Assuring Quality and Access in Advanced Practice Nursing: A Challenge to Nurse Educators

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In an environment characterized by a projected oversupply of primary care providers and a public seeking higher quality, cost-effective care, advanced practice nurses will be measured not only by their comparative value in delivering conventional primary care, but also by the uniqueness of their contributions to health outcomes. These value-added skills, distinctive to nursing practice at all levels, include health education, disease prevention, health promotion, community resource access, and partnerships with patients. Government, private payors, and national and state regulators all authorize increasingly independent practice by advanced practice nurses. When advanced practice nurses assume such fully accountable primary care roles, their title and certification should be distinctive to that level of practice. A Doctor of Nursing Practice (DNP) degree would signal to the public that nurses—at their highest practice competency—are at the same level as other health professionals holding doctorates (such as MD, DDS, or PharmD). (Index words: Advanced practice nursing; Doctor of Nursing Practice degree; Nurse practitioner; Nursing education—graduate; Primary care) J Prof Nurs 16:322-329, 2000. Copyright © 2000 by W.B. Saunders Company

WE FACE A TIME of incredible complexity and change in health care. Never have nursing’s unique contributions—a focus on the whole patient in a family and social context, disease prevention and health promotion, and incorporation of patient education as an integral part of care—been more needed and more in demand. Unfortunately nursing’s contributions, particularly advanced practice nursing, are not well understood. Schools that prepare advanced practice nurses are reconfiguring curricula at both the master’s and doctoral levels to cover their graduates’ expanded scope of practice. Agencies that credential advanced practice nurses are also changing credentialing requirements. Although these efforts to meet changing health care needs are to be applauded, if the past is any guide, fragmentation and confusion about nursing’s role in health care will result. For these efforts to be effective, a concerted attempt to standardize both the educational programs and the credentialing process must be made by those who educate and credential advanced practice nurses. The public and payors need to be able to recognize and access high-quality health care services, but this will be possible only if there is a better understanding of the unique services nurses provide. The dominant view that “a nurse is a nurse is a nurse,” must be replaced with a more accurate and clearly differentiated perception. A projected oversupply of primary care providers (Cooper, 1994, 1998), a growing quest for quality and error reduction (Institute of Medicine [IOM], 2000), stronger consumer partnerships, an aging population, and a continuing focus on cost provide the context in which advanced practice nurses can thrive by providing a different kind of full-scope primary care.

For the advanced practice nurse in primary care—the nurse practitioner—the key to providing full-scope care is showing competency in managing all aspects of primary care in any setting. In short, education and training must prepare the nurse practitioner to stabilize, initiate, or sustain treatment for any condition...
that is presented. Currently, no standards address independent nursing practice in the full-scope primary care role, and no educational programs prepare nurse practitioners for this complex role.

We are proposing the development of a new and standardized academic program and credential, the Doctor of Nursing Practice (DNP). We believe there is an urgent need to do this now, and to reach broad consensus within the profession on the importance of a single, clearly understood degree for the highest level of independent nursing practice. The advancement of our profession has been hampered at every level of practice because of multiple entry points, confusing and variable certifications, and similar titles for different levels of practice. The profession is recognizing the need for advanced education in practice, but new iterations of existing degrees or disparate efforts to develop new degrees could further cloud the public's understanding of nursing. We must clarify our message to our many constituencies regarding who we are and what we accomplish.

A DNP would become the terminal degree for advanced practice. Students with an MS in primary care and measurable competencies in site-specific care, including prescriptive authority and the ability to diagnose and manage illness for a defined population of patients, would be eligible for the 1-year clinical fellowship culminating in the DNP degree.

Since the inception of the advanced practice nursing role in primary care, researchers and the public have been interested in whether a nurse practitioner can accomplish what a primary care physician does. More than 100 studies—some small, some disease specific, and none with true randomized controlled methodology—have all, nonetheless, shown high-quality advanced nursing practice, with no major deficits identified. The lead article in the January 2000 issue of The Journal of the American Medical Association reported on a large-scale randomized controlled trial comparing nurse practitioners and physicians, examining quality, use, and outcomes (Mundinger et al., 2000). Overcoming many weaknesses of the earlier studies, these findings also confirmed advanced practice nurse competence in primary care, showing that these nurses were indistinguishable in quality, cost, and outcomes when compared with physicians.

This, however, is only half the answer the public needs. Is there a value-added benefit when nurse practitioners deliver primary care? Does their care transcend the traditional disease detection/management/cure model? Are there components of advanced practice nursing primary care that are more distinctive in disease prevention, health promotion, community-based resource access, and patient education and empowerment? These are, after all, the hallmarks of the profession from the very beginning of baccalaureate nursing education.

It has been argued that in an overcrowded primary care marketplace, advanced practice nurses will survive only if they can offer patients value-added benefits. Before advanced practice nurses were independently reimbursed, their differentiated skills were often lost in the employee role because they mirrored the classical medical model of primary care. But today they can practice and be reimbursed independently. They can provide care within a nursing model, which includes a strong focus on engaging their patients in adopting a healthier lifestyle and preventing at-risk medical episodes. Such differentiated practices are just beginning to be carefully measured, including the landmark Columbia Advanced Practice Nurse Associates practice, which is now completing a 3-year evaluation funded by the W. K. Kellogg Foundation. If, as expected, advanced practice nurses do achieve better outcomes in disease prevention and health promotion, their special niche will be secure even in an overcrowded medical marketplace. More importantly, the access patients want to this unique service will be preserved.

Meanwhile, advanced practice nurses are a rapidly growing resource. There are nearly twice as many advanced practice programs today in the nation's nursing schools as there were just 8 years ago (American Association of Colleges of Nursing [AACN], 1997-2000). During the past decade, when most health policy analysts thought the country had too few primary care providers, payors and regulators opened access to advanced practice nurses with breathtaking scope and rapidity.

In the past decade, every state has increased nurse practitioner independence, including prescriptive authority, direct reimbursement, and decreased physician oversight. Medicaid reimburses nurse practitioners directly in every state; Medicare reimburses nurse practitioners for all Part B services; commercial insurers are beginning to credential nurse practitioners as fully qualified primary care providers; and all states give nurse practitioners some level of independent prescriptive authority (Pearson, 2000).

As with any practice profession, nursing depends on individual attainments of competency based on formal learning and practice experience. Standardizing and evaluating these higher-level competencies would give those who qualify the opportunity to earn a credential that all constituents could rely on for quality assurance.
A carefully crafted and rigorously evaluated educational program is needed to further assure advanced practice nursing quality at the highest level that state governments and public and private payors already authorize. In keeping with classic health professions training, nurses at their highest practice competency should earn a doctorate, as has long been established in medicine (MD), dentistry (DDS), and pharmacy (DPHarm). This degree would not be a professional investigator degree, such as the DNsc in nursing, DrPH in public health, or DSW in social work, nor would it be the traditional generic investigator degree (PhD), which all professionals and cognitive researchers can earn. The DNP would signify competency at the highest practice level in nursing.

This program, when adopted, will assure quality, will be a clearly understood credential for patients and payors alike when choosing providers, and will assure survival of and access to the unique and valued services advanced practice nurses provide. Although there have been attempts by several conservative medical groups to curtail the development of independent advanced nursing practice, the evolution of advanced practice nurses from dependent physician extenders to independent differentiated practitioners will complement, not compete, with medicine and should be a welcome resource for patients and for physicians (Mundinger, 1994). Equally important, the development of this independent cross-site nursing role will also increase recruitment of bright young people who might not otherwise consider a nursing career that does not offer the authority, status, and rewards equivalent to other professions.

**Growth in Nurse Practitioner Programs and Graduations**

Over the past decade, during a period of considerable upheaval in health care delivery and reimbursement systems, some surprising statistics emerged:

- In 1998-1999, more than 8,000 nurse practitioners have joined the ranks of primary care providers in this country; this number is similar to the number of primary care physicians added to the system each year.
- In 1999-2000, an additional 7,800+ nurse practitioner graduates are expected to be added to the system.
- Since 1992, there has been a 170% increase in the number of master’s programs educating nurse practitioners.
- The number of nurse practitioner graduates per year has doubled in 4 years.
- Although there are national standards for education of nurse practitioners and expected competencies of practitioners, these often are at variance with state requirements for practice, resulting in confusion in quality of various programs and the level of expertise of their graduates.
- The number of such programs located in schools of nursing in academic health centers has remained constant, at about 16% or 85 schools of nursing. The growth of new programs is occurring more often in schools with no experience in advanced practice nursing education (AACN, 1997-2000).

**Regulatory Authority and Reimbursement for Nurse Practitioners**

The legal authority for advanced practice nursing has expanded rapidly in every state during the past decade. As outlined in the *Annual Legislative Update: How Each State Stands on Legislative Issues Affecting Advanced Nursing Practice* (Pearson, 2000), 39 states (including the District of Columbia) have no statutory or regulatory requirement for physician direction or supervision of advanced practice nursing. In 17 of those states, scope of practice has a requirement for a physician collaborator to serve as a guaranteed colleague for the nurse practitioner seeking consultation. Every state provides nurse practitioners with some level of prescriptive authority.

As independent practitioners, nurse practitioners are, in many situations, being directly reimbursed. Both Medicare and Medicaid authorize direct payments to nurse practitioners within the scope of their practice as defined by the law of the state in which they practice. Under the Balanced Budget Act (BBA) of 1997 (Public Law 105-33), nurse practitioners are eligible for direct payment for all Medicare Part B services in any setting. Provided the nurse practitioner is practicing within the scope of his or her practice, has a designated physician with whom to collaborate, has a Medicare identification number, and Medicare is not already paying for nurse practitioner care through the employment facility, Medicare will reimburse nurse practitioners directly. This creates substantial demand for and access to nurse practitioners for primary care.
Medicaid specifically prohibits discrimination with respect to the participation, reimbursement, or indemnification as to any provider who is acting within the scope of the provider’s license or certification under applicable state law.

Nurse practitioners can legally provide primary care within their scope of practice to all populations. Limitations, however, exist with respect to reimbursement, which is driven by credentialing criteria and participation in health plans. In general, the limiting factor for obtaining reimbursement is whether the nurse practitioner is a participating provider under the terms of the patient’s insurance coverage. Some insurance coverage limits payments to only participating providers or limits the benefits applied to the member based on whether the provider has a contract with the carrier.

Except where mandated by state law, health maintenance organizations (HMOs) are not required to include nurse practitioners as primary care providers. Nevertheless, in situations in which there is a proven network need (and in states where they are mandated to do so), HMOs have adopted credentialing criteria for nurse practitioners as primary care providers. These criteria are used to ensure that nurse practitioners can provide full-scope primary care indistinguishable from primary care physicians.

The experience of Columbia Advanced Practice Nurse Associates (CAPNA) who have managed care contracts in New York, is that these criteria mirror the credentialing criteria for primary care physicians and include: national board certification as an adult, family, or pediatric nurse practitioner, hospital admitting privileges, years of experience managing a panel of patients, malpractice coverage, full prescriptive authority with DEA registration, state licensure, and minimum education of a master’s degree correspondent with licensure and certification. Independent practices of nurse practitioners must meet the same site review criteria and agree to contractual terms, which include adherence to managed care use and quality management programs. Participation is based on meeting credentialing criteria consistent with state regulations.

### Certification in Advanced Practice

There are numerous professional credentialing organizations. The American Nurses Credentialing Center (ANCC) credentials the largest number of specialties (family, adult, pediatric, acute care, geriatric, pediatric, and school nurse practitioners) and is the most widely known. In many instances, ANCC certification is the required credential for state-based authority. The American Academy of Nurse Practitioners (AANP) provides competency-based national certification examinations for adult and family nurse practitioners. This certification is voluntary and is recognized by many legal or practice groups that require national professional certification, either as a basis for practice or as a means of validating practice expertise. Several other professional nursing organizations provide similar certifications. The National Credentialing Corporation (NCC) of the Association of Women’s Health, Obstetric, and Neonatal Nurses provides certifying examinations for adult and family nurse practitioners. The National Association of Pediatric Nurse Associates and Practitioners (NAPNAP) also certifies pediatric nurse practitioners.

Concerned about the quality of nurse practitioner preparation and national certification examinations, in...
1996 the National Council of State Boards of Nursing (NCSBN) convened a task force composed of nurse practitioners from nine different specialties. Their charge was to develop a consensus with regard to core and specialty competencies for entry-level nurse practitioners. The project has been instrumental in the revision of some certification examinations.

The efforts described earlier have led to adoption by many of the following criteria for nurse practitioner education and practice: (1) the master’s degree as the entry-level requirement for a nurse practitioner; and (2) national certification by the relevant professional organization. National certification is a requirement for nurse practitioners in many states, but not all; it is also a requirement for credentialing at many health care institutions. Because of varying state practice requirements, however, these criteria have not been fully operationalized.

The National Organization of Nurse Practitioner Faculties (NONPF) was established in 1974, and in 1976 began efforts to standardize educational preparation and develop basic practice competencies. NONPF (1995) has defined critical and noncritical competencies that must be reflected in nurse practitioner master’s curricula. Noncritical competencies are identified as competencies developed in baccalaureate programs and expanded on but not taught in master’s nurse practitioner programs. These previously defined noncritical competencies, which are assumed to have been learned in baccalaureate programs, should be measured in nurse practitioner outcomes to perfect the nurse practitioner’s ability to provide differentiated care.

Three Alternatives for Advanced Credentialing

If a more comprehensive model of practice evolves, as seems currently evident, additional education and training for this role is necessary. Not all master’s-prepared advanced practice nurses will welcome or embrace this augmented role. For those who do wish to practice at this level of accountability, there are three possible ways to add this preparation for differentiated cross-site, full-scope practice to the current Master’s-level primary care curricula.

One is to increase the level of training in existing master’s nurse practitioner programs. This would likely increase the existing credit load and subsequent cost in tuition and time so as to significantly decrease interest in a program leading only to a master’s degree. In nursing and in other clinical master’s education (public health, for example), 1 to 2 years of postbaccalaureate education is the norm. A second method would make the extra training a discrete add-on to the Master’s program, perhaps in the form of a post-Master’s certificate. Only those who wanted to assume the advanced cross-site practice nursing role would be required to complete the training. This option, however, would still incur the high cost in time and money for a credential that might have even less clarity with the public than an enhanced Master’s degree. The third option for advanced practice nursing is to create an advanced practice nursing doctorate.

The Master’s and certificate options are problematic for three reasons. If the goal is to recognize the ultimate in practice competency within the profession, the Master’s degree does not signify to the public, to payors, or to potential recruits into the profession what a doctoral degree reflects. Every other health profession grants a doctoral degree to indicate the highest level of practice competency. Nursing loses in several ways by not providing a similar credential for its highest level practitioners.

First, and perhaps most important, if we cannot develop an attractive, substantive and recognized program to raise the level of practice competency for nurse practitioners, then nurses will be absent from the cadre of fully qualified primary care providers available to patients. As the primary care market place becomes crowded, nurse practitioners with less than cross-site, full-scope practices will not survive as full primary care providers. Physicians are the traditional primary care providers, but patients are beginning to recognize nurse practitioners’ unique skills and contributions, which differentiate them from their primary care physician colleagues. To assure that patients have valued and cost-effective nursing services, nurse practitioners need the added training and a recognizable high-level credential.

Also, for those aspiring to a health professions career, nursing already loses promising applicants who want an independent and prestigious credential. We cannot afford to lose these potential nurse leaders to other professions in which they can earn the title of “doctor” and have the authority to direct their own practice. Finally, payors will reimburse a known, high-quality primary care nurse who has the skills and authority to provide and coordinate care across sites and with specialist providers.

Doctoral Education in Nursing

There are currently three major types of doctoral programs in nursing: the academic doctorate (PhD),
the professional applied-research-focused doctorate (DNSc), and the professional doctorate that is designed as an entry-level practice degree (ND). A brief description of the goals of these programs and the competencies expected of their graduates reveals that none actually prepares nurses for truly advanced practice.

The most common doctoral degree is the PhD, currently offered by 64 of 74 institutions or consortia/partnerships offering doctoral programs in nursing. Programs offering the academic doctorate are research focused with their goals generally stated in terms of producing scholars and researchers who can generate and advance the knowledge of the discipline. The curricula for PhD programs in nursing tend to include a sizable component of research methodology and theoretical and theory-development content. The competencies expected of graduates focus primarily on research skills and the ability to generate new knowledge. More emphasis is placed on the ability to develop and test theories than to apply knowledge to clinical problems.

Dissertations are universally required. Graduates of PhD programs optimally are employed in positions in which research is an integral part of the role. A majority work in academia; however, nursing PhDs also find employment in clinical settings as administrators and researchers and in government positions.

Professional degree programs are of two types: the investigational or research-focused doctorate and the entry-level practice doctorate. The more common type (with 12 programs in operation as of January, 2000) offers the Doctor of Nursing Science (DNS, DNSc, DSN), which, like the PhD, is a research degree. A majority of the research-focused professional doctoral programs in nursing are virtually identical in goals, objectives, and content to PhD programs; however, a growing trend is to differentiate them from the academic doctorate by incorporating more of an applied focus. Newer professional DNSc programs (i.e., those initiated during the 1990s) tend to address the development of practice and policy leadership competencies as well as research-related competencies. Although the ability to conduct independent research is an expected outcome in all such programs, those designed to be different from the PhD tend to place priority on applied research, testing and applying theories and knowledge in real-world clinical and policy situations, and on outcomes research that goes beyond the individual as the unit of analysis. As with the PhD, dissertations are universally required. DNSc graduates typically are employed in leadership positions in clinical settings and in academic positions that focus on clinical research, practice, and teaching.

The second type of professional degree program, offering the nursing doctorate (ND) degree, is oriented toward preparation for clinical practice. Originally designed to be analogous to the MD, DDS, and other degrees that admit students after baccalaureate preparation in another discipline and prepare graduates for entry into practice, there is currently little consistency in the goals and curricula of ND programs. Dissertations are generally not required in ND programs; however, several of the programs require a clinical research or research use project and practice. The existing ND programs differ considerably, making it difficult to characterize their goals and expected competencies. None address the advanced full-scope practice role proposed here.

The current doctoral programs in nursing do not provide adequate preparation for truly advanced practice nursing—practice that is independent, sophisticated, analytical, and cross-site. The investigational academic and professional doctorates appropriately place their emphasis on research competencies. The ND degree lacks meaning at this point in time because of the widely divergent skill levels and competencies that are being incorporated. Several existing doctoral programs include useful courses for advanced practice nursing practice, such as intensive residency experience, health care system and related economics, and evaluation techniques. However, currently there is no one program that packages sufficient courses and learning experiences to produce the complex array of competencies needed. The most important barrier to nurse practitioners gaining full recognition as primary care providers in all contexts is lack of uniformity in training, standards, and outcomes.

**Preparation for the DNP Degree**

In 1994, the Columbia University advanced practice nursing faculty began a practice, primarily for Medicaid patients, that mirrored the conventional authority and responsibilities of a medical primary care practice. Three years later, in 1997, the school opened a primary care practice in midtown Manhattan, with the same full-scope authority that enrolled patients with commercial health insurance. This practice has the same contractual terms, including identical fee schedules and the same insurer groups as Columbia-New York-Presbyterian physicians. With their substantive and enthusiastic support, primary care
specialist partnerships that acknowledge differentiated practice by advanced practice nurses have been established.

With active, involved experts from medicine, biostatistics, economics, and health policy, the evaluations of these two practices provide the basis for a curriculum that can lead to competency in the advanced full-scope primary care role. The basic template for this advanced role preparation is based on the experiences of the CAPNA practitioners. After a nurse practitioner has mastered the basics of single-site primary care, including prescriptive authority, an intensive 1-year program of full-time study (approximately 40 semester credits) is proposed. That is, the nurse practitioner graduate of a high-quality master’s program would require time in dedicated practice before enrolling for the doctoral degree.

The program would include both didactic instruction and an intensive credit-bearing clinical fellowship experience, which would be designed and supervised by the school of nursing faculty in collaboration with adjunct physician and advanced practice nursing faculty experienced in full-scope primary care. Because it would be a practice doctorate, no dissertation would be required; however, a comprehensive evaluation to measure attainment of terminal competencies would be performed.

The school of nursing would be the entity controlling the requirements for and quality of the degree within the policies and guidelines of the parent institution. Ideally, there would be agreement within the profession about the specific terminal competencies and types of clinical experiences and other requirements for the degree so that requirements could be consistent from one institution to another, allowing the nature and meaning of the degree to be clearly communicated and understood. Because individual institutions vary somewhat in their policies about credit allocation, transfer credits, and residency requirements, these would be determined by each institution awarding the degree.

Because most nurse practitioners have 4 years of baccalaureate professional training and 2 years of Master’s primary care training, the proposed seventh year, which would lead to the doctorate, is valid; other professions require 4 years total of professional education for the doctorate. A 4- to 5-year period of instruction would be the total professional education for an individual entering nursing with a nonnursing baccalaureate degree and progressing through a streamlined program of study. The envisioned post-master’s credit allocation of approximately 40 credits (earned in an intensive calendar year of study) is equivalent to the average number of nondissertation credits required in programs offering the investigational professional nursing doctorate, including Yale, Johns Hopkins, and Columbia.

The training model that has worked for Columbia could be easily replicated at other academic medical centers. But advanced practice nurses everywhere, and particularly those in remote or innercity underserved areas, are already developing these higher levels of practice because of patient necessity and with few formal mentors. If nurse educators go forward with this new credential, methods must be found to evaluate and acknowledge the competencies of those already practicing with high quality at advanced levels. Also, ways must be found to make the DNP degree accessible to every qualified advanced practice nurse who wants to pursue this credential through, for example, regional consortia by using a variety of distance learning technologies.

Only advanced practice nursing in primary care has been addressed in this article; there are equal opportunities in acute-care and community care. If nursing professionals, patients, and payors agree on the value of this advanced nurse practitioner, then nurse educators have the responsibility and unique opportunity to develop the standards and assure quality and access to care. Hard work lies ahead, but the outcomes mean not only survival, but the way to prevail in the new health care system.

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