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PROFESSIONAL NURSING

Concepts & Challenges

Beth Perry Black
Maureen J. Baker

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Concepts & Challenges

Beth Perry Black, PhD, RN, FAAN
Associate Professor Emeritus
University of North Carolina at Chapel Hill
School of Nursing
Chapel Hill, North Carolina

Maureen J. Baker, PhD, RN
Clinical Associate Professor
University of North Carolina at Chapel Hill
School of Nursing
Chapel Hill, North Carolina

ELSEVIER

Elsevier
1600 John F. Kennedy Blvd.
Ste 1800
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Senior Content Strategist: Sandra Clark
Senior Content Development Specialist: Rae Robertson
Content Development Manager: Danielle Frazier
Project Manager: Haritha Dharmarajan
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To Calvin and Jett
My grandsons, who find joy in life's simple pleasures
and remind me to do the same.
And it is true:
you can never read "The Runaway Bunny" too many times.
I love you MTYCI.
—BPB

To Joan Kelly
My mother, who always told me I was very capable
and I could do anything I set my mind to
and to make sure I had some fun while doing it.
—MJB

REVIEWERS

Charles Edwards, PhD, RN
Assistant Professor
Washington State University, College of Nursing
Spokane, Washington

Melissa A. Fettig, RN
Director, BSN Completion Program
Department of Nursing
Minot State University
Minot, North Dakota

Anita Hapshie, RN, MSN, Alumnus CCRN
Associate Nursing Instructor
Taylor College
Ocala, Florida

April Minster, EdD, MPH, RN, CNE
Associate Director of Curriculum and Instruction
Galen College of Nursing
Louisville, Kentucky

PREFACE

As the largest group of health care providers in the United States, nurses are well positioned to be leaders in envisioning and reforming health care access and delivery. To be effective leaders, nurses must master a wide variety of knowledge, think critically and creatively, participate in robust interprofessional education and collaborations, and grapple with complex ethical dilemmas that challenge providers in a time when healthcare resources are strained. As leaders, nurses need to understand their history because the past informs the present; vision for the future builds on the lessons of today.

The 11th edition of *Professional Nursing: Concepts & Challenges* reflects our commitment to present current and relevant information. As we develop this edition, the COVID-19 pandemic has subsided, but COVID and its sequelae still affect the health of the most vulnerable residents of the United States and provide irrefutable evidence of the consequences of severe, prevalent disparities related to social determinants of health. The effects of climate change have created significant barriers to optimal health and well-being among economically disadvantaged US citizens and residents, who tend to live in areas most affected by flooding, poor air quality, and problems with food distribution. Nurses know that health care is not just what happens in hospitals and clinics, but that it plays out in every aspect of daily life.

In this edition, we maintained the same order of the chapters as in the 10th edition, based on generous feedback from faculty who noted that this order provides a cohesive view of nursing—our history, education, and conceptual and theoretical bases, and the place of nursing in the US health care system. We encourage faculty, however, to use the chapters in any order that reflects their own pedagogic and theoretical approaches. This edition continues to include the effects of social media on nursing, including legal and ethical implications of their use. With the easy and free availability of health-related statistics from .gov and other websites, we are continuing with the format and content that was successful in the tenth edition: more narrative and fewer statistics. We 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.

Words matter. Throughout the book, we are careful to use inclusive language, to avoid heteronormative and ethnocentric words, to use examples that avoid stereotypes of all types, and to include photographs that capture the diversity of American nursing. You will notice that we use the gender-neutral "they" as a now-accepted singular pronoun, and its related possessive form "theirs," both avoiding the awkward "he and/or she" term and assigning a specific gender to a situation or person.

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 used a phrase in a clever or elegant way that needed to be cited. Research and clinical works are relevant and contemporary.

As with the last six editions, the 11th 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, we have made every effort to present material that is comprehensive enough to challenge users at all levels without overwhelming beginning students. Our goal is to create an engaging and interesting textbook while taking care to minimize jargon commonly used in health care. We have provided a Glossary to assist in developing and refining a professional vocabulary, and key terms are highlighted in the text itself. The Glossary also contains basic terms that are not necessarily used in the text but may be unfamiliar to students new to nursing.

We hope that this edition continues to meet the high standards set by Kay Chitty, the original author and editor of this text, and that students and faculty will find this edition readable, informative, and thought provoking. More than anything, we hope that *Professional Nursing: Concepts & Challenges*, 11th 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
Maureen J. Baker

ACKNOWLEDGMENTS

For the first time since the fifth edition, *Professional Nursing: Concepts & Challenges* welcomes a new editor, Dr. Maureen J. Baker. Dr. Baker brings to this work her deep understanding of and respect for today's generation of students and knows how to "meet them where they are." Combined with her energy, vision, and extensive experience as a nurse educator, Dr. Baker is an invaluable asset to this newest edition. With each new edition of *Professional Nursing: Concepts & Challenges*, we find ourselves increasingly in awe of the intelligence, creativity, humility, and work ethic of the nursing students and nurses who continue to inspire us.

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

- To nursing faculty who used earlier editions and shared their helpful suggestions to make this book better.
- To nursing students who sent e-mails, expressing their gratitude for an interesting and readable textbook while offering ideas for improvement.
- To the contributors from earlier editions, whose efforts on their chapters provided a strong foundation for our work on this edition.
- To our extraordinary nursing students and alumni of the UNC at Chapel Hill School of Nursing, of whom we are so proud.
- To Amanda Black, whose keen eye for detail was invaluable in preparing the final manuscript for submission. More important, however, was Amanda's sensitivity to the issues and language of gender, race, and diversity. Her incisive, exacting critique of the manuscript and her tireless work in searching out original sources and better references are an editor's dream! This text is better because of her work on it, and we are truly grateful.

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Nursing in Today's Evolving Healthcare Environment

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.

Nursing is the largest segment of the healthcare workforce in the United States today, with 4.7 million registered nurses (RNs), 89% of whom are employed in nursing (American Association of Colleges of Nursing [AACN], 2024a). RNs have increasing opportunities to practice in a wide variety of settings. More than ever, the profession requires a well-trained, flexible, and knowledgeable workforce of nurses who can practice in today's evolving healthcare environment. 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 US Nursing is continuously evolving to meet these demands.

The World Health Organization (WHO) designated 2020 as the Year of the Nurse and Midwife, recognizing the invaluable contributions of nurses to global health. However, this symbolic acknowledgment coincided with unprecedented challenges in health care. Over the past 4 years, the US healthcare system has faced a series of historic challenges, including the COVID-19 pandemic, which stretched resources and tested the resilience of healthcare workers. At the forefront of patient care, nurses bore the brunt of this crisis, grappling with shortages of personal protective equipment, overwhelming patient workloads and acuity, and the emotional toll of witnessing immense suffering and loss.

As we develop this edition of *Professional Nursing: Concepts & Challenges*, the United States continues to grapple with the aftermath of the worldwide pandemic caused by SARS-CoV-2, commonly known as COVID-19, which led to significant loss of life, disability, and socioeconomic disruption. The emergence of this novel coronavirus was declared a Public Health Emergency of International Concern by the WHO on January 30, 2020, and was later classified as a pandemic on March 11, 2020. According to the WHO's April 2024 report, more than 7 million individuals (about twice the population of the state of Oklahoma) worldwide have died from COVID-19, with 1.2 million of these fatalities occurring in the United States (Reynolds et al., 2023; WHO, 2024). This means that 24% of the world's COVID-related fatalities occurred in the United States, an alarming fact made even more disquieting given that the United States comprises only 5% of the world population.

Although researchers, scientists, and healthcare providers have gained a better understanding of the pandemic's effects, the long-term health and socioeconomic consequences of the pandemic are multifaceted and continue to unfold. Post-COVID conditions, also

known as long COVID, encompass a range of health problems that arise, persist, or recur following acute COVID-19 illness, including fatigue, respiratory symptoms, and neurological issues. In 2022, 6.9% of US adults reported experiencing long COVID (Centers for Disease and Control and Prevention [CDC], 2024; Ford et al., 2024). In July 2021 long COVID was recognized as a condition that could result in disability under the Americans with Disabilities Act if persistent symptoms limit activities of daily living, such as eating, dressing, bathing, mobility, medication management, and working (U.S. Department of Health and Human Services [HHS], 2021). While new COVID infections and related deaths may be declining in the United States, the effects of long COVID and social isolation persist. This places additional strain on an already burdened healthcare system, revealing gaps and deficiencies exacerbated by the pandemic's challenges.

Furthermore, the COVID-19 pandemic sparked significant and vehement political and sociocultural debates. Topics of debate included whether and how to mandate wearing masks and vaccinations, the effectiveness of social distancing, and how to address the spread of disinformation related to COVID-19 transmission and the use of untested, unsupported, and even dangerous substances to prevent or cure infection. Social media exacerbated and often fueled the spread of misinformation and conspiracy theories surrounding COVID-19, amplifying the confusion and uncertainty during the pandemic. Platforms like Facebook, X (formerly Twitter), and YouTube became breeding grounds for false claims about the virus, its origins, and potential treatments. The viral nature of social media allowed misinformation to spread rapidly, undermining public health efforts and contributing to vaccine hesitancy. As a result, combating misinformation became a significant challenge and priority for public health authorities, highlighting the need for effective communication strategies and fact-checking measures to address false narratives and promote accurate information about COVID-19.

During the COVID-19 pandemic, the registered nurse (RN) workforce decreased by more than 100,000 in 2021 in the United States—a far greater single-year drop than observed at any time over the past four decades (Auerbach et al., 2024). Despite these unprecedented challenges, nurses demonstrated resilience, adaptability, and dedication in providing high-quality care to patients throughout the COVID-19 pandemic. They were essential frontline workers in the fight against the virus, demonstrating their critical role in healthcare delivery and public health response efforts.

Moreover, the COVID-19 pandemic both highlighted and exacerbated existing health disparities and inequities related to **social determinants of health**, especially for persons of color, individuals and families who live in poverty, and those for whom access to adequate housing and health care is elusive. Social determinants of health (SDOH) are, in the broadest sense, significant factors influencing our health and health outcomes. These determinants include where we live, grow, learn, work, and play.

COVID-19 deaths are influenced by age, race, and ethnicity, with older individuals and certain minority groups experiencing higher mortality rates (Gold et al., 2020; Wong et al., 2021). Older adults, due to underlying health conditions, are more vulnerable to severe illness. Racial and ethnic disparities in COVID-19 outcomes persist, with Black, Hispanic, and Indigenous populations disproportionately affected, as a function of structural racism and other SDOH (Glance et al., 2021; Gold et al., 2020). Studies have shown higher mortality rates among these groups, even after adjusting for socioeconomic factors (Gold et al., 2020; Wong et al., 2021).

Numerous studies have shown that older age is a significant risk factor for COVID-19 mortality. According to data from the Centers for Disease Control and Prevention (CDC), adults aged 65 and older accounted for most COVID-19 deaths in the United States since the onset of the pandemic (Tejada-Vera & Kramarow, 2022). Older adults are more likely to have underlying health conditions and weakened immune systems, making them more vulnerable to severe illness and death from COVID-19.

Research has consistently shown racial and ethnic disparities in COVID-19 outcomes, with Black, Hispanic, and Indigenous populations experiencing higher rates of infection, hospitalization, and death compared to White individuals (CDC, 2023a; Luck et al., 2023; Magesh et al., 2021; Wong et al., 2021). CDC data highlights systemic inequities in access to health care, socioeconomic factors, and structural racism that contribute to these disparities (CDC, 2023b). For example, counties with higher proportions of Black residents experienced higher COVID-19 mortality rates compared to counties with lower proportions of Black residents, even after accounting for socioeconomic factors and healthcare

access (Baltrus et al., 2021; CDC, 2023a,b). Hispanic and Black individuals had significantly higher COVID-19 mortality rates compared to White individuals, with disparities persisting even after adjusting for age, sex, and comorbidities (Figueroa et al., 2021).

The issue of access to care and how to pay for it continues to be a challenge in the United States, which has lagged behind other nations of comparable economic development in terms of accessibility of adequate health care, mortality rates, disease burden, and other key health metrics (Gunja et al., 2023; Wager et al., 2024). One of the most notable influences on today's healthcare 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 changes to the way that Americans gain access to and pay for their health care.

Additionally, the ACA 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 (NAM) noted nursing's opportunities to act in partnership with other health professions in improving and reconfiguring the US healthcare system and how care is delivered (National Academy of Medicine [NAM], 2010). The most recent study by NAM on the Future of Nursing 2020–30 built on the findings from 2010 to 2020, noting the primacy of the health of its citizens to ensure that a nation will thrive, and that nurses as "trusted bridge builders" are catalysts for implementing changes in to the US healthcare system to advance health equity by building on a stronger and more expert nursing workforce (National Academies of Science, Engineering, and Medicine, 2021). *The Future of Nursing 2020-2030* document and related resources can be found at https://nam.edu/publications/the-future-of-nursing-2020-2030/.

Writing about "nursing today" poses a challenge because what is current is likely to change 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 sometimes quickly shifting needs of the profession in an evolving healthcare 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 open 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

A diverse nursing workforce is fundamental to meeting healthcare needs in the United States and to address health inequities, including access to care among historically underserved communities (AACN, 2024b; Flaubert et al., 2021; Placide et al., 2023). To achieve this fundamental goal, schools of nursing must recruit and admit individuals from diverse backgrounds (AACN, 2024b). 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.

As an initial mechanism to respond to the need for understanding the nursing workforce, the US Department of Health and Human Services conducted 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. This important survey was discontinued, however, after its final report was issued in 2010.

In response to the ongoing need to understand the nursing workforce, the National Council of State Boards of Nursing (NCSBN) and the Forum of State Nursing

Workforce Centers (FSNWC) combined efforts in 2013 to conduct a comprehensive national survey of a randomized sample of 157,459 registered nurses and 39,765 licensed practical nurses/licensed vocational nurses (Smiley et al., 2023). In this chapter, data from the 2022 National Nursing Workforce Survey are presented to provide you with a thumbnail sketch of nursing, specifically focusing on the number of nurses in the workforce, and their gender, age, race, ethnicity, and educational levels. Any data retrieved from sources other than the 2022 National Nursing Workforce Survey are cited; otherwise, data are from this survey. For more comprehensive data, you can download the 2022 survey as a PDF in its entirety for free at https://www.journalofnursingregulation.com/article/S2155-8256(23)00047-9/fulltext.

At the time this chapter was being updated, the 2024 National Nursing Workforce Survey was underway, randomly surveying nurses from April to September 2024. By the time this edition is published, you are likely to have access to the findings from the 2024 survey.

Another helpful tool based on the 2018 and 2022 Nurse Workforce Survey is the National Center for Health Workforce Analysis (NCHWA) Nursing Workforce Dashboard. The Nursing Workforce Dashboard is an interactive tableau tool that visualizes data from the 2018 and 2022 National Sample Survey of Registered Nurses (NSSRN). The Dashboard is designed to help users understand the current landscape and challenges facing the nursing workforce. The survey covers various aspects, including demographics, educational attainment, licenses and certifications, and employment characteristics of registered nurses (RNs) in the United States. The 2022 dashboard can be found at https://data.hrsa.gov/topics/health-workforce/nursing-workforce-dashboards.

Nurses in the Workforce

With over 4.71 million active licenses, registered nurses (RNs) constitute the largest group of healthcare providers in the United States, experiencing a growth rate of 14.6% between 2019 and 2024 (National Council of State Boards of Nursing (NCSBN), 2024a; Smiley et al., 2023). Although many nurses left clinical practice during the pandemic, they continue to hold an active nursing license. It is important to note that "active" licenses indicate that a nurse holds a valid license but is not necessarily currently employed in nursing. A nursing license, issued by state boards of nursing (BON), ensures that the holder meets predetermined standards for safe practice (NCSBN, 2024b). This will be discussed further in Chapter 6.

The median age of registered nurses (RNs) is 46 years, with 89% of all licensed nurses employed in nursing, approximately 70% of whom work full-time, 11% work part-time, and approximately 8% work **per diem shifts** (i.e., flexible schedules on an as-needed basis in which nurses get paid only for the shifts they work). Hospitals, ambulatory healthcare services, nursing and residential care facilities, government, and educational services are the primary employers of RNs (AACN, 2024c; Smiley et al., 2023).

The nursing workforce has undergone significant changes, particularly in the aftermath of COVID-19, which saw a notable exodus of older nurses from the profession. In 2020, nurses aged 55 years or older comprised 43% of registered nurses (RNs) and 42% of licensed practical nurses/licensed vocational nurses (LPNs/LVNs). However, by 2022, these figures dropped to 31% for RNs and 30% for LPNs/LVNs, a departure of an estimated 200,000 experienced RNs and 60,000 experienced LPNs/LVNs from the workforce (Smiley et al., 2023). Despite attrition of nurses from the workforce during and after the pandemic, the median age of nurses remains unchanged.

Gender

The current registered nurse (RN) workforce is comprised of 11.2% males, indicating a significant increase of 19.1% since 2020 (9.4%) and a 40% increase since 2015 (8%) (AACN, 2024c; Smiley et al., 2023). Additionally, in 2022, 0.3% of respondents identified as "other," a nonspecific, undefined term to capture responses of persons whose gender identity is not reflected in binary male/female signifiers used in previous surveys, representing a 200% increase from the 2020 survey of 0.1%. According to the AACN 2018–19 report, men accounted for 11.3% of students in entry-level Bachelor of Science in Nursing (BSN) programs, 10.8% in master's programs, 13.4% in Doctor of Nursing Practice (DNP) programs, and 11.2% in research-focused doctoral programs (AACN, 2024c; Smiley et al., 2023).

Age

The future of any profession relies on the influx of younger individuals, and the steady rise in the age of the nursing workforce has raised concerns. The median

age, which indicates the midpoint where half of the nurses are older and half are younger, serves as a more meaningful measure than calculating a mean age. Since 1988, when the median age was 38, it has increased by 2 years with each national survey. By 2004 the median age reached 46, signaling a troubling trend that the nursing workforce was aging. As of 2020, 13.2% of nurses were 65 years or older, and an additional 12.2% were aged 60 to 64, totaling roughly 25% of the nursing workforce. In 2022 the highest percentage of registered nurses (RNs) was evenly divided between two age brackets: 30 to 34 years and 65 years or older (13.2% each). While older nurses are extending their careers in the workforce, efforts are underway to attract younger individuals to the nursing profession. The increasing number of nurses aged 60 and older remaining in the workforce may be attributed to economic conditions necessitating older nurses to stay employed rather than retiring. To prevent a severe nursing shortage as older nurses approach retirement, the nursing profession must continue to recruit, educate, and retain younger nurses.

One effective recruitment approach is to begin to recruiting students to nursing during the middle and high school years. Middle and high schools can encourage more students to consider nursing as a career by offering career exploration programs, mentorship opportunities, and partnerships with healthcare institutions to expose diverse students to nursing careers. By integrating cultural competency training, inclusive curriculum representation, and offering support through scholarships and financial aid, students are better equipped to envision themselves as becoming nurses. These efforts not only help alleviate the impending nursing shortage as older nurses retire but also foster diversity and inclusion in health care.

Race and Ethnicity

Racial and ethnic minorities constitute 39.39% of the US population but only 16.89% of the registered nurse (RN) population, indicating an underrepresentation of over 50% as of 2020. However, in 2022, the nursing workforce displayed greater demographic diversity compared to previous years, which is promising given the growing emphasis on health equity and the need for a diverse nursing workforce. Detailed data from the 2020 National Nursing Workforce Survey revealed significant disparities, particularly with Hispanic/Latino and Black/African American populations, who are underrepresented among RNs despite their larger proportions in the general population. Detailed data from the 2022 National Nursing Workforce Survey showed that the largest disparity between the US general population and the RN population is seen with Hispanics/Latinos of any race. Although this group forms about 19.1% of the US population (U.S. Census Bureau, 2023), they make up only 6.9% of RNs. There is also a significant disparity for non-Hispanic Black/African Americans: now constituting 13.6% of the US population, this group makes up just 6.3% of RNs. The Asian population, comprising 6.2% of the general US population, makes up 7.4% of the RN population, a moderate overrepresentation (U.S. Census Bureau, 2023). Many nurses identifying as Asian and practicing in the United States immigrated to the United States after completing their nursing education in Asia; this however may not fully explain the overrepresentation of the population in nursing. Although the profession of nursing has a long way to go to reach proportional representation across racial/ethnic groups, there is evidence of some improvement. 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 34.2% in 2022 (AACN, 2024c).

Education

Entry level into practice is the term for one's basic education to become a nurse. 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®. After passing 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-RN: (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 completion of a 3-year hospital-based program, including prerequisite courses that may be taken at another school.

As per the 2022 National Nursing Workforce Survey, only 4.1% of registered nurses (RNs) possess a nursing diploma, making it the least prevalent educational pathway for nursing. Currently, there are fewer than 100 diploma programs remaining in the United States. In contrast, a more significant proportion of RNs have pursued higher education, with 17.4% of RNs earning a Master of Science (MSN) degree. Additionally, 2.7% of RNs have furthered their education by attaining their doctoral degree, either a PhD (Doctor of Philosophy) or a DNP (Doctor of Nursing Practice) (AACN, 2024c; Smiley et al., 2023).

Currently, most registered nurses begin their careers with either a bachelor's degree (BSN) from a 4-year college or university, or an associate degree (ADN) from a community college. As of 2022, 71.7% of the registered nurse (RN) workforce had attained a Bachelor of Science (BSN) degree or higher as their highest level of nursing education (U.S. Bureau of Labor Statistics, 2024a). Employers increasingly prefer to hire nurses who have completed baccalaureate-level education. According to the most recent survey by the AACN on the Employment of New Nurse Graduates, nearly 28% of employers mandate that new recruits hold a bachelor's degree, while 72% express a strong preference for baccalaureate-prepared nurses (AACN, 2022a).

In comparison, in 2020, only 41.8% reported having a BSN as their first degree or credential, while 17.2% reported having an ADN as their first degree or credential (Smiley et al., 2023). In 2022, approximately 82.0% of LPNs/LVNs obtained a vocational/practical certificate upon their initial licensure in the United States. This proportion remained largely consistent from 2015 to 2022. Just over 10% obtained a nursing diploma upon initial licensure, while 8.0% held either a bachelor's or associate degree (AACN, 2024c; Smiley et al., 2023).

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 (Robert Wood Johnson Foundation, 2013). However, from 2018 to 2022 enrollment in RN to Baccalaureate (RN-to-BSN) programs decreased for the fourth year in a row. In fact, the 2022–23 school year saw a 16.9% decline (19,871 students) in RN-BSN programs in schools reporting data in both 2021 and 2022, marking the first-year nationwide enrollment has dropped below 100,000 since 2012. Regionally, schools in the Midwest saw the smallest change, with a 12.9% decrease, compared to a 20.9% decrease in North Atlantic schools (AACN, 2023a).

In December 2017 the state of New York implemented a law requiring nurses who graduate from ADN or diploma programs from that date forward must earn a BSN or higher degree within 10 years of graduation; students enrolled in ADN and diploma programs at the time the law was implemented had a grace period of 18 additional months to earn a BSN or higher (University at Buffalo School of Nursing, n.d.). Importantly, many colleges and universities offer BSN programs, often online, to accommodate RNs in practice who want or are required to work toward a BSN degree as a supplement to their entry-level ADN or diploma nursing education. Nursing education is discussed in greater detail in Chapter 4.

Data from the American Association of Colleges of Nursing (AACN) reveal a 1.4% decline in enrollment in entry-level baccalaureate nursing programs in 2022, marking the end of a 20-year trend of increasing enrollment in programs aimed at training new registered nurses (RNs). Master's and PhD programs showed similar declines. Concerted efforts are needed to provide pathways into nursing to address the healthcare demands of the nation adequately (AACN, 2023b). Despite the drop in student enrollment, nursing schools continue to face challenges that required them to turn away qualified applicants recently, primarily due to shortages in faculty and clinical training sites and opportunities.

Globalization and the international migration of nurses have increased the number of internationally educated nurses (IENs) practicing in the United States. Between 2006 and 2015, there was a 40% rise in the number of IENs in the United States. The Commission on Graduates of Foreign Nursing Schools (CGFNS) Nurse Migration Report (2022) shows a 109% surge in nurse migration to the United States since 2018, with 81% of new visa applicants in 2022 being registered nurses (CGFNS International, 2022). Supporting successful integration of culturally diverse IENs into the US healthcare system starts with understanding their experiences. In 2021, approximately 16% of all RNs (546,000) in the United States were educated in other countries, a slight increase from the 15% in 2016 (Migration Policy Institute [MPI], 2021). Recruiting IENs to the United States has been a strategy to expand the nursing workforce in response to nursing shortages. This strategy,

however, may result in shortages in nurses' countries of origins. IENs may face challenges as they join the workforce in the United States, including English as a second language for some, and discrimination from co-workers who may not perceive them as knowledgeable (Ghazal et al., 2020; Thekdi et al., 2011). Cultural differences may further separate the IENs from their American peers. Ghazal and colleagues (2020) 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.

Practice Settings for Professional Nurses

Nurses practice in a wide variety of settings, most commonly in hospitals. 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 in clinics located in pharmacies and other retail settings. Nurses also provide palliative care—symptom management to improve quality of life of persons with serious and/or chronic conditions—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 healthcare system continues to evolve. According to the 2022 Nursing Workforce Dashboard, inpatient hospital care (59%) was the most common work setting for RNs, with 23% in general medical/surgical in-patient units (U.S. Bureau of Labor Statistics, 2024a). Also of interest, the 2018 reports noted that fewer than 1% of RNs worked in pulmonary/respiratory or infectious/communicable disease settings, a statistic that held significant implications for the nursing workforce during the COVID-19 pandemic (HHS, 2020). Other specialty areas of significance to the COVID-19 pandemic response were emergency care (8.1% of RNs), critical care (7.4%), and psychiatric mental health (3.8%). In 2022 those specialty areas did not change with 1% of RNs working in pulmonary/respiratory or infectious/communicable disease settings, 8% in emergency care, a slightly higher percentage of nurses (10%) in critical care, and 4% in psychiatric mental health. The capacity of the RN workforce was clearly challenged by the COVID-19 pandemic and its aftermath.

Ambulatory care settings, such as nurse-based practices, physician-based practices, and free-standing emergency and surgical centers, accounted for 12%, the second largest segment of the nurse workforce. Public and community health accounted for 9% of employed nurses, and an additional 5% worked in home health. Long-term care, skilled nursing (SNFs), or subacute care facilities employed 3% of nurses in the workforce. The remainder of employed RNs worked in settings or roles, such as schools of nursing; healthcare management/administration; informatics, and school nursing, among others (HHS, 2022).

Not all nurses provide direct patient care as their primary role. A small and important group of nurses spend most 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 healthcare organizations. Nurses with advanced education, such as master's and doctoral degrees, are prepared to become researchers, educators, and administrators. Nurses can practice as advanced practice registered nurses (APRNs), 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 they have little affinity. A nurse who enjoys working with children may not feel at ease in caring for older 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 post-anesthesia care unit (PACU) does not allow the formation of professional therapeutic relationships with patients that this nurse might appreciate

Fig. 1.1 Although most nurses work in hospitals, nurses in home health settings often enjoy long-term relationships with their patients. (From iStock.com/Jacob Wackerhausen.)

in a psychiatric setting. Nursing school offers the chance to experience a variety of settings with diverse patient populations. At the end of your education, you will likely be surprised by the skills you have developed and populations that appeal to you (Fig. 1.1).

With healthcare reform and the concomitant push to transform the healthcare system, along with the effects of a worldwide pandemic, the profession of nursing continues to evolve. 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, they 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, persons giving birth 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 American Nurses Association (ANA) Enterprise. No other healthcare 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 healthcare agencies. For example, NYU Medical Center uses a four-tiered clinical ladder for its nursing

staff, starting with Staff Nurse, followed by Senior Staff Nurse, Nurse Clinician, and culminating with Senior Nurse Clinician. Similarly, the Clinical Advancement Program (CAP) at Johns Hopkins Hospital encourages nurses to pursue continuing education, certifications, and involvement in evidence-based practice to advance through the ranks of Clinical Nurse I–Clinical Nurse IV. 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 as staff nurses in hospitals 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 advanced practice nurses with master's, postmaster'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. Nurses benefit from the clinical ladder by allowing them to advance their careers even while continuing their education, sometimes working toward their BSN or graduate degrees while still working directly with patients. Hospitals then benefit by retaining experienced, highly educated 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 effects of adequate RN staffing on patient outcomes. Two decades 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. 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. More recently, Aiken was part of a research team studying patients in 519 hospitals that increased their proportion of BSN nurses between 2006 and 2016. These patients had significantly

reduced rates of mortality, 7- and 30-day readmissions, and shorter lengths of stay (Lasater et al., 2021).

The World Alliance of Patient Safety was formed by the WHO after the alarming results of a US National Academy of Medicine (NAM) study published in 1999 demonstrated the high incidence of patient harm associated with healthcare delivery across the world. At the University of Pennsylvania in the United States, the Center for Health Outcomes and Policy Research initiated an international research program known colloquially as RN4CAST. In 2018 Aiken and colleagues published a summary of key findings from RN4CAST and described the work in progress from Chile on patient safety. A key finding was that "higher nurse resourced hospitals" (p.324), with resulting higher labor costs, had better patient outcomes, with 40% fewer expensive intensive care unit (ICU) admissions and shorter patient lengths of stay than hospitals who did not invest in hiring more professional nurses. This means that the costs of providing care by a larger workforce of professional nurses were offset by fewer expensive patient complications requiring ICU admission and longer hospital stays (Aiken et al, 2018). 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, **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 high-quality patient care through appropriate nurse-patient ratios for each shift. **Nurse-patient ratios** refer to the number of patients assigned to a single nurse during a shift. This ratio is a critical factor in healthcare settings, as it directly affects the quality of care, patient safety, and well-being of both patients and nurses. 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 expected to be low during certain days of the year when elective procedures are not routinely scheduled. Generative Artificial Intelligence (AI) may facilitate adequate nurse staffing by using predictive modeling and algorithms to predict patient acuity and staffing needs (Aguinis et al., 2024) to provide adequate and safe levels of care at all times.

In addition to confirming improved patient safety with a BSN-prepared workforce in a hospital setting, Aiken and colleagues documented the importance of optimal nurse-patient ratios. They 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 had state-mandated nurse-to-patient ratios. In the California hospitals, nurses typically had one fewer patient to care for on average compared to nurses in other states, and two fewer patients on medical and surgical units. Lower nurse-patient ratios were associated with significantly lower patient mortality (Aiken et al., 2010). Additionally, when nurse workloads aligned with California's mandated ratios in all states, nurses experienced less burnout and job dissatisfaction, leading to consistently higher reported quality of care (Aiken et al., 2010).

The roles of nurses across hospital settings vary, each with its 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 who 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 during labor and birth. These babies can be very, very sick, and their families 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 must do are painful, so I make sure that I talk to the baby while I am doing a procedure and try to provide comfort the best I can. Sometimes, when things are quiet in the unit, I'll wrap a blanket around a baby whose family can't visit often and rock the baby for a while. The only thing better than that is the day the family takes their baby home.*

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 and Director of the Center for Health Outcomes and Policy Research, is noted for her work examining issues of healthcare outcomes and the nursing workforce. She is an authority on causes, consequences, and solutions for nursing shortages both in the United States and worldwide and has published extensively. Twenty years ago, Dr. Aiken 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 and 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, and in 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).

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

(Continued)

EVIDENCE-BASED PRACTICE BOX 1.1—cont'd

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

patient outcomes and retention of professional nurses who provide high-quality care.

In 2014 Aiken et al. published foundational 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 found 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 help 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. Furthermore, in 2018, Aiken et al. reported on the business case for improved nurse staffing, noting the continuing accumulation of compelling evidence from around the world demonstrating the same phenomenon: investing in improved nurse staffing simply makes hospitalization safer for patients and less expensive for the institutions. Despite the tendency for policymakers and executives to try to minimize the expense of nurse staffing, allocation of additional resources to professional nurse staffing pays off in the form of better health and financial outcomes.

More recently, Aiken's team (2021) analyzed data from 34 public and private Chilean hospitals and compared patient outcomes when the nurse had 9 patients to the patient outcomes when the nurse had 18 patients. They found patients with the higher nurse-patient ratio had 41% higher odds of dying, 20% higher odds of being readmitted, 41% higher odds of staying longer, and 68% lower odds of rating their hospital highly (Lasater et al., 2021).

Resources

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Lasater, K. B., Sloane, D. M., McHugh, M. D., Porat-Dahlerbruch, J., & Aiken, L. H. (2021). Changes in proportion of bachelor's nurses associated with improvements in patient outcomes. *Research in Nursing & Health*, *44*(5), 787–795.

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

Fig. 1.2 Hospital staff nurses work closely with the families of patients, as well as with the patients themselves. (From iStock.com/SDI Productions.)

time. The diagnosis of cancer can be traumatic, and patients may struggle to cope, especially if their cancer is 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 wouldn't have it any other way.

These are only two of the many possible roles nurses in hospital settings may choose. Although brief, these descriptions convey an idea of the responsibility, complexity, and fulfillment to be found in hospital-based nursing (Fig. 1.2).

Nursing in Communities

Lillian Wald (1867–1940) initiated public health/community health nursing when she established the Henry Street Settlement in New York City in 1895, provided care to families living in poverty, and was an early proponent of nurses in public schools. In 2013 the American Public Health Association (APHA) published a statement defining and describing the practice of public health nursing: "…the practice of promoting and protecting the health of populations using knowledge from nursing, social, and public health sciences" (APHA, 2013). The writers of this comprehensive statement noted that the terms *public health nursing* and *community health nursing* are often used interchangeably and did not make a distinction between the two. Some make a distinction in that public health nursing is a broader concept and focuses on population-based health concerns, while community health nursing focuses on individuals, families and community-based health concerns. For purposes of this chapter, the term public health nursing, as defined by the APHA, is used.

The COVID-19 pandemic put issues of public health front and center in American life and beyond. As the world grappled with how to prevent and then manage the transmission of this highly contagious airborne virus, public health efforts also had to address and counter widespread disinformation and confusion about the virus, how it could be spread, testing for contact tracing, masking, and vaccine administration. Much media and public attention was placed on nurses and other healthcare providers in in-patient settings, particularly ICUs, because these units faced a burgeoning number of extremely ill patients requiring ventilatory and other extensive support to survive the effects of the viral infection. Early in the pandemic, these nurses were deemed "heroes." At the same time, other nurses faced challenges in communities to prevent the spread of the virus among particularly vulnerable populations. One of these efforts occurred in Alaska, where the Alaska Native Tribal Health Consortium (ANTHC), the largest and most comprehensive tribal health organization in the United States, works to address the needs of Alaska Native and American Indian people, both populations at high risk for COVID-19 (CDC Foundation, 2021). Evidence-Based Practice Box 1.2 features the efforts of three nurses—Elizabeth Aarons, MS, RN; Elizabeth Arteaga, DNP, RN; and Tracy Frost, CMSR who, using evidence-based practice, led an impressive effort to provide testing for a geographically dispersed population in Alaska for whom intensive care may be delayed if not impossible. The work of the ANTHC nurses is a prime example of how expertise and patient preference, in addition to the research used to create and test vaccines to prevent or mitigate COVID-19, makes for a powerful way to get health care to where communities need it most. You will learn in Chapter 2 that the ANTHC nurses followed in the footsteps of important pioneers in public health nursing, such as Lillian Wald and Jessie Sleet Scales, who were instrumental in identifying problems and improving health in their communities in New York City over a century ago.

Public health nurses may work for either the government or private agencies. Those working for public health departments provide care in clinics, schools,

EVIDENCE-BASED PRACTICE BOX 1.2

Nurses Taking Care Into Their Community: COVID-19 Testing Among the Resilient Alaskan Native People

Elizabeth Aarons, MS, RN

I am Inupiaq, from the Native Village of Unalakleet. I come from a lineage of healers. Before the time when pregnancy, labor, and birth became medicalized in Western health care, my great-great-grandmother on my mom's side was one of the local midwives in my home village. On my dad's side, my great-grandfather was a doctor trained in Western Medicine. The duality of their practices has given me perspective and respect for where knowledge originally came from: Indigenous healers.

Before attending nursing school, I earned my bachelor's degree in Anthropology from the University of Colorado, Boulder. I was an intern in the Epidemiology Dept at ANTHC. I created fact sheets for data dissemination related to Alaska Native health disparities and outcomes, using the Behavioral Risk Factor Surveillance System. I also assisted in facilitating focus groups to develop the Getting Together safety card for Alaskan teens in both rural and urban settings. I received a MS in Public Health Nursing from the University of California at San Francisco (UCSF). At UCSF, I worked as a Research Assistant at Larkin Street Youth Services, and I helped develop an evidence-based evaluation tool and collected data among HIV-positive homeless youth for an intervention that addressed substance use and mental illness.

My interest in public health nursing stemmed from a class I took in undergraduate studies on the intersection between race, class, and gender. This sparked my interest in health intersectionality. I chose a career in public health because I am passionate about health literacy and its role in primary prevention. I chose to work at Alaska Native Tribal Health Consortium (ANTHC) because I wanted to serve my people. As a nurse, I am in a position to improve health literacy among Alaska Native People; this empowers patients to be advocates for themselves or family members, which allows people to make informed and ethical decisions in critical situations. I moved back to Alaska and cared for critically ill patients in the ICU at Alaska Native Medical Center.

When the pandemic hit, I was still able to work with my fellow Alaska Native People at ANTHC through my position at the CDC Foundation. Here I was able to do program management and program/team development at the ANMC Testing Site, along with contact tracing. Each tribal community has specific COVID-19 restrictions. We have had to help community members navigate airline and regional restrictions, while testing them within a timeframe where they can get a negative result that allows them to go home. Resource availability was a variable that affected this greatly and was a great challenge. We were able to work with our lab to determine prioritization, so our patients could travel home safely.

Alaska Native People are experts at survival and have lived off the land for tens of thousands of years. We nurture and use the land, animals, plants, and weather to survive. Although colonization-related trauma has resulted in health problems among Alaska Native People, we are resilient. Despite adversity, we continue to live off the land, while participating in the global economy.

Tracy Frost, CMSRN

I am Yupik Eskimo, born and raised in rural Alaska, where there isn't a hospital or doctors and nurses but only a village clinic run by health aides. I marveled at their ability to help others who were in need of health care. I decided to become a nurse to help others in their health and wellness journey. I decided to work for ANTHC specifically because I want to help my fellow Alaskan Natives become the healthiest people in the world, which is ANTHC's vision. I also love ANTHC's mission statement: "Providing the highest quality health services in partnership with our people and the Alaska Tribal Health System." The Alaska Native people have so many strengths, most of which they are not fully aware. They are resilient and they love and respect the land. We gather and live off the land, and this, in turn, keeps us a healthy people. Alaska has so many delicious and very nutritious wild foods, and Alaska Natives use this valuable asset to great extent.

I graduated from nursing school in 2014. After becoming an RN, I immediately came to work for ANTHC and have been employed here since. I am a certified medical-surgical RN and worked mainly in the oncology and medical-surgical inpatient unit. I also worked as a "swat nurse," where I would assist in many of the other inpatient departments. I dabbled in school nursing for a few years with the Anchorage School District as a second job, which was a rewarding experience. In partnership with the CDC Foundation and ANTHC, I now help manage the Alaska Native Medical Center COVID Testing Site because the need for widespread testing is imperative to mitigate or stop the pandemic.

Our testing site staff are an amazing group of healthcare providers who are willing to work through the elements in Alaska. The pandemic started in the middle of winter, so setting up testing sites while maintaining safety and social distancing was a challenge. We worked outdoors through subfreezing temperatures, high windstorms, and other inclement weather that our beautiful state has to offer. The rewarding part of this was to know that we were

EVIDENCE-BASED PRACTICE BOX 1.2—cont'd

Nurses Taking Care Into Their Community: COVID-19 Testing Among the Resilient Alaskan Native People

there for our patients, who were quite anxious because of the pandemic, and despite these challenges, we helped stop the spread of COVID-19 through widespread testing. Being there to lend them a helping hand, share an encouraging word, or give a smile beneath your mask is important to public health because mental well-being plays a role in optimal health.

Elizabeth Arteaga, DNP, RN

It was always a dream of mine to work for the Native community. My father's family is from the Yukon-Kuskokwim Delta region of Alaska, and he helped build the Native hospital. He would continually express gratitude and yearning to give back to the community.

I decided to become a nurse and first earned an ADN in 2008. Three years later, I graduated with a BSN from Jacksonville State University. In 2019 I earned an MSN and then graduated in 2020 from Chatham University with my Doctor of Nursing Practice (DNP), with a focus on executive leadership and management. I began my nursing career working as an RN in a Progressive Care Unit, then a Surgical Intensive Care Unit, and then a Post-Anesthesia Care Unit. Afterward, I worked as a travel nurse at various locations throughout the United States before seeking employment at ANTHC. I worked in the PACU and comprehensive pain management at ANTHC before the pandemic. I began working as the Director of COVID-19 Testing and Resulting Operations in April 2020.

In remote Alaskan village settings, prevention is absolutely imperative because resources—including health care—are limited. As news of the pandemic swept across the globe, I could only envision the impact the virus would have on the vulnerable population of the Alaska Native communities. I had a fortunate opportunity to work with a phenomenal team to build the COVID-19 Testing and Resulting department where our focus was just that—to offer widespread testing to identify positive cases to mitigate community spread.

Early in the pandemic, we quickly outlined priorities and how best to use the resources we had available. We set up operations quickly, but the volume was not as high as we had expected. We learned we needed to bring these testing opportunities to those who needed it most. We planned and initiated Mobile Testing Units and brought testing to many different Native corporations, businesses, and congregate settings such as homeless shelters. We will continuously grow and adapt to meet the needs of this resilient population we serve. We continually focus on adapting what we do to meet the needs of our people.

Elizabeth Aarons, RN, MS; Tracy Frost, CMSRN; Elizabeth Arteaga, DNP, RN
Tribal Nation Testing and Resulting Statewide Services Director and Coordinators
Alaska Native Tribal Health Consortium

Acknowledgment: The CDC Foundation is an independent nonprofit organization created by the US Congress to mobilize philanthropic and private-sector resources in support of the work of the Centers for Disease Control and Prevention to protect the health, safety, and security of the United States and the world. The CDC Foundation featured the work of Nurses Aarons, Frost, and Arteaga on the foundation website, aptly describing them as battling "COVID and the elements" in their work to mitigate the spread of COVID in Native Alaska communities. We are grateful for the CDC Foundation's public recognition of the work of these nurses and other nurses who became part of the massive-scale efforts to "crush COVID." We encourage students and faculty to take a long look at the CDC Foundation's website www.cdcfoundation.org; you will be both inspired and humbled by the incredible work your nurse colleagues and other healthcare providers have done and are continuing to do. –BPB/MJB

Courtesy Elizabeth Aarons, MS, RN; Tracy Frost, CMSRN; Elizabeth Arteaga, DNP, RN; CDC Foundation.

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. Public health nurses provide educational programs in health maintenance, disease prevention, nutrition, and childcare, 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 healthcare industry. The US Bureau of Labor Statistics forecasts a 21% rise in home health employment from 2021 to 2031, creating an average of 711,700 new home health jobs annually.

Home health care is a natural fit for many nurses because patients and nurses can interact in a different way than in-patient or ambulatory care settings. Home health nurses across the United States provide quality care in the most cost-effective and, for patients, comfortable setting possible. Patients cared for at home may face significant health challenges from significant chronic illnesses requiring management 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. Nurses can manage extensive wounds in the patient's home, and home health nurses who provide 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, unlike in an in-patient setting, they may not have the expertise of more experienced nurses quickly available. Strong assessment and communication skills are essential in home health nursing, and effective home health nurses recognize the importance of respect for person's cultural and social practices in the home that may differ from their own. 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 their 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 in his late 30's 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 receive three types of antibiotics for six months. If this treatment didn't work, he would require an above-the-knee amputation. I taught his wife how to assess the central line dressing and site, how to change the dressing, and how to do the infusions twice each day. I noted on my initial visit that the patient was obese with a BMI of 38, and he smoked at least one pack of cigarettes each day. At my once-a-week visits to draw blood, I got to know the patient and his wife well and began to feel comfortable that I could talk to him about his weight and smoking and how they both can interfere with healing. He said that no one had ever told him that. He lost 80 pounds, quit smoking completely, and at the end of six 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.*

In your clinical rotations in nursing school, you might encounter nurses who are ANCC-certified as community health or home health nurses. The examinations for these two specialties have now been retired, but previously certified nurses can have their credentials renewed. 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 when 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 health and safety education, including injury prevention, basic healthcare services, 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 (Gubler et al., 2018). 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), first aid, and basic life support. Good interpersonal skills to provide counseling and referrals for lifestyle problems, such as stress or substance abuse, are needed in this setting, as is the ability to do counseling and crisis intervention for employees. OHNs also need to know laws and regulations related to health and safety in their setting, such as those of the Occupational Safety and Health Administration (OSHA), and to understand how to maintain legal and regulatory compliance. 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 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. OHNs, like many nurses, faced significant issues related to the COVID-19 pandemic in doing testing, contact tracing, implementing safe distancing, masking regulations and vaccine requirements of the company, in addition to assisting employees in dealing with disinformation and confusion about the virus and its spread, vaccinations and vaccine hesitancy, and recognizing the onset of symptoms of COVID in employees.

Nurses in occupational settings must be confident in their nursing skills, effective communicators with both employees and managers, able to motivate employees to adopt healthier habits, and 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), and experienced nurses may take the more advanced specialist OHN certification exam.

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 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 features Lt. Joseph Biddix, NC, USN, whose work as a Navy nurse has given him a wide variety of experiences, including space exploration, and opportunities in his development as an RN.

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 US Department of Defense pays for tuition, books, moving expenses, and even salary for nurses obtaining advanced degrees. This allows students to focus on their 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.

Nursing in Schools

School nursing is a vital type of public health nursing based in the educational setting. The National Association of School Nurses (NASN) defines 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.

During the COVID-19 pandemic, school nurses faced significant challenges in maintaining the safety of children in school. Routinely, school nurses continue to evaluate students for COVID symptoms or possible exposures. Moreover, they provide guidance to school administrators and teachers on prevention strategies, contact tracing, school-based testing strategies, and assist in the support of students, families, and school staff as they face their own challenges related to the pandemic and its accompanying concerns, anxieties, and losses. At the height of the pandemic, the CDC provided

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 in 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. However, I questioned what the military would do with a soldier who majored in film and 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.

Over 11 years later, I have found military nursing to be a phenomenal experience. One of the primary responsibilities of Navy nurses is training 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 shock after a blast injury, you know when the light bulb turns on and the sailor has added another layer to their knowledge base.

While I primarily provide care to active-duty service members, their families, and retirees, I have also had the opportunity to care for a host of other unique populations. I deployed aboard the USNS Comfort (T-AH 20) for 6 months in 2015, providing humanitarian assistance alongside partner nation and civilian experts to patients in 11 countries in Central and South America and the Caribbean. In August 2021, I was working at Walter Reed National Military Medical Center as a perioperative nurse in the operating room when a suicide bomber attacked the Hamid Karzai International Airport in Kabul, Afghanistan. Within days, we received injured marines and Afghan refugees who needed extensive, life-saving surgery. We worked day and night to ensure our patients received the best possible care.

In 2024 I embarked on the USS San Diego (LPD 22) as part of a Fleet Surgical Team supporting NASA's Underway Recovery Test-11. This partnership between NASA and the United States Navy is the first time in over 50 years that the two organizations have worked together to conduct an at-sea recovery of astronauts and a space capsule that lands in the ocean. Across 8 days, we trained with the astronauts of the Artemis II moon mission and rehearsed a variety of medical scenarios we could encounter when they return to Earth.

Military nursing not only provides a wide variety of experiences but also requires flexibility and the ability to adapt to new situations quickly. As a Navy nurse, you must always be prepared and clinically sound, whether it is to deploy abroad to provide medical to support to warfighters, provide needed humanitarian assistance to a region hit by a natural disaster, or shore up the capabilities of our fellow Americans whose health systems have been strained by a pandemic. While the nature of the need is ever changing, Navy nurses will always answer the call.

Lt. Cmdr. Joseph Biddix, NC, USN, DNP
Fleet Surgical Team Nine

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.*

Courtesy Lt. Joseph Biddix.

guidance to school nurses in addressing the wide variety of challenges they faced, frequently changing recommendations based on a quickly evolving science related to the virus and its transmission.

School nurses are in short supply. Very few states achieve the federally recommended ratio of 1 school nurse for every 750 students. In 2021, only 65.7 % of schools had access to a full-time (35 hours a week) school nurse, and 6.3% of schools did not have a nurse at all (NASN, 2022). In 2023 only 12 states had set a nurse-to-student ratio; however, these ratios were not necessarily consistent with the guidelines set by the CDC and NASN. For instance, in 2022, Florida's ratio in public schools was 1 nurse per 2109 with several counties far above that mark (Florida Department of Health, 2023). In 2023 Tennessee's ratio was set at 1 nurse per 3000 students, four times the prescribed ratio (Steed et al., 2022). 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. In a position statement revised in 2020, NASN stated, "All students need access to a school nurse every day" (NASN, 2022).

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, which requires the 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 is a nursing specialty 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 knowledge about human growth and development to detect developmental problems early and refer children to appropriate therapists. Counseling skills are important because many students 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 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 also work 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 healthcare 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 a 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. 1.3). 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.

Fig. 1.3 School nurses manage a variety of students' health problems, from playground injuries to chronic illnesses, such as asthma and diabetes. (From iStock.com/FatCamera.)

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. NASN has a current position statement stating their position that "every student should attend school in a safe, supportive and equitable environment," noting that "access to a registered nurse…democratizes health care for the most vulnerable students and families" (NASN, 2023).

Nursing in At-Home Hospitals

In the evolving landscape of healthcare delivery, at-home hospitals have emerged. In this innovative model, patients can receive care and recover from the comfort of their own homes as a function of advancements, such as telehealth, wearable technology like Bluetooth cardiac monitors, continuous glucose monitoring (CGM), and nursing visits. Telehealth enables remote consultations with healthcare providers, allowing patients to access medical advice and monitoring from anywhere. Wearable devices, such as smartwatches and health trackers, provide real-time data on vital signs and activity levels, meaning that patients may participate actively in shaping their health outcomes. Additionally, nursing visits offer personalized care and support, ensuring patients receive the attention they need while recuperating at home. This intersection of technology and nursing practice opens up exciting possibilities for your future career in health care.

Nursing in Palliative Care and Hospice Settings

Palliative care and hospice nursing is a nursing specialty dedicated to improving the quality of life of patients who are seriously or terminally ill and their families. The WHO defines *palliative care* as "an approach that improves the quality of life of patients (adults and children) and their families facing the problem associated with life-threatening illness. It prevents and relieves suffering through the early identification, correct assessment and treatment of pain and other problems, whether physical, psychosocial or spiritual" (WHO, 2020). Hospice care is "the model for quality, compassionate care at the end-of-life, hospice involves a team-oriented approach to expert medical care, pain management, and emotional and spiritual support expressly tailored to the patient's needs and wishes. Support is extended to the patient's loved ones, as well" (National Hospice and Palliative Care Association [NHPCO], n.d.).

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 palliative and end-of-life care. The HPNA's website is https://advancingexpertcare.org/ and can be followed on X at @hpnainfo. The HPNA journal, *JHPN—Journal of Hospice and Palliative Nursing*, is a peer-reviewed semi-monthly publication promoting excellence in palliative and end-of-life care and can be followed on X at @JHPN. 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, the HPNA, HPNF, and HPCC adopted shared mission and vision statements, in addition to pillars of excellence held in common. The shared mission is "to advance expert care in serious illness" and the shared vision is "to transform the care and culture of serious illness." The shared "pillars of excellence," values on which these organizations base their work, are education, advocacy, leadership, and research (HPNA, n.d.).

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* (AACN, 2022b). This document provides palliative care competencies for undergraduate nursing students and

may be viewed online at https://www.aacnnursing.org/Portals/0/PDFs/ELNEC/ELNEC-Cares-and-G-CARES-2nd-Edition.pdf.

In 2000 the 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. In 2024 the AACN announced 47,532 nurses and other healthcare providers individuals had participated in the ELNEC train-the-trainer course, and in turn, these trainers had provided state-of-the-art palliative care education to 1,532,311 nurses and other professionals across the United States and in 144 other countries (AACN, 2024d). Currently ELNEC offers 10 curricula: ELNEC Core; APRN; Communication; Critical Care; Geriatric; Oncology APRN; Pediatric; Undergraduate/New Graduate; Graduate; and Veterans (AACN, 2024d). For more information about ELNEC online modules for undergraduate nursing students and new graduate nurses, see http://elnec.academy.reliaslearning.com.

Hospice and palliative care nurses work in a variety of settings, including inpatient palliative and hospice units, free-standing residential hospices, community-based or home hospice programs, ambulatory palliative care programs, teams of consultants in palliative care, and long-term care facilities. Both generalists and APNs work in palliative care. In Professional Profile Box 1.2 you will meet Lily Gillmor, RN, a nurse who works in a large community-based pediatric palliative care program, who describes her career path and passion for her work with children with serious illness and their families.

PROFESSIONAL PROFILE BOX 1.2

Pediatric Palliative Care Nurse

I graduated from college with a Bachelor of Arts in Psychology and a minor in Health Care Studies. Convinced I was destined for a career in public health, I immediately enrolled in a Master of Public Health (MPH) program. Almost as immediately, I realized I had made a terrible mistake: an MPH was not the right fit for me. A physician classmate also recognized this was not the right fit for me, and I decided to go to nursing school. A year and a half and a lot of prerequisites later, I enrolled in UNC at Chapel Hill's accelerated BSN program. And from day 1, I knew I had found the right fit.

My first job after nursing school was in inpatient pediatrics, before hospitals had pediatric palliative care teams. One particular situation bothered me: the medical team proceeded with an organ transplant knowing the child would likely not survive, and there was no discussion with the family of the likelihood of a poor outcome. When I questioned why we were not discussing all options with the child's parents, I was told, "We don't want them to think we have given up. We need to give them hope." I was struck by this response and knew that I did not see an honest discussion with the family as giving up or taking away hope, and I worried perhaps nursing was not the right fit after all.

A few years later I was fortunate enough to fall into the world of hospice and palliative care. It was there that I realized nursing itself was not the problem but that I just had not yet found my people! I was suddenly immersed in a world where honest conversations were the foundation of my work and walking with patients and families through these conversations was the expectation, not the exception. I learned the fundamentals of palliative care, focusing on managing the symptoms of a disease rather than the disease itself, providing discussions around goals of care and quality of life, and supporting patients and families through the complexities of serious illness. Having found my right fit I have continued in this field my entire career, and I currently work in a community-based organization that provides palliative and hospice services to both adults and children. Our organization is unique in that all pediatric services are provided by a dedicated pediatric program, which includes perinatal, palliative, hospice, and bereavement care to children and families.

I often get asked how and why I work in the field of pediatric palliative care; my answer is always "the kids and their families." *They* are the foundation of our work. Families of children with chronic or life-limiting illnesses, are, quite simply, rock stars. They are immersed in a world of juggling, balancing, and coordinating provider appointments, supplies, medications, schooling, nursing, and more, while also trying to work full-time jobs and keep up with the regular household needs such as grocery shopping and paying bills. Their work requires an extraordinary amount of time, patience, planning, and a good sense of

PROFESSIONAL PROFILE BOX 1.2—cont'd

Pediatric Palliative Care Nurse

humor. Every family's journey is different, with a unique set of experiences throughout their child's illness. Having the privilege to witness these journeys, and support kids and families throughout is the how and why I work in the field of pediatric palliative care.

The moment I tell someone I work in hospice and palliative care—specifically pediatrics—I can feel the air get sucked out of the room as silence descends, followed by the statement, "Wow. I don't know how you do that; it's just too sad for me." This has always been an intriguing statement to me, the implication being that because I work in this area, it is not sad for me. It is sad. The work we do is sad for every single team member. It is heavy work that challenges us daily. Children aren't supposed to get seriously ill and die so there is not a lot of discussion about it. Our team gives patients and families a safe place for their questions and concerns, often giving them the opportunity to discuss difficult things for the first time. Holding this space for families can be taxing, and an important part of our roles as pediatric palliative care specialists is to take time to care for ourselves. Our pediatric team builds self-care into daily practice, treating it with same importance as the care we provide our patients. The team is accountable to each other, and we have the support and resources necessary to keep the team healthy.

What people don't often think about with this work though is the happy: the chance to work with kids and families to make the most of whatever time there is, focusing on what is most meaningful and important to them. Just because a child has an illness does not mean they stop being a kid. There is a level of joy and fun that we get to see in our work that you don't get to see anywhere else. Visits with kids may include a serious discussion of goals of care, but they also may break into a nerf gun battle or splatter paint bonanza. We also get to witness a depth of love between a child and their family that cannot easily be described. No one gets to decide how much time they have on this earth, and for some, it may not be very long. As a palliative care nurse, I get to help people fill that time however they would like, focusing on what is important to them and their families and making the most out of it. There is no career more difficult, no career more rewarding, and no other career I can imagine having.

Lily Gillmor, RN
BSN, University of North Carolina at Chapel Hill, 2006

Courtesy Lily Gillmor, RN.

Information Technologies in Nursing: Telehealth and Informatics

Telehealth is the delivery of healthcare services and related healthcare activities through telecommunication technologies. **Telehealth nursing** 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) (telehealth.hhs.gov, 2024). 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 healthcare 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 other devices; 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. You can learn more about telehealth, an area of growing interest in nursing and other health professions, as well as some controversy, from the American Telemedicine Association (www.americantelemed.org), and from the American Academy of Ambulatory Care Nursing (www.aaacn.org). A lesson from the COVID-19 pandemic is the growing need for expertise in delivery of telehealth. In addition, access to telehealth services needs to be increased by widening the availability of broadband Internet across the United States, so that people in remote areas or those for whom in-person visits mean unacceptable risk for exposure to COVID can receive adequate health care from a distance.

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, n.d.). **Informatics nurses** (also known as *nurse informaticists* or *nurse informaticians*) were well-positioned to assist in the implementation of the 2009 American Recovery and Reinvestment Act and the Health Information Technology Act, important legislation containing federal incentives for the adoption of electronic health records (EHRs). To qualify for Centers for Medicare and Medicaid Services (CMS) federal support incentive payments, healthcare organizations had to select, implement, enhance, and/or measure the impact or meaningful use of EHRs on patient care. **Meaningful Use (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 integrated into 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, 2019). HealthIT.gov contains a wealth of information for nurses and others interested in the advancements of EHR and use of data collected from these records.

Because they are nurses themselves, nurse informaticists 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 2022 Healthcare Information and Management Systems Society Nursing Informatics Work Survey, there has been a noticeable shift in how nursing informaticists work, get paid, pursue continuing education, and take on leadership roles. The latest survey of 1100 respondents (including 5% from outside North America) highlights three key themes: the growing value of nursing informatics, new practice methods, and evolving leadership roles and organizational structures. In fact, the roles of chief nursing informatics officer and senior nursing informatics officer continue to be on the rise, with 54% of respondents reporting that their organization has one of these roles (Carroll, 2023).

As healthcare organizations continue to adopt and implement EHRs and new technologies, nurse informaticists 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 informaticists have advanced degrees, including doctorates. Certification as a nurse informaticist 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, 2021). The ANI website is www.allianceni.org.

Nursing informatics is at a pivotal juncture, as the surge of generative AI has great potential to revolutionize and transform how nurses deliver and track patient care. Generative AI can analyze vast datasets and uncover patterns and predict patient outcomes, enabling nurses to make more informed decisions. It also can facilitate personalized care plans by integrating diverse data sources, from electronic health records to wearable devices. Furthermore, AI-driven tools can automate routine tasks, allowing nurses to focus more on direct patient care.

Generative AI is more likely to reshape the role of nurse informaticists rather than replace them, offering opportunities to focus on strategic initiatives and AI integration in health care. By adapting and embracing AI, nurse informaticists can enhance their contributions and remain crucial in the evolving healthcare landscape. As generative AI continues to evolve, its integration into nursing informatics may elevate the quality, efficiency, and personalization of healthcare delivery, ultimately improving patient outcomes and operational efficiency in healthcare settings.

Nurse Entrepreneurs

Nurse entrepreneurs are emerging as innovative leaders in the healthcare industry, creating businesses that address critical gaps in patient care and healthcare delivery. Leveraging their clinical expertise and firsthand experience, these entrepreneurial nurses are developing a wide array of ventures, including telehealth services, healthcare consulting firms, medical device startups, and wellness coaching businesses. They are particularly adept at identifying inefficiencies within the healthcare system and designing solutions that enhance patient outcomes, streamline operations, and reduce costs. By combining their medical knowledge with entrepreneurial skills, nurse entrepreneurs are not only advancing their own careers but also contributing significantly to the evolution of health care, ensuring that services are more accessible, personalized, and effective. For example, launching telehealth services, establishing mobile clinics, and developing patient-centered health education platforms help address existing gaps in care and access.

Their unique perspective as both caregivers and business innovators allows them to create impactful, patient-centered solutions that drive the future of health care.

One notable example of a successful nurse entrepreneur in the field of elder care is Anne Llewellyn, who founded Nurse Advocate LLC. Llewellyn, a registered nurse with extensive experience in case management and patient advocacy, established her business to assist older adults in navigating the complexities of the healthcare system. Nurse Advocate LLC provides a range of services including care coordination, appointment scheduling, medication management, and advocacy during medical appointments. Llewellyn's approach ensures that her clients receive personalized attention and comprehensive support, helping them manage their health effectively and maintain their independence. Her business exemplifies how nurse entrepreneurs can leverage their clinical skills and compassionate care to meet the unique needs of older adults, ultimately improving their quality of life.

Nurse advocates, who assist patients in navigating the healthcare system and making informed decisions, are generally not covered by traditional health insurance plans. Their services are typically offered as a private pay service, meaning that patients or their families would need to pay out-of-pocket for the advocacy services. However, some long-term care insurance policies or employee assistance programs (EAPs) might offer coverage for nurse advocacy services as part of broader health management benefits.

Travel Nursing

Travel nursing experienced a significant surge during the healthcare staffing shortages exacerbated by the COVID-19 pandemic. As hospitals and healthcare facilities faced unprecedented patient loads and workforce depletion, travel nurses became an essential solution to bridge the staffing gaps. The urgent demand for these skilled professionals led to highly competitive pay structures, with many agencies offering substantial signing bonuses, increased hourly wages, and comprehensive benefits packages. These financial incentives attracted nurses from across the United States to take on short-term assignments in high-need areas. The flexibility and lucrative compensation associated with travel nursing not only helped address immediate staffing crises but also provided nurses with opportunities to gain diverse

clinical experiences and advance their careers. This shift underscored the critical role of travel nurses in maintaining healthcare delivery during times of crisis.

The travel nursing trend has significantly empowered nurses by giving them greater control over when and where they work, promoting a healthier work-life balance. Unlike traditional nursing roles with fixed schedules and locations, travel nurses have the flexibility to choose assignments that fit their personal and professional preferences. Many travel nurses opt for short-term contracts, such as 6-week assignments, which allow them to work intensively for a period and then take several weeks off. This arrangement not only helps prevent burnout but also provides opportunities for personal time, travel, and rest. By selecting assignments based on their desired location, specialty, and duration, travel nurses can tailor their careers to align with their lifestyle goals and family needs, making this role more attractive and sustainable in the long term.

While travel nursing offers many benefits, it also brings challenges for permanent nursing staff. The increasing reliance on traveling nurses during COVID placed additional burdens on nurses employed in the setting where traveling nurses were working, who took on extra administrative and training responsibilities while being paid less than their contracted counterparts. According to Sasha Albert, associate director of research and cost trends at the Massachusetts Health Policy Commission, this strain led to burnout and turnover among facility-employed nurses, further increasing the demand for contract travel nurses (Drysdale, 2023). Overreliance on travel nurses can create a harmful cycle that damages unit morale and disrupts patient care, as the continuity of care is compromised when unfamiliar nurses are frequently rotated in and out of a nursing unit.

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 nurse educators, clinical nurse leaders, nurse practitioners, clinical nurse specialists, certified nurse-midwives, and certified registered nurse anesthetists. Advanced practice nursing occurs in a variety of settings. These careers are described in the next sections.

Nurse Educators

Nurse educators teach across all levels of nursing education. 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. Nurse educators such as those teaching basic (prelicensure) nursing education typically have expertise in the clinical area in which they teach students and can be excellent mentors for nursing students. Being a nurse educator requires being highly organized, having good communication skills, possessing the ability to help learners be safe and comfortable in clinical settings, and having the ability to evaluate student performance fairly. A primary responsibility of nurse educators in clinical settings is to maintain safety for both students and patients, a significant aspect of the role. For this reason, state boards of nursing set firm limits on the ratio of faculty to prelicensure students in clinical settings.

In September 2022 the AACN released a survey indicating a vacancy rate for faculty positions at 8.8%, an increase from 8 % in 2021 and 6.5% in 2020. Additionally, the survey showed that US schools of nursing turned away more than 91,000 qualified applicants, generally because of the lack of adequate numbers of faculty. At a time when demand for nurses continues to grow, the lack of adequate numbers of nursing faculty limits the number of new nurses entering the workforce (Bakewell-Sachs et al., 2022). Preceptors, who are clinicians providing on-site clinical education, play a crucial role in bridging this gap. However, ongoing concerns about a critical shortage of nursing faculty in the future highlight the urgent need to support and integrate preceptors more effectively into the educational framework.

The Nurse Faculty Loan Program (NFLP) is a federal initiative designed to increase the number of qualified nursing educators by offering financial assistance to nurses pursuing graduate studies. Through this program, aspiring nurse faculty members can secure loans to cover their educational expenses. A major incentive for nurses to pursue careers as nurse faculty members via the NFLP is the loan forgiveness feature. Upon graduation, participants commit to working as full-time nurse educators for a specified period, typically 4 to 5 years. During this timeframe, a portion of their loans (up to 85%) is forgiven, easing their financial burden. This forgiveness serves as encouragement for nurses to further their education, transition into teaching roles,

and help alleviate the shortage of nursing faculty while contributing to the training of future nurses.

Clinical Nurse Leaders

The credential **clinical nurse leader** (CNL) is a designation intended to give master's-prepared nurses opportunity to oversee and manage care at the point of care in various settings, with the goal of increasing patient safety and improving patient outcomes. CNLs are clinical experts who focus on several aspects of patient care. The AACN (n.d.) notes seven key elements of the CNL's clinical focus: case coordination, outcomes measurement, transitions of care, interprofessional communication and team leadership, risk assessment, implementation of best practices based on evidence, and quality improvement.

The role of CNL was not without controversy and objections from Clinical Nurse Specialists (CNS)––advanced practice registered nurses (APRN) who see the CNL role as duplicative and holding potential to disenfranchise the CNS role. Currently, the AACN lists 121 schools offering CNL programs (American Association of Colleges of Nursing (AACN), n.d.).

Advanced Practice Nursing

Advanced practice registered nurse (APRN) is a general term applied to an RN who has met educational and clinical practice requirements beyond the 2 to 4 years of basic nursing education required of all RNs and refers to the four recognized advanced practice specialization: Certified Registered Nurse Anesthetist (CRNA); Nurse Practitioner (NP); Certified Nurse Midwife (CNM); and Clinical Nurse Specialist (CNS). Advanced practice nursing has grown since it evolved more than 40 years ago. The US Bureau of Labor Statistics reported that 355,000 APRNs work in advanced practice roles in 2022, and the projected demand for these roles will increase 45% by 2030 (U.S. Bureau of Labor Statistics, 2024b). A heightened demand for efficient and cost-effective treatment mean that advanced practice poses excellent career opportunities for nurses. However, the cost-effectiveness of NPs does not mean a reduction in the quality of care. Numerous studies have demonstrated that patient outcomes under NP care are similar to those under MD care, particularly in primary care and chronic disease management (Liu et al., 2020; Mileski et al., 2020). This makes NPs a valuable resource in improving access to health care while controlling costs.

The implementation of the Affordable Care Act (ACA) stimulated even greater interest and growth in the numbers of APRNs. The American Association of Nurse Practitioners (2023) found that NPs provide safe, effective, patient-centered, efficient, equitable and evidence-based care, comparable in quality to that of physician colleagues, and that under the care of NPs, patients have fewer unnecessary hospital readmissions, fewer potentially preventable hospitalizations, higher patient satisfaction, and fewer unnecessary emergency room visits than patients under the care of physicians. The following section provides a short overview of each of these roles.

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 postmaster's certificates and prepare nurses to take the national certification examinations as NPs. The length of NP 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 American Association of Colleges of Nursing member institution's endorsement of a clinical doctorate for advanced practice. The DNP is consistent with other health professions offering practice doctorates, including medicine (MD), dentistry (DDS), pharmacy (PharmD), physical therapy (DPT), and psychology (PsyD), among others. As of mid-2024, 433 DNP programs were actively enrolling students across all 50 states plus the District of Columbia, and another 87 programs were in the planning stages. By the end of 2023, 11,718 had graduated from DNP programs. The growth of DNP degree programs and number of graduates indicate the rapid growth of this career option (AACN, 2024c).

States vary in the level of practice autonomy according 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. The scope of practice across states can vary, which has implications for practice opportunities, and reimbursement (payor) policies may be linked to state practice regulations. This issue is discussed in more detail later in this section.

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. Nurse practitioners 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.

The American Association of Nurse Practitioners is the professional organization for NPs. More information about the NP role is available at their website www.aanp.org.

Clinical Nurse Specialist

Clinical nurse specialists (CNSs) are APRNs 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.

The National Association of Clinical Nurse Specialists (NACNS) is the professional organization for CNSs. If you are interested in additional information about the CNS role, the NACNS website is www.nacns.org.

Certified Nurse-Midwife

Certified nurse-midwives (CNMs) are APRNs who provide well-woman care and attend or assist in childbirth in various settings, including hospitals, birthing centers, private practice, and home birthing services. CNM training programs are required to award a Master 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 healthcare providers who can prescribe medications in all 50 states, the District of Columbia, and most US 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 CDC, CNMs attended 372,991 births in 2019, representing 12% of the total births in the United States in 2019 (American College of Nurse Midwives, 2022; U.S. Government Accountability Office, 2023). 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. The American College of Nurse-Midwives (ACNM) is the professional organization representing CNMs and certified midwives (CMs) and sets education and practice standards. If you are interested in additional information about the profession, the ACNM website is www.midwife.org. Kandyce Brennan, DNP, CNM is an experienced nurse-midwife who describes her work in Professional Profile Box 1.3.

Certified Registered Nurse Anesthetist

In early 2024 there were approximately 61,000 **certified registered nurse anesthetists** (CRNAs) and more than 2400 resident registered nurse anesthetists graduate each year (AANA, n.d.[a]). By 2025 newly hired CRNAs will be required to have a Doctorate of Nurse Anesthesia Practice (DNAP), meaning that anyone who is not already a CRNA must attend a doctoral level program (AANA, 2024; Council on Accreditation of Nurse Anesthesia Educational Programs, 2019). Masters-prepared CRNAs already in practice by 2025 will be allowed to continue practicing.

Eighty-six percent of CRNAs are members of the American Association of Nurse Anesthetists the professional organization for CRNAs (AANA, 2024). Nurse anesthetists administer more than 50 million anesthetics each year and are the only anesthesia providers in more than 80% of rural US counties (AANA, n.d.[b]). Collaborating with physician anesthesiologists or working independently, CRNAs are found in a variety of

PROFESSIONAL PROFILE BOX 1.3

Certified Nurse Midwife

As a Certified Nurse-Midwife, I am passionately committed to delivering comprehensive and holistic wellness care. My career is devoted to advancing sexual and reproductive health across all stages of life. My "call" to midwifery was ignited by my grandmothers' experiences with coercive care and forced sterilization. Their resilience and steadfast advocacy for reproductive justice in their communities deeply influence and inspire my own practice and research as a midwife.

I have a Bachelor of Arts in biology from the University of North Carolina at Chapel Hill, a Bachelor of Science in nursing from Duke University, and an MSN and DNP from Frontier Nursing University in 2020 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 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 sexual and reproductive health is critical to being an effective clinician. In addition to my clinical practice, I specialize in leveraging technology to improve access and quality of reproductive healthcare services. My research integrates the use of Female Technology to enhance contraceptive access and education, aiming to address healthcare disparities in rural and underserved communities.

Nurse-midwives serve in diverse environments, ranging from home visits and community health centers in both rural and urban areas, to large hospital systems. A typical day as a nurse-midwife with a full scope of practice could involve providing gynecologic, antepartum, intrapartum, and postpartum care, including home or hospital rounds on individuals who have given birth and seeing patients in the office. In the outpatient or office setting, we focus on evidence-based care, such as contraceptive management, family planning, primary care, and treating common illnesses. Alongside gynecologic services, we provide obstetric care that is anchored in the fundamental belief that childbirth is a normal, healthy human process. However, we are trained to collaborate with physicians when emergent care requiring their expertise is necessary. In my current practice state, Certified Nurse-Midwives (CNMs) are permitted to practice independently after gaining at least 24 months of experience and completing 4000 practice hours. While evidence strongly supports the independent practice of CNMs as vital for providing equitable access to quality health care, especially in rural and underserved areas, as of 2024, only 35 states allow CNMs to practice independently.

As a nurse-midwife, I am privileged to serve communities by upholding the principles of reproductive justice and ensuring equitable access to quality care for individuals and their families. This role equips me with the expertise necessary for engaging in both research and practices in family planning and reproductive health that contribute significantly to the profession and enhance the quality of care provided. My work is driven by a profound dedication to addressing injustices and ensuring access to care that empowers families to thrive.

Kandyce Brennan, DNP, CNM, RN

Note: In August 2024, Dr. Brennan received grant funding as a Changemaker from the Society of Family Planning. She is developing an AI-supported program designed to help patients express their values, preferences, and beliefs when making shared reproductive health decisions with their providers.
Courtesy Kandyce Brennan, DNP, CNM, RN.

settings, including operating suites; birth settings; the offices of dentists, podiatrists, ophthalmologists, and plastic surgeons; ambulatory surgical facilities; and military and governmental health services (AANA, n.d.[b]).

To become a CRNA, nurses must complete 2 to 3 years of specialized education beyond the required bachelor's degree. In mid-2024, 130 nurse anesthesia programs operated in the United States and Puerto Rico, and all 130 programs are approved to award doctoral degrees for entry into CRNA practice. Nurse anesthetists must also meet national certification and recertification requirements. The safety of care delivered by CRNAs is well established, and numerous outcome studies have demonstrated that there is "no difference in the quality of care provided by CRNAs and their physician counterparts" (AANA, n.d.[b]).

The COVID-19 pandemic resulted in changes in supervision requirements for CRNAs by the Centers for Medicare and Medicaid Services (CMS) and in several states, additional barriers to their practice were lifted. This was to increase the capacity of the healthcare delivery system in the COVID crisis, and CRNAs were among the top 20 specialties providing non-telehealth care during the height of the pandemic (AANA, n.d.[b]). The website for the AANA is www.aana.com.

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 APRNs in many, but not all, states.

For Nurse Practitioners (NPs), "full practice" refers to the ability to practice to the full extent of their education and training without the need for physician oversight or collaboration. In states with full practice authority, NPs can independently diagnose, treat, prescribe medications, and manage patient care without physician supervision. "Reduced practice" typically means that NPs have some restrictions on their scope of practice, such as requiring physician collaboration, oversight, or a written collaborative agreement for certain activities like prescribing medications or ordering certain diagnostic tests. "Restricted practice" refers to states where NPs have significant limitations on their scope of practice, often requiring direct physician supervision for many aspects of patient care, prescribing authority, or limitations on the types of patients they can see or conditions they can treat.

In the past, substantial barriers to APRN autonomy existed because of the overlap between traditional medical care and advanced practice nursing care. A decade ago, the picture was considerably less optimistic than it is now. The issue of APRNs practicing autonomously was a politically charged arena, with organized medicine positioned firmly against all efforts of nurses to be recognized as independent healthcare providers receiving direct reimbursement for their services. Organized nursing, however, persevered. Nurses, through their professional associations, continue 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 APRNs have played in increasing the efficiency and availability of primary healthcare delivery while reducing costs; however, opposition to APRN autonomy persists. Roadblocks to full practice autonomy continue, primarily because of the resistance of organized physician groups despite data indicating positive patient outcomes. Despite progress, there remains the need for APRNs to continue to work with their professional organizations to promote legislation mandating full autonomy.

EMPLOYMENT IN NURSING

Employment Outlook in Nursing

The Bureau of Labor Statistics is confident about nursing's overall employment prospects in the near and distant future. According to the bureau (U.S. Bureau of Labor Statistics, 2024a), nurses can expect their employment opportunities to grow at 6%, higher than the 3% average for all occupations. The bureau estimates that, during this time, 17,740,000 new RN jobs will be created to meet growing patient needs and to replace retiring nurses (U.S. Bureau of Labor Statistics, 2024a). 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 effect because older people are more likely to require medical care. As aging nurses retire, many additional job openings will result. Notably, these statistics reflect

the alarming attrition in the healthcare workforce, including nurses because of the COVID-19 pandemic. The need for nurses will continue over the next several years as the pandemic lingers and the long-term effects of COVID infections become clearer.

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. APRNs can also expect to be in higher demand for the near future. The evolution of integrated healthcare 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 US Bureau of Labor Statistics, in 2024, median annual salary for nurses was $83,102, (as a comparison, the median salary for all workers was $54,132). Salaries were the highest among government and hospital employees and lowest in educational settings. About 20.4% 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.

APRNs have higher salaries than do staff nurses; CRNAs average the highest salary of any advanced practice specialty group. 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.

Recognizing an Exemplary Nurse and His Career

Some of this chapter has been, in all honesty, a sobering look at lingering issues and new ones that challenge our profession. Throughout this text you will be introduced to other challenges facing the nursing workforce as the healthcare system in the United States and throughout the world recovers from the COVID-19 pandemic and its pervasive ripple effects on health and health care. Across the history of nursing, however, are stories of nurses and their careers that are inspirational and aspirational. Ernest Grant, PhD, RN is one of those nurses. A past president of the American Nurses Association, Dr. Grant describes his career trajectory as an African American man who understood that, albeit unfairly, he had to "be better" than other nurses to lead the profession, an acknowledgment that shaped his educational and career path. Dr. Grant was the first African American man to earn a PhD at the University of North Carolina–Greensboro School of Nursing. It is an honor to share Dr. Grant's story, found in Professional Profile Box 1.4.

PROFESSIONAL PROFILE BOX 1.4

Recognizing an Exemplary Nurse and His Career

My work life started when I was in high school, in the deli-bakery department of a local grocery store chain during my junior and senior years. I managed that department in the evening and weekends, and I recall being the one of the first persons hired there and remained until I graduated from nursing school. Although nursing was not my first job, it was my first professional career.

I had wanted to be an anesthesiologist …and drive a 1968 lime green Mercury Cougar with a red leather interior. Being the youngest of seven children whose mom was widowed, I knew in high school that there was probably no money available for me to go to college, let alone to medical school. My high school guidance counselor told me I definitely had the grades (I graduated #13 of 197 students), so I could probably get some scholarships for undergraduate school, but perhaps not for medical school. He suggested that I look at nursing as a career. I could become a CRNA, and if I still wanted

(Continued)

PROFESSIONAL PROFILE BOX 1.4—cont'd

Recognizing an Exemplary Nurse and His Career

to go to medical school and become an anesthesiologist, at least I could work my way through med school as a CRNA making more money than I would as a staff nurse. Then he suggested that I might not like nursing, so he suggested that I first take a 1-year LPN course at a local community college, and if I liked nursing, I could then apply to the college's associate degree in nursing (ADN) program to become an RN. About 3 months into the LPN course, I totally forgot about medical school. I realized that nursing was my calling, and a BSN would give me the opportunity to do more for my patients than I could as an LPN. I enjoyed being an LPN, but mostly in that role I was doing patient care and being the unit's medication nurse. I wanted to be an advocate for the patients that I took care of.

After completing the LPN course, I immediately started taking college courses toward my BSN, graduating from North Carolina Central University (Durham, NC) in 1985. After 5 years, I realized I could advocate more on behalf of the profession and my patients by earning my MSN, which I completed in 1993, and 25 busy years later, I completed my PhD at the University of North Carolina–Greensboro. During the interval between my MSN and PhD, I was doing what I loved: advocating for patients and the profession. I also got very busy as a member of the North Carolina Nurses Association (NCNA) and ANA, serving on several committees and boards.

The first 2 years of my career as an LPN, I worked on a med-surg floor at a community-based hospital in the NC mountains. I began to float to the adult ICU due to staffing shortages and eventually transferred to that unit because I loved the challenge of caring for trauma, stroke, and post open-heart patients. As an LPN, I had extensive ICU training and had taken board of nursing-approved critical care courses that allowed me to run a balloon pump and care for patients after open-heart surgery and other critically ill persons. When I moved to the Triangle (Raleigh, Durham, Chapel Hill) area in central NC, I found out that, compared with the NC mountain area where BSN-prepared RNs were still a rarity, they were a dime a dozen here. ICUs were fully staffed with RNs; the only exceptions were the North Carolina Jaycee Burn Center at UNC and a special oncology floor at a local regional hospital. I didn't think I could do oncology nursing. Coincidentally, I was a member of the Black Mountain-Swannanoa chapter of the North Carolina Jaycees, the organization that had built and still supports the burn center. One of major fundraisers for the Jaycees is the annual jelly sale, and as a Jaycee I had actually chaired three of these projects. Based on my relationship as a member of the Jaycees, I joined the staff of the Burn Center. My intention was to only work there until I graduated from NCCU with my BSN, and then I would head back to the mountains where my family lived.

About 3 months into working at the Burn Center, I guess you could say that I was convinced this was my calling. I really felt that I was able to make a difference in the lives of the patients and families that I cared for. This was an era during which we used wire scratch brushes to debride the wounds and administered very little pain medication. Wound care was done three times a day, so that if you worked day shift, you did dressing changes first thing in the morning, and around 5:00 p.m. Night nurses would change dressings between 9:00 p.m. and 11:00 p.m. Some dressing changes would take up to 3 hours to complete, and the room temperature was set at 85 degrees to prevent the patients from becoming hypothermic. It was not unusual to step out of the room and have to change scrubs because they were soaked through with sweat. My plan to work there only until I completed my BSN turned into 36.5 years!

I grew to love my work at the burn center and welcomed the challenge, as I quickly realized that I was able to use everything I learned in nursing school in that setting—and I do mean EVERYTHING—including OB! Our burn center admitted pediatric, geriatric, and all persons in between, so I had to remain very well versed in the care of all patient populations and their cultures. I found myself applying knowledge of anatomy and physiology, nutrition, pediatric and adult care, med-surg, orthopedic, neuro … the list goes on and on. Many of our patients had mental health problems either before or after entering the burn center, especially if they had burns to their face or hands which could not be covered up. This work required all my skills to help the patients and their families, even if it was as the patient transitioned from this life to the next, or helping them get through their hospital stay and beyond.

A couple of issues triggered my desire to seek further education, specifically an MSN degree. First, as I mentioned earlier, in the Triangle area, RNs with BSN degrees common. To advance up the career ladder and into leadership roles, you needed the MSN or higher degree to even be considered for a career beyond the bedside. Significantly, I knew as an African American male, I had to be better than those that I may be competing against for those leadership positions. In hospital administration at that time, maybe one or two BIPOC (Black, Indigenous,

PROFESSIONAL PROFILE BOX 1.4—cont'd

Recognizing an Exemplary Nurse and His Career

People of Color) persons held leadership positions. Second, I realized a graduate degree had some weight in giving nurses a voice. Two years after completing my BSN, I had become the Education Clinician for the Burn Outreach program. I knew that in order to go to other hospitals and teach physicians and other providers how to care for and prepare patients who would be transferred to our unit, I needed a graduate degree to be seen as credible. The same principle applied when going to the NC General Assembly to seek passage of legislation containing measures to make our homes safer by having a working smoke alarm, or decreasing the hot water heater temperature, among others.

Shortly after completing my MSN, I realized I wanted to obtain my PhD; however, work and my professional career path got in the way for about 25 years! I became very active in NCNA, ANA, and the Burn community. Even though I was making great strides at advocating for my patients and the profession, I could not yet find the time it would take to study for my PhD. After completing my term as the President of the NCNA, I realized that I did not have anything else to do—so it was a good time to start working on my PhD. Also driving me was my desire to run for President of the ANA, although I was concerned that by not having a degree beyond an MSN, I might not be seen as well qualified as others running for this office. I knew that because I would be working with leaders in the federal government and other organizations, having a PhD would give me additional leverage to be taken seriously and to have my voice heard. I used my work experience as the basis for my PhD research, focusing on prevention of burns in elderly persons, and I'm considered a geriatric burn expert with a concentration of critical care as well. My dissertation was a qualitative study that examined whether older Black and White men changed their habits after sustaining a burn injury. It yielded some very interesting results!

I became involved in NCNA during nursing school. My instructors instilled into their students the need to belong to their professional associations. They would assign extra credit for students to attend our local chapter meetings and the state meeting. They not only walked the walk but talked the talk: they attended those meetings. They were *active* participants on committees, asking questions at the microphones after presentations, or debating an issue. They showed us how it was to be done. About 2 weeks after graduating from NCCU in 1985, I became a member of NCNA, and shortly afterward, began serving on a committee. The next thing I knew, I was chairing committees and being asked to serve on the Board of Directors.

I think unconsciously, I was preparing myself for the next role in my career: that of becoming the president of the ANA. I knew that somewhere deep down, I would be involved in helping the nursing profession to advance to have its voice heard and to advocate for mankind on every level, whether well, sick, or somewhere in between with chronic illnesses, nurses needed to be at the table advocating for health and health care!

Ernest Grant, PhD, RN
PhD, University of North Carolina–Greensboro, 2015

Courtesy Ernest Grant, PhD, RN.

CONCEPTS AND CHALLENGES

- ***Concept:*** Nursing is the largest workforce in health care in the United States.
  Challenge: The ripple effects of the COVID-19 pandemic on the healthcare workforce, including nursing, are vast. Staffing shortages, increased workload and stress on healthcare workers, long COVID symptoms, and heightened mental health challenges for both patients and healthcare providers continue to challenge the delivery of health care.
- ***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 effects of the migration from hospital to community.
- ***Concept:*** The Affordable Care Act and other changes in healthcare delivery and payment will create more opportunities for practice for nurses. Increased use of APRNs as providers of primary care may be part of the solution to the American healthcare crisis as the population ages, the number of older persons increases, and the need for healthcare cost containment becomes critical.
  Challenge: APRNs deliver high-quality and cost-effective care; however, educating adequate numbers of APRNs is essential to meet the demands on the healthcare system.
- ***Concept:*** Nursing will continue to be a profession in high demand.
  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 nurse in your community about their practice. What are the advantages and major barriers to practice that they encounter?
5. Each year, the Commonwealth Fund's Scorecard on State Health System Performance evaluates the latest data to measure how effectively the healthcare system is functioning in every US state. Check to see how your state ranks at https://www.commonwealthfund.org/publications/scorecard/2023/jun/2023-scorecard-state-health-system-performance.

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2

The History and Social Context of Nursing

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.
- Explain the significance of early nurse leaders to the development of modern 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 how issues of gender and race/ethnicity have influenced the development of the profession of nursing.
- Describe nursing's efforts to manage and improve its image in the media.
- Evaluate the implications for nursing in a technologically driven era, including AI.
- Describe how the nursing profession has reacted to nursing shortages.
- Explain how nursing shortages affect patient outcomes.

HISTORICAL CONTEXT OF NURSING

From the work of Florence Nightingale and Mary Seacole in the Crimea and beyond in the mid-1800s to the present-day efforts of nurses to address the onslaught of demands on the healthcare system by the COVID-19 pandemic, the profession of nursing has been influenced by and reacted to the social, political, and economic climate of the times, as well as by advances in science and technology. This chapter presents an overview of some of the highlights of nursing's history and its early leaders and 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 recognized 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, aristocratic women visited sick and poor persons to deliver food, render care, and provide religious and spiritual support. When she was young, Nightingale often accompanied her mother on these visits; however, her parents were surprised by and opposed her decision when, at age 30, she entered the 3-year nurse training program at Kaiserswerth, Germany, where she learned basic nursing care under the guidance of Protestant deaconesses. Later, Nightingale continued her nursing education when she studied with the Sisters of Charity in Paris. Care of persons with illness was often in the purview of women and men in religious orders, within both Catholic and Protestant religious traditions.

Having secured her education and training in nursing practice, Nightingale sought the means to communicate