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It is hard to believe that we are publishing the fourth edition of *Advanced Practice Nursing*. Since the first edition was published in 1995, advanced practice nursing has seen incredible growth and change. Dr. Mariah Snyder, one of the first editors, envisioned a textbook to guide advanced practice nurses through the opportunities and challenges they face within a strong nursing framework. At the time of the first edition, there was only one other advanced practice text on the market. Today, there are many texts available, providing educators and students with a wide variety of choices to meet their educational needs.

This fourth edition is written for graduate students enrolled in master's or practice doctorate advanced practice nursing programs. The content will be helpful for both the beginning student in a graduate nursing program and also for those nearing completion of their program as they explore future employment as an advanced practice nurse. Major role development concepts and topics that graduate nursing students should address during their studies are highlighted. The content is not setting or role specific but addresses advanced nursing practice standards and competencies identified by professional nursing organizations, including the American Nurses Association (ANA) Standards of Practice, American Association of Colleges of Nursing (AACN), the National Organization of Nurse Practitioner Faculties (NONPF), the National Association of Clinical Nurse Specialists (NACNS), the American Association of Nurse Anesthetists (AANA), and the American College of Nurse Midwives (ACNM). The development of a new regulatory model for advanced practice registered nurses along with the development of the doctor of nursing practice as the entry level for advanced practice nursing by 2015 is reflected in the content offered here.

A brief overview of each of the four advanced practice registered nurse (APRN) roles and the historical context within which they developed provides the reader with an understanding of the richness of
advanced practice nursing. Contributors to this text bring perspectives from a wide variety of practice backgrounds and settings. For example, the chapter on health policy, written by a former secretary of health and human services for the state of Wisconsin, provides unique insights into policy development.

This edition of *Advanced Practice Nursing* reflects the movement of advanced practice nursing toward the practice doctorate. The reader will find some new and revised areas of the text consistent with developing changes in advanced practice. As the doctor of nursing practice (DNP) develops, emphasis will not only focus on care and management of patients, but also how the advanced practice nurse interacts and functions within the health care arena. The chapter on leadership has been revised significantly to emphasize leadership development in practice doctorate programs. Three chapters—informatics, health care organization, and health care policy—have been added to this edition to reflect essential content identified by the AACN for DNP programs. The chapter on research has been revised to emphasize translation of research into practice and evidence-based practice. The reimbursement chapter has undergone major revision and will assist advanced practice nurses in navigating the reimbursement process. Other revisions include expansion of content on regulation, certification, and credentialing, as well as inclusion of practice agreements for advanced practice nurses.

It is noted that the APRN Regulatory Model proposed by the APRN Consensus and Joint Dialogue Group uses the term *advanced practice registered nurse* (APRN) to include all four APN roles: nurse practitioner, clinical nurse specialists, certified nurse-midwives, and certified registered nurse anesthetists. As the APRN Regulatory Model is implemented, it is anticipated that APRN will be used consistently to designate all advanced practice nurses. We have used the term APN and APRN interchangeably in this edition.

As with past editions, our goal is to provide a text for students and entry-level advanced practice nurses that is easy to read, a quick reference, and a guide. With multiple APN texts available, we believe that this guide for advanced practice will assist advanced practice nurses in launching their careers, with pertinent, practical, useful, and insightful information.

Michaelene P. Jansen
Mary Zwygart-Stauffacher
Overview of Advanced Practice Nursing

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Advanced practice nurses (APNs) are taking their place in the forefront of the rapidly changing health care system, developing a myriad of roles in organizations that aim to provide cost-effective, quality care. APNs can be found working internationally in community health, in government positions, hospitals, nursing homes, and clinics. They serve the most economically disadvantaged as well as the elite. APNs function as deans and educators, as consultants and researchers, as policy experts, and, of course, as outstanding clinicians.

Advanced practice nursing is an exciting career choice with many opportunities and challenges. Some of the challenges are related to prospective payment systems, decreased hospital stays, and spiraling costs. Evolving technology is producing amazing diagnostic and treatment results; genetic research is unraveling complex pathophysiology; and sophisticated information technology is changing the way that information is gathered, stored, and shared. Home health care programs and complimentary care clinics are now commonplace. These and other trends have resulted in a rapidly changing health care system, ready for the influence of APNs.

Graduate education prepares APNs to be key players in these complex systems, and nursing theories provide APNs with a strong conceptual base for practice. Nursing research uncovers scientific evidence for best practice, and research utilization skills enable APNs to bring fresh
ideas and proven interventions to health care consumers. Complex, evolving reimbursement mechanisms require that APN education also encompass content in financial management and health policy issues. Although APNs were traditionally educated to provide advanced nursing care in a specific system or setting such as a hospital unit or clinic, it is now fairly common for APNs to work across system boundaries to follow their patients in a multifaceted care delivery arena. For example, they may see their patients in outpatient clinics, visit them during hospitalizations to assist in care coordination, and perhaps do home visits or communicate with long-term care organizations following a patient’s discharge (Marten, 2000). Working in multiple systems requires APNs to be credentialed in multiple sites in order to legally provide care.

Advanced specialization of nurses beyond their formal entry-level education has a long history in nursing. Nurse anesthetists and nurse-midwives were the first to develop programs, professional organizations, and certification, beginning nearly a century ago (Hanson & Hamric, 2003). However, only recently has the preparation, certification, and licensing of these advanced nurses become more standardized (American Nurses Association [ANA], 2004a). The term “advanced practice nurse” (APN), sometimes also called “advanced practice registered nurse” (APRN), denotes nurses with formal post-baccalaureate preparation in one of four roles: nurse-midwives, nurse anesthetists, nurse practitioners, and clinical nurse specialists (ANA, 2004a).

A number of factors led nursing leaders to delineate these four roles in advanced practice nursing. A critical factor was the legal status that enabled APNs to obtain direct reimbursement for their nursing services, a gradual process first achieved by nurse-midwives 25 years ago and expanded to the other three roles over time. Reimbursement law and regulations require that nursing be able to specify the preparation of these reimbursable APNs and led to increased standardization of titling and education. The term APN became the common “umbrella” term used to designate these four roles.

Public protection was another factor that led to the APN delineation. State boards of nursing are mandated by state legislatures to safeguard the public from unsafe practice, and over time all states have implemented laws and regulations to ensure that nurses who have APN preparation have certain expertise and skills. In some states, this is done by a second-level licensure process; in other states, it is done through laws such as title protection and specific designation of scope of practice (National Council of State Boards of Nursing, 2002).
A final factor influencing standardization has been the definition of advanced practice nursing curricular guidelines and program standards. This definition was developed by nursing organizations such as the American Association of Colleges of Nursing (AACN, 1996, 2006), the American Nurses Association (ANA, 2004a, 2004b), the National Organization of Nurse Practitioner Faculties (NONPF, 2006a, 2006b), and numerous specialty organizations.

ADVANCED PRACTICE NURSING

There are many definitions of advanced practice nursing. Nursing’s Scope and Standards of Practice (ANA, 2004b) defines APNs as having advanced specialized clinical knowledge and skills through master's or doctoral education that prepares them for specialization, expansion, and advancement of practice. Specialization is concentrating or limiting one’s focus to part of the whole field of nursing. Expansion refers to the acquisition of new practice knowledge and skills, including knowledge and skills legitimizing role autonomy within areas of practice that overlap traditional boundaries of medical practice. Advancement involves both specialization and expansion and is characterized by the integration of theoretical, research-based, and practical knowledge that occurs as part of graduate education in nursing. APN is an umbrella term for the four roles mentioned earlier: clinical nurse specialist (CNS), certified registered nurse anesthetist (CRNA), certified nurse-midwife (CNM), and nurse practitioner (NP). Each role is distinguishable from the others, but in some respects they overlap. This APN definition encompasses nurses engaged in clinical practice; it does not include nurses with advanced preparation for administration, education, or research (ANA, 2004b).

Only recently has the expectation arisen that APNs should receive their education within master's or doctoral nursing programs. Although CNSs have always required master's degrees in nursing, the educational preparation for many nurse-midwives, nurse anesthetists, and nurse practitioners did not necessarily occur in graduate nursing programs. Now, however, NPs must receive their education in graduate master's or clinical doctoral programs in nursing. CRNAs receive preparation in graduate programs, although the master's degree does not necessarily have to be in nursing. The majority of CNMs are prepared in graduate nursing programs, although some programs are in health-related professions schools. Moving the education of all APNs to graduate degree
nursing programs, and now the movement to the DNP, has resulted in more uniformity in CNM, CRNA, NP, and CNS education, regulation, and credentialing.

The four groups included within the definition of APN have each evolved along different paths over different time frames. Because of their historical underpinnings, each APN category has developed with a unique history; and members of each of the four groups have strong allegiance to their titles and their professional organizations. At times, this allegiance has been a barrier to the development of consistent language regarding APN roles because each group has developed its own education, history, and title. However, significant progress continues to be made in identifying commonalities (Hamrick, Spross, & Hanson, 2009).

Traditionally, four functions have been identified as characteristics of APN practice: patient care, educator, consultant, and researcher (Hamric, Spross, & Hanson, 2009). Although the four functions have been most strongly associated with CNSs, these functions are appropriate for all four types of APN. NONPF (2006a) incorporates role functions of nurse practitioners within their seven domains. Research-based practice is one characteristic that has overwhelmingly been acknowledged as a key characteristic of APNs as organizational change agents. Chapter 3 discusses these roles and additional sub-roles in further detail.

The American Association of Colleges of Nursing (AACN), through a consensus building process, formulated curricular elements for graduate advanced practice nursing education in 1996. Exhibit 1.1 presents the content to be included in the graduate core curriculum and the advanced practice nursing core curriculum master’s programs. The core essentials for master’s programs are included in this text because many current APN students are in programs developed on these standards. Essentials for DNP advanced practice developed by AACN (2006), as well as DNP competencies (NONPF, 2006b), are included in Exhibit 1.2 for students enrolled in DNP advanced practice programs. DNP competencies for CNSs are currently under development by the National Association of Clinical Nurse Specialists, and the reader is referred to their website for further updates.

The core master’s clinical content focuses on advanced health and physical assessment, advanced physiology and pathology, and advanced pharmacology (often referred to as the three Ps). The AACN (1996) noted that this content is of a general nature and that specifics are needed for students in the various specialty areas. For example, nurse-midwifery students need additional content on assessment
of pregnant women and newborn infants, nurse anesthetist students require extensive content on anesthetic agents, and psychiatric/mental health students need additional content on antipsychotic medications. The essentials required of doctoral education for APNs expand upon the master's core clinical content. The areas of pathophysiology, physical assessment, and pharmacotherapeutics are highlighted in the document’s appendix (AACN, 2006).

Although the curriculum and competencies originally developed by NONPF in 1995 and updated in 2002 and 2006 (HRSA, 2002; NONPF, 2006a, 2006b) were developed specifically for NP education, they have much relevance to the content included in the graduate nursing core. Many commonalities are found between the AACN master’s and practice doctorate curriculum (AACN 1996, 2006) and the NONPF competencies (NONPF, 2006a, 2006b). The American College of Nurse-Midwives first published a set of core competencies in 1978,
which was most recently updated in 2007. The American Association of Nurse Anesthetists and the National Association of Clinical Nurse Specialists also have core competency documents readily available on their websites and frequently updated.

The NONPF domains and competencies were developed based on the work by Bryckczynski (1989), Benner (1984), and Fenton (1985).
These seven domains are: (1) management of client health/illness status, (2) nurse practitioner–patient relationship, (3) teaching-coaching function, (4) professional role, (5) managing and negotiating health care delivery systems, (6) monitoring and ensuring the quality of health care practice, and (7) culturally sensitive care (NONPF, 2006a). Specific competencies are described for each domain. These domains are detailed and encompassing, indicating that APN practice requires a broad range of knowledge and expertise. NACNS (2004) developed essential characteristics and essential core content for CNS programs based on spheres of influence: patient/clients and patients; nurses and nursing practice; and organizations/systems.

The American Nurses Association (ANA 2004a, 2004b) has developed many types of practice standards, some broadly inclusive and others specialty focused. For example, the ANA, National Association of Pediatric Nurse Practitioners (NAPNAP), and the Society for Pediatric Nursing (SPN) created a joint document that outlines pediatric nursing competencies at both basic and advanced practice levels (ANA, 2008).

Health promotion and health maintenance are emphasized in all of the nursing standards. Nurses have traditionally emphasized health promotion activities as being a key characteristic of the professional practice of nursing. Health promotion, whether it is for persons who have no specific illness or for persons who have chronic health problems, is critical in our current society. Implementation of care that focuses on health promotion also has been shown to be cost effective (Safriet, 1998; Mundinger et al., 2000). Horrocks, Anderson, and Salisbury (2002) noted that NPs offered more advice on self-care and management than did physicians, and they seemed to identify physical abnormalities more frequently. However, there was no difference in patient health outcomes between the NP- and physician-managed patient groups.

There are also professional ethics standards for APNs. In addition to issues related to confidentiality and relationships, APNs must provide support to patients and families in making ethical decisions related to treatment options (Bartter, 2001; Gallo, Angst, & Knafl, 2009). Although ethical issues appear to be more prominent in tertiary care settings, issues such as abuse and neglect are present in all settings. APNs are frequently called upon to assist staff in resolving ethical dilemmas.

The increasing complexity of care and the provision of care in multiple settings require that APNs collaborate with other health professionals. Collaboration is an ANA standard of care and is also referenced in state and federal law. Functioning on interdisciplinary teams or working
in collaboration with other health professionals requires APNs to be able to identify the contributions of nursing to patient outcomes. APNs also collaborate with patients and their families in planning care and making decisions about the most acceptable treatments.

One emerging area of scholarship emphasizes APN outcomes (Kleinpell, 2005). It is essential that nurses participate in documenting nurse practitioner outcomes in this era of health care reform. A new term is “comparative effectiveness research” (CER), especially promoted by the Agency for Healthcare Research and Quality (AHRQ) and the Institute of Medicine (IOM). Given the history of cost-effectiveness, good patient satisfaction and high-quality outcomes, APNs should fare well in CER if studies focus on nursing models and outcomes. A critical review of relevant APN outcomes research (Newhouse, Stanik-Hutt, White, Johntgen, Zangoro, Heindel, et al., in press) is a very helpful document to demonstrate nursing effectiveness and APN-sensitive indicators of care quality.

The above description of content in APN education and professional standards demonstrates the complexity and depth of the APN’s preparation and practice. There are questions about whether APNs can be fully prepared for their scope of practice in two-year master’s programs. This has prompted discussion about whether it would be more appropriate to have APNs prepared at the doctoral level (Edwardson, 2004).

Doctoral APN education existed in nursing doctorate (ND) programs as early as the mid 1980s at Rush University, Case Western Reserve University, and the University of Colorado, all of which awarded nursing doctorate (ND) degrees to students completing NP programs. These ND programs have now discontinued the ND degrees; they have been replaced by doctor of nursing practice (DNP) degrees. The DNP is a new degree first advocated by the AACN and NONPF. These two organizations as well as other nursing organizations have partnered in joint conferences, documents, and standards (AACN & NONPF, 2003). In October 2004, the nation’s nursing deans attending AACN passed a resolution to move APN education to a practice doctorate level by 2015.

There are many pros and cons to the DNP degree. The increased time and cost for students is balanced by the increase in knowledge, skill, and prestige that this doctoral degree confers. Pharmacy, audiology, physical therapy, and psychology make doctoral education the entry to practice, and this has also influenced the DNP initiative. More than 100 DNP programs were under way nationwide by early 2009 with at least another education initiative (AACN, 2009). Less clear is whether the practice community will as quickly embrace the DNP and whether
employers will compensate DNP graduates at a level commensurate to their education. Other issues include physician reactions to the nursing practice doctorate; for example, several states have implemented legislation that reserves the term “doctor” for physicians in clinical arenas (Pearson, 2009). A joint dialogue statement eloquently points out that “Graduate educational programs in colleges and universities in the United States confer academic degrees, which permit graduates to be called ‘doctor.’ No one discipline owns the title ‘doctor’” (Nurse Practitioner Roundtable, 2008). The DNP continues to be a controversial issue but one that is propelling APN roles forward with new knowledge and abilities at a time when health care reform is at the forefront of the national conversation.

APNs are best understood by examining the evolution, commonalities, and issues related to titling, licensing, education, and certification of each of the four groups that comprise advanced practice nursing (Berlin & Bednash 2000; Berline & Stennett, 2003; Benash, 2009; Chornick, 2008).

**Nurse Practitioners**

Nurse practitioners (NPs) have been defined by the ANA (2004a) as follows:

Nurse practitioners (NPs) are registered nurses who have graduate level nursing preparation as a nurse practitioner at the master's or doctoral level. NPs perform comprehensive assessments and promote health and the prevention of illness and injury. These advanced practice registered nurses diagnose; develop differential diagnoses; order, conduct, supervise, and interpret diagnostic and laboratory tests; and prescribe pharmacologic and non-pharmacologic treatments in the direct management of acute and chronic illness and disease. Nurse practitioners provide health and medical care in primary, acute, and long-term care settings. NPs may specialize in areas such as family, geriatric, pediatric, primary, or acute care. Nurse practitioners practice autonomously and in collaboration with other healthcare professionals to treat and manage patients’ health programs, and serve in various settings as researchers, consultants, and patient advocates for individuals, families, groups and communities. (p. 16)

Nurse practitioners have traditionally been defined as primary care providers. However, NPs are now functioning in many settings, including tertiary care, and specific competencies and examinations have been developed for acute care nurse practitioners (NONPF, 2004).
The nurse practitioner movement began at the University of Colorado; Loretta Ford, PhD, RN, and Henry Silver, MD, both full professors, collaborated to launch a post-baccalaureate program to prepare nurses for expanded roles in the care of children and their families. Professors Ford and Silver (Ford, 1979) recognized that nurses had the ability to assess children’s health status and define appropriate nursing actions. The purpose of the first nurse practitioner demonstration project was to implement new roles to improve the safety, efficacy, and quality of health care for children and families (Ford, 1979). Although the project’s initial focus was on children and families, Ford noted that she was confident that nurses could be educated to meet the health needs of community-dwelling persons across the lifespan. Nurses in the Colorado program received 4 months of intensive didactic education in which assessment skills and growth and development were emphasized. The nurses then completed a 20-month precepted clinical rotation in a community-based setting.

Following Colorado’s lead, many schools initiated educational programs admitting nurses with varying levels of educational preparation. The growth of the nurse practitioner movement was facilitated by many studies through the years, such as those summarized in a meta-analysis by Brown and Grimes (1995). Over the years, NPs have demonstrated that they safely provide high-quality health care, and the NP role has expanded into many new practice areas (Martin, 2000; Mundinger, Kane, Lenz, Totten, Tsai, Cleary, et al., 2000; Newhouse et al., in press). Although initially, Dr. Ford’s goal was to prepare nurse practitioners within master’s programs, societal demand for nurse practitioners led to a proliferation of post-baccalaureate continuing education programs rather than graduate education (Ford, 1979; Ford, 2005). Federal funding for nurse practitioner programs also prompted the initiation of numerous post-baccalaureate and graduate nurse practitioner programs. The length of these early NP programs varied from a few weeks to 2 years, with many certificate programs being 9 to 12 months in length.

The proliferation of post-baccalaureate programs rather than graduate programs for the education of NPs was partially due to the resistance of graduate nursing programs to recognize NPs as being a legitimate part of nursing. A number of nursing leaders termed NPs “physician extenders” and did not view NP practice as “nursing.” This lack of enthusiasm for NP education exhibited by numerous nursing leaders in the 1960s and 1970s may also have been fostered by the fact that the NP movement grew out of a collaborative nurse-physician effort rather than being
solely initiated by nurses. The early NP curricula were viewed as being based on the medical model rather than a nursing framework, although that was not the focus of Dr. Ford’s original NP curriculum that emphasized child development and health promotion (Ford, 1979).

There were over 140,000 NPs in the United States as of March 2004, as reported in the National Sample Survey of Registered Nurses March 2004: Preliminary Findings (Health Resources Services and Administration, 2005). This report stated that 65.5% of NPs graduated from master’s programs; in addition, 10.5% were prepared in post-master’s certificate programs. In 2004, 87.7% of NPs were employed in nursing; of those, 65.7% held positions with the title of “nurse practitioner.” The reason for this smaller percentage is that many nurse practitioners assume positions as educators, administrators, and policy makers, or choose other employment.

NPs are prepared in a multitude of specialties, including acute care, adult health, family health, gerontology, pediatrics, psychiatry, neonatology, and women’s health. Specific competencies have been developed for many NP specialty areas (i.e., acute care, psychiatric mental health, etc.). After completing graduate education, NPs are eligible to sit for national certification examinations in their specialty areas. Certification is a mechanism for the nursing profession to attest to the entry-to-practice knowledge of NPs. The certification requirement has been adopted by third-party payers such as the Center for Medicare and Medicaid Services (CMS) and by most state boards of nursing as a standard that assists in protecting the public from unsafe providers (Pearson, 2009). Certification examinations are offered by a variety of bodies: the American Nurses Credentialing Center (ANCC), the American Academy of Nurse Practitioners (AANP), the Pediatric Nursing Certification Board (PNCB), the American Association of Critical Care Nurses, and the National Certification Corporation (NCC) for the obstetric, gynecologic, and neonatal specialties. Certification for nurse practitioners is discussed further in Chapter 8.

Changes in reimbursement laws, regulations, and policies that allow for direct reimbursement of NPs, the rapid increase in managed care as a mechanism to control health care costs, and the growing recognition of the significant contributions of NPs to positive patient outcomes have resulted in a rapid increase in the number of NP programs, particularly DNP programs. AACN’s survey of enrollments in baccalaureate and graduate programs in nursing during the 2007–2008 academic year found that the overall number of nursing students in doctoral programs increased 20.9% between 2007 and 2008, with enrollment growth seen
in DNP programs rather than research-focused doctoral programs (AACN, 2009). APNs who are savvy about ascertaining the gaps in health care and designing roles for themselves that are not merely physician-replacement roles are likely to be very successful in obtaining satisfactory employment (Hamric, Spross, & Hanson, 2009).

Scope of practice is regulated by state laws and describes the legal boundaries of health professional practice. Changes in scope of practice reflect the dynamic evolution of NP abilities to deliver quality, comprehensive care in a safe and effective manner (ANA, 2008). NPs practicing outside the designated scope of practice risk legal sanctions and potential liability (Klein, 2005). However, great variability exists regarding the regulation of acute and primary care NPs by individual states. A survey of state regulations regarding acute care nurse practitioner (ACNP) laws and regulations (Percy & Sperhac, 2007) revealed that 31 states recognized acute care certification examinations; many states were silent on differentiating between primary care and acute care certification. Many factors have influenced the growth in acute care nurse practitioner programs (Cajulis & Fitzpatrick, 2007; Chan & Garbez, 2006; Kleinpell & Hravnak, 2005; McLaughlin, 2007; Rosenfeld et al, 2003). Among these are the increasing complexity of inpatient care and technology and the regulations that limit the number of hours that physician residents are allowed to work. ACNPs have established themselves in specialty and critical care practice sites and are active in quality improvement and system redesign in those facilities. For further discussion or regulation and scope of practice, please refer to Chapters 8 and 9.

Relative to CNMs and CRNAs, NPs have a relatively short history in the health care delivery system. However, in this short period of time they have gained the respect of many health professionals and of their patients (Scherer, Bruce, & Runkawatt, 2007). Recently, television and lay publications have featured NPs and the significant contributions that they are making to improve health. New areas of practice and settings for nurse practitioners continue to arise. In many instances, NPs have succeeded in caring for persons in rural areas, in the inner city, and for other vulnerable groups. NPs have established themselves as an integral part of the health care system.

**Nurse-Midwives**

Nurse-midwives are unique among APNs because they are educated in two different professions. Midwifery is a profession in its own right;
nursing is not a prerequisite to midwifery in many countries around the world. The American College of Nurse-Midwives (ACNM) defines certified nurse-midwives (CNMs) as individuals educated in the two disciplines of nursing and midwifery and who possess evidence of certification according to the requirements of the ACNM (ACNM, 2004a). According to the ACNM, midwifery practice is the independent management of women’s health care, focusing particularly on common primary care issues, family planning and gynecologic needs of women, pregnancy, childbirth, the postpartum period and the care of the newborn. The certified nurse-midwife and certified midwife practice within a health care system that provides for consultation, collaborative management or referral as indicated by the health status of the client. Certified nurse-midwives and certified midwives practice in accord with the Standards for the Practice of Midwifery, as defined by the American College of Nurse-Midwives (ACNM, 2004b, p. 1).

Although the focus of midwifery care has historically been prenatal care and managing labor and births, nurse-midwives are also primary care providers for essentially healthy women. Nurse-midwives strongly believe in supporting natural life processes and not utilizing medical interventions unless there is a clear need. This belief and others are reflected in the 2004 ACNM philosophy statement, which states that every person has a right to:

- Equitable, ethical, accessible, quality health care that promotes healing and health
- Health care that respects human dignity, individuality, and diversity among groups
- Complete and accurate information to make informed health care decisions
- Self-determination and active participation in health care decisions
- Involvement of a woman’s designated family members, to the extent desired, in all health care experiences (ACNM, 2004b)

Midwives also believe in:

- Watchful waiting and non-intervention in normal processes
- Appropriate use of interventions and technology for current or potential health problems
Consultation, collaboration, and referral with other members of the health care team as needed to provide optimal health care (ACNM, 2004b)

Midwifery is a very old profession, mentioned in the Bible. The practice of midwifery declined in the 18th and 19th centuries, and obstetrics developed as a medical specialty. In 1925, Mary Breckenridge established the Frontier Nursing Service (FNS) in Kentucky and was the first nurse to practice as a nurse-midwife in the United States. She received her midwifery education in England and returned to the United States with other British nurse-midwives to set up a system of care similar to that which she had observed in Scotland. The FNS was begun to care for individuals who were without adequate health care. The nurse-midwives of the FNS provided maternal and infant care and effectively demonstrated quality care and significantly improved outcomes.

The first U.S. nurse-midwifery education program was started at the Maternity Center Association, Lobenstein Clinic, in New York City in 1932. The American College of Nurse-Midwives was incorporated in 1955. Nurse-midwifery practice grew slowly until the late 1960s and early 1970s when nurse-midwifery experienced increased acceptance as a profession and an increase in consumer demand for nurse-midwives and the kind of care they provided (Varney, 2003). There are over 7,000 CNMs/CMs in the United States, and in 2006 they attended over 317,000 births, or 7.4% of all births and 11.3% of vaginal births in the United States (Martin, Hamilton, Sutton, Ventura, Menacker, et al., 2009). Nurse-midwives have direct third-party reimbursement and prescriptive authority in all 50 states.

In the 1970s, national accreditation of nurse-midwifery education programs and national certification of nurse-midwives was begun by ACNM. The accreditation process is recognized by the U.S. Department of Education, and the certification process now conducted by the American Midwifery Certification Council (AMCB) is recognized by the National Commission of Health Certifying Agencies.

The ACNM document, Core Competencies for Basic Midwifery Practice (ACNM, 2007), describes the skills and knowledge that are fundamental to the practice of a new graduate of an Accreditation Commission for Midwifery Education (ACNM) accredited education program. These competencies guide curricular development in midwifery programs and are utilized in the nationally recognized accreditation process. Categories of competencies described in the document include
professional responsibilities; the midwifery management process; primary health care of women, including health promotion and disease prevention, preconception care, family planning and gynecologic care, perimenopausal and postmenopausal care, and management of common health problems; the childbearing family, including prenatal, intrapartum, and postpartum care of the childbearing woman, as well as care of the newborn. Hallmarks of midwifery practice are also delineated.

Nurse-midwifery education began with certificate programs and has progressed to graduate education. There are presently 38 ACME-accredited programs in the United States. Most midwifery programs are in schools of nursing, but two are in health-related professions schools. A direct entry (non-nursing) route to midwifery education, utilizing the same nationally recognized accreditation and certification standards, began in 1997 at the State University of New York (downstate campus). Certificated midwife (CM) students are required to complete certain prerequisite health sciences courses, such as chemistry, biology, nutrition, and psychology, prior to beginning midwifery education. In addition, certain knowledge and skills common in nursing practice are required before beginning the midwifery clinical courses in the program (ACME, 2005). CMs are currently licensed to practice under the title of certified midwife in three states. Certified Professional Midwives (CPMs), another type of direct entry midwives who attend out-of-hospital births, are increasingly recognized by some states and are often confused with the ACME-educated midwives.

Nurse-midwives in the United States have consistently demonstrated that their care results in excellent outcomes and client satisfaction among the large proportion of underserved, uninsured, low-income, minority, and otherwise vulnerable women for whom CNMs provide care. Researchers have demonstrated lower caesarean section rates and outcomes comparable to a private obstetrics practice in a nurse-midwifery practice caring for underserved women (Blanchette, 1995) and fewer medical interventions, a lower caesarean section rate for nurse-midwifery clients compared with similar low-risk women cared for by family physicians and obstetricians (Rosenblatt et al., 1997). A study at the National Center for Health Statistics demonstrated significantly lower risks of neonatal mortality, low birth weight, infant mortality, and a significantly higher mean birth weight in births attended by nurse-midwives compared with those attended by physicians. These comparisons controlled for medical and sociodemographic risks (MacDorman & Singh, 1998). Births attended by CNMs and CMs occur primarily in hospitals; 99%

Over the 80-plus-year history of nurse-midwifery and midwifery in the United States, a strong base of support documented by research has been developed. The number of educational programs and practitioners has grown substantially. As health care dollars continue to be carefully allocated and specific outcomes are measured more closely, certified nurse-midwives and certified midwives should play an increasing role in providing quality primary health care to women.

Clinical Nurse Specialists

The American Nurses Association has defined clinical nurse specialists (CNSs) as follows:

The clinical nurse specialist is a clinical expert who provides direct patient care services including health assessment, diagnosis, health promotion and preventive interventions and management of health problems in a specialized area of nursing practice. The clinical nurse specialist promotes the improvement of nursing care through education, consultation, research, and in the role of change agent in the health care system (ANA, 1996, p. 3).

CNSs are registered professional nurses with graduate preparation earned at the master's or doctoral level. They may also be educated in a postmaster's program that prepares graduates to practice in specific specialty areas (Lyon & Minarik, 2001; Lyon, 2004). In 2000, 183 schools offered CNS master's programs, an increase from 147 programs in 1997 (Dayhoff & Lyon, 2001). In addition to the curriculum proposed for graduate clinical education by the American Association of Colleges of Nursing (AACN, 1996), the National Association of Clinical Nurse Specialists has developed curriculum recommendations for CNS education (NACNS, 2004). NACNS is currently developing competencies to reflect the Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006). CNSs have traditionally worked in hospitals, but they now practice in many settings, including nursing homes, schools, home care, and hospice.

The CNS is one of four categories of APNs, each with distinctively different practice characteristics (NACNS, 2004). The CNS has had a long history in the United States. The Clinical Nurse Specialist role was developed following World War II. Prior to that time, specialization for
nurses was in the functional areas of administration and education. Recognizing the need to have highly qualified nurses directly involved in patient care, the concept of clinical nurse specialists emerged. Reiter first used the term “nurse clinician” in 1943 to designate a specialist in nursing practice (Reiter, 1966). The first master’s program in a clinical nursing specialty was developed in 1954 by Hildegard Peplau at Rutgers University to prepare psychiatric clinical nurse specialists. That program launched the CNS role that has been an important player in the nursing profession and health care arena ever since, although the role has not been without controversy. Health care restructuring and cost-cutting initiatives in the 1980s and 1990s resulted in a loss of CNS positions in the United States. However, after increasingly frequent reports of adverse events in hospital settings in the 1990s (Institute of Medicine, 1999, 2001), it became apparent that CNSs were critical to obtaining quality patient outcomes (Clark, 2001; Heitkemper & Bond, 2004), with the result that CNSs are again seen as valuable professionals in many U.S. health care systems.

As with the NP movement, the availability of federal funds for graduate nursing education programs and the Professional Traineeship Program through HRSA that provides stipends for students has played a role in the development of many graduate CNS programs.

The development and use of complex health care technology in the management of patients in hospitals and intricate surgical procedures has resulted in increasing acuity and complexity of patient care delivery. Thus, there is a need for nurses with advanced knowledge and expertise to be integrally involved in working with staff to assess, plan, implement, and evaluate care for these patients. Many hospitals have used CNSs as care coordinators and case managers in which they coordinate the care of patients with acute or chronic illnesses during their hospital stays and prepare them for discharge to their homes or other care facilities (Wells, Erickson, & Spinella, 1996). CNSs have also been used as discharge planners working with staff to plan post-hospital care for patients who have complex health problems (Naylor et al., 1994; Neidlinger, Scroggins, & Kennedy, 1987). Their importance in care coordination over the care continuum is only now being lauded, exemplified in the work of Naylor and colleagues who reported that use of gerontological CNSs as discharge planners resulted in fewer readmissions of elderly cardiac patients.

Since its inception, the CNS role has suffered from role ambiguity (Rasch & Frauman, 1996; Redekopp, 1997). Although the initial vision was for CNSs to be integrally involved in patient care for a specific
patient population, they have assumed many other roles, such as staff
and patient educator, consultant, supervisor, project director, and more
recently, case manager. Redekopp noted that it is difficult for CNSs to
precisely describe their role to others because their roles are continually
changing to meet the health needs of a changing patient population in an
ever-changing health care system. Role ambiguity has made it difficult
to measure the impact that CNSs have on patient outcomes. Thus, when
budgetary crises have occurred in hospitals, CNSs have frequently had
to advocate strongly to maintain their positions because outcome data to
support the positive impact of their practice has either not been readily
available or simply did not exist.

There are numerous CNS specialties and subspecialties: psychiatric/
mental health nursing, adult health, gerontology, oncology, pediatrics,
cardiovascular, neuroscience, rehabilitation, pulmonary, renal, diabetes, and
palliative care, to name a few. Numerous organizations offer certification
examinations for CNSs. However, some organizations do not specify that
master’s degrees are required for certification in the specialty, causing
confusion regarding the regulation and title of clinical nurse specialist. In
the past, many CNSs have not sought third-party reimbursement so they
have not taken specialty CNS certification examinations. With changes
in state nursing practice acts and the increase in third-party payment
and prescriptive privileges for advanced practice nurses, the number of
certified CNSs is now increasing. Controversy regarding CNS certifica-
tion continues, however, because the examinations are not available in
the many specialties that CNSs perform. Exemptions from state laws and
regulations for CNSs have been provided by some states because of this
lack of certification. To address this need, a core CNS certification exam
is under development by the American Nurses Credentialing Center.

In the late 1980s and early 1990s, many discussions and debates took
place around the merging of the CNS and NP roles (Page & Arena,
1994). Several studies were conducted comparing the knowledge and
skills of these two advanced practice roles (Elder & Bullough, 1990;
Fenton & Brykczynski, 1993; Forbes, Rafson, Spross, & Kozlowski,
1990; Lindeke, Canedy, & Kay, 1996; Lindeke, 2004; Lindeke & Jukkala,
2005). Research indicated that there were many similarities in the educa-
tional preparation of these two groups of APNs. Many CNSs viewed the
proposed merger as the demise of the CNS role. NPs were concerned
that they would need to abandon the title of NP, a term that had become
familiar to many patients and health professionals. A new organization,
the National Association of Clinical Nurse Specialists, was formed to
assist CNSs and to provide a vehicle to publicize the many contributions that CNSs have made and continue to make in providing quality patient care. The CNS role today is a dynamic and needed advanced practice nursing role, and many in the nursing profession anticipate that it will continue to exist for years to come.

Certified Registered Nurse Anesthetists

Modern nurse anesthesia traces its roots to the last two decades of the 1800s when records indicate that nurses were often asked to administer anesthesia. In fact, the practice was so common that in her 1893 textbook, *Nursing: Its Principles and Practices for Hospital and Private Use*, Isabel Adams Hampton Robb included a chapter on the administration of anesthesia. By 1912 a formal course in anesthesia had been developed in Springfield, Illinois, by Mother Magdalene Weidlocher of the Third Order of the Hospital Sisters of St. Francis. The Sisters of St. Francis went on to establish St. Mary’s Hospital in Rochester, Minnesota, where nurse anesthetists became well known for their expertise in the administration of anesthesia (Bankert, 1989). Alice McGaw, one of the early nurse anesthetists for the Drs. Mayo at St. Mary’s Hospital, published several papers in the early 1900s reporting on the thousands of anesthetics administered with ether and/or chloroform—all “without a death attributable to the anesthesia” (Bankert, 1989, p. 31).

A certified registered nurse anesthetist (CRNA) is a registered nurse who is educationally prepared to provide anesthesia and anesthesia-related services in collaboration with other health care professionals, such as surgeons, dentists, podiatrists, and anesthesiologists. The practice of nurse anesthesia is a specialty within the profession of nursing, and CRNAs are recognized by state licensing or regulatory agencies, primarily boards of nursing, in all 50 states (AANA, 2008a).

The CRNA scope of practice includes comprehensive patient care

1. Performing and documenting a pre-anesthetic assessment and evaluation of the patient, including requesting consultations and diagnostic studies; selecting, obtaining, ordering, and administering pre-anesthetic medications and fluids; and obtaining informed consent for anesthesia

2. Developing and implementing an anesthetic plan

3. Initiating the anesthetic technique, which may include general, regional, local, and sedation
4. Selecting, applying, and inserting appropriate noninvasive and invasive monitoring modalities for continuous evaluation of the patient’s physical status
5. Selecting, obtaining, and administering the anesthetics, adjuvant and accessory drugs, and fluids necessary to manage the anesthetic
6. Managing a patient’s airway and pulmonary status using current practice modalities
7. Facilitating emergence and recovery from anesthesia by selecting, obtaining, ordering, and administering medications, fluids, and ventilatory support
8. Discharging the patient from a post-anesthesia care area and providing post-anesthesia follow-up evaluation and care
9. Implementing acute and chronic pain management modalities
10. Responding to emergency situations by providing airway management, administration of emergency fluids and drugs, and using basic or advanced cardiac life support techniques (AANA, 2007a)

The CRNA scope of practice may also include responsibilities such as administration and management, quality assessment, education, research, committee appointments, interdepartmental liaison, and clinical and administrative oversight of non-anesthesia departments (e.g., respiratory therapy or the post-anesthesia care unit) (AANA, 2007a).

Nurse anesthesia educational programs are a minimum of 24 months in length and are conducted in a master’s degree framework. In 2008, approximately 55% of nurse anesthesia educational programs were housed within or affiliated with university schools of nursing. The other nurse anesthesia programs offer a variety of master's degrees, including majors such as nurse anesthesiology (not housed in a school of nursing), biology, health science, or anesthesiology education. The Council on Accreditation of Nurse Anesthesia Educational Programs (COA, 2003 & 2008) accredits all nurse anesthesia educational programs. In turn, the COA is recognized by the U.S. Department of Education and the Commission on Recognition of Postsecondary Accreditation. This formal accreditation process was begun in 1952.

Although many exceed the requirements, all nurse anesthesia programs, regardless of the master's degree offered, provide a minimum curriculum, including pharmacology of anesthetic agents and adjuvant drugs including concepts in chemistry and biochemistry (105 hours);
anatomy, physiology, and pathophysiology (135 hours); professional aspects of nurse anesthesia practice (45 hours); basic and advanced principles of anesthesia practice, including physics, equipment, technology, and pain management (105 hours); research (30 hours); and clinical correlation conferences (45 hours). In addition to completing the classroom hours during the educational program, nurse anesthesia students are required to administer a minimum of 550 anesthetics, using a variety of anesthetic techniques for a wide range of procedures on healthy patients and those with comorbidities (COA, 2004).

Like all APNs in advanced practice nursing roles, CRNAs have grappled with the American Association of Colleges of Nursing (AACN) recommendation that all advanced practice nursing programs be conducted within a doctor of nursing practice (DNP) framework by 2015 (AACN, 2006). Because 45% of nurse anesthesia programs are housed within non-nursing academic units, granting a DNP degree is not possible for many programs. To address the impact of the AACN recommendation on the nurse anesthesia profession, the American Association of Nurse Anesthetists appointed a Task Force on Doctoral Preparation of Nurse Anesthetists (DTF) in 2005 (AANA, 2006). In September 2007, the AANA announced its support of the recommendation of the DTF, namely that the doctorate be required for entry into nurse anesthesia practice by 2025 (AANA, 2007b). For programs not housed within schools of nursing, the doctorate of nurse anesthesia practice (DNAP) may become the degree offered. To become a certified registered nurse anesthetist (CRNA), a nurse anesthesia graduate must successfully complete the National Certification Examination administered by the Council on Certification of Nurse Anesthetists (CCNA). Because CRNAs must graduate from a COA-accredited educational program and pass a certification examination to practice, the public can be assured that a CRNA has “met objective, predetermined qualifications for providing nurse anesthesia services” (CCNA, 2008, p. 3).

With the passage of the Omnibus Budget Reconciliation Act of 1986, CRNAs became the first advanced practice nursing professionals to be granted direct reimbursement for their services to Medicare recipients, giving them new practice options. In the 2007–2008 AANA Professional Practice Survey, the most common primary employment arrangement for CRNAs was reported as “employee of a group” (37%), followed by “employee of hospital” (35%), and “independent contractor” (15%). “Employee in other setting,” “owner/partner,” and “military/government/Department of Veterans Affairs” make up the remaining 13% (AANA, 2008b).
CRNAs function as sole anesthesia providers in rural hospitals, enabling these hospitals to stay open by providing surgical, obstetric, and trauma stabilization services (AANA, 2008c). Although no state statute requires anesthesiologist supervision of CRNAs, the Centers for Medicare and Medicaid (CMS) do state in their rules for participation that CRNAs must be supervised by a physician. In 2001, CMS amended this requirement by providing an opt-out or exemption ruling. Fourteen state governors have requested and received exemption from the CMS rule requiring physician supervision of CRNAs (AANA, 2008d).

International

Although the content in this chapter has focused on APNs in the United States, it is encouraging to see the continuing development of these roles in other countries. Midwifery, a profession often distinct from nursing, has a longer history internationally than in the United States. The International Confederation of Midwives, so named in 1954, has more than 90 midwifery organization members representing 80 countries (see www.internationalmidwives.org). Clinical specialization in nursing has existed in many countries for a very long time. For example, in the United Kingdom the NP role developed dramatically during the 1990s once the National Health Services recognized its legitimacy (Reverly, Walsh, & Crumbie, 2001). However, in other countries APNs are only beginning to develop programs and practices (Wang, Yen, & Snyder, 1995).

As part of the International Council of Nurses, the International Nurse Practitioner/Advanced Practice Nursing Network promotes the role of the APN globally (www.icn-apnetwork.org). Every two years, international conferences are held; there, APNs from around the world share their experiences, provide support to each other in the cause of advancing the status of nursing worldwide, and keeping alive the nursing ideal of providing quality care for all persons.

CONCLUSION

Advanced practice nurses have made significant contributions to quality health care, particularly for vulnerable populations. If all Americans are to receive quality, cost-effective health care, it is critical that greater use be made of APNs (Hooker & Berlin, 2002). A bright future awaits nursing and APNs in this new century. The APNs’ advanced knowledge
and skills, both in nursing and related fields, give them the capabilities to make valuable contributions to the current and future health care system, especially as our country takes on the task of meaningful health care reform. As the United States becomes more diverse, APNs can play key roles in ensuring that culturally competent care is delivered. They are poised to assume leadership in developing new practice sites and innovative systems of care to enhance health care outcomes.

REFERENCES


The most important word in the title of Advanced Practice Nursing (APN) is the last one: nursing. Advanced education enables nurses to expand their knowledge base and expertise in nursing so that their practices differ not only from those of nurses with an associate’s or bachelor’s degree but also from that of other health professionals, particularly physicians or physician assistants. Nurses often underestimate the profound positive effect that their care can have on improving patient outcomes. Florence Nightingale, in *Notes on Nursing* (1859, reprinted 1992), noted that people in her day often thought of nursing as signifying “little more than the administration of medicines and the application of poultices” (p. 6). Efforts are still necessary to convey the full scope of nursing practice to other professionals and to the public so that nurses’ contributions to positive health outcomes are understood, valued, and reimbursed. So often the media has focused on the physical assessment skills and prescriptive privileges of APNs rather than on the distinctive skills and expertise that characterize APN practice.

As advanced practice nursing moves toward the practice doctorate for entry into practice, an excellent opportunity exists to reconceptualize how advanced practice nursing is taught in APN programs. Burman, Hart, Conley, Brown, Sherard, and Clarke (2009) challenge educators to focus on health promotion and disease management incorporating...
theories from a variety of disciplines to improve health behavior and change as Doctor of Nursing Practice (DNP) programs develop.

WHAT IS NURSING?

Definitions of Nursing

For many years the nursing profession has sought to define nursing and to identify its scope of practice. It is critical that APNs and those aspiring to this role have a clear understanding of what nursing is in order for them to provide a clear understanding of nursing’s unique contributions to health care outcomes in their interprofessional and other interactions. Therefore, we will examine several of the many definitions of nursing that have been put forth over the years.

Florence Nightingale (1859, reprinted 1992) formulated one of the earliest definitions of nursing as “having charge of the personal health of a person.” The aim of nursing care, according to Nightingale, is to put the patient in the best possible condition so that nature can act upon the person. Nightingale’s Notes on Nursing, although it was written 150 years ago, speaks to the substantive basis of nursing. Not only does Nightingale elaborate on interventions nurses can employ, she also underscores the necessity of thorough assessments before planning nursing care. Reading Notes on Nursing should therefore be a part of every APN curriculum.

In Virginia Henderson’s (1966) definition of nursing, emphasis is placed on the nurse collaborating with the patient to enhance the patient’s health status. Henderson defined nursing as

Assisting the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will, or knowledge. And to do this in such a way as to help him gain independence as soon as possible. (p. 15)

Henderson’s definition contains many elements that constitute the substantive nature of nursing. Health promotion is a key component of her definition. In addition, the caring aspects of nursing are emphasized. Not all patients will recover from their diseases or injuries. It is the nurse’s role to assist patients to achieve the goals the patient has established. Myss (1996, 2003, 2004) noted in her well-known works on healing that in curing modalities the patient is passive, but she argues that the
patient must take an active role to be healed. APNs can play a key role in assisting patients in their healing process because they are able to bring additional expertise to these interactions and to perform holistic health assessments. Henderson stresses helping the patient gain independence. Independence is truly a Western belief and may not be a value in all cultures. Thus, it is important for the nurse to ascertain the personal values of each patient and realize that independence may not be one of their preferences.

Nojima (1989), a Japanese nursing theorist, defined nursing practice as “a human activity carried out by nurses to help individuals organize their health conditions so that they are able to live optimally and realize their potential” (p. 6–7). In her definition, the focus is on a person’s quality of life. The partnership between the nurse and the patient is evident in Nojima’s definition of nursing. With the advent of globalization, it is important to review the characteristics of nursing outside of Western medicine (Nojima, Tomikana, Makabe, & Snyder, 2003).

The American Nurses Association (ANA) has defined nursing as follows:

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, communities, and populations. (2003)

Previously, the definition of nursing focused on persons and their responses to health problems, rather than specific illnesses. This definition of nursing developed in 2003, which emphasizes health promotion and optimal health, remains unchanged in current discussions of the American Nurses Association’s (ANA) Social Policy Statement (ANA, 2008). The focus on health differentiates nursing from the practice of medicine.

Despite the frequent reference to the ANA definition of nursing, many APNs have encountered difficulty working from a nursing model. They have been forced to launch their practice within the medical model in part due to medical diagnoses used for billing and coding. Although it is important to know the cause of a person’s pain or stress, much of nursing care remains the same despite the etiology. It has been encouraging to see the Agency for Healthcare Research and Quality (AHRQ) consider problems or responses, rather than disease entities, as the focus of practice guidelines. The AHRQ website (www.ahrq.gov) is an excellent resource for evidence-based practice and current clinical practices.
Advanced practice nursing builds upon the competence of the professional nurse and is characterized by the integration and application of a broad range of theoretical and evidenced-based knowledge (ANA, 2008). APNs are prepared in one of the four roles described in Chapter 1: certified nurse-midwife, clinical nurse specialist, nurse practitioner, or certified registered nurse anesthetist. Licensure, accreditation, certification, and education (LACE) should be consistent with role population (APRN Consensus Group, 2008). Specialization within advanced practice focuses beyond the six populations and provides depth within a population. One of the most important aspects of specialization in nursing is that specialization is a part of the whole field of professional nursing (ANA, 2008).

Ongoing discussions related to the revision of the ANA's A Social Policy Statement (2003) emphasizes the characteristics of nursing practice to include human responses, theory application, evidence-based nursing actions, and outcomes. These characteristics build the foundation for the proposed Model of Professional Nursing (ANA, 2008). Within this model, nursing's professional scope of practice, code of ethics, specialization, and certification lay the base for professional nursing. Building upon this base in a pyramid model are individual state's nurse practice acts, rules, and regulations. From this level, institutional policies and procedures guide nursing practice with self-determination as the top level of the pyramid model. This model lays the foundation not only for professional nursing, but all its expanded roles and specializations.

**Scope of Practice**

Gaining more knowledge about the substantive basis of nursing is an essential component of APN education. Scope of practice can be viewed in several ways. In fact, findings from the numerous studies undertaken to identify, describe, and classify the phenomena of concern to nurses have helped to clarify our understanding of scope of practice. One way to determine scope of practice from a regulatory framework is to focus on population, with each APN working within their practice population and their work determined by education and regulation. Other initiatives delineate the substantive basis of nursing. Two of these initiatives—nursing diagnoses and human responses—will be discussed further.
Nursing Diagnoses

Nursing diagnoses are one strategy nurses have used to describe phenomena for which nurses provide care. Since the First Nursing Diagnosis Conference in 1973, nurses within the North American Nursing Diagnosis Association (NANDA) have worked to identify, describe, and validate patient problems and concerns that fall within the domain of nursing. Currently there are 201 approved nursing diagnoses with a projection of over 300 diagnoses to come (NANDA, 2009). Continued efforts are necessary to identify and validate new diagnoses and to revise existing diagnoses. APNs have provided and can continue to provide leadership in the nursing diagnosis movement.

NANDA diagnoses are grouped under nine functional patterns: exchanging, communicating, relating, valuing, choosing, moving, perceiving, knowing, and feeling. According to Newman (1984), it is important for nurses to determine changes in a patient’s patterns. In approaching assessment in this manner, the focus is the whole person rather than specific diagnoses.

Nursing diagnoses have been widely accepted not only in the United States but also internationally (NANDA, 2009). As the first effort to develop a common language for nursing phenomena, and despite numerous criticisms, using such diagnoses assists nurses in focusing on those aspects of care for which nursing interventions can be identified and nurse-sensitive outcomes can be determined. APNs therefore need to be familiar with both nursing and medical diagnoses.

In the United States, a number of projects to identify and classify nursing interventions have been initiated. The National Intervention Classification (NIC) has identified and classified over 430 interventions (Bulechek, Butcher, & McCloskey Docherman, 2008). A project identifying nursing outcomes links nursing diagnoses, nursing outcomes, and interventions (Johnson, Bulechek, McCloskey Dochterman, Maas, Moorhead, et al., 2005).

Human Responses

The American Nurses Association has delineated phenomena of concern to nursing (ANA, 2003). The identified phenomena were not meant to be exhaustive but rather exemplars of the types of concerns that fall within the purview of nursing. Human experiences and responses proposed by the ANA (2008) include promotion of health and wellness;
promotion of safety and quality of care; care and self-care processes; physical, emotional and spiritual comfort, discomfort, and pain; adaptation to physiologic and pathophysiologic processes; emotions related to the experience of birth, growth and development, health, illness, disease, and death; meanings ascribed to health and illness; linguistic and cultural sensitivity; health literacy; decision making and the ability to make choices; relationships, role performance, and change processes within relationships; social policies and their effects on health; health care systems and their relationships to access, cost, and quality of health care; and the environment and the prevention of disease and injury (p. 7).

As with nursing diagnoses, these identified human responses assist APNs in focusing on the health concerns for which nursing care is of primary importance in producing positive patient outcomes. Therapeutics for managing the responses or assisting the person to manage transcends medical entities. For example, despite various etiologies for sleep problems, nursing interventions, such as massage and music therapy, can be used to manage these problems. Viewing nursing from the perspective of human responses helps nurses to organize content from the nurse’s point of view.

THE ART AND SCIENCE OF NURSING

The Art of Nursing

The art of nursing is integrally tied to the caring aspect of nursing. For many years, nursing was defined as an art and a science. As nursing began to give more attention to establishing a scientific basis for practice and thereby gained greater acceptance in the scientific community, the art or caring aspect of nursing received less attention. In practice settings, for example, nurses paid more attention to the high technology used in caring for patients with complex health problems. Nonetheless, the public has sustained its attachment to caring interventions, such as massage, touch, and aromatherapy, to name a few. A number of reasons for which people seek complementary therapies have been proposed: (1) they wish to be treated as a whole person by health professionals; (2) they wish to be active participants in their care; (3) they desire that the treatment not be worse than the disease; and (4) they feel that Western health care does not meet all of their needs. Therefore, it is important that APNs consider how they can integrate the art of
nursing, which includes traditional and nontraditional nursing interventions, into their practice.

Caring is a critical element of nursing practice. Leininger (1990), Watson (1988), and Gadow (1980) have each put forth definitions of caring. Watson defined the art of caring as

A human activity consisting of the following: a nurse consciously, by means of certain signs, passes on to others feelings he or she has lived through, realized or learned; others are united to these feelings and also experience them. (p. 68)

Newman, Sime, and Corcoran-Perry (1991) noted that the focus of nursing is “caring in the human health experience” (p. 3). The National Organization of Nurse Practitioner Faculties (NONPF) has identified caring as a characteristic of APNs that continues as a theme throughout their seven competency domains (NONPF, 2006).

Caring requires that a nurse be competent in assessing and intervening. Benner (1998) noted that a caring attitude was not sufficient to make an action a caring practice. The practice must be implemented in an excellent manner in order to be viewed as caring. Caring and the art of nursing convey very similar meanings, but caring nurses also seek the scientific basis for their practice and continue to update their expertise and knowledge. APNs possess the knowledge and ability to critique research about specific therapies and determine their applicability to specific patient populations.

The Science of Nursing

Significant progress has been made in developing the knowledge base that underlies nursing practice, revealing that nursing is characterized by both art and science (ANA, 2004). Although nursing is guided by standards of practice based on clinical evidence and research, additional research is needed before APNs will have a sound scientific basis from which to choose specific interventions for a patient or population (ANA, 2008). The clinical guidelines developed by professional and governmental agencies—available through the National Guideline Clearinghouse—exemplify the work that has been done, and continues to be done, in identifying “best practices” based on research findings. APNs have a key role in helping nurses review research and develop clinical guidelines that incorporate the existing knowledge base.
THEORETICAL AND CONCEPTUAL MODELS

During the past 50 years, the nursing profession has given considerable attention to theoretical and conceptual models. This attention has served to differentiate nursing from other disciplines (Marrs & Lowry, 2009; Russell & Fawcett, 2005). However, nursing theories are not new in nursing. Nightingale (1859/1992) elaborated on the relationship of the environment to health and well-being. Numerous theoretical and conceptual models exist.

What relevance do nursing theories have to practice? Can’t nurses merely practice nursing? Meleis (2006) noted that a theory articulates and communicates a mental image of a certain order that exists in the world. This image includes components, and these components inform a model or perspective that guides each nurse’s practice. This model may be identical to one of the publicized nursing theories, or it may be based on a theoretical perspective from another discipline. In some instances, eclectic models are used in which nurses combine elements from established nursing theories or theories from other disciplines. New nursing theories continue to be developed. Of particular importance is the delineation of nursing theories that incorporate various cultural perspectives because the Western philosophical perspective to date has not pervaded many of the existing theories.

There has been much discussion about whether one grand nursing theory for nursing is needed. Would the existence of a grand or meta-theory be advantageous to the progression of the profession and discipline? Riehl-Sisca (1989) stated that nursing has benefited from having a multiplicity of theories. The wide range of perspectives elaborated in these theories has helped nurses to more clearly define the nature of the discipline and profession, to evaluate various approaches that can be employed in practice, and to respect diversity as a positive element. Alligood and Marriner-Tomey (2005) identified seven theorists who have developed grand theories or conceptual frameworks for nursing. They are Johnson (1980), King (1971), Levine (1967), Neuman (1974), Orem (1980), Rogers (1970), and Roy (1984). Many other nurses have developed midrange theories or conceptual frameworks that have served as a basis for research and practice.

More recently, nurses have turned their attention to midrange theories. Midrange theories, which focus on a limited number of variables, are more amenable to empirical testing than are grand theories by definition (Olson & Hanchett, 1997). Examples of midrange theories include: empathy
(Olson & Hanchett, 1997), uncertainty in illness (Mishel, 1990), resilience (Polk, 1997), mastery (Younger, 1991), self-transcendence (Reed, 1991), caring (Swanson, 1991), and illness trajectory (Wiener & Dodd, 1993).

Many nurses give little thought to the tenets that guide their practice; however, these philosophical underpinnings have profound impact on the nature and scope of their work. Often an APN practices clinical decision making within a nursing framework but is not consciously aware of doing so. Nurses have an ethical responsibility to practice nursing with a consciously defined approach to care. The theoretical or conceptual model used by a nurse provides the basis for making the complex decisions that are crucial in the delivery of good nursing care. In this regard, Smith (1995) stated

The core of advanced practice nursing lies within nursing’s disciplinary perspective on human-environment and caring interrelationships that facilitate health and healing. This core is delineated specifically in the philosophic and theoretic foundations of nursing. (p. 3)

Thus, nursing theory is an important component of APN education. Nursing is a practice discipline, and theories achieve importance in relation to their impact on nursing care. Recently attempts have been made to relate nursing theories to practice and to begin testing these theories. However, only minimal testing of these theories in practice settings has occurred. The number of theoretical nursing studies, particularly studies examining the efficacy of nursing interventions, is an indication of the apparent separation of theories and practice that has characterized much of nursing practice. As DNP programs develop, it is anticipated that the application gap between theories and practice will narrow.

The theoretical or conceptual framework that an APN selects and uses has a major impact on the patient assessments that are made and the nature of the interventions that are chosen to achieve patient outcomes. Gordon (2007) and Johnson (1989) have noted the profound impact a nurse’s theoretical perspective can have on a nursing practice. Gordon (1987) stated

One’s conceptual perspective on clients and on nursing’s goals strongly determines what kinds of things one assesses. Everyone has a perspective, whether in conscious awareness or not. Problems can arise if the perspective “in the head” is inconsistent with the actions taken during assessment. Information collection has to be logically related to one’s view of nursing. (p. 69)
A conceptual model provides the practitioner with a general perspective or a mindset of what is important to observe, which in turn provides the basis for making nursing diagnoses and selecting nursing interventions.

INCORPORATING NURSING INTO ADVANCED PRACTICE NURSING

Because APNs provide health care to many populations and in many settings, they have many opportunities to make major contributions to advancing the substantive basis of nursing. By focusing on the nursing elements of health care, APNs have the opportunity to demonstrate to the public and to policy makers the unique and significant contributions that nursing has on health outcomes. In using the nursing rather than the medical model as the focus of practice, APNs give the public a distinct and adjunctive model of care rather than a substitutive model (i.e., replacing physicians). APNs may carry out activities that have traditionally been a part of medicine, but the performance of these activities by APNs need to be translated into the realm of nursing.

Guaranteeing that APNs view the provision of health care from a nursing perspective has implications for graduate curricula. The American Association of Colleges of Nursing (AACN) (2006) includes nursing theory as a component of their document *Essentials of Doctoral Education for Advanced Nursing Practice*. Students also need assistance in utilizing this theoretical content in their practice. Faculty and preceptors who model this approach for APN students are critical for helping them integrate theory into practice.

REFERENCES


