FIFTH EDITION

JOEL

ADVANCED PRACTICE NURSING

Essentials for Role Development

F.A. DAVIS

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Essentials for Role Development

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Preface

The content of this text was identified only after a careful review of the documents that shape both the advanced practice nursing role and the educational programs that prepare these individuals for practice. That review allowed some decisions about topics that were essential to all advanced practice nurses (APNs),* whereas others were excluded because they are traditionally introduced during baccalaureate studies. This text is written for the graduate-level student in advanced practice and is intended to address the nonclinical aspects of the role.

Unit 1 explores *The Evolution of Advanced Practice* from the historical perspective of each of the specialties: the clinical nurse-midwife (CNM), nurse anesthetist (NA), clinical nurse specialist (CNS), and nurse practitioner (NP). This historical background moves to a contemporary focus with the introduction of the many and varied hybrids of these roles that have appeared over time. These dramatic changes in practice have been a response to societal need. Adjustment to these changes is possible only from the kaleidoscopic view that theory allows. Skill acquisition, socialization, and adjustment to stress and strain are theoretical constructs and processes that will challenge the occupants of these roles many times over the course of a career, but coping can be taught and learned. Our accommodation to change is further challenged as we realize that advanced practice is neither unique to North America nor new on the global stage. Advanced practice roles, although accompanied by varied educational requirements and practice opportunities, are well embedded and highly respected in international culture. In the United States, education for advanced practice had become well stabilized at the master's degree level. This is no longer true. The story of our more recent transition to doctoral preparation is laid before us with the subsequent issues this creates.

The Practice Environment, the topic of Unit 2, dramatically affects the care we give. With the addition of medical diagnosis and prescribing to the advanced practice repertoire, we became competitive with other disciplines, deserving the rights of reimbursement, prescriptive authority, clinical privileges, and participation as members on health plan panels. There is the further responsibility to understand budgeting and material resource management as well as the nature of different collaborative, responding, and reporting relationships. The APN often provides care within a mediated role, working through other professionals, including nurses, to improve the human condition.

Competency in Advanced Practice, the topic of Unit 3, demands an incisive mind capable of the highest order of critical thinking. This cognitive skill becomes refined as the subroles for practice emerge. The APN is ultimately a direct caregiver, client advocate, teacher, consultant, researcher, and case manager. The APN's forte is to coach individuals and populations so that they may take control of their own health in their own way, ideally even

seeing chronic disease as a new trajectory of wellness. The APN's clients are as diverse as the many ethnicities of the U.S. public, and the challenge is often to learn from them, taking care to do no harm. The APN's therapeutic modalities go beyond traditional Western medicine, reaching into the realm of complementary therapies and integrative health-care practices that have become expected by many consumers. Any or all of these role competencies are potential areas for conflict, needing to be understood, managed, and resolved in the best interests of the client. Some of the most pressing issues confronting APNs today are how to mobilize informational technology in the service of the client, securing visibility for their work, and disseminating their thinking through publication. The chapters in this section aim to introduce these competencies, not to provide closure on any one topic; the art of direct care in specialty practice is not broached.

When you have completed your course of studies, you will have many choices to make. There are opportunities to pursue your practice as an employee, an employer, or an independent contractor. Each holds different rights and responsibilities. Each demands *Ethical, Legal, and Business Acumen*, which is covered in Unit 4. Each requires you to prove the value you hold for your clients and for the systems in which you work. Cost efficiency and therapeutic effectiveness cannot be dismissed lightly today. The nuts and bolts of establishing a practice are detailed, and although these particulars apply directly to independent practice, they can be easily extrapolated to employee status. Finally, experts in the field discuss the legal and ethical dimensions of practice and how they uniquely apply to the role of the APN to ensure protection for ourselves and our clients.

This text has been carefully crafted based on over 40 years of experience in practice and teaching APNs. It substantially includes the nonclinical knowledge necessary to perform successfully in the APN role and raises the issues that still have to be resolved to leave this practice area better than we found it.

Lucille A. Joel

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* Please note that the terms advanced practice nurse (APN) and advanced practice registered nurse (APRN) are used interchangeably in this text according to the author's choice.

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Contents

UNIT

1

The Evolution of Advanced Practice

1

Advanced Practice Nursing

Doing What Has to Be Done

Lynne M. Dunphy

Learning Outcomes

Learning outcomes expected as a result of this chapter:

- Recognize the historical role of women as healers.
- Identify the roots of professional nursing in the United States including the public health movement and turn-of-the-century settlement houses.
- Describe early innovative care models created by nurses in the first half of the 20th century such as the Frontier Nursing Service (FNS).
- Trace the trajectory of the role of the nurse midwife across the 20th century as well as the present status of this role.
- Recognize the emergence of nurse anesthetists as highly autonomous practitioners and their contributions to the advancement of surgical techniques and developments in anesthesia.
- Describe the development of the clinical nurse specialist (CNS) role in the context of 20th-century nursing education and professional development with particular attention to the current challenges of this role.
- Describe the historical and social forces that led to the emergence of the nurse practitioner (NP) role and understand key events in the evolution of this role.
- Describe the development of the doctor of nursing practice (DNP) and distinguish this role from the others described in this chapter.
- Describe the current challenges to all advanced practice roles and formulate ways to meet these challenges going forward.

INTRODUCTION

Advanced practice is a contemporary term that has evolved to label an old phenomenon: lay healers, usually women, providing care to those in need in their surrounding communities. As Barbara Ehrenreich and Deidre English (1973) note, "Women have always been healers. They were the unlicensed doctors and anatomists of western history … they were pharmacists, cultivating herbs and exchanging the secrets of their uses. They were midwives, travelling from home to home and village to village" (p. 3). Today, with health care still dominated by a medical model rooted in patriarchy and white privilege, advanced practice nurses (APNs) (especially those with Doctorates of Nursing Practice [DNPs] cheeky enough to call themselves "doctor" even while clarifying their nursing role and background) are sometimes viewed as "mere" nurses "pushing the envelope"—the envelope of regulated, standardized nursing practice. The reality is that the boundaries of professional nursing practice have always been fluid with changes in the practice setting often speeding ahead of the educational and regulatory environments. This phenomenon occurred again during the COVID-19 pandemic as scope-of-practice regulations in a number of states expanded in light of national need. It has always been those nurse healers caring for persons and families who see a need and respond—at times in concert with the medical profession and at times at odds with it—who are the true trailblazers of contemporary advanced practice nursing.

This chapter makes the case that, far from being a new creation, APNs actually predate the founding of modern professional nursing. A look back into our past reveals legendary figures always responding to the challenges of human need, changing the landscape of health care, and improving the health of the populace. The titles may change—such as the DNP—but the essence remains the same.

PRECURSORS AND ANTECEDENTS

There is a long and rich history of female lay healing with roots in both European and African cultures. Well into the 19th century, the female lay healer was the primary health-care provider for most of the population. The sharing of skills and knowledge was seen as one's obligation as a member of a community. These skills were broad based and might have included midwifery, the use of herbal remedies, and even bone setting (Ehrenreich, 2000, p. xxxiii). Laurel Ulrich, in *A Midwife's Tale* (1990), notes that when the diary of the midwife Martha Ballard opens in 1785, "… she knew how to manufacture salves, syrups, pills, teas, ointments, how to prepare an oil emulsion, how to poultice wounds, dress burns, treat dysentery, sore throat, frost bite, measles, colic, 'whooping cough,' 'chin cough,' … and 'the itch,' how to cut an infant's tongue, administer a 'clister' (enema), lance an abscessed breast … induce vomiting, assuage bleeding, reduce swelling and relieve a toothache, as well as deliver babies" (p. 11).

Ulrich notes the tiny headstones marking the graves of midwife Ballard's deceased babies and children as further evidence of her ability to provide compassionate, knowledgeable care; she was able to understand the pain and suffering of others. The emergence of a male medical establishment in the 19th century marked the beginning of the end of the era of female lay healers, including midwives. The lay healers saw their role as intertwined with one's obligations to the community, whereas the emerging medical class saw healing as a

commodity to be bought and sold (Ehrenreich & English, 1978). Has this really changed? Are not our current struggles still bound up with issues of gender, class, social position, and money? Have we not entered a phase of more-radical-than-ever division between the haves and have-nots with grave consequences to our social fabric?

Nursing histories (O'Brien, 1987) have documented the emergence of professional nursing in the 19th century from women's domestic duties and roles, extensions of the things that women and servants had always done for their families. Modern nursing is usually pinpointed as beginning in 1873, the year of the opening of the first three U.S. training schools for nurses, "as an effort on the part of women reformers to help clean up the mess the male doctors were making" (Ehrenreich, 2000, p. xxxiv). The incoming nurses, for example, are credited with introducing the first bar of soap into Bellevue Hospital in the dark days when the medical profession was still resisting the germ theory of disease and aseptic techniques.

The emergence of a strong public health movement in the 19th century, coupled with the Settlement House Movement, created a new vista for independent and autonomous nursing practice. The Henry Street Settlement, a brainchild of a recently graduated trained nurse named Lillian Wald, was a unique community-based nursing practice on the lower east side of New York City. Wald described these nurses who flocked to work with her at Henry Street Settlement as women of above average "intellectual equipment," of "exceptional character, mentality and scholarship" (Daniels, 1989, p. 24). And Wald herself was extraordinary in her abilities to coalition-build and raise funds from a variety of public and private sources to support her endeavors (Dunphy, 2011). The nurses of the Henry Street Settlement, as has been well documented, enjoyed an exceptional degree of independence and autonomy in their nursing practice caring for the poor, often recent immigrants.

In 1893, Wald described a typical day. First, she visited the Goldberg baby and then Hattie Isaacs, a patient with consumption to whom she brought flowers. Wald spent 2 hours bathing her ("the poor girl had been without this attention for so long that it took me nearly two hours to get her skin clean"). Next, she inspected some houses on Hester Street where she found water closets that needed "chloride of lime" and notif ied the appropriate authorities. In the next house, she found a child with "running ears," which she "syringed," showing the mother how to do it at the same time. In another room, there was a child with a "summer complaint"; Wald gave the child bismuth and tickets for a seaside excursion. After lunch she saw the O'Briens and took the "little one, with whooping cough" to play in the back of the Settlement House yard. On the next floor of that tenement, she found the Costria baby who had a sore mouth. Wald "gave the mother honey and borax and little cloths to keep it clean" (Coss, 1989, pp. 43–44). This was all before 2 p.m.! Far from being some new invention, midwives, nurse anesthetists, clinical nurse specialists (CNSs), and nurse practitioners (NPs) are merely new permutations of these long-standing nursing commitments and roles.

NURSE-MIDWIVES

Throughout the 20th century, nurse-midwifery remained an anomaly in the U.S. health-care system. Nurse-midwives attend only a small percentage of all U.S. births. Beginning in the

19th century, physicians laid claim to being the sole legitimate birth attendants in the United States, although it took them until the early years of the 20th century to achieve true dominance (Dawley, 2001; Dye, 1984). This is in contrast to Great Britain and many other European countries where trained midwives still attend a signif icant percentage of births. In Europe, homes remain an accepted place to give birth, whereas hospital births reign supreme in the United States. In contrast to Europe, the United States has little in the way of a tradition of professional midwifery. Once again, our crisis with the COVID-19 pandemic raised questions about this. Why *not*, in such times and with such stress on our health-care system, deliver babies at home, surrounded by friends and family? Would not this be *far safer?* (Kline & Hayes-Klein, 2020)

As late as 1910, 50% of all births in the United States were reportedly attended by midwives, and the percentage in large cities was often higher. However, at that time, the health status of the U.S. population, particularly in regard to perinatal health indicators, was poor (Bigbee & Amidi-Nouri, 2000). Midwives—unregulated and by most accounts unprofessional—were easy scapegoats on whom to blame the problem of poor maternal and infant outcomes. New York City's Department of Health commissioned a study that claimed that the New York midwife was essentially "medieval." According to this report, fully 90% were "hopelessly dirty, ignorant, and incompetent" (Edgar, 1911, p. 882). There was a concerted movement away from home births. This was all part of an assault on midwifery by an increasingly powerful medical elite of obstetricians determined to control the birthing process.

These revelations resulted in the tightening of existing laws and the creation of new legislation for the licensing and supervision of midwives (Kobrin, 1984). There was need for the "professionalizing" of the nurse-midwife, more grounding in scientif ic advances through education and regulation. Several states passed laws granting legal recognition and regulation of midwives, resulting in the establishment of schools of midwifery. One example, the Bellevue School for Midwives in New York City, lasted until 1935, when the diminishing need for midwives made it diff icult to justify its existence (Komnenich, 1998). Obstetrical care continued the move into hospitals in urban areas that did not provide midwifery. For the most part, the advance of nurse-midwifery has been a slow and arduous struggle often at odds with mainstream nursing. For example, Lavinia Dock (1901) wrote that all births must be attended by physicians. Public health nurses, committed to the professionalizing of nursing and adherence to scientif ic standards, chose to distance themselves from lay midwives. The stigma of the unprofessional image of the lay midwife would linger for many years.

A more successful example of midwifery was the founding of the Frontier Nursing Service (FNS) in 1925 by Mary Breckinridge in Kentucky. Breckinridge, having been educated as a public health nurse and traveling to Great Britain to become a certif ied nurse-midwife (CNM), pursued a vision of autonomous nurse-midwifery practice. She aimed to implement the British system in the United States (always a daunting enterprise on any front). In rural settings, where doctors were scarce and hospitals virtually nonexistent, midwifery found more fertile soil. However, even in these settings, professional nurse-midwifery had to struggle to bloom.

Breckinridge founded the FNS at a time when the national maternal death rate stood at 6.7 per 1,000 live births, one of the highest rates in the Western world. More than 250,000 infants, nearly 1 in 10, died before they reached their first birthday (U.S. Department of Labor, 1920). The Sheppard-Towner Maternity and Infancy Act, enacted to provide public funds for maternal and child health programs, was the first federal legislation passed for specif ically this purpose (Cockerham & Keeling, 2012). Part of the intention of this act was to provide money to the states to train public health nurses in midwifery; however, this proved short-lived. By 1929, the bill lapsed; this was attributed to some opposition by the American Medical Association (AMA), which advocated the establishment of a "single standard" of obstetrical care, care that is provided by doctors in hospital settings (Kobrin, 1984).

Breckinridge saw nurse-midwives working as independent practitioners and continued to advocate home births. And even more radically, the FNS saw nurse-midwives as offering complete care to women with normal pregnancies and deliveries. However, even Breckinridge and her supporters did not advocate the FNS model for cities where doctors were plentiful and middle-class women could afford medical care. She stressed that the FNS was designed for impoverished "remotely rural areas" without physicians (Cockerham & Keeling, 2012; Dye, 1984).

The American Association of Nurse-Midwives (AANM) was founded in 1928, originally as the Kentucky State Association of Midwives, which was an outgrowth of the FNS. First organized as a section of the National Organization of Public Health Nurses (NOPHN), the American College of Nurse-Midwives (ACNM) was incorporated as an independent specialty nursing organization in 1955 when the NOPHN was subsumed within the National League for Nursing (NLN). In 1956, the AANM merged with the college, forming the ACNM as it continues today. The ACNM sponsored the *Journal of Nurse-Midwifery,* implemented an accreditation process of programs in 1962, and established a certif ication examination and process in 1971. This body also currently certif ies non-nurses as midwives and maintains alliances with professional midwives who are not nurses. As noted by Bigbee and Amidi-Nouri (2000), CNMs are distinct from other APNs in that "they conceptualize their role as the combination of two disciplines, nursing and midwifery" (p. 12).

At their core, midwives as a group remain focused on their primary commitment: care of mothers and babies regardless of setting and ability to pay. Rooted in holistic care and the most natural approaches possible, in 2019 there were 12,218 CNMs and 102 certif ied midwives (CMs) (ACNM Fact Sheet, 2020). CNMs or CMs attended 318,469 births, accounting for 12.1% of all vaginal births and 9.1% of total U.S. births (MacDorman & Desclercq, 2019). The World Health Organization has named 2020 the Year of the Nurse and Midwife. CNMs are def ined as primary care providers under federal law. CMs are also licensed, independent health-care providers who have completed the same midwifery education as CNMs. CMs are authorized to practice in Delaware, Hawaii, Maine, New Jersey, New York, and Rhode Island and have prescriptive authority in New York, Maine, and Rhode Island (ACNM Fact Sheet, 2020). The first accredited CM education program began in 1996. The CM credential is not yet recognized in all states.

Although midwives are well-known for attending births, 53.3% of CNMs and CMs

identify reproductive care and 33.1% identify primary care as main responsibilities in their full-time positions. Examples include annual examinations, writing prescriptions, basic nutrition counseling, parenting education, patient education, and reproductive health visits (Kline & Hayes-Klein, 2020).

NURSE ANESTHETISTS

Nursing made medicine look good. —Baer, 1982

Surgical anesthesia was born in the United States in the mid-19th century. Immediately, there were rival claimants to its "discovery" (Thatcher, 1953). In 1846 at Massachusetts General Hospital, William T. G. Morton first successfully demonstrated surgical anesthesia. Nitrous oxide was the first agent used and adopted by U.S. dentists. Ether and chloroform followed shortly as agents for use in anesthetizing a patient. One barrier to surgery had been removed. However, it would take infection control and consistent, careful techniques in the administration of the various anesthetic agents for surgery to enter its "Golden Age." It was only then that "surgery was transformed from an act of desperation to a scientif ic method of dealing with illness" (Rothstein, 1958, p. 258).

There are early accounts of nurses giving anesthesia during the American Civil War, 1861–1865 (Moore, 1886; cited in Thatcher, 1953, p. 34). A history of Roman Catholic nuns in this same war also cited instances of nuns administering anesthesia (Jolly, 1927). Lusk et al. (2019) document *Instructions for Administration of Chloroform* from Adams Hampton (1893, pp. 331–336), an early textbook for nurses. They note that "… typically nurses only administered anesthesia when a physician was unavailable" (p. 3). They go on to note that "Following the increasingly scientif ic and specialized nature of giving anesthesia, the practice became the prerogative of physicians" (p. 3) with notable exceptions. For surgeons to advance their specialty, they needed someone to administer anesthesia with care. However, anesthesiology lacked medical status; the surgeon collected the fee. No incentive existed for anyone with a medical degree to take up the work. Who would administer the anesthesia? And who would do so reliably and carefully? There was only one answer: nurses.

In her landmark book *Watchful Care: A History of America's Nurse Anesthetists* (1989), Marianne Bankert explains how economics changed anesthesia practice. Physician-anesthetists "needed to establish their 'claim' to a field of practice they had earlier rejected" (p. 16), and to do this, it became necessary to deny, ignore, or denigrate the achievements of their nurse colleagues. The most intriguing part of her study, she says, was "the process by which a rival—and less moneyed—group (in this case, nurses) is rendered historically 'invisible'" (p. 16).

St. Mary's Hospital, later to become known as the Mayo Clinic, played an important role in the development of anesthesia. It was here that Alice Magaw, sometimes referred to as the "Mother of Anesthesia," practiced from 1860 to 1928. In 1899, she published a paper titled "Observations in Anesthesia" in *Northwestern Lancet* in which she reported giving anesthesia in more than 3,000 cases (Magaw, 1899). In 1906, she published another review of more than 14,000 successful anesthesia cases (Magaw, 1906). Bigbee and Amidi-Nouri

(2000) note, “She stressed individual attention for all patients and identif ied the experience of anesthetists as critical elements in quickly responding to the patient” (p. 21). She also paid special attention to her patients’ psyches: She believed that “suggestion” was a great help “in producing a comfortable narcosis” (Bankert, 1989, p. 32). She noted that the anesthetist “must be able to inspire conf idence in the patient” and that much of this depends on the approach (Bankert, 1989, p. 32). She stressed preparing the patient for each phase of the experience and of the need to “‘talk him to sleep’ with the addition of as little ether as possible” (p. 33). Magaw contended that hospital-based anesthesia services, as a specialized field, should remain separate from nursing-service administrative structures (Bigbee & Amidi-Nouri, 2000). This presaged the estrangement that has historically existed between nurse anesthetists and “regular” nurses; we see a nursing specialty with expanded clinical responsibilities developing outside of mainstream nursing.

The American Association of Nurse Anesthetists (AANA) was founded in 1931 by Hodgins and originally named the National Association for Nurse Anesthetists. This group voted to aff iliate with the American Nurses Association (ANA), only to be turned away. As early as 1909, Florence Henderson, a successor of Magaw’s, was invited to present a paper at the ANA convention with no subsequent extension of an invitation to become a member of the organization (Komnenich, 1998). Thatcher (1953) speculates that organized nursing was fearful that nurse anesthetists could be charged with practicing medicine, a theme we will see repeated when we examine the history of the development of the NP role. This rejection led the AANA to af filiate with the American Hospital Association (AHA).

The relationship between nurse anesthetists and anesthesiologists has always been, and continues to be, contentious. Consistent with health-care workforce data in general, there is a maldistribution of MDs, including anesthesiologists, who frequently choose to practice in areas where patients can afford to pay or in desirable areas to live. Rural areas continue to be underserved as well as indigent areas in general. Certified Registered Nurse Anesthetist (CRNAs) pick up the slack, “doing what has to be done” to meet the needs of underserved patients. Complicating this picture is that there is an uneven supply of CRNAs in different geographic areas. As CRNAs retire later, unwilling to give up lucrative positions, some regions experience intergenerational hostility as well.

Despite a brief period of relative harmony from 1972 to 1976, when the AANA and the American Society of Anesthesiologists (ASA) issued the “Joint Statement on Anesthesia Practice,” their partnership ended when the board of directors of the ASA withdrew its support of this statement, returning to a model that maintained physician control (Bankert, 1989, pp. 140–150).

The CRNA credential came into existence in 1956. At present, there are more than 54,000 CRNAs (AANA, 2020),* 40% of whom are male (compared with the approximately 10% male population in nursing overall, a figure that has held steady for some time). CRNAs safely administer approximately 49 million anesthetics to patients each year in the United States according to the AANA 2019 Practice Prof ile Survey.

Interestingly, the inclusion of large numbers of males in its ranks has not eased the advance of this venerable nursing specialty; turf wars between practicing anesthesiologists and nurse anesthetists remain intense as of this writing, further aggravated by the incursion of

"doctor-nurses" or "nurse-doctors." Nonetheless, nurse anesthetists continue to thrive and have situated themselves in the mainstream of graduate-level nursing education. It was in 2007 that the AANA issued a commitment that the Doctor of Nurse Anesthesia Practice (DNAP) be the entry into practice by 2025 (AANA, 2007; Lusk et al., 2019, p. 7). Glass (2009) documents the first post-baccalaureate DNP program for CRNAs in 2009. Their inclusion in the spectrum of advanced practice nursing continues to be invigorating for all of us.

THE CLINICAL NURSE SPECIALIST

The role of the CNS is the one strand of advanced practice nursing that arose and was nurtured by mainstream nursing education and nursing organizations. Indeed, one could say it arose from the very bosom of traditional nursing practice. As early as 1900, in the *American Journal of Nursing,* Katherine DeWitt wrote that the development of nursing specialties, in her view, responded to a "need for perfection within a limited domain" (Sparacino, 1986, p. 1). According to DeWitt, nursing specialties were a response to "present civilization and modern science [that] demand a perfection along each line of work formerly unknown" (Sparacino, 1986, p. 1). She argued that "the new nurse is more useful, at least to the patient himself, and ultimately to the family and community. Her sphere is more limited, but her patient receives better care" (Sparacino, 1986, p. 1).

Historically, nurses were trained and worked in hospitals that were structured for the convenience of the doctors around specif ic populations of patients. Early on, nurses initiated guidelines for the care of unique populations and often garnered a hands-on kind of intimacy, an expertise in the care of certain patients that was not to be denied. Caring day in and day out for patients suffering from similar conditions enabled nurses to develop specialized and advanced skills not practiced by other nurses. Think of the nurses who cared exclusively for patients with tuberculosis, syphilis, and polio. Because these conditions are no longer common, any nursing expertise that might have been developed has been lost.

In a 1943 speech, Frances Reiter first used the term *nurse-clinician.* She believed that "practice is the absolute primary function of our profession" and "that means the direct care of patients" (Reiter, 1966). The nurse-clinician, as Reiter conceived the role, consisted of three spheres. The first sphere, clinical competence, included three additional dimensions of function, which she termed *care, cure,* and *counseling.* The nurse-clinician was labeled "the Mother Role," in which the nurse protects, teaches, comforts, and encourages the patient. The second sphere, as envisioned by Reiter, involved clinical expertise in the coordination and continuity of the patient's care. In the final sphere, she believed in what she called "professional maturity," wherein the physician and nurse "share a mutual responsibility for the welfare of patients" (Reiter, 1966, p. 277). It was only through such working together that the patient could best be served and nursing achieve "its greatest potential" (Reiter, 1966). Although Reiter believed that the nurse-clinician should have advanced clinical competence, she did not specify that the nurse-clinician should be prepared at the master's level.

In 1943, the National League for Nursing Education advocated a plan to develop these nurse-clinicians, enlisting universities to educate them (Menard, 1987). The GI Bill was also

becoming available. Nurses in the Armed Services were eligible to receive funds for their education. Esther Lucile Brown, in her 1948 report *Nursing for the Future*, promoted developing clinical specialties in nursing as a way of strengthening and advancing the profession. Traditionally, graduate education in nursing had focused on "functional" areas, that is, nursing education and nursing administration.

It took the entrance of another strong nurse leader, Hildegard Peplau, to move these ideas forward to fruition. In 1953, she had both a vision and a plan: She wanted to prepare psychiatric nurse-clinicians at the graduate level who could offer direct care to psychiatric patients, thus helping to close the gap between psychiatric theory and nursing practice (Callaway, 2002). In addition, as always there was a great need for health-care providers of all stripes in psychiatric settings. In her first 2 years at Rutgers University in New Jersey, Peplau developed a 19-month master's program that prepared only CNSs in psychiatric nursing. In contrast, existing programs, such as that at Teachers College in New York City, attempted to prepare nurses for teaching and supervision in a 10-month program, as noted previously.

The field of psychiatric nursing was in the process of inventing itself. Before the passage of the National Mental Health Act in 1946, there was no such field as psychiatric nursing. It was the availability of National Institute of Mental Health funds to "seed" such programs as Peplau's that allowed psychiatric nursing to begin and eventually to flourish. In retrospect, Peplau would note that no encouragement was received from the two major nursing organizations of the day, the NLN and the ANA. According to Callaway (2002), she stated, "We were highly stigmatized. Any nurse who worked in [the field of mental health] was considered almost certif iable…. We were thoroughly unpopular, we were considered queer enough to be avoided" (p. 229).

The "received wisdom" of the day was the axiom followed by the vast majority of nurses that "a nurse is a nurse is a nurse," opposing any differentiation between who was doing what among them. Peplau's rigorous curriculum and clinical and academic program requirements expected that faculty would continue their own clinical practice, do clinical research, and publish the results (Callaway, 2002). This was a radical model for nursing faculty, few of whom were doctorally prepared in the 1950s. In 1956, only 2 years following the initiation of the first clinically focused graduate program, a national working conference on graduate education in psychiatric nursing formally developed the role of the psychiatric clinical specialist.

Most hospital training schools remained embedded in a functional method of nursing well into the 1960s. As originally conceptualized by Isabel Stewart in the 1930s, "nurses were trained and much of nursing practice was rule-based and activity-oriented" (Fairman, 1999, p. 42), relying heavily on repetition of skills and procedures. There was little, if any, scientif ic understanding of the principles underlying care. There was little, if any, intellectual content to be found in the nursing curriculum.

With the advent of antibiotics in the 1940s and the resulting decline of infectious diseases, nurses' practice shifted to caring for patients with acute, often rapidly changing exacerbations of chronic conditions. Specialties evolved such as the coronary care nursing specialist (Lynaugh & Fairman, 1992). Leaders such as Peplau, along with others such as Virginia

Henderson, Frances Reiter, and later Dorothy Smith, began developing a theoretical orientation for practice. Students were being taught to assess patient responses to their illnesses and to make analytical decisions. Smith experimented with the idea of a nurse-clinician who had 24-hour responsibility for a patient area and who was on call. Laura Simms at Cornell University–New York Hospital School of Nursing developed a CNS role to provide consultation to more generalist nurses. As opposed to the nurse who might have been expert in procedures, these new clinicians were experts in clinical care for a certain population of patients. This development occurred across specialties and was seen in oncology, nephrology, psychiatry, and intensive care units (Sills, 1983).

Role expansion of the CNS grew rapidly during the 1960s because of several factors. Advances in medical technology and medical specialization increased the need for nurses who were competent to care for patients with complex health needs. Nurses returning from the battlef ields of Vietnam sought to increase their knowledge and skills and continue to practice in advanced roles and nontraditional areas (such as trauma or anesthesia). Role def initions for women loosened and expanded. There was a shortage of physicians. The Nurse Training Act of 1964 allocated necessary federal funds for additional graduate nursing education programs in different clinical specialties (Lusk et al., 2019).

The terms *nurse-clinician, CNS,* and *nurse specialist,* among others, were used extensively by nurses with experience or advanced knowledge who had developed an expertise within a given area of patient care. There were no standards regarding educational requirements or experience. In 1965, the ANA developed a position statement declaring that only those nurses with a master's degree or higher in nursing should claim the role of CNS (ANA, 1965). These trends continued into the 1970s. The number of academic programs providing master's preparation in a variety of practice areas increased. Federal grants, including those from the Department of Health, Education, and Welfare, continued to provide funding for nursing education at the master's and doctoral levels.

In 1976, during the ANA's Congress on Nursing Practice, a position statement on the role of the CNS was issued. The ANA position statement read as follows (ANA Congress for Nursing Practice, 1976):

> The clinical nurse specialist (CNS) is a practitioner holding a master's degree with a concentration in specif ic areas of clinical nursing. The role of the CNS is def ined by the needs of a select client population, the expectation of the larger society and the clinical expertise of the nurse.

The statement went on to elaborate that "by exercising leadership ability and judgment," the CNS is able to affect client care on the individual, direct-care provider level as well as affect change within the broader health-care system (ANA Congress for Nursing Practice, 1976).

The 1970s were a time of growth in academic CNS programs; the 1980s were years in which ref inements occurred. In 1980, the ANA revised its earlier policy statement of 1976 to def ine the CNS as "a registered nurse who, through study and supervised clinical practice at the graduate level (master's or doctorate) has become an expert in a def ined area of knowledge and practice in a selected clinical area of nursing" (ANA, 1980, p. 23). This

statement was signif icant because it was the first time that education at the master's level had been dictated as a mandatory criterion for entry into expert practice.

The CNS role, more than any other advanced nursing role, was situated in the mainstream of graduate nursing education with the first master's degree in psychiatric and mental health nursing conferred by Rutgers University in 1955. The inclusion of clinical content in master's degree education was an essential step forward for nursing's advancement. But the implementation and use of the CNS avoided easy categorization and their eff icacy was elusive.

In February 1983, the ANA Council of Clinical Nurse Specialists met for the first time (Sparacino, 1990). The council grew rapidly throughout the subsequent years, supporting and providing educational conferences for the increasing numbers of CNSs. In 1986, the council published the CNS's role statement. This statement identif ied the roles of the CNS as specialist in clinical practice and as educator, consultant, researcher, and administrator. This role statement by the council depicted the changing role of the CNS, notably delegating and overseeing practice as its primary focus (Fulton, 2002). The year 1986 was also notable for the publication of the journal *Clinical Nurse Specialist: The Journal for Advanced Nursing.*

In 1986, the ANA's Council of Clinical Nurse Specialists and the Council of Primary Health Care Providers published an editorial outlining the similarities of the CNS and NP roles. Discussion surrounding the commonalities of both specialties occurred throughout the decade. In 1989, during the annual meeting of the National Organization of Nurse Practitioner Faculty (NONPF), the 10-year-old debate regarding the merger of the two roles reached a crescendo without resolution (Lincoln, 2000). It remains an issue of contention to the present day. Despite this, the two ANA councils did merge in 1990, becoming the Council of Nurses in Advanced Practice (Busen & Engleman, 1996; Lincoln, 2000). Following the merger of the councils, several studies were published comparing CNS and NP roles, finding the education for practice generally comparable (Joel, 2011).

The dissolution of the CNS council was of concern to CNSs around the country, who continued to meet at conferences (https://nacns.org/about-us/history/ accessed Nov. 12, 2020). These CNS leaders formed a national association in 1992, naming it the National Association of Clinical Nurse Specialists (NACNS). They began drafting a constitution, bylaws, and a framework for functioning, supported by faculty and staff at the Indiana University School of Nursing. At the 1994 national CNS conference held in Indianapolis, they presented their work. Sixty-nine charter members joined; and in 1995, with assistance from the American Association of Critical Care Nurses (AACN), the NACNS became a legal entity. Within 2 years, the NACNS had 530 members, which now number more than 2,000. The organization represents the more than 70,000 CNSs working in hospitals and health systems, clinics and ambulatory settings, and colleges and universities today.

The 1990s was also an era of health-care "reform." Health-care costs were skyrocketing; hospital stays were shorter with acutely ill patients being discharged quicker and sicker. Because of fiscal mandates, hospitals were decreasing the number of beds and personnel and the focus of health care shifted from hospital to ambulatory care within the community and home. The historically hospital-based CNS was considered too expensive and unproven. Thus, CNSs all over were losing positions.

In 1993, the American Association of Colleges of Nursing (AACN) met to discuss educational needs and requirements for the 21st century. At the AACN's annual conference in December 1994, members voted to support the merging of the CNS and NP roles in the curricula of graduate education in nursing. Although the structure of the curricula suggested in the AACN's "Essentials of Masters Education for Advanced Practice Nursing" (1996), as well as the ANA's "Scope and Standards of Advanced Practice Registered Nursing" (ANA, 1996) were widely adopted, the lived reality of role adaptation and its implementation in the marketplace has been less uniform and more divisive. Educational requirements for CNS practice involved many specialties, standards, and differing certif ication examinations. Enrollments have declined, per AACN data, to under 2,000 in 2015 (Lusk et al., 2019, pp. 14–15).

Scope-of-practice barriers continue in this area of advanced practice nursing. The latest setback occurred when the Standard Occupational Classif ication Policy Committee (SOCPC) announced its recommendations to the Of fice of Management and Budget for the 2018 Standard Occupational Classif ication on July 22, 2016. The SOCPC declined to include the CNS in a separate broad occupation and detailed occupation category, stating:

Multiple dockets requested a new detailed occupation for Clinical Nurse Specialists. The SOCPC did not accept this recommendation based on Classif ication Principle 2, which states that occupations are classif ied based on work performed and on Classif ication Principle 9 on collectability.

In July 2014, the NACNS submitted an extensive filing on why the CNS should be included in the Standard Occupational Classif ication (SOC) as a "broad category." This is the second time that the SOCPC did not accept the request to make the CNS a new detailed occupation in the SOC. Retaining CNSs in the RNs 2010 classif ications is inconsistent with federal agencies, with nursing practice in the states, and with the larger nursing community, all of which distinguish CNSs as APRNs. Congress has accepted CNSs as APRNs for nearly two decades. The *Balanced Budget Act of 1997* allowed CNSs to directly bill their services through the Centers for Medicare and Medicaid Services under Part B participation in Medicare. CNSs were recognized as eligible for Medicare's Primary Care Incentive Program in the *Patient Protection and Affordable Care Act* (PPACA, 2010).

CNSs prescribe medications, durable medical equipment, and medical supplies as well as order, perform, and interpret diagnostic tests including laboratory work and x-rays. Two unequivocal differences exist between CNSs and RNs: diagnosing patients and prescribing pharmaceuticals. CNSs can perform both; RNs are not authorized to perform either. The SOCPC's recommendation to not recognize the CNS as a broad and detailed occupation, similar to how other APRNs are categorized, skews the quality and utility of federal health-care policy data. Linking the CNS workforce data with the RN workforce does not allow CNS contributions to be differentiated from or compared with any other APRN data. Simply put, a database set up by any federal, state, regional, local, research, or private entity using the 2010 SOC categories has no data on the more than 70,000 CNSs in the United States (NACNS, 2020).

The “other side” of this story of advanced practice nursing—NP evolution—is addressed in the next section of this chapter. The futures of these various roles remain on some level intertwined and are further complicated by the emergence of a new model of educational preparation: the DNP.

THE EVOLUTION OF THE NURSE PRACTITIONER ROLE: “A DISRUPTIVE INNOVATION”

The history of the NP “movement” has been extensively documented (Brush & Capezuti, 1996; Fairman, 1999, 2008; Jacox, 2002; Lusk et al., 2019; Towers, 1995). A lesser known story involves Dr. Eugene A. Stead, Jr., of Duke University, who in 1957 conceived of an advanced role for nurses somewhere between the role of the nurse and the doctor. Thelma Ingles, a nursing faculty member on a sabbatical, worked with Stead, accompanying the interns and residents on rounds, seeing patients, and managing increasingly ill patients with acumen and sensitivity. Ingles shared Stead’s ideas and returned to the Duke Nursing School to create a master of science in nursing program modeled on her experience with Stead. Stead was gratif ied and anxious to impart this expanded role to other nursing faculty, envisioning a new role for nurses with, in his view, expanded autonomy. He was shocked at the “lukewarm” response of the dean of nursing at Duke and the unsupportive stance of several prominent nurses at the university. On top of that, the NLN, the school’s accrediting body, did not approve of Ingles’s new program for nurse clinical specialization and withheld the program’s accreditation. They found the program “unstructured” and criticized the use of physicians as instructors to teach courses for nurses in a nursing program. They disavowed the study of the esteemed discipline of medicine that Stead was so anxious to impart (Holt, 1998). Instead, they wanted the students to study “nursing.” Stead could not understand this. What was there in nursing to study? Rejected and disheartened, Stead eventually turned to military corpsmen to actualize this new role, which he named *physician assistant.* He insisted that they be male. In his view, nurse leaders were very antagonistic to innovation and change (Christman, 1998). In the view of some, this was a missed opportunity for organized nursing but one governed by historical circumstances when viewed on the broader stage of history. Fairman (2008), in an extensive study of Stead’s papers, offers the appraisal that “Stead’s diff iculties went beyond his experiences with organized and academic nursing. They reflected his perceptions of the kind of help his physician colleagues needed” (Fairman, 2008, p. 98).

Stead’s original proposal was quite prescient. Gender roles were loosening as were hierarchical structures in general; nurses were better educated and well able to assume the role responsibilities that Stead envisioned. Yet it came at a time when nursing was merely a fledgling discipline, new to the university, new to development as an academic discipline, and new to doctoral education. Academic nursing was fixated on def ining its own knowledge base and developing its own unique science. Along with expanded opportunities for women came ideas of an autonomous nursing role separate and distinct from medicine. Stead’s deeply rooted gender-role stereotyping no doubt further inflamed nursing resistance to “his” new role. Other settings—such as the University of Colorado, where Henry Silver, a

pediatrician, and Loretta Ford, a master's-prepared public health nurse, founded a partnership rooted in collaboration—provided more fruitful results. All these factors were in play when the first NPs emerged in the 1960s.

However, the NP was not really a new role for nurses. Examining our history, it is apparent that nurses functioned independently and autonomously before the rise of organized medicine. If medicine was ambivalent about the emergence of this new role, nursing itself was no less conflicted.

In 1978, the following statement appeared in the *American Journal of Nursing* (Roy & Obloy, 1978, p. 1698):

> The nurse practitioner movement has become an issue in nursing, a topic on which there is no consensus. One question about the movement is whether the development of the nurse practitioner role adds to, or detracts from, the development of nursing as a distinct scientif ic discipline.

This statement was issued more than 13 years after the initiation of the first NP program at the University of Colorado. If, as Sparacino (1990) spells out, the domain of the CNS is situated in the secondary and tertiary setting, the domain of the NP originally arose as a role situated in primary care.

Loretta Ford and Dr. Henry Silver originally designed a certif icate program curriculum for pediatric nurses to provide ambulatory care to poor rural Colorado children. The goal of this program was to bridge the gap between the health-care needs of children and the family's ability to access and afford primary health care (Ford & Silver, 1967; Silver et al., 1967). This certif icate program included courses such as health promotion and growth and development with the intent of the student understanding the principles of healthy childcare and patient education. Nurses would then be able to provide preventive nursing services outside the hospital setting in collaboration with physicians. Students had to have a baccalaureate degree and public health nursing experience to be admitted to the program.

Ford notes that the lack of organizational leadership in the profession coupled with a lack of responsiveness in academic settings caused a "bastardization of the model" (Jacox, 2002, p. 157). She had envisioned that our professional organization, as in other professions, would identify, credential, and advance the new role. However, Ford was to discover that the "ANA in those early years was reluctant to stick its neck out and give some leadership to the NP groups that were growing rapidly" and that the lack of leadership in nursing education created "a patchwork quilt" of differently prepared NPs (Jacox, 2002, p. 157). Although clinically based programs were growing, there remained resistance to the NP model. Ford (Jacox, 2002, p. 155) says,

> I understood that faculty members were supposed to be doing just that—push the borders of knowledge and publish their work. In my naiveté of faculty politics, I expected that since the NP model grew out of professional nursing and public health nursing—including primary, secondary, and tertiary prevention and community-based services—it was a perfectly legitimate investigation. Instead, it became a battleground, and even recently was labeled in the *Harvard Business Review* as a "Disruptive Innovation." What a compliment!

The collaboration between NP and physician has been analyzed and debated since the advent of the NP role, including the relationship between Ford and Silver (Fairman, 2002, 2008). The sticking point of collaboration is that it has included the heavy implication of supervision and thus control. In truth, in the early 1970s both NPs and physicians had to give up their traditional roles, tasks, and knowledge to establish this new provider role, often in the face of organizational and societal opposition. Jan Towers describes the growth of her own NP practice as follows: "The area that I perhaps most feared turned out to be the least troublesome, after some initial adjustments between the physician with whom I was working and me were made" (Towers, 1995, p. 269). What would often be impossible on an organizational level was more easily resolvable among professionals with a shared interest and commitment: the good of the patient.

Prescriptive authority was—and continues to be in some states—a major issue. It was either delegated from the medical practice act and carried out under physicians' standing orders or protocols or it came directly from the nursing practice acts. Nurse historian Arlene Keeling has argued that far from being a new realm of nursing practice, the "prescribing"—or use—of a variety of techniques and substances for therapeutic effect has always been a dimension of nursing practice (Keeling, 2007). The states of Oregon and Washington allowed nurses the freedom to prescribe independently in 1983 (Kalisch & Kalisch, 1986). Some of the fiercest turf battles have heated up over prescriptive privileges. By 1984, nurses were accused of practicing medicine, although they were practicing well within the scope of their expanded role. Physicians remained ambivalent. They pushed NPs to function broadly but did not usually support legislation that authorized an increased scope of practice, especially in the area of prescriptive privileges. Joan Lynaugh, nurse historian, describes NPs as looking for an "exam room of their own"—essentially a clinical space in which to provide nursing care (Fairman, 2008, p. 7). This space is indeed a crowded one (Fairman, 2008, p. 200, note 9). Prescriptive authority is discussed in greater detail in Chapter 6.

The Great Society entitlement programs signif icantly influenced the need for NPs to care for people who were covered under Medicare and Medicaid. Predominant social movements—women's rights, civil rights, antiwar protest, consumerism—had a profound impact on the need for groups to assert their place in the society of the 1960s and early 1970s. Nurses were not immune to the forces unleashed in these years and took advantage of the opportunities to work with physicians "in relationships that were entrepreneurial and groundbreaking, and to engage in a kind of dialogue that supported new models of care" (Fairman, 2002, p. 165). These nurses were pioneers, rebels, and renegades treading on uncertain ground.

The National Advisory Commission on Health Manpower supported the NP movement (Moxley, 1968). The Committee to Study Extended Roles for Nurses in the early 1970s

recommended that the expanded role for nurses was necessary to provide the consumer with access to health care and proposed the inclusion of highly developed health assessment skills (Kalisch & Kalisch, 1986; Leininger et al., 1972; Marchione & Garland, 1997). Although the committee did stop short of providing a def initive scope-of-practice statement, it recommended support for licensure and certif ication for advanced practice, recognition in the nursing practice act, further cost-benef it research, and surveys on role impact. Government and private groups rapidly developed funding support for educational programs (Hamric et al., 2013). According to Marchione and Garland (1997), "The traditional role of humanistic caring, comforting, nurturing and supporting was to be maintained and improved by the addition" of new primary care functions that the Department of Health, Education, and Welfare approved: total patient assessment, monitoring, health promotion, and a focus that encompassed not only disease prevention but health promotion and maintenance, treatment, and continuity of care.

The Division of Nursing of the Department of Health, Education, and Welfare tracked the development of the NP role from 1974 to 1977. During that time, the number of NP programs rose from 86 to 178 across the country with signif icant governmental support through the Nurse Training Act to advanced practice nursing education programs of all types. Although nurse educators by this time wanted NP education standardized, in 1977 most NP programs awarded a certif icate with some still using continuing education models and accepting less than a baccalaureate degree for entry. However, the number of NP graduates of master's programs did increase from 20% in 1975 to 26% in 1977, again largely encouraged by the availability of federal funds for support. The education of NPs was the rallying cry for the formation of the NONPF in 1980, dedicated to def ining curriculum and evaluation standards as well as pioneering research and development related to NP practice and teaching-learning methodologies. The political voice for NPs was enhanced with the formation of the American Academy of Nurse Practitioners (AANP) in 1985 and the American College of Nurse Practitioners (ACNP) in 2003.

The Nurse Training Acts of 1971 and 1975 were critical in providing federal funding to support NP programs. By 1979, more than 133 programs and tracks existed, and approximately 15,000 NPs were in practice. By 1983 and 1984, NP graduates numbered approximately 20,000 to 24,000; they were primarily employed in sites that served those in greatest need: public health departments, community health centers, outpatient and rural clinics, health maintenance organizations, school-based clinics, and occupational health clinics (Kalisch & Kalisch, 1986; Lusk et al., 2019; Pulcini & Wagner, 2001). NPs were typically providing care for health promotion, disease prevention, minor acute problems, chronic stabilized illness, and the full range of teaching and coaching that nurses have always provided for patients and families.

A hindrance to practice in rural areas was finding appropriate physician backup. By 1987, the federal government had spent $100 million to promote NP education, primarily through the U.S. Public Health Service Division of Nursing (Pulcini & Wagner, 2001). By the 1980s, the master's degree was viewed broadly as the educational standard for advanced practice (Geolot, 1987; Sultz et al., 1983), and by 1989, 90% of programs were master's and post-master's level (Pulcini & Wagner, 2001). The NONPF thrived in the 1980s, developing

curriculum guidelines and competencies, surveying faculties, and studying role components.

An interorganizational task force to identify criteria for quality NP educational programs occurred as an outgrowth of the work to unify certif ication. This work, begun in 1995 by the NONPF and NLN, was the beginning of the development of a model curriculum for NP education that would be used nationally and provide the basis for certif ication eligibility (Hamric et al., 2013). At that time, the NLN was the only accrediting body for nursing graduate programs, and program standards, curriculum guides, and domains and competencies for NP education from the NONPF were often used by the NLN in the accreditation process. In 1998, the Commission on Collegiate Nursing Education, an accreditation arm of the AACN, was formed to provide an alternative to the NLN as a source of accreditation to schools offering baccalaureate and higher degrees in nursing. The thrust of the 2001 meeting of the NP task force when it reconvened was for accrediting bodies to move toward the approval of NONPF guidelines and standards as the reigning accepted standards for accreditation of programs preparing NPs (Edwards et al., 2003). In addition, the APRN Consensus Model (see later section) spells out specif ic criteria for preapproval and accreditation of APRN education.

There is a cautionary note to this perception of progress. Despite clear statutes in some states, credentialing by insurers for NPs may still lag, providing additional barriers to care. Scope of practice, a primary focus of the 2011 Institute of Medicine (IOM) *Future of Nursing* recommendations, remains a contested battleground for control of professional practice and reimbursement.

In 2008, the adoption of the Consensus Model for Advanced Practice Registered Nurse (APRN) Regulation by the National Council of State Boards of Nursing (NCSBN) gave direction for gains in legal authority, prescriptive privilege, and reimbursement mechanisms across the 50 states and the District of Columbia. Current NPs have achieved a higher degree of autonomy in practice and associated prestige (Phillips, 2011) with the mandate for continued advancement contained in the IOM report *The Future of Nursing* (2011). More victories than failures provide evidence of success, but, as in the late 1970s, today's NP is still battling for autonomy and consumer recognition in practice, especially in states with many physicians. Veterans' Health Affairs (VHA) Advanced Practice Registered Nurses Proposed Rule (81 F.R. 33155 [proposed May 25, 2016]) to the Federal Register passed in 2016 with the CRNAs left behind (Livanos, 2017); implementation of this rule still varies widely from VA to VA. As early as 1985, Hayes stated, "No role in nursing, or for that matter, in any field has been so debated in the literature, and possibly no other nursing function has ever been so obsessed about by those performing it as has been the NP role" (Hayes, 1985, p. 145). Yet, as Hayes asserts, there has been an avalanche of support from satisf ied consumers of NP services.

THE CONSENSUS MODEL

In an effort to bring some clarity to and standardization of advanced practice nursing roles, in 2008 the APRN Consensus Model, also referred to as a regulatory model, was published by the APRN Consensus Work Group and the NCSBN APRN Advisory Committee with

extensive input from a larger APRN stakeholder community. The nomenclature *APRN* was adopted, and four APRN roles were def ined in the document: CNMs, CRNAs, CNSs, and certif ied nurse practitioners (CNPs). An APRN is further def ined as an RN who has completed a graduate degree or postgraduate program that has prepared him or her to practice in one of these four roles. The acronym LACE—standing for "licensure, accreditation, certif ication, and education"—demonstrates alliances across these spheres for implementation of the APRN Consensus Model, thus promoting uniformity and standardization of the APRN role for the safety of the consumer of health care. This model has been widely implemented with an alignment of current national certifying examinations with educational program offerings and subsequent licensure. This is amazing given the continued strength of states' rights and the opposition of organized medicine.

YET ANOTHER "DISRUPTIVE INNOVATION": THE DOCTOR OF NURSING PRACTICE

The future of nursing contains clouds on the horizon as well as sunshine. Fairman (1999) cautions that although local negotiations between individual physicians and nurses may have been, in some cases, easily traversed in the interest of the good of the patient, on the professional level hierarchical relationships and power are at stake. As noted at the start of this chapter, within this hotly competitive health-care environment, with the still controversial implementation of the PPACA (2010), the entire health-care sector continues to face hurdles, challenges, and assaults. Our political environment remains contentious, disruptive, and polarized—indeed, paralyzed. This is mirrored in the health-care sector and between health-care disciplines.

In October 2004, the members of the AACN endorsed the *Position Statement on the Practice Doctorate in Nursing,* which called for the movement of educational preparation for advanced practice nursing roles from the master's degree to the doctoral level by 2015. Although this target date has not been achieved, there has been much movement in this direction, and DNP programs are experiencing dramatic growth. This "new" doctorate is a "practice" doctorate in contrast to the doctor of philosophy (PhD)—the traditional research degree—and is not intended to "replace" the PhD. There are many reasons for this development. Some master's programs for APNs had become very lengthy without any change in the credential awarded at the completion of studies. The number of credits, in many cases, approaches what is required for a doctoral degree. And many educators believe that this is necessary to ensure clinical competency. Furthermore, other practice disciplines such as pharmacy, physiotherapy, and occupational therapy have moved on to doctoral-level preparation. The debate continues. See Chapter 4 for more discussion on this issue.

THE IOM ISSUES ITS 2010 REPORT: THE FUTURE OF NURSING: LEADING CHANGE, ADVANCING HEALTH

This dramatic, evidence-based report presents the results of 2 years of study by the Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing at the IOM. This committee was chaired by Donna Shalala, PhD, FAAN, long-time nurse advocate, former head of the U.S. Department of Health and Human Services (1992–2000), and now University of Miami president, in concert with Nursing Vice Chair Linda Burnes Bolton, RN, DrPH, FAAN. This report was presented in November 2010. The far-reaching impact of the report's recommendations are just now beginning to be fully absorbed. Key recommendations begin with the assumption that "nursing can fill … new and expanded roles in a redesigned healthcare system" (IOM, 2011, p. xi). We will need our renegades, rebels, and trailblazers more than ever.

SUMMARY

The boundaries of practice are always malleable. They are always subject to myriad external forces—political, economic, social, and cultural—and are interpreted in different ways by different practitioners. APRNs are a mixed breed; each trajectory under the umbrella of advanced nursing practice has evolved differently and under variable circumstances. This leads to vigor, strength, and diversity. The struggles documented within this chapter have aimed to strengthen each variant of the nursing advanced practice role. The struggles are not over; in many ways, they are just beginning. It is our hope that nursing will continue to produce rebels, renegades, and trailblazers motivated by concern for patients, concern for community, and concern for humanity. We have no doubt that we will continue to take on new and challenging roles using creative and diverse strategies. The COVID-19 pandemic merely highlights the urgency of these issues and shines a blinding light upon ongoing health disparities and inequities. Nursing continues to lurch forward; progress is sometimes slow, sometimes variable, sometimes unsteady—but, as always, nurses continue to find opportunity in chaos, motivated, as ever, by commitment to patients, families, and communities, to human need and alleviation of suffering.

LEARNING ACTIVITY

Consider and discuss with your classmates the following critical-thinking questions.

- Hypothesize about the future of advanced practice nursing, especially given the shortage of primary care physicians. What is the next trail to be blazed? Consider carefully the prescription of medications and medical services.
- Why is the use of birthing centers and nurse-midwives so prominent in cultures other than North America?
- Does the growth and development of the advanced practice nursing role add to or detract from the development of nursing as a distinct scientif ic discipline?
- The American public has grown to know and appreciate nurse practitioners. This followed an initial resistance to the role by the nursing profession. What are some

reasons for these changed attitudes?

- Good patient care is a common goal between nurses and physicians and has propelled the nurse practitioner into common acceptance. Describe NP practice in your state in this context.
- The issues of physician supervision and control of practice continue as a major issue of dispute between physicians and advanced practice nurses. How far have we come? What differences remain—role to role and place to place?

* In some states, the title CRNA has been changed to APN-Anesthesia.

2

Emerging Roles of the Advanced Practice Nurse

Patricia A. Tabloski

Learning Outcomes

Learning outcomes expected as a result of this chapter:

- Describe the advanced practice registered nurses (APRN) Scope of Practice and the Consensus Model.
- Discuss how the care provided by APRNs contributes to cost savings, quality improvement, and implementation of evidence-based practice.
- Identify role highlights of the APRN in primary care with adult, older adult, and pediatric populations in various community settings; in psychiatric and mental health care; in women's health/gender-related care; and in acute care with neonatal, pediatric, adult, and the older adult populations.
- Discuss nurse-midwifery with an emphasis on primary care and first-assistant services.
- Summarize the new certif ication requirements for APRNs.
- Discuss palliative and hospice care as an emerging practice area for all APRNs.
- Propose diverse practice opportunities for APRNs with emphasis on emerging roles.

INTRODUCTION

Advanced practice nursing continues to evolve to meet the changing and increasing needs of patients, communities, and society as a whole. Advanced practice registered nurses (APRNs)* have successfully adapted their roles to meet these ever-changing needs and expectations. The growth occurring now can be attributed to several elements, such as health-care reform and fuller implementation of the Patient Protection and Affordable Care Act (PPACA), a national emphasis on the provision of safe and high-quality care, pay-for-performance initiatives, and the call by the Institute of Medicine (IOM)'s *Future of Nursing* (2011) report for APRNs to work to the fullest extent of their scopes of practice without

restrictions or barriers. These initiatives foster new opportunities for the development of advanced practice nursing roles.

Progress has been achieved on some of the *Future of Nursing* report's goals, but clearly work is needed on others. One of the goals of the report was to increase the number of nurses with a bachelor's degree to 80% by 2020. Progress to date notes that 54% of employed nurses now hold bachelor's degrees (up from 49% in 2010). A second goal was to double the number of employed nurses with a doctoral degree by 2020. This recommendation has been achieved, growing from 10,022 in 2010 to 33,640 in 2018. Additionally, progress has been made by state legislatures to enable APRNs to practice to the full extent of their education and training. We have increased the number of nurses assuming leadership positions on boards to 7,100 (goal was 10,000) and increased race/ethnicity and gender diversity to begin to approach levels that represent the U.S. population. Small progress has been achieved, but percentages of men and ethnically and culturally diverse persons are still well below national statistics (Campaign for Action, 2020).

Several factors have influenced the emergence and acceptability of advanced practice roles. These factors include the growing numbers of older patients as baby boomers reach retirement age, increased complexity and severity of illness in hospitalized patients, recent experiences with a pandemic accompanied by systemic failures within our public health infrastructure, further reductions in medical residents' clinical work hours, a call for greater access to care for all citizens, and nursing and primary care physician shortages that vary by geographical region. These and other factors will continue to influence the growth and acceptance of the APRN role in the coming decades.

APRNs provide direct patient care including diagnosis and treatment of illness; collaborate with other health-care professionals to advise on public health issues; oversee and manage chronic diseases; and provide specialty care consistent with their education, including administration of anesthesia, pain management services, quality end-of-life care, and holistic maternity care including infant delivery. APRNs must possess at least a master's degree in addition to the basic nursing education, state licensing as required for all registered nurses, and additional advanced practice credentialing when def ined by the state.

In 2004, the member schools in the American Association of Colleges of Nursing (AACN, 2006) voted to endorse the *Position Statement on the Practice Doctorate in Nursing.* This document called for increasing the educational requirement for APRN practice from the master's level to the doctoral level by 2015. While about 25% of schools of nursing added Doctor of Nursing Practice (DNP) programs, they also retained their master's programs, which enrolled three times as many students as DNP programs did. Further, by 2015, no state board of nursing had adopted the DNP as the standard for entry into APRN practice, and the demand for DNP graduates in the job market was not signif icantly different than for graduates prepared with a master's degree (Doctor of Nursing Practice.org, 2020). As a result, with the Master of Science in Nursing (MSN) degree still acceptable to employers while offering the benef it of a less expensive and shorter pathway to advanced practice, the DNP requirement has been slow to be implemented. Currently there are 348 DNP programs enrolling students at schools of nursing nationwide with an additional 98 new DNP programs in the planning stage (AACN, 2019).

The DNP curriculum was designed to build on traditional master's program content by including content on evidence-based practice, quality improvement, systems leadership, scientif ic knowledge, and practice expertise to meet the changing demands of our nation's complex health-care environment. Additionally, the DNP mirrors the evolution of other health-care professions that have transitioned to doctoral education as an entry into practice including medicine (MD), dentistry (DDS), pharmacy (PharmD), physical therapy (DPT), and psychology (PsyD), which all require practice doctorates. Nationally, schools of nursing that have initiated the DNP are reporting sizable enrollments, and the demand for DNP-prepared nurses is growing in recognition of the many and signif icant contributions that these APRNs can make in the practice arena (AACN, 2019). Additionally, in a 2018 national survey, APRNs with a DNP were paid, on average, about $7,000 more per year than those with a master's degree with DNPs earning an average of $94,000, and those with a master's degree earing $87,000 (Lippincott Solutions, 2018). According to AACN (2019), the benef its of obtaining a DNP degree include:

- Enhanced knowledge and skills to improve patient outcomes
- Enhanced leadership skills
- Ability to serve as clinical faculty to educate future APRNs
- Development of needed competencies for increasingly complex clinical, faculty, and leadership roles

Although certif ication for entry into practice for most APRNs is still allowed for those with only master's degrees, the Council on Accreditation of Nurse Anesthesia Education Programs will require the DNP degree as the requirement for certif ication by 2022, regardless of state licensing requirements (Doctor of Nursing Practice.org, 2020). Widespread adoption of the DNP standard for entry into practice could assist APRNs with their efforts to convince state lawmakers to authorize expanded practice authority, autonomy of practice, and clinical privileges.

The four major groups of APRNs currently practicing in the United States are certif ied registered nurse anesthetists (CRNAs), certif ied nurse-midwives (CNMs), clinical nurse specialists (CNSs), and nurse practitioners (NPs). The range of current advanced practice roles and the numbers of nurses in these roles demonstrate the continued success and acceptance of APRNs. (See **Table 2.1**.) Studies evaluating clinical outcomes of care delivered by APRNs are overwhelmingly positive as are surveys of patient satisfaction with the care provided by APRNs.

TABLE 2.1

Numbers of Advanced Practice Nurses

Clinical nurse specialists	70,000

Certif ied registered nurse anesthetists	54,000
Certif ied nurse-midwives	12,218
Nurse practitioners	290,000

Source: Adapted from American Association of Nurse Anesthetists. (2019). *Certif ied registered nurse anesthetists fact sheet*. Retrieved from https://www.aana.com; Miller-Hoover, S. (2020). *Year of the nurse: Midwives.* Retrieved from https://www.rn.com/featured-stories/year-of-the-nurse-midwives/; National Association of Clinical Nurse Specialists (2020). *Fact sheet.* Retrieved from https://www.aana.com; Phillips, S. J. (2020). 32nd annual legislative update. *Nurse Practitioner, 45*(1), 28–55.

AACN in collaboration with leaders from the practice environment have supported the creation of a nurse role to enhance care delivery entitled the clinical nurse leader (CNL). The CNL is an advanced generalist with a master's degree. The CNL oversees care coordination, implements evidence-based practice, evaluates outcomes, and functions as part of an interdisciplinary team. The CNL is *not* prepared as an APRN but rather complements that role and provides consultation and support (AACN, 2020).

By accepting the responsibilities of the advanced practice role, APRNs understand the need to expand legislative recognition of their professional status, including prescriptive authority and reimbursement for care delivered. Recognition of APRNs in the United States varies with most states providing some level of legal recognition and prescriptive authority.

SCOPE OF PRACTICE

Professional nursing organizations and state boards of nursing understand the need to describe and interpret the responsibilities of advanced practitioners in their areas of specialization. Underlying this need is the obligation to ensure public safety, to identify the essential characteristics of advanced practice, and to interpret for the practitioner the components of competent care (American Nurses Association, 2020). The scope of practice may be described by the functions performed by the APRN and the minimal competencies needed to perform those functions. These descriptions and guidelines direct APRNs in the implementation and conceptualization of their roles and responsibilities.

In addition, each state has a legislative and regulatory stance on issues affecting advanced practice within its jurisdiction (Phillips, 2020). The legal scope of practice, including prerogatives for diagnosing, prescriptive authority, and reimbursement, is described within these regulations. Scope and standards of practice are def ined by the professional organization and enacted into law at the state level. The actual role is further delineated through the recognition of practice responsibilities and activities at the institutional or employment level. Hospitals and other health-care organizations typically def ine role responsibilities and prerogatives through a process of review by practitioners already in the role and then commit the specif ics to a contract wherein responsibilities, prerogatives, and limitations are made clear. Ideally, the governmental, professional, and institutional

perspectives on practice are congruent. This review results in the granting of institutional- or organizational-based practice privileges for the APRN.

Although scope of practice guidelines are important philosophically and may even have the weight of law, they do not imply that the roles of APRNs are unchanging. When knowledge evolves and different care-delivery models emerge, roles also evolve. More commonly, roles change as different practice settings become available and opportunities for improved patient access to care appear. The nature of advanced practice is broader than individual roles or functions.

Regulation of the Advanced Practice Registered Nurse

Regulation of APRNs occurs at the state level, but there are both educational and certif ication prerequisites. Graduate-level educational preparation of APRNs is guided by educators and members of professional organizations who identify essential curricular goals, content, and competencies expected of APRN graduates.

Content and competencies core to all APRNs and those specif ic to a particular role must be provided in all APRN educational programs. **Table 2.2** lists major APRN organizations that develop the educational and certif ication prerequisites and the APRN essential content and competency documents that direct the preparation of APRNs for entry into practice. On completion of an accredited master's or doctoral-level program, graduates must pass a national certif ication examination in the area of intended practice before applying for licensure at the state level.

APRNs may be recognized and licensed at the state level in one of the four aforementioned roles. However, many issues have been identif ied with the current regulatory process, particularly eligibility for reciprocity of licensure between states. In response to this need to develop more consistent standards for APRN recognition across states, the APRN Consensus Work Group and the National Council of State Boards of Nursing have developed the *Consensus Model for APRN Regulation: Licensure, Accreditation, Certif ication and Education* (2008; 2020). This model sought to improve patient access to health care delivered by APRNs, to enable APRN practice across different states, and to establish high standards for APRN certif ication and license renewal. This document has been accepted by over 40 nursing organizations and stakeholder groups. As a result, most certif ication credentials did not change but some were changed to clarify the role and population served, whereas other certif ication categories were retired. The regulatory model acknowledges the four APRN roles and recommends that advanced practice registered nursing must be regulated in one of the four roles and in at least one of six population foci: psychiatric or mental health, women's health/gender-related, adult-gerontology, pediatrics, neonatal, and individual families across the life span. The adult-gerontology and pediatric populations are further distinguished by either an acute care or a primary care focus. Of note, the CNS practice, although specialized in focus, is described to occur across primary and acute care settings and as such must reflect both in their education. Further, the Consensus Model specif ied completion of a graduate educational program that included completion of three separate courses of advanced pathophysiology, health assessment, and pharmacology with a minimum of 500-precepted

clinical hours.

TABLE 2.2

Professional Organizations and Essential Educational Content

Organization	Landmark Publications
American Association of Colleges of Nursing	*The essentials of master's education in nursing.* Washington, DC: Author, 2011. *The essentials of doctoral education for advanced nursing practice.* Washington, DC: Author, 2006. *Essentials Task Force, tasked to re-envision all essentials documents to ensure quality in nursing programs offered at the baccalaureate, master's and doctoral (DNP) levels.* Washington, DC: Author, 2020.
American College of Nurse-Midwives	*Core competencies for basic midwifery practice.* Silver Spring, MD: Author, 2012. *Competencies for master's level midwifery education.* Silver Spring, MD: Author, 2014. *Midwifery education and doctoral education.* Silver Spring, MD: Author, 2019.
National Association of Nurse Practitioners in Women's Health	*The women's health nurse practitioner: Guidelines for practice and education* (8th ed.). Washington, DC: Author, 2020. *National Association of Nurse Practitioners in Women's Health white paper: The essential role of women's health nurse practitioners.* Author, 2020.
Council on Accreditation of Nurse Anesthesia Educational Programs	*Standards for accreditation of nurse anesthesia educational programs.* Chicago, IL: Author, 2019.
National Association of Clinical Nurse Specialists	*Criteria for the evaluation of clinical nurse specialist master's, practice doctorate, and post-graduate certif icate educational programs.* Philadelphia, PA: Author, 2012.

	CNS statement for clinical nurse specialist practice and education (CNS statement). Philadelphia, PA: Author, 2019.
National Organization of Nurse Practitioner Faculties	*Common advanced practice registered nurse doctoral-level competencies.* Washington, DC: Author, 2017. *Adult-gerontological acute care nurse practitioner competencies.* Washington, DC: Author, 2016. *Adult-gerontological primary care nurse practitioner competencies.* Washington, DC: Author, 2013. *Population-focused nurse practitioner competencies: Family/Across the lifespan, neonatal, pediatric acute care, pediatric primary care, psychiatric-mental health, women's health/gender-related.* Washington, DC: Author, 2013.

Requirements for consistent educational preparation across all APRN roles have provided greater uniformity among programs. The curricula for all APRNs must include graduate-level courses in advanced pathophysiology, advanced physical assessment, and advanced pharmacology, called the *APRN core* (Consensus Model, 2008). In addition, content related to the population served, role development, and clinical experience in the specif ic role is required. The Consensus Model has influenced and will continue to influence the licensure, accreditation, certif ication, and educational preparation of all future APRNs, and the essential characteristics of that model can be found in **Table 2.3**.

Clinical Nurse Specialist (CNS)

CNSs are nurses with master's- or doctorate-level education in a def ined area of knowledge and practice. They typically work in unit- or population-based settings; in hospitals, off ices, or outpatient clinic settings; and in community practice. The American Association of Critical Care Nurses offers CNS certif ication in Adult-Gerontology, Pediatric, and Neonatal Care (Wellness through Acute Care). Other certif ications are available through the American Nurses Credentialing Center. Certif ication denotes excellence in patient care through system improvements, research, and high-quality nursing practice (AACN, 2020). Many states require graduate-level certif ication as a requisite for practice. CNSs have prescriptive authority in 36 states with some being contingent on physician collaboration/oversight (Phillips, 2020).

TABLE 2.3

Essential Characteristics of the Advanced Practice Registered Nurse*

1. Completion of an accredited graduate-level program in one of four areas: nurse-midwifery, nurse anesthesia, NP, or CNS
2. Successful completion of a national certif ication examination requiring graduate-level education and measuring APRN role and population-of-focus competencies and maintains competence through recertif ication
3. Possession of advanced clinical knowledge and skills needed for direct patient care and a signif icant component of education and practice focuses on direct care of individuals
4. Practice builds on RN competencies and demonstrates depth and breadth of knowledge, data synthesis, complex skills, intervention, and role autonomy
5. Educational preparation for health promotion and maintenance, assessment, diagnosis, and management of patient problems including use and prescription of pharmacological and nonpharmacological interventions
6. Possesses depth and breadth of clinical experience reflecting intended area of practice
7. Possesses license to practice as an APRN in one of the four APRN roles: CRNA, CNM, CNS, or CNP

Note. *APRN*, advanced practice registered nurse; *CNM*, certif ied nurse-midwife; *CNP*, certif ied nurse practitioner; *CNS*, clinical nurse specialist; *CRNA*, certif ied registered nurse anesthetist; *RN*, registered nurse.

*Adapted from *Consensus Model for APRN Regulation: Licensure, Accreditation, Certif ication and Education.* (2008). Completed through the work of the APRN Consensus Work Group and the National Council of State Boards of Nursing APRN Advisory Committee. Retrieved from http://www.aacn.nche.edu/Education/pdf/APRNReport.pdf

Typical CNS activities include the following:

- Synthesizing, interpreting, making decisions and recommendations, and evaluating responses based on complex, sometimes conflicting, sources of data
- Identifying and prioritizing clinical problems based on education, research, and experiential knowledge
- Facilitating development of clinical judgment in health-care team members (e.g., nursing staff, medical staff, other health-care providers) through serving as a role model, teaching, coaching, and/or mentoring
- Promoting a caring and supportive environment
- Promoting the value of lifelong learning and evidence-based practice while continually acquiring knowledge and skills needed to address questions arising in practice to improve patient care
- Evaluating current and innovative practices in patient care based on evidence-based

practice, research, and experiential knowledge
- Incorporating evidence-based practice guidelines; research; and experiential knowledge to formulate, evaluate, and/or revise policies, procedures, and protocols

Successful achievement of these results often involves partnerships with physicians and acute care nurse practitioners (ACNPs). The acute care CNS is prepared to function as an expert clinician and patient advocate, a leader in the advancement of nursing practice, and an identif ier of opportunities for organization and system changes to enhance patient care (AACN, 2020).

The CNS shifts functions depending on the needs of the situation and participates in a mix of direct and indirect patient care activities. Still, the traditional roles of CNS practice remain, including those of expert practitioner, educator, consultant, manager, and researcher.

The Clinical Nurse Specialist and Cost Savings

Multiple studies have demonstrated the positive contributions of CNSs to patient care outcomes and patient satisfaction, but fewer studies have evaluated the CNSs' economic impact and their ability to generate income and save costs. A recent systematic review by Salamanca-Balen et al. (2018) demonstrated that CNS interventions may be effective in reducing specif ic resource costs such as hospitalization/re-hospitalization and in decreased length of stay. These savings are real, but they may not be returned to the CNS's home (usually nursing) department. Because of this, the immediate supervisors of CNSs may not appreciate the benef its of expert CNS practice. This reality is compounded by the inability of CNSs to bill directly for services if they are hospital-based, salaried employees. Skilled advanced practice nursing care is not directly reimbursed and remains bundled in the hospital's room, food, laundry, and supplies bill. More creative and appropriate financial models that could remedy the situation are needed. This limitation on role functioning is usually not faced by self-employed or practice-based CNSs, who likely are not institutional employees and who generally work in outpatient or community settings.

The Clinical Nurse Specialist and Evidence-Based Practice (EBP)

CNSs have long been considered change agents; recently, the implementation of EBP is where many CNSs spend their time. CNS involvement in quality initiatives and their contributions to improved patient outcomes have been recognized as agencies apply for Magnet Recognition. The Magnet Recognition Program® offered by the American Nurses Credentialing Center (ANCC) recognizes health-care organizations for quality patient care, nursing excellence, and innovations in professional nursing practice (Hanson, 2015). The CNS role is essential to implementing innovation and sustaining improved patient outcomes, which are integral components of the Magnet Recognition Program. The CNS role broadly and specif ically supports the process by which care is delineated, changes are made, and improvements are noted. CNS participation in the attainment of these goals and the movement of organizations toward achieving Magnet status likely will provide new and expanded opportunities for the CNS.

Ambiguity and the Clinical Nurse Specialist Role

Despite the many contributions made by CNSs to improve patient care, there remains some ambiguity related to the role. Although CNSs provide valuable patient care, support frontline staff, and drive system change to ensure regulatory compliance, some health-care organizations have reduced the number of CNSs employed in their institutions. A possible reason for this reduction may be that CNSs do not generally bill for their services and therefore do not generate revenue for the employing institution (Tracy, 2015). Research into cost reduction and improvement of patient outcomes should continue in order to document the positive direct and indirect outcomes resulting from CNS interventions across settings.

Nurse Practitioner

NPs are frontline health-care providers essential to developing and maintaining successful communication and collaboration among providers across health-care settings. In primary, acute, and specialty care settings, NPs can ensure continuity of care, decrease health-care costs, and optimize health outcomes for patients (Morgan et al., 2019; Villaseñor & Krouse, 2016). NPs are the providers of choice for millions of Americans, and the majority of NPs are prepared to deliver primary care unlike physicians, the majority of whom choose specialty practice. **Table 2.4** describes the specialty areas of practice and certification.

TABLE 2.4

Distribution by NP Certif ication

Certif ication*	Percent of NPs
Family^	65.4
Adult^	12.6
Adult–Gerontology Primary Care^	7.8
Acute Care	5.5
Pediatrics–Primary Care^	3.7
Adult–Gerontology Acute Care	3.4
Women’s Health^	2.8
Psychiatric/Mental Health–Family^	1.8