date management and treatment for women's health is critical to being an effective clinician.

Although the professional work environment for nurse-midwives varies, a typical day as a nurse-midwife with a full scope of practice involves providing gynecologic, antepartum, intrapartum, and postpartum care, which includes hospital rounds on patients who have given birth, as well as seeing patients in the office. Evidence-based care in the office setting includes contraceptive management, family planning, primary care, gynecologic care, and sick visits, among others. In addition to gynecologic care, nurse-midwives provide obstetric care that is grounded in our belief that childbirth is a normal, healthy human event. However, we are educated in how and when to collaborate with physician colleagues for emergent care that necessitates a physician's specific expertise.

I strongly believe that my role as a nurse-midwife is to be "with a woman" and to honor her journey toward health and wellness, as well as respecting her wishes for her birth within the limits of safety. When I reflect on my journey as a nurse-midwife for the past decade, I know that I am truly carrying out my purpose in providing holistic women's health care to the highest standard of excellence.

Karen Sheffield, MSN, CNM
Yale University, 2005

Reference: Courtesy Karen Sheffield, MSN, CNM.

Issues in Advanced Practice Nursing

Each year in January, *The Nurse Practitioner: The American Journal of Primary Health Care* publishes an update on legislation affecting advanced practice nursing. Over the years, advances have been made toward removing the barriers to autonomous practice for APNs in many, but not all, states.

In the past, substantial barriers to APN autonomy existed because of the overlap between traditional medical and nursing functions. A decade ago, the picture was considerably less optimistic than it is now. The issue of APNs practicing autonomously was a politically charged arena, with organized medicine positioned firmly against all efforts of nurses to be recognized as independent health care providers receiving direct reimbursement for their services. Organized nursing, however, persevered. Nurses, through their professional associations, continued their efforts to change laws that limit the scope of nursing practice. Their efforts were aided by the fact that numerous published studies validated the safety, cost efficiency, and high patient acceptance of advanced practice nursing care.

Both the public and legislators at state and national levels have begun to appreciate the role that APNs have

played in increasing the efficiency and availability of primary health care delivery while reducing costs; however, opposition to APN autonomy persists. Roadblocks to full practice autonomy continue, primarily because of the resistance of organized physician groups despite data indicating positive patient outcomes. Although progress has been made, there remains the need for APNs to continue to work with their professional organizations to promote legislation mandating full autonomy.

EMPLOYMENT OUTLOOK IN NURSING

The Bureau of Labor Statistics, a division of the U.S. Department of Labor, is confident about nursing's overall employment prospects in the near and distant future. According to the bureau (U.S. Department of Labor, 2016), nurses can expect their employment opportunities to grow "15% from 2016 to 2026, much faster than average for all occupations." The bureau estimates that, during this time, 438,100 new RN jobs will be created to meet growing patient needs and to replace retiring nurses (U.S. Department of Labor, 2016). Several factors are fueling this growth, including technological advances and the increasing emphasis on primary care. The aging of the nation's population also has a significant impact, because older people are more likely to require medical care. As aging nurses retire, many additional job openings will result.

Opportunities in hospitals, traditionally the largest employers of nurses, will grow more slowly than those in community-based sectors. The most rapid hospital-based growth is projected to occur in outpatient facilities, such as same-day surgery centers, rehabilitation programs, and outpatient cancer centers. Home health positions are expected to increase the fastest of all. This is in response to the expanding elderly population's needs and the preference for and cost effectiveness of home care. Furthermore, technological advances are making it possible to bring increasingly complex treatments into the home.

Another expected area of high growth is in assisted living and nursing home care; this is primarily in response to the larger number of frail elderly in their 80s and 90s requiring long-term care. As hospitals come under greater pressure to decrease the average patient length of stay, nursing home admissions will increase, as will growth in long-term rehabilitation units (U.S. Department of Labor, 2016).

An additional factor influencing employment patterns for RNs is the tendency for sophisticated medical procedures to be performed in physicians' offices, clinics, ambulatory surgical centers, and other outpatient settings. RNs' expertise will be needed to care for patients undergoing procedures formerly performed only in hospital settings. APNs can also expect to be in higher demand for the foreseeable future. The evolution of integrated health care networks focusing on primary care and health maintenance and pressure for cost-effective care are ideal conditions for advanced practice nursing.

Salaries in the nursing profession vary widely according to practice setting, level of preparation, credentials, experience, and region of the country. According to the U.S. Board of Labor Statistics, in 2016, median annual salary for nurses was $68,450 (as a comparison, the median salary for all workers was $37,040). The lowest paid 10% earned less than $47,120, and the highest paid 10% earned more than $102,990. Salaries were the highest with government and hospital employers and lowest in educational services. About 21% of RNs are members of unions or are covered by union contracts. Interestingly, California has the highest nursing salaries in the United States and has a vigorous union in the California Nurses Association/National Nurses United. Salaries in nursing vary by region, as do salaries in other professions and occupations.

APNs have higher salaries than do staff nurses; CRNAs average the highest salary of any advanced practice specialty group. Clearly, in nursing as in most other professions, additional preparation and responsibility increase earning potential.

Most of the wage growth for nurses occurs early in their careers and tapers off as nurses near the top of the salary scale. This leads to a flattening of salaries for more experienced nurses in a phenomenon known as *wage compression*. Wage compression may account for nurses leaving patient care for additional education or other careers in nursing or outside the profession, an issue that must be addressed to improve retention of the most experienced nurses in the profession.

CONCEPTS AND CHALLENGES

- ***Concept:*** Nursing is the largest workforce in health care in the United States.
  Challenge: The influence of nursing is not as powerful as it could be because the large majority of nurses do not belong to professional organizations such as the ANA, a federation of state nurses associations that is the voice of nursing.
- ***Concept:*** More than half of working nurses are employed in hospitals, a traditional setting for nursing practice.
  Challenge: As health care becomes increasingly based in the community, more nurses will be working outside of the hospital. Nursing must consider the impact of this migration from hospital to community.
- ***Concept:*** The Affordable Care Act and other changes in health care will create more opportunities for practice for nurses. Increased use of APNs as providers of primary care may be part of the solution to the American health care crisis as the "baby boom" generation ages, the numbers of elderly increase, and the need for health care cost containment becomes critical.
  Challenge: APNs are capable of delivering high-quality care to many segments of the population who do not have adequate care; however, educating adequate numbers of advanced practice nurses is essential to meet the demands on the health care system.
- ***Concept:*** Nursing will continue to be a profession in high demand in the foreseeable future.
  Challenge: Nursing faculty shortages at all levels of nursing education pose an ongoing challenge to educate enough professional nurses to meet the health needs of the population.

IDEAS FOR FURTHER EXPLORATION

1. Think of the areas of nursing that interest you most. How do your personal interests and nursing education compare with the characteristics needed in the roles presented in this chapter?
2. As you continue your nursing education, ask questions of nurses in various practice settings to learn how they prepared for their positions, what their work life is like, and what they find most challenging and rewarding about their work.
3. Call the nurse recruiter or personnel office of a nearby hospital to inquire about education, experience, and salaries and other benefits for entry-level and advanced practice nursing. Is there a clinical ladder program? How does it work?
4. Ask an advanced practice RN in your community about his or her practice. What are the advantages and major barriers to practice that this advanced practice RN encounters?
5. Contact your state nurses association to find out what legislative initiatives are being undertaken to remove barriers to full advanced practice nursing in your state.

REFERENCES

Aiken LH, Clarke SP, Cheung RB, et al.: Educational levels of hospital nurses and surgical patient mortality, *JAMA* 290(12):1617–1623, 2003.

Aiken LH, Sermeus W, Van den Heede K, et al.: Patient safety, satisfaction, and quality of hospital care: cross sectional survey of nurses and patients in 12 countries in Europe and the United States, *BMJ* 344:1717, 2012.

Aiken LH, Sloane DM, Bruyneel L, et al.: Nurse staffing and education and the hospital mortiality in nine European countries: a retrospective observational study, *Lancet* 383(9931):1824–1830, 2014.

Aiken LH, Sloane DM, Cimiotti JP, et al.: Implications of the California nurse staffing mandate for other states, *Health Serv Res* 45(4):904–921, 2010.

Alliance for Nursing Informatics (ANI) (website): *Our mission,* 2015. Available at: www.allianceni.org.

American Association of Colleges of Nursing (AACN): *Nursing fact sheet,* 2011. Available at: www.aacn.nche.edu/media-relations/fact-sheets/nursing-fact-sheet.

American Association of Colleges of Nursing (AACN): *DNP fact sheet,* 2017. Retrieved from: http://www.aacnnursing.org/DNP/Fact-Sheet.

American Association of Colleges of Nursing (AACN): *Creating a more qualified nursing workforce* (website), 2014. Available at: www.aacn.nche.edu/media-relations/diversityFS.pdf.

American Association of Colleges of Nursing (AACN): *Fact sheet: Enhancing diversity in the nursing workforce* (website), 2014. Available at: www.aacn.nche.edu/media-relations/fact-sheets/nursing-workforce.

American Association of Colleges of Nursing (AACN): *New AACN data confirm enrollment surge in schools of nursing* (website), 2015. Available at: www.aacn.nche.edu/news/articles/2015/enrollment.

American Association of Colleges of Nursing (AACN): *End-of-life nursing education consortium* (website), 2018. Available at: http://www.aacnnursing.org/ELNEC/About/ELNEC-Curricula.

American Nurses Association: *Nursing: scope and standards of practice*, Silver Spring, MD, 2015a, American Nurses Association.

American Nurses Association: *Code of ethics for nurses with interpretive statements*, Silver Spring, MD, 2015b, American Nurses Association.

American Nurses Association: *Faith community nursing, scope and standards of practice*, 3rd ed, Silver Spring, D, 2017, Nursing Knowledge Center.

American Association of Nurse Anesthetists (AANA). *Certified registered nurse anesthetists at a glance* (website). Available at: www.aana.com.

American Association of Nurse Anesthetists (AANA): *Certified registered nurse anesthesists fact sheet* (website), 2016. Available at: https://www.aana.com/patients/certified-registered-nurse-anesthetists-fact-sheet.

American College of Nurse Midwives: *Fact sheet CNM/CM attended birth statistics in the United States* (website), 2016, March. Retrieved from: http://www.midwife.org/acnm/files/ccLibraryFiles/Filename/000000005950/CNM-CM-AttendedBirths-2014-031416FINAL.pdf.

American Association of Colleges of Nursing: *DNP fact sheet,* 2017, June. Retrieved from: http://www.aacnnursing.org/DNP/Fact-Sheet.

American College of Nurse Midwives: *Fact sheet CNM/CM attended birth statistics in the United States* (website), 2016, March. Available at: http://www.midwife.org/acnm/files/ccLibraryFiles/Filename/000000005950/CNM-CM-AttendedBirths-2014-031416FINAL.pdf.

American Medical Informatics Association: 2015 (website). Available at: www.amia.org/programs/working-groups/nursing-informatics.

American Nurses Association (ANA): *Position statement on pain management and control of distressing symptoms in dying patients*, Washington, DC, 2003, The Association.

American Nurses Association (ANA): *Hospice and palliative care nursing: scope and standards of practice*, Silver Spring, MD, 2007, The Association.

American Nurses Association (ANA): *News release: ANA and Health Ministries Association to co-publish faith community nursing: scope and standards of practice*, ed 2 (website), 2012. Available at: http://nursingworld.org/FunctionalMenuCategories/MediaResources/PressReleases/2012-PR/ANA-and-Health-Ministries-Association-Co-Publish-Faith-Community-Nursing-Scope-Standards.pdf.

American Nurses Association (ANA): *News release: ANA and Health Ministries Association to co-publish faith community nursing: scope and standards of practice*, ed 2 (website), 2012. Available at: http://nursingworld.org.

American Telemedicine Association: *Telehealth nursing fact sheet* (website), 2015. Retrieved from: www.americantelemed.org/docs/default-document-library/fact_sheet_final.pdf?sfvrsn=2.

American Telemedicine Association, Congress keeps pushing out proposals to promote telemedicine, 2015 (website). Retrieved from: www.americantelemed.org/news-landing/2015/05/27/congress-keeps-pushing-out-proposals-to-promote-telemedicine#.

Bauer JC: Nurse practitioners as an underutilized resource for health reform: evidence-based demonstrations of cost-effectiveness, *JAANP* 22(4):228–231, 2010.

Budden JW, Zhong EH, Moulton P, Cimiotti JP: Highlights of the national workforce survey of registered nurses, *J Nurs Regulation* 4(2):5–14, 2013.

Bureau of Labor Statistics: *U.S. Department of labor, occupational outlook handbook, nurse anesthetists, nurse midwives, and nurse practitioners*, 2018, June 13. Retrieved from: https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm.

Camera L: *Many school districts don't have enough school nurses*, 2016. Available at: https://www.usnews.com/news/articles/2016-03-23/the-school-nurse-scourge.

Hain D, Fleck L: Barriers to nurse practitioner practice that impact healthcare redesign, *OJIN Online J Issues Nurs* 19(2):5–31, 2014.

HealthIT.gov: *Meaningful use and the shift to merit-based incentive payment system* (website), 2017. Available at: https://www.healthit.gov/topic/federal-incentive-programs/meaningful-use.

Healthcare Information and Management Systems Society Nursing Informatics: *2017 Nursing informatics work survey*, 2018. Retrieved from: www.himss.org/sites/himssorg/files/2017-nursing-informatics-workforce-executive-summary.pdf HealthIT.gov.

Health Resources and Services Administration: *National center for health workforce analysis: The U.S. nursing workforce: trends in supply and education*, 2013. Washington, DC. Retrieved from: http://bhpr.hrsa.gov/healthworkforce.

Hospice and Palliative Nurses Association (HPNA): *Shared Mission, Vision & Pillars*, 2015 (website). Available at: www.advancingexpertcare.org.

Institute of Medicine: *The future of nursing: leading change*, Washington, DC, 2010, Advancing Health, National Academy of Sciences.

Murphy J: The nursing informatics workforce: who are they and what do they do? *Nurs Econ* 29(3):150–152, 2011.

National Association of School Nurses (NASN): *Transforming school health* (website), 2014. Available at: www.joomag.com/magazine/annual-report-2013-2014/0147811001426704218?short.

National Association of School Nurses (NASN): *FAQ: about school nursing: the definition of school nursing* (website). Available at: https://www.nasn.org/faq.

National Council of State Boards of Nursing: *Active RN licenses*, 2016. Retrieved from: https://www.ncsbn.org/6161.htm.

National Council of State Boards of Nursing and the Forum of State Nursing Workforce Centers: *2015 national workforce survey of RNs*, 2015. Retrieved from: https://www.ncsbn.org/2015ExecutiveSummary.pdf.

National Hospice and Palliative Care Organization: *Hospice care* (website), 2018. Available at: www.nhpco.org/about/hospice-care.

National League for Nursing: *Percentage of basic RN programs by program type*, 2014. Retrieved from: http://www.nln.org/docs/default-source/newsroom/nursing-education-statistics/percentage-of-basic-rn-programs-by-program-type-1994-to-1995-and-2003-to-2012-and-2014-%28pdf%29.pdf?sfvrsn=0.

National League for Nursing: *Nursing student demographics*, 2014. Retrieved from: http://www.nln.org/newsroom/nursing-education-statistics/nursing-student-demographics.

National League for Nursing: *NON faculty census survey 2014-15*, 2015. Retrieved from: http://www.nln.org/newsroom/nursing-education-statistics/annual-survey-of-schools-of-nursing-academic-year-2015-2016.

National Journal: *First nurse nominated as Army Surgeon General*, 2011. Retrieved from: www.nationaljournal.com/nationalsecurity/first-nurse-nominated-as-army-surgeon-general-20110505.

National Association of Clinical Nurse Specialists: *2016-2018 public policy agenda*, 2018. Retrieved from: https://nacns.org/advocacy-policy/public-policy-agenda/.

Rankin V: Clinical nurse leader: a role for the 21st century, *MEDSURG Nursing* 24(3):199–201, 2015.

Reid K, Dennison P: The clinical nurse leader (CNL)®: point-of-care safety clinician, *Online J Issues Nurs* 16(3):4, 2011.

Robert J: *Waters center for telehealth and e-health law: our mission* (website), 2018. Available at: http://ctel.org/about-2/our-mission/.

Robert Wood Johnson Foundation: *Charting nursing's future: the case for academic progression* (website), 2013. Retrieved from: www.rwjf.org/content/dam/farm/reports/issue_briefs/2013/rwjf407597.

Rosenberg CE: *The care of strangers: the rise of America's hospital system*, Baltimore, MD, 1995, Johns Hopkins University Press.

Schroepfer E: A renewed look at faith community nursing, *MEDSURGNursing* 25(1):62–66, 2016.

Sigma Theta Tau International (STTI): *Policy/position statement: International nurse migration* (website), 2005. Retrieved from: www.nursingsociety.org/aboutus/PositionPapers/Documents/policy_migration.pdf.

Storr GB: Learning how to effectively connect with patients through low-tech simulation scenarios, *Int J Hum Caring* 14(2):36–40, 2010.

Swan M, Ferguson S, Chang A, Larson E, Smaldone A: Quality of primary care by advanced practice nurses: a systematic review, *Intern J Qual Health Care* 27(5):396–404, 2015.

Telemedicine and Telehealth, 2017 (website). Available at: https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth.

Thede L: Informatics: where is it? *Online J Issues Nurs* 17(1):10, 2012.

Thekdi P, Wilson BL, Xu Y: Understanding post-hire transitional challenges of foreign-educated nurses, *Nurs Manage* 42(9):8–14, 2011.

U.S. Department of Health and Human Services, Health Resources and Services Administration: *The registered nurse population: findings from the 2008 national sample survey of registered nurses*, Washington, DC, 2010, U.S. Government Printing Office. Retrieved from: http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf.

U.S. Department of Labor Bureau of Labor Statistics: *Occupational outlook handbook: Registered Nurses*, 2016. Retrieved from: https://www.bls.gov/ooh/healthcare/registered-nurses.htm.

Westberg Institute for Faith Community Nurses: *What is faith community nursing?* 2018. Retrieved from: https://westberginstitute.org/faith-community-nursing/.

World Education Service, 2018. Available at: https://wenr.wes.org/2018/03/how-well-do-foreign-educated-nurses-integrate-into-the-u-s-and-canada#_edn6.

World Health Organization: *WHO definition of palliative care*, 2018. Available at: www.who.int/cancer/palliative/definition/en/.

2

The History and Social Context of Nursing

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To enhance your understanding of this chapter, try the Student Exercises on the Evolve site at http://evolve.elsevier.com/Black/professional.

LEARNING OUTCOMES

After studying this chapter, students will be able to:

- Identify the social, political, and economic factors and trends that influenced the development of professional nursing in the United States.
- Describe the influence of Florence Nightingale on the development of the nursing profession.
- Identify nursing leaders and explain their significance to nursing.
- Describe the development of schools of nursing.
- Explain the role that the military and wars have had on the development of the nursing profession.
- Describe the struggles and contributions of minorities and men in nursing.
- Describe nursing's efforts to manage and improve its image in the media.
- Evaluate the implications for nursing in a technologically driven era.
- Describe how nursing has reacted to nursing shortages.
- Explain how nursing shortages affect patient outcomes.

HISTORICAL CONTEXT OF NURSING

From the work of Florence Nightingale in the Crimea in the mid-1800s to the present, the profession of nursing has been influenced by the social, political, and economic climate of the times, as well as by technological advances and theoretical shifts in medicine and science. This chapter presents an overview of some of the highlights of nursing's history and its early leaders, as well as a discussion of current and past social forces that have shaped the profession's course of development.

Mid–19th-Century Nursing in England

Nursing's most notable early figure, Florence Nightingale, was born into the aristocratic social sphere of Victorian England in 1820. As a young woman, Nightingale (Fig. 2.1) often felt stifled by her privileged and protected social position. As was customary at the time, aristocratic women visited the sick and poor to deliver food, care for the sick, and provide religious outreach. Young Florence often accompanied her mother on these visits. Yet her parents were surprised and opposed her announcement when, at age 30, Nightingale entered the 3-year nurse training program at Kaiserswerth, Germany, where she learned the basics of nursing under the guidance of the Protestant deaconesses. Later, she continued her nursing education when she studied with the Sisters of Charity in Paris. Care of the sick was often in the purview of women and men in religious orders, within both Roman Catholic and Protestant religious traditions.

Having secured her education and training in nursing practice, Nightingale sought the means to communicate her emerging ideas about health and sickness. On

Fig. 2.1 Florence Nightingale (1820–1910), founder of modern nursing. (T. Cole, wood engraving, National Library of Medicine, Bethesda, MD.)

hearing of the terrible conditions suffered by the sick and wounded British soldiers in Turkey during the Crimean War (1853–1856), Nightingale lobbied British decision makers to support her travel and interventions to aid the sick and wounded. Nightingale took 38 nurses to the British hospital in Scutari, Turkey. With great compassion, and despite the opposition of military officers, Nightingale and the other nurses organized and cleaned the hospital and provided care to the wounded soldiers. Armed with an excellent education in statistics, Nightingale collected very detailed data on morbidity and mortality of the soldiers in Scutari. Using this dramatic supporting evidence, she effectively argued the case for reform of the entire British Army medical system. Gill and Gill (2005) claimed that "Nightingale's influence today extends beyond her undeniable impact on the field of modern nursing to the areas of infection control, hospital epidemiology, and hospice care" (p. 1799).

Fig. 2.2 Mary Seacole (1805–1881). Seacole's contributions in the Crimea and elsewhere are often overlooked. A beloved figure, she was voted as the "Greatest Black Briton" in history in 2003. (Albert Charles Challen, oil on panel, National Portrait Gallery, London.)

On her return to England after the Crimean War, Nightingale founded the first English training school for nurses at St. Thomas' Hospital in London in 1860. St. Thomas' Hospital became the model for nursing education in nurse training schools in the United States. Nightingale's most famous publication was *Notes on Nursing: What It Is and What It Is Not* (1859). In this document Nightingale stated clearly for the first time that mastering a unique body of knowledge was required of those wishing to practice professional nursing (Nightingale, 1859/1946). Her publications, dedication to hospital reform, commitment to upgrading conditions for the sick and wounded in the military, and establishment of training schools for nurses influenced the development of nursing in the United States, especially after the Civil War, as well as in her native England.

Mary Seacole (1805–1881) was an interesting Black woman who made significant contributions to the health of soldiers in the Crimean War. Although she and Nightingale were in proximity during the war, they did not work together. Described as a Jamaican nurse and businesswoman, Seacole (Fig. 2.2) was voted as "the greatest Black Briton" in history in a 2003 poll and campaign to raise the profile of contributions of Blacks to Britain over the past 1000 years (100 Great Black Britons, 2015). Although historical accounts of Seacole's life and contributions refer to her as a nurse, Seacole did not refer to herself as a nurse despite her desire to be part of Nightingale's team of nurses going to the Crimea. Her request to be part of the team was refused.

An independent woman with some wealth, Seacole funded her own travel to the Crimea, where her offer to be of service at the British hospital run by Nightingale was again refused. Seacole later reflected in her 1857 autobiography, *Wonderful Adventures of Mrs. Seacole,* "Once again I tried, and had an interview this time with one of Miss Nightingale's companions. She gave me the same reply, and I read in her face the fact that, had there been a vacancy, I should not have been chosen to fill it.… Was it possible that American prejudices against colour had some root here? Did these ladies shrink from accepting my aid because my blood flowed beneath a somewhat duskier skin than theirs?" (Spartacus Educational, 2014). Not only did Seacole face the challenge of racial bias when she sought to be of assistance, but she also faced the bias and the minimization directed toward "colonials," the residents of the widely dispersed countries of the British Empire, which included Seacole's home of Jamaica.

Undeterred by her opposition, Seacole then gathered resources to an establishment she referred to as a "hotel," where injured soldiers received care. Seacole visited the battlefield to tend to the injured and sick and brought many to her hotel. Seacole had a great deal of experience in the management of cholera because of an outbreak in Panama while she was visiting her brother; cholera and other infectious diseases were the cause of a huge percentage of deaths of soldiers in the Crimea. In her autobiography, Seacole described performing an autopsy on a small child who had died of cholera in Panama, the results of which she did not make public but which shaped her understanding of the effects of cholera and how it should be managed. Criticism of Seacole surrounded her entrepreneurship—she sold food and drinks during the war to officers and spectators (Spartacus Educational, 2014).

Called "Mother Seacole" by British soldiers, news accounts of the day described her as a heroine, compassionate, fearless, and determined. Many referred to her as a physician or "doctress"; however, an article in 2012 published in the London newspaper *The Daily Mail* referred to Seacole as "our greatest Black Briton, a woman who did more to advance the cause of nursing and race relations than almost any other individual.… she is said to have saved the lives of countless wounded soldiers and nursed them to health in a clinic paid for out of her own pocket" (Spartacus Educational, 2014). When Seacole filed for bankruptcy soon after her return to England, 80,000 persons attended a 4-day fundraising event organized in her honor.

She was a beloved figure in England, described in 2013 by writer Hugh Muir for *The Guardian* as not a threat to the legacy of Nightingale but as a woman who "reigned on the battlefield." The context for Muir's remarks is an ongoing controversy among politicians and historians about whether Seacole's story will continue to be taught to schoolchildren in a national curriculum and whether to erect a monument to Seacole that is larger than the one honoring Nightingale (Spartacus Educational, 2014).

1861–1873: The American Civil War—An Impetus for Training for Nursing

At the onset of the American Civil War, no professional nurses were available to care for the wounded, and no organized system of medical care existed in either the Union or the Confederacy. Conditions on the battlefield and in military hospitals were unimaginable, with wounded and dying men lying in agony in squalor and filth. Military leadership made appeals for nurses, and the women of both the North and the South responded. Most significant perhaps was the response by the Roman Catholic orders, particularly the Sisters of Charity, the Sisters of Mercy, and the Sisters of the Holy Cross, who had a long history of providing care for the sick (Wall, 1995). Likely the most skilled and devoted of the women who provided nursing care in the Civil War, these Catholic sisters were highly disciplined, organized, and efficient.

On both the Union and the Confederate sides of the war, as well as on the war's Western Front, women responded to meet the needs of the sick and wounded. A number of leaders emerged, including Dorothea L. Dix, a longtime advocate for the mentally ill in prewar years. She was appointed Superintendent of Women Nurses by the Union Army. In that position she was instrumental in creating a month-long training program at two New York hospitals for women who wanted to serve. Thousands of women volunteered and gained nursing skills that made them employable in the postwar era. The lives of countless Union soldiers were saved through Dix's efforts. Several African American women took care of injured Union soldiers, including the famous abolitionist Sojourner Truth and Harriet Tubman, a former field slave who established the Underground Railroad and led slaves to freedom in the North. Another former slave, Susie King Taylor, first worked as a laundress but was called

on to assist as a nurse. She is noted for teaching soldiers, African American and White, how to read and write.

Mary Ann ("Mother") Bickerdyke, who attended Oberlin College in Ohio, was a widow who moved to Illinois and worked as an herbalist, creating alternative treatments with plants and herbs. An active member of her Congregationalist Church, she learned of the squalid conditions of the battlefield hospitals through a letter sent to the church by her friend, a surgeon with the 22nd Illinois infantry. She was selected by her congregation to deliver supplies to troops on the Western Front and to investigate the situation in the hospital camp at Cairo, Illinois, where conditions were as bad as described. Bickerdyke had no official authority and was opposed by the camp surgeons, but this did not deter her efforts to bring order out of chaos and create cleaner conditions. She set up field hospitals as she accompanied Ulysses S. Grant and his troops down the Mississippi River, making cleanliness a priority. She hired escaped and former slaves to work with her. Even though she was not a formally trained nurse, she provided much-needed nursing services and deserves her place in history.

Clara Barton is another well-known nursing pioneer. Barton, a Massachusetts woman who worked as a copyist in the U.S. Patent Office, began an independent campaign to provide relief for the soldiers. Appealing to the nation for supplies of woolen shirts, blankets, towels, lanterns, camp kettles, and other necessities (Barton, 1862), she established her own system of distribution, refusing to enlist in the military nurse corps headed by Dorothea Dix (Oates, 1994). Barton took a leave of absence from her patent job and traveled to Culpeper, Virginia. Because of Culpeper's strategically important location, many battles occurred there, including Cedar Mountain, Kelly's Ford, and Brandy Station. The latter was the largest cavalry battle in the Western Hemisphere, with more than 20,000 soldiers in combat. Barton set up a makeshift field hospital and cared for the wounded and dying. During her time at Culpeper, Barton gained her famous title, "Angel of the Battlefield." In 1881, Barton founded the American Red Cross, an organization whose name continues to be synonymous with compassionate service.

The women of the South also responded with an outpouring of support for their Confederate soldiers. Until late 1861 and early 1862, female volunteers or wounded soldiers staffed Confederate hospitals. When the Confederate government assumed control, several women were appointed as superintendents of hospitals. Superintendent Sallie Thompkins, who had earlier established a private hospital in Richmond, Virginia, was commissioned a "captain of Cavalry, unassigned" by Confederate President Jefferson Davis and was the only woman in the Confederacy to hold military rank. Women living near battlefields in both the North and South brought men wounded in battle into their homes to care for them.

Although thousands of women supported the war effort, only a few were appointed as hospital matrons. One of the earliest was Phoebe Pember, whose initial assignment in 1862 to Chimborazo Hospital in Richmond, Virginia, put her in charge of a sprawling government-run institution crowded with "sick or wounded men, convalescing and placed in that position, however ignorant they might be until strong enough for field duty" (Pember, 1959, p. 18).

The Civil War, for all of its destruction and horror, set the stage to advance professional nursing practice because the leaders, although largely untrained, had achieved dramatic improvements in care during the conflict. The successful reforms in military hospitals served as models for reform of civilian hospitals nationwide.

After the Civil War: Moving toward Education and Licensure under the Challenges of Segregation

The move toward formal education and training for nurses grew after the Civil War. Support was garnered from physicians as well as the U.S. Sanitary Commission, the private relief agency created by the federal government in 1861 to provide, coordinate, and support sick and wounded soldiers during the Civil War. After the war, the Sanitary Commission raised massive resources—the equivalent of an estimated $385 million today. At the 1869 American Medical Association meeting, Dr. Samuel Gross, Chair of the Committee on the Training of Nurses, presented three proposals. The most significant was the recommendation that large hospitals begin the process of developing nurse training schools. At the same time, members of the influential U.S. Sanitary Commission, who had seen the effectiveness of nursing care during the Civil War, also lobbied for the creation of nursing schools (Donahue, 1996). Support for their efforts gained momentum as advocates of social reform reported the shockingly inadequate conditions that existed in many hospitals.

The First Training Schools for Nurses and the Feminizing of Nursing

In 1872 the New England Hospital expanded its "nursing course" into "the first general training school for nurses in America" (Kalisch and Kalisch, 2004, p. 65–66). The first diploma was earned by Linda Richards, who is considered to be America's first professionally trained nurse.

The first three American training schools based on the Nightingale model were the Bellevue Training School for Nurses in New York City, the Connecticut Training School for Nurses in New Haven, and the Boston Training School for Nurses at Massachusetts General Hospital in Boston. Opening in 1873, these schools were modeled after Nightingale's school at St. Thomas' Hospital in London. Although these schools were American, they were called *Nightingale Schools*.

The Victorian belief in women's innate sensitivity and high morals led to the early requirement that applicants to these programs be women, for it was thought that these feminine qualities were useful qualities in a nurse. Sensitivity, intelligence, and characteristics of "ladylike" behavior, including submission to authority, were highly desired personal characteristics for applicants. Conversely, men were generally prevented from entering the profession, except among Roman Catholics orders, such as the Alexian Brothers. The number of training schools increased steadily during the last decades of the 19th century, and by 1900 these schools provided hospitals with a steady, albeit subservient, female workforce, as hospitals came to be staffed primarily by students (Fig. 2.3).

Some schools in the North admitted a small number of African American students to their programs. The training school at the New England Hospital for Women and Children in Boston agreed to admit one African American and one Jewish student in each of their classes if they met all entrance qualifications. Mary Eliza Mahoney (Fig. 2.4), the first African American professionally educated nurse, received her training there. Historical Note 2.1 gives some details about Mahoney.

The development of separate nursing schools for African Americans reflected the segregated American society. African Americans received care at separate hospitals from Whites and were cared for by African American nurses. The first program established exclusively for training of African American women in nursing was established at the Atlanta Baptist Female Seminary (later Spelman Seminary, now Spelman College) in Atlanta, Georgia, in 1886. This program was 2 years long and

Fig. 2.3 Nurses training in the bacteriologic laboratory at Bellevue Hospital, New York City, circa 1900. (Bettman/Corbis Images.)

Fig. 2.4 Mary Eliza Mahoney (1845–1926), the first trained African American nurse in the United States.

HISTORICAL NOTE 2.1

Mary Eliza Mahoney (1845–1926) is known as the first educated, professionally trained African American nurse (Miller, 1986). She began her nursing training at the New England Hospital for Women and Children at age 33. An inscription in records from the New England Hospital reads "Mary E. Mahoney, first coloured girl admitted" (Miller, p. 19). The course of study was rigorous, and admission was highly competitive. When Ms. Mahoney applied, there were 40 applicants; 18 were accepted for a probationary period; only 9 were kept after probation, and only 3 earned the diploma. Mahoney was among those 3. As was common in her day, her practice mainly consisted of private duty nursing with families in the Boston area. To celebrate her accomplishments and her status as the first African American professional nurse, the Mary Mahoney Award was established by the National Association of Colored Graduate Nurses in 1935, with the first award given in 1936. This organization was later combined with the ANA.

Miller HS: *America's first black professional nurse,* Atlanta, 1986, Wright Publishing.

led to a diploma in nursing. Although Spelman closed its nursing program in 1928 after graduating 117 nurses (Carnegie, 1995), it remains a global leader in the education of women of African descent today.

Male students were not allowed in the early nursing schools that enrolled women. The earliest school established exclusively for the training of men in nursing was the School for Male Nurses at the New York City Training School, established in 1886. The Mills College of Nursing at Bellevue Hospital was the second school for men, founded in 1888. In 1898 the Alexian Brothers Hospital in Chicago established a nursing school to train men. They opened a second school in 1928 in St. Louis. The Alexian Brothers ministry dates back to the Middle Ages in Europe, where they tended to the sick and hungry and, in the mid-1300s, cared for victims of the Black Plague that devastated the continent. The Alexian Brothers Health System still exists today.

Professionalization through Organization

The 1893 Chicago World's Fair was an unlikely setting for a turning point in nursing's history. Several influential nursing leaders of the century, including Isabel Hampton Robb, Lavinia Lloyd Dock, and Bedford Fenwick of Great Britain, gathered to share ideas and discuss issues pertaining to nursing education. Isabel Hampton Robb presented a paper in which she protested the lack of uniformity across nursing schools, which led to inadequate curriculum development and nursing education. A paper by Florence Nightingale on the need for scientific training of nurses was presented at this same meeting. Also at this event the precursor to the National League for Nursing, the American Society of Superintendents of Training Schools for Nurses, was formed to address issues in nursing education. The society changed its name in 1912 to the National League of Nursing Education (NLNE), and in 1952 it became the National League for Nursing (NLN). This event held during the Chicago World's Fair became a pivotal point in nursing history.

Three years later, in 1896, Isabel Hampton Robb founded the group that eventually became the American Nurses Association (ANA) in 1911. Originally known as the Nurses' Associated Alumnae of the United States and Canada, the initial mission of this group was to enhance collaboration among practicing nurses and educators.

At the close of the century, in 1899, this same group of energetic American nursing leaders, along with nursing leaders from abroad, collaborated with Bedford Fenwick of Britain to found the International Council of Nurses (ICN). The ICN was and remains dedicated to uniting nursing organizations of all nations; fittingly, its first meeting was held in 1901 at the Pan-American Exposition in Buffalo, New York. At that meeting, a major topic of discussion was one that would dramatically change the practice of nursing: state registration of nurses.

Early nursing professional organizations reflected the segregation that characterized post–Civil War America. Initially nurses from minority groups were excluded from the ANA. After 1916, African American nurses were admitted to membership, but only through their constituent or state associations. In the parts of the United States that remained segregated, including the southern states and the District of Columbia, African American nurses lacked a pathway to membership.

African American nurses recognized the need for their own professional organization to represent and manage their specific challenges. Martha Franklin sent 1500 letters to African American nurses and nursing schools across the country to gather support for this idea (Carnegie, 1995). In response, the National Association of Colored Graduate Nurses (NACGN) was formed in 1908 in New York with the objectives of achieving higher professional standards, breaking down discriminatory practices faced by African Americans in schools of nursing and nursing organizations, and developing

Fig. 2.5 Lillian Wald (1867–1940), nurse and social activist. Wald founded the Henry Street Settlement, which is still in operation today, and was one of the founders of the National Association for the Advancement of Colored People (NAACP).

Fig. 2.6 The Henry Street Settlement nurses were undeterred from their daily visits to their patients in New York's Lower East Side.

leadership among African American nurses. Believing they had met their objectives, and with declining funding for the NACGN, in 1949 the group accepted a proposed merger with the ANA, which was finalized in 1951.The ANA had by that time committed full support to minority groups, as well as abolishment of discrimination in all aspects of the profession.

Nursing's Focus on Social Justice: The Henry Street Settlement

From the late 1800s into the 20th century, the young profession of nursing addressed the serious health conditions related to the arrival of European immigrants who sought work in the urban and rural factories of the northeastern United States. Infectious diseases were easily spread in the overcrowded living conditions of inner city tenement housing. In response to these primitive conditions and the lack of sufficient medical services, the Henry Street Settlement was established on New York's Lower East Side in 1893. Its founders, Lillian Wald (Fig. 2.5) and her colleague Mary Brewster, obtained financial assistance from local philanthropists and began the first formalized public health nursing practice established in a settlement house. The Henry Street Settlement continues to serve its immediate community in the 21st century. Social activist and reformer Lavinia Dock and others worked with Wald to provide services through visiting nurse home visits and clinic services that cared for well babies, treated minor illnesses, prevented disease transmission, and provided health education to the neighborhood (Cherry and Jacob, 2005). Through the Henry Street Settlement, in 1902 Lina Rogers became the first school nurse in the United States. The public health nurses of the Henry Street Settlement were relentless in establishing and achieving broad goals to improve the health of the immigrants who were seeking better lives in America (Fig. 2.6). Historical Note 2.2 describes another pioneering nurse, Margaret Sanger, whose work was inspired by the plight of immigrant women on the Lower East Side (Kennedy, 1970). Sanger became the face of the battle for safe contraception and family planning for women. Her work was sometimes dangerous and always controversial, yet she persisted

HISTORICAL NOTE 2.2

Margaret Sanger, a nurse who worked on the Lower East Side of New York City in 1912, was struck by the lack of knowledge of immigrant women about pregnancy and contraception. After witnessing the death of Sadie Sachs from a self-attempted abortion, Sanger was inspired to action by this tragedy and became determined to teach women about birth control. A radical activist in her early years, Sanger devoted the remainder of her life to the birth control movement and became a national figure in that cause (Kennedy, 1970).

Fig. 2.7 Jessie Sleet Scales, a visionary African American nurse, was among the first to bring community health nursing principles to the tenements of New York City around 1900. (Courtesy Hampton University Archives.)

in her work to preserve reproductive and contraceptive rights for women. The Henry Street Settlement still provides services to fight urban poverty in New York's Lower East Side, serving all ages with a variety of health services, social services, and the arts. A more comprehensive view of the remarkable history and work of the Henry Street Settlement is available at www.henrystreet.org.

A Common Cause, but Still Segregated

Tuberculosis was a major health problem in the tenements of America's crowded industrial cities. Dr. Edward T. Devine, president of the Charity Organization Society, noted the high incidence of tuberculosis among New York City's African American population. Aware of racial barriers to receiving health care and the related cultural resistance to seeking medical care, Dr. Devine determined that a Black district nurse should be hired to conduct outreach into the African American community to persuade local residents to accept health services, screen for tuberculosis, and provide treatment if needed. Jessie Sleet Scales (Fig. 2.7), an African American nurse trained at Providence Hospital in Chicago, was hired as a district nurse and soon earned a permanent position. Her report to New York's Charity Organization Society, published in the *American Journal of Nursing* in 1901, was titled "A Successful Experiment":

> *I beg to render to you a report of the work done by me as a district nurse among the colored people of New York City during the months of October and November. I have visited forty-one families and made 156 calls in connection with these families, caring for nine cases of consumption, four cases of peritonitis, two cases of chickenpox, two cases of cancer, one case of diphtheria, two cases of heart disease, two cases of tumor, one case of gastric catarrh, two cases of pneumonia, four cases of rheumatism, and two cases of scalp wound. I have given baths, applied poultices, dressed wounds, washed and dressed newborn babies, cared for mothers.*
>
> ***(Sleet, 1901, p. 729)***

Jessie Sleet Scales later recommended to Lillian Wald that Elizabeth Tyler, a graduate of Freedmen's Hospital Training School for Nurses in Washington, D.C., work with African American patients through the Henry Street Settlement. Working within the confines of segregation, Scales and Tyler established the Stillman House, a branch of the Henry Street Settlement that served Black persons in a small store on New York's West 61st Street. For community health nursing, the addition of these pioneer African American nurses to the ranks of the Henry Street Settlement signified activism, expansion, and growth. Despite the persistent racial barriers and squalid living and health conditions, Scales and Tyler succeeded in providing excellent nursing care to underserved families with increasing but manageable health problems. Their common focus on prevention of disease and management of illness bound these visionary nurses of the Henry Street Settlement across the deep racial divide.

War Again Creates the Need for Nurses: The Spanish-American War

In 1898 the U.S. Congress declared war on Spain, and once again nursing had a major role in the care of those soldiers sick and injured in war. Anita M. McGee, MD, was appointed head of the Hospital Corps, a group formed to recruit nurses. Encouraged by Isabel Hampton Robb and the fledgling Nurses' Associated Alumnae of the United States and Canada, McGee initially wanted only graduates of nurse training schools in the Hospital Corps (Wall, 1995); however, it soon became clear

Fig. 2.8 Red Cross nursing in the Spanish-American War, circa 1898. Nurses on deck of the hospital ship Relief near Cuba. (National Library of Medicine, Bethesda, MD.)

that this requirement could not be met. A widespread epidemic of typhoid fever created a greater need than anticipated, and as a result others, including the Sisters of the Holy Cross (whose order had served during the Civil War) and untrained African American nurses who had had typhoid fever in the past, were accepted for service (Wall, 1995). Namahyoke Curtis was employed as a contract nurse by the War Department during the Spanish-American War, making her the first trained African American nurse in this capacity. Although McGee and Robb had to enlist untrained persons to care for the sick and wounded during the Spanish-American War, their efforts set the stage for the development of a permanent Army Nurse Corps (1901) and Navy Nurse Corps (1908) (Fig. 2.8).

Professionalization and Standardization of Nursing through Licensure

The institution of state licensure for nurses was a huge milestone for nursing in the early 20th century, although early efforts to establish licensure were not well received. After an educational campaign, the ICN passed a resolution asking each country and each American state to provide for licensure of the nurses working there. As a result, state legislatures in New Jersey, New York, North Carolina, and Virginia passed what were known as permissive licensure laws for nursing in 1903. Nurses did not have to be registered to practice but could not use the title of registered nurse (RN) unless they were registered. By 1923, although all American states required examinations for permissive licensure, the examinations were not standardized. It was not until the 1930s that New York became the first state to have mandatory licensure, but this was not fully mandated until 1947. In 1950 the NLN assumed responsibility for administering the first nationwide State Board Test Pool Examination, meaning all candidates for nursing licensure took the same examination.

The first edition of the *American Journal of Nursing,* published in October 1900, was a key event of this decade. Nurse leaders Isabel Hampton Robb, Mary Adelaide Nutting, Lavinia L. Dock, Sophia Palmer, and Mary E. Davis were heavily involved in the development of the journal. Sophia Palmer, director of nursing at Rochester City Hospital, New York, was appointed as the first editor, with the goal of presenting "month by month the most useful facts, the most progressive thought and the latest news that the profession has to offer in the most attractive form that can be secured" (Palmer, 1900, p. 64).

1917–1935: The Challenges of World War I, the 1918–1919 Influenza Epidemic, and the 1930s Depression Era

The significant events of 1917–1918 combined to challenge nursing resources and organized responses. The United States entered World War I. The utility of trained female nurses to provide care for soldiers during warfare had been demonstrated successfully in previous military campaigns and wars. When the United States entered the war in Europe in early April 1917, the National Committee on Nursing was formed (Dock and Stewart, 1920). This committee was chaired by Mary Adelaide Nutting, professor of Nursing and Health at Columbia University, with membership including Jane A. Delano, Director of Nursing for the American Red Cross, and other prominent nursing leaders. Charged with supplying an adequate number of trained nurses to U.S. Army hospitals abroad, the National Committee on Nursing initiated a national publicity campaign to enhance recruitment of young women to enter nurse training (Fig. 2.9), established the Army School of Nursing with Annie Goodrich as its dean, and introduced college women to nursing through participation in the Vassar Training Camp for Nurses.

From September 1918 to August 1919, an influenza pandemic swept the nation and eventually the world, infecting a staggering one-third of the world's population. The influenza pandemic spurred widespread public

Fig. 2.9 A World War I Red Cross nursing poster, 1918. "Not one shall be left behind!" by James Montgomery Flagg is typical of World War I recruitment posters. Nurses answered the call in record numbers. (Collection of the Library of Congress.)

education in home care and hygiene through Red Cross nursing. Historical Note 2.3 describes the impact of the influenza pandemic on the nation and the profession.

By the time World War I ended, the nursing profession had demonstrated its ability both to provide care to wounded soldiers and to respond effectively to the influenza pandemic. In 1920 Congress passed a bill that provided nurses with military rank (Dock and Stewart, 1920). The 1920s also saw increased use of hospitals and an acceptance of the scientific basis of medicine.

Two other noteworthy events of the decade included the publication of the 1923 Goldmark Report, a study of nursing education (discussed further in Chapter 4) that advocated for the establishment of schools of nursing associated with colleges and universities, rather than hospital-based diploma programs, and encouraged the establishment of rural programs in midwifery, and the establishment of the Frontier Nursing Service (FNS) in 1925.

The FNS was established in 1925 by Mary Breckinridge, a nurse and midwife. Originally established as the Kentucky Committee for Mothers and Babies, this service provided the first organized nurse-midwifery program in the United States. Nurses of the FNS worked in isolated rural areas in the Appalachian Mountains, traveling by horseback to serve the health needs of the poverty-stricken mountain people (Fig. 2.10). FNS nurses delivered babies, provided prenatal and postnatal care, educated mothers and their families about nutrition and hygiene, and cared for the sick. Through this rural midwifery service, Breckinridge demonstrated that nurses could play a significant role in providing primary rural health care.

HISTORICAL NOTE 2.3

The influenza pandemic of 1918–1919 increased the public's awareness of the necessity of public health nursing. A pandemic is an epidemic over a very large geographic area—a continent or even the world, crossing international boundaries—and simultaneously affects a large proportion of the population. Across the United States, the U.S. Public Health Service, American Red Cross, and local Visiting Nurse and Public Health Nursing agencies mobilized to provide care for the hundreds of thousands who contracted influenza, known as "La Grippe" or "Spanish flu." One-third of the world's population (approximately 500,000,000 persons) was affected, and in the United States, 28% of all Americans became infected, killing an estimated 675,000 citizens. The influenza was most deadly to persons 20 to 40 years of age. This age group is typically least susceptible to death by infectious disease, whereas infants, children, and the elderly are usually most affected—but this was no ordinary seasonal influenza. Approximately half of the fatalities among U.S. soldiers in Europe were due to influenza, not war injuries, and in total, an estimated 43,000 servicemen mobilized during World War I died of influenza. In Spring 1919 the second wave of the flu epidemic struck the U.S. East Coast and swept across the country. Although not as lethal as the first epidemic wave, the 1919 flu epidemic closed businesses, schools, and churches. The demand for nursing services increased across these two waves of influenza.

1931–1945: Challenges of the Great Depression and World War II

With hospitals largely staffed by nursing students, most nurses who had completed their training worked as private duty nurses in patients' homes. The Great Depression, however, meant that many families could no longer afford private duty nurses, forcing many nurses into

Fig. 2.10 Mary Breckinridge, founder of the FNS, on her way to visit patients in rural Kentucky. (Used with permission of the Frontier Nursing Service, Wendover, KY.)

unemployment. In 1933 President Franklin D. Roosevelt established the Civil Works Administration (CWA) in which nurses participated by providing rural and school health services. They also took part in specific projects such as conducting health surveys on communicable disease and nutrition of children. Hospitals, as a result of the severe economic conditions of the Depression, were forced to close their schools of nursing. Consequently, hospitals no longer had a reliable, inexpensive student workforce at the time when there was a significant increase in the number of patients needing charity care. The solution soon became apparent: unemployed graduate nurses, willing to work for minimum pay, were recruited to work in the hospitals rather than doing private duty for wealthy families. This had a lasting effect on the staffing of hospitals.

The Social Security Act (SSA) of 1935, a significant part of President Roosevelt's plans to bring the nation out of the Depression, enhanced the practice of public health nursing. One of the purposes of the SSA was to strengthen public health services and to provide medical care for children with disabilities and blind persons. Public health nursing was supported by the SSA and became the major avenue of care to dependent mothers and children, the blind, and children with disabilities.

World War II: Challenges and Opportunities for Nursing

During World War II, the nation's military once again found itself without an adequate supply of nurses. In response to the need for nurses, Congress enacted legislation to provide substantial financial support for nursing education. The military and collegiate programs of nursing formed the Cadet Nurse Corps, an alliance to train student nurses. Students received tuition, books, a stipend, and a uniform in return for a commitment to serve as nurses for the duration of the war in either civilian or military hospitals, the Indian Health Service, or public health facilities. Approximately 124,000 nurses volunteered, graduated, and were certified for military services in the Army and Navy Nurse Corps between 1943 and 1948. As a result of lobbying by U.S. Congresswoman Frances Payne Bolton, First Lady Eleanor Roosevelt, and the National Organization of Colored Graduate Nurses, for the first time, America's African American nurses were permitted to provide nursing services to injured soldiers in foreign countries. At home, despite ongoing racial segregation, African American collegiate programs, as well as the NACGN, were active participants in the Cadet Nurse Corps.

Historical Note 2.4 describes the courage of nurses in the Philippines at Corregidor and Bataan during World War II, who were held in captivity for 3 years in an internment camp.

1945–1960: The Rise of Hospitals—Bureaucracy, Science, and Shortages

The professionalization of nursing continued after the end of World War II. In 1947 military nurses were awarded full commissioned officer status in both the Army and the Navy Nurse Corps, and segregation of African American nurses was ended. Julie O. Flikke was the first nurse to be promoted to the rank of colonel in the U.S. Army. In 1954 men were allowed to enter the military nursing corps.

In 1946 the Hill-Burton Act was enacted, providing funds to construct hospitals, which led to a surge in the growth of new facilities. This rapid expansion in the number of hospital beds resulted in an acute shortage of nurses and increasingly difficult working conditions. Long hours, inadequate salaries, and increasing patient loads made many nurses unhappy with their jobs, and threats of strikes and collective bargaining ensued.

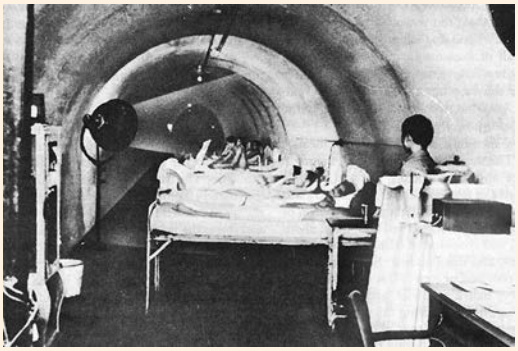
In response to the shortages, "team nursing" was introduced. Team nursing involved the provision of care to a group of patients by a group of care providers. Although efficient, the method fragmented patient care and removed the RN from the bedside. Another

HISTORICAL NOTE 2.4

Hours after Pearl Harbor was attacked on December 7, 1941, a successful surprise attack on U.S. installations in the Philippines crippled the air force in the South Pacific. At that time, more than 100 nurses were enlisted with the U.S. Army and Navy units in the Philippines. Some of the most dramatic stories in nursing's history played out over the next weeks and months during the Japanese takeover of the Bataan peninsula, a large land mass at the northern tip of the Philippines, and then Corregidor, a small island (about 6 square miles) in a strategically advantageous location at the opening on the Manila Bay. Nurses proved their ingenuity, commitment, courage, and intelligence during the first months of 1942 as they were forced to provide care under the most extreme conditions. The two field hospitals that were built to handle 1000 patients each had 11,000 patients by the end of March 1942. One month later, there were 24,000 sick and wounded. The field hospitals themselves were bombed twice. With the imminent fall of the Bataan to Japanese control, the nurses were evacuated to Corregidor.

Corregidor contained a huge bomb-proof tunnel system, a complex of a main tunnel (the Malinta Tunnel, 1400 feet long and 30 feet wide) and numerous lateral tunnels with electricity and ventilation, and a hospital. At first, the conditions deep in the tunnel were a stark contrast to the horrors of Bataan, until conditions deteriorated over the next few weeks as Corregidor continued to be under relentless air attack by the Japanese. The number of wounded soldiers increased, until finally 1000 young men were being cared for by the nurses in a space where power outages, poor ventilation, oppressive heat, and vermin were common.

Although many nurses were evacuated from Corregidor before the final takeover of the island fortress by the Japanese military, about 85 American and Filipino nurses remained in the tunnel hospital to attend to the wounded.



On May 4, 1942, the American forces on Corregidor surrendered. The nurses remaining on Corregidor were confined to the tunnel hospital, were not allowed to go outside for fresh air, and were given only two small meals a day, and yet they continued to provide effective nursing care for 1000 sick and injured soldiers. This continued for 6 weeks until they were moved to the old hospital site outside the tunnel. One week later, they were bound for Manila, not knowing that they were soon to be providing care at an internment camp, where they would also be interned for the next 33 months. On February 3, 1945, U.S. troops liberated the internment camp.

For more details of the nurses' work during their ordeal at Bataan, Corregidor, and the internment camp, consult these excellent resources:

Kalisch PA, Kalisch BJ: Nurses under fire: the World War II experiences of nurses on Bataan and Corregidor, *Nurs Res* 44(5):260–271, 1995.

Norman E: *We band of angels: the untold story of American nurses trapped on Bataan by the Japanese,* New York, 1999, Random House.

response to the shortage was the institution of the associate degree in nursing (ADN), discussed in more detail in Chapter 4. As nursing continued to search for its identity, it focused on the scientific basis for nursing practice. Clinical nursing research began in earnest, and the *Journal of Nursing Research* was first published in 1952.

1961–1982: The Great Society, Vietnam, and the Change in Women's Role

Two 1965 amendments to the Social Security Act, designed to ensure access to health care for elderly, poor, and disabled Americans, resulted in the establishment of Medicare and Medicaid. Soon after, hospitals began to rely heavily on reimbursements from Medicare and Medicaid. Because most of the care for the sick was taking place in hospitals rather than homes, the hospital setting became the preferred place of employment for nurses, giving rise to new opportunities and roles for nurses.

The 1960s were the era of specialty care and clinical specialization for nurses. The successful development of the clinical specialist role in psychiatric

nursing—combined with the proliferation of intensive care units and technological advances of the period—fostered the growth of clinical specialization in many areas, including cardiac-thoracic surgery and coronary care. The increase in medical specialization, along with the concurrent shortage of primary care physicians and the public demand for improved access to health care that grew out of President Lyndon B. Johnson's "Great Society" reforms, fostered the emergence of the nurse practitioner (NP) in primary care. In 1971 Idaho became the first state to recognize diagnosis and treatment as part of the legal scope of practice for NPs.

Again, war—this time in Vietnam—provided nurses with opportunities to stretch the boundaries of the discipline. The Vietnam War occurred in jungles not easily accessed by rescue workers or medics and without clearly drawn lines of combat. Mobile hospital units were set up in the jungles, where nurses often worked without the direct supervision of physicians as they fought to save the lives of the wounded. They performed advanced emergency procedures such as tracheotomies and chest tube insertions, never before executed by nurses. They also had to deal with the lack of support at home, where the Vietnam War was controversial and widely protested. The trauma of the battlefield was intensified by this lack of support at home, and many nurses suffered posttraumatic stress disorder, as did the returning soldiers. In 1993 the Vietnam Women's Memorial statue was dedicated, which featured two nurses—one White, one Black—tending to the prostrate figure of an injured soldier. Most of the American women who served in Vietnam were nurses. This memorial captured the difficult and crucial role of nurses in the Vietnam War, and it stands in sharp contrast to the days of segregation from earlier decades. The Vietnam Women's Memorial statue is featured on the title page of this chapter.

1983–2000: Challenges for Nursing—HIV/AIDS and Life Support Technologies

The early 1980s was marked by the recognition of the rapid spread of a retrovirus that later became known as the human immunodeficiency virus (HIV). This virus was isolated from a person with acquired immunodeficiency syndrome (AIDS) and ultimately resulted in a change in health care globally. At first believed to be confined to the gay community, in 1983 the first incidence of the spread of HIV was noted in hemophiliacs as a result of HIV-contaminated blood products. It became clear that all persons were susceptible to HIV. Although much is known about HIV and its transmission now, 30 years ago the questions that surrounded HIV were frightening and resulted in massive changes to the daily routines in health care, including the implementation of universal precautions. The development of antiretroviral treatments proved to be useful in prolonging the time from infection with HIV to the development of AIDS, and the use of antiretroviral drugs during pregnancy reduced the incidence of mother-to-child transmission from 30% to 3%. Very quickly, the HIV/AIDS epidemic changed the landscape of health care, affecting everything from materials such as needles, intravenous catheters, and gloves to global AIDS initiatives in resource-poor nations, particularly in Africa.

The 1980s and 1990s were also marked by an enormous increase in the use of medical technologies, including the wide use of life support. Many ethical questions were raised during these years regarding the use of life support technologies and when they are appropriate. A prominent case involved the decision of the parents of Karen Ann Quinlan to discontinue ventilatory support after she lapsed into a drug- and alcohol-induced coma in 1975. The phrase "persistent vegetative state" became well known, if not entirely understood, by the public. Ms. Quinlan lived for a decade after the discontinuation of the ventilator, never regaining consciousness. Another case involving a young woman, Nancy Cruzan, raised questions of "right to die" and what the patient would have wanted. Ms. Cruzan was in a persistent vegetative state, and her parents asked for her feeding tube to be removed, eventually taking their fight to the U.S. Supreme Court, which upheld a ruling by the Missouri court that prevented them from discontinuing her nutritional support. They eventually won a court order under the Due Process Clause that supports a person's right to refuse medical treatment. The Cruzans provided evidence that their daughter would have wanted her life support terminated, and they were allowed to have nutritional support discontinued. These prominent cases moved forward support for advance directives that would provide evidence of a patient's wishes while still competent.

2001–2018: The Post–9/11 Era, Natural Disasters, and Health Care Reform

The United States underwent a sudden and cataclysmic social and cultural shift in the aftermath of the September 11, 2001, attacks. Almost all areas of American life

were touched by the events of that day, including nursing. Disaster management became a focus of nursing efforts to be better prepared for mass casualties, and disaster drills have become part of the routine in hospitals to ensure that nurses and other personnel can respond effectively and efficiently, with a focus on saving as many lives as possible during a wide-scale disaster.

In 2005 Hurricane Katrina created a disaster along the Gulf Coast of Louisiana, Mississippi, and beyond. Parts of the city of New Orleans were underwater, and the images of people sitting on housetops and propped in wheelchairs along the walls of the Superdome became part of the story of Katrina. In hospitals filled with floodwaters in their lower floors, nurses, physicians, and other providers sought to protect and comfort patients under horrendous conditions. In 2006, in response to the arrest of two nurses for administering lethal doses of morphine and midazolam to four terminally ill patients in the aftermath of Hurricane Katrina, the ANA published comments on nursing care during disasters, citing the "unfamiliar and unusual conditions with the health care environment that may necessitate adaptations to recognized standards of nursing practice"; the comments, however, did not address the specific details of these nurses' situations. The ANA comments can be found at www.nursingworld.org/DocumentVault/Ethics/ANAonKatrina.html. What was clear from both the World Trade Center attacks and the aftermath of Hurricane Katrina is that nurses were called on to act in conditions that had been previously unimaginable and unaddressed. Nursing as a profession has responded by increasing preparedness for human catastrophes and natural disasters that are certain to occur in the future.

Another marker of the current social context of nursing was the passage of the Affordable Care Act (ACA), signed into law by President Barack Obama in March 2010. This legislation was and continues to be debated vigorously. This legislation was often referred to as "health care reform." The ANA supported the passage of this Act and in 2011 affirmed its continuing support for the Act in the face of efforts by subsequent sessions of Congress to repeal it. Provisions of the ACA were implemented over time. Early provisions banned lifetime limits on insurance coverage by insurers so that patients with extreme medical costs can be assured of continuing benefits over the course of their illness and lifetime. Young adults up to age 26 were allowed coverage on their parents' insurance plan unless they had insurance coverage at work. The ACA also prevented insurance companies from denying coverage to children and teens younger than age 19 because of a preexisting condition. An estimated 162,000 children benefitted from these two provisions. Later provisions included coverage of recommended preventive services with no out-of-pocket expenses for insurance holders, the right to appeal coverage decisions, and having a choice of primary care providers. By 2015, more than 16 million Americans had a health care plan under the ACA, meaning that only 10.1% were without health coverage, a decrease of more than 4% since the first ACA open enrollment in 2013. The Congressional Budget Office, a nonpartisan department of the federal government, estimated a cost savings of more than $1.7 trillion over two decades. Interestingly, the ACA has improved patient safety and prevented an estimated 50,000 deaths between 2010 and 2013 from health care–related harm. An important provision of the ACA was that persons with a preexisting health condition could not be denied health insurance coverage. This provision affected 129 million Americans.

Another major development in the health care field that affects the nursing profession has been the rapid development of informational and medical technologies. Electronic health records have become common as the U.S. health care system is moving toward becoming paperless. Digitalized health records allow for access across disciplines and across distance, with the goal to improve continuity of health care no matter where a person may require medical treatment. In many institutions, nurses enter patient data into computers at the bedside. Life-sustaining medical technologies have created new ethical challenges for nurses, who continue to be the first line of defense on behalf of their vulnerable patients. This role has never changed for nurses, even though technologies have altered the terrain of health care over time.

Many of the issues that confronted nurses of the past still confront nurses today. War, infectious disease, poverty, and immigration still pose challenges to public health. With an increasing interest in global health, nurses are finding that, although many infectious diseases have been managed, HIV/AIDS and malaria still threaten the health of people in Africa and other underdeveloped parts of the world. Nurses are increasingly aware of the need for cultural competence in providing care to others with whom nurses share little in common demographically. Monsivais (2011) noted that, although cultural markers such as age, gender, education, and