THE ABCs OF THE DOCTOR OF NURSING PRACTICE: ASSESSING RESOURCES, BUILDING A CULTURE OF CLINICAL SCHOLARSHIP, CURRICULAR MODELS

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The Doctor of Nursing Practice (DNP) degree prepares nurses to provide comprehensive care across sites and over time. It is absolutely crucial—for both patient care and the nursing profession—that broadly recognized standards of competency for these new practitioners be established. The Council for the Advancement of Comprehensive Care has met since 2000 to build consensus on competency standards and a process for certifying these graduates. Deans of five nursing schools discuss their experiences and provide guidance for schools interested in developing DNP programs. (Index words: Doctor of Nursing Practice; Nurse practitioners; Curricular models) J Prof Nurs 25:69–74, 2009. © 2009 Published by Elsevier Inc.

THE DOCTOR OF Nursing Practice (DNP) has emerged on the national scene as a solution to the long-standing need for a sufficient number of well-qualified clinicians to provide coordinated and comprehensive care and at the same time provide for the delivery of care that is safe, accessible, and of high quality. Nurse practitioners (NPs) have been partially meeting this need, particularly in ambulatory settings, for over 30 years. However, until now, nurses with advanced clinical practice education have not had the full complement of skills necessary to care for patients with complex comorbidities seamlessly across all sites of care and to do so authoritatively. The clinical practice doctorate provides sophisticated education for practitioners to attain these competencies. Authority for providing comprehensive care—from public and private payers and from hospital medical boards—is increasing rapidly and will be further grounded by this new level of nursing practice. This article will share experiences from some of the academic pioneers who are preparing nurses for this new paradigm of practice, their experiences with assessing and considering resources, building clinical scholarship, designing clinical experiences, creating innovative curricular models, and seeking degree approvals.

Developing new clinical programs at the doctoral level is a challenge. Concurrent with the development of new programs, it is critical that broadly recognized standards be developed to distinguish graduates. To link these two
elements, Columbia University School of Nursing established a group of clinical and health policy experts in 2000 to form the Council for the Advancement of Comprehensive Care (CACC). Deans of several academic health center nursing schools and health policy experts from medicine and related fields have collaborated for more than 7 years to establish consensus on competency standards and a process of certifying graduates who meet a new, high bar of performance for the delivery of comprehensive care at the doctoral level. It is important to note that this dialogue has included professionals from several disciplines, as well as providers and payers of care.

In 2000, the newly established CACC first met to consider the new degree and determine reliable standards, which are necessary so that the public, payers, and patients know how to access and facilitate the services of these new professionals. The Council focused on DNP standards development within the context of a national health care system where a shortage of physicians and of nurses impacts optimal outcomes. Physician and nurse members of the Council shared a vision for expanding clinician resources for comprehensive care and transcended conventional turf issues to reach consensus on DNP standards. Initially, primary care was the focus of the council. Content for building additional competencies in differential diagnosis and choosing relevant treatment options were included as recommendations for the degree; then, content covering advanced training in genetics, practice management, ethics, informatics, and legal parameters of practice was added. Over time, there was recognition that this “new” care with an emphasis on active management and coordination of care across sites is more comprehensive than conventional primary care. From ongoing deliberations and dialogue, it became clear that this clinical doctoral education involves a set of skills and knowledge that build on any master’s (MS)-certified specialty in nursing, as well as on medically based primary care.

The council arrived at a common set of doctoral competencies for all specialties in 2003 and published them in a monograph. In 2006, AACN published “The Essentials of Doctoral Education for Advanced Nursing Practice” for DNP programs (AACN, 2006). They are very similar to the 2003 council-published competencies except for the AACN definition of “practice,” which spans more than the clinical competencies for practice with patients that is the focus of the council's work. These competencies now form the template for documenting and evaluating student achievements and build upon and extend those achieved in advanced practice nursing MS degree programs.

1. Provide health promotion, anticipatory guidance, counseling, and disease prevention services to healthy or sick patients in all clinical settings.

2. Apply principles of epidemiology, environmental health, and biostatistics to identify population or geographically based risks to health of specific patients.

3. Formulate diagnostic strategies to deal with ambiguous or incomplete data in developing differential diagnosis for patients who present with new conditions and those with complex illnesses, comorbid conditions, and potential multiple diagnoses.

4. Determine the need for emergency evaluation and/or inpatient admission and manage/co-manage and coordinate the care of patients in the emergency, acute, and subacute setting.

5. Identify and select appropriate sophisticated interventions that incorporate cultural values.

6. Establish and utilize a collaborative network of specialists while maintaining primary responsibility for patient care.

7. Manage chronic illness by involving specialists, other disciplines, community resources, and family, maintaining continuity of care among different settings.

8. Identify gaps in access and/or reimbursement and act to resolve barriers that compromise patients’ optimal care.

9. Introduce and guide the process of planning end-of-life care.

10. Apply the principles of legal and ethical decision making to identify and analyze dilemmas that arise in patient care.

11. Use and synthesize evidence from practice and patient databases and analyze data to generate evidence from practice to improve patient care.

The council believes it is important that the DNP be recognized as education for advanced clinical care. Although schools may be tempted to create programs focusing on other areas, history shows that clearly defined competencies for graduates lead to the kind of eminence, reliability, and public acceptance evident in medicine and law. It is critical for both patient care and our profession that we establish clarity of purpose and a defined level of competency for these new practitioners. If the level of specificity required for a standardization of purpose and precise delineation of competencies cannot be attained with the academic degree alone, then certification is essential. To the extent that DNP program focus varies from direct patient care to administration or education, the public must be made aware of the distinctions between graduates of these programs. Administrative, educational, and systems experts are needed in the profession, but these areas of accomplishment are fundamentally different from advanced clinical practice competencies. If the distinctions are not evident, the full potential of DNP clinical experts—for safe and quality care—will be lost.

The council is deeply committed to formulating common clinical standards for comprehensive care. Only by providing care of unquestionable quality can we break down the barriers to independent and authoritative nursing practice. Standards will ensure high-quality care and will allow the public to identify and
access practitioners who have attained the competencies to deliver such care. To accomplish this, the council is establishing a national certification process, which will ensure validation of the advanced clinical practice competencies of DNP graduates for the delivery of comprehensive care. It is anticipated that only those who have graduated from a clinical practice doctoral program that includes a direct patient care residency will be eligible to sit for certification. Every DNP graduate who successfully completes the certification process will be designated as a Diplomate in Clinical Doctoral Nursing. The council will also broadly promulgate policy for the reimbursement, access, and authority of these individuals.

In the spring of 2007, council members who are establishing clinical practice doctoral programs spoke at a conference convened by Columbia University. The nursing deans of the University of Illinois at Chicago (UIC), University of Tennessee Health Science Center at Memphis, University of Texas Health Science Center at Houston (UTHSC-H), University of Washington, and host Columbia University presented issues and approaches related to establishing DNP programs. They addressed various alternatives to the creation of a program—upgrading MS programs, transitioning from an existing doctorate that focused on clinical research, or establishing a new clinical doctorate in addition to an existing research doctorate—and how they had developed the resources and the curriculum and built a culture of clinical scholarship necessary for a clinical doctoral program. Uniformly, the decisions of the different schools were based on faculty resources, a vision for clinical scholarship, and opportunities for clinical training.

To provide a framework for those schools that are in the process of developing these programs, we summarized the various strategies and considerations of schools that are represented on the council and were at the conference.

Assessing Resources and Readiness: Faculty Practice and Development of Resources

An adequate number of existing doctoral faculty with advanced clinical expertise proved to be the most crucial resource. Educating and preparing faculty for the new degree were, by most accounts, the most challenging. Schools used a variety of methods to develop faculty, but a common theme was the opportunity for direct clinical practice. The schools with extensive formal faculty practice initiatives were able to move more quickly than schools that were more intensely focused on research scholars. At the time they began to build their programs, faculty practice at the five council schools represented at the March conference was either already integrated into core faculty responsibilities or was created in anticipation of the clinical doctoral program. All schools agreed that a strong emphasis on faculty practice, embedded in the cultures of their schools, was critical to their ability to move forward. Formal program development usually began only when a critical mass of practice faculty whose sole focus was on graduate clinical education was in place.

The second most important resource was the academic health center environment and shared resources found therein. Academic health center medical schools all have advanced practitioners on their faculties, and most are specialists eager to welcome comprehensive care generalists. Similarly, public health colleagues are frequently available (epidemiology, biostatistics, advanced informants, environmental health), and academic health centers provide excellent opportunities for interdisciplinary education and clinical training.

Faculty Practice

Columbia University was the first to create a new clinical practice doctordate. Faculty practice, first instituted in 1986, was the primary instrument for establishing a culture of clinical scholarship and ultimately the professional resources necessary to launch the DNP. The school conducted a randomized controlled trial (RCT) in 1995 to 1998, which compared the care outcomes of NPs and of NPs with physicians in primary care. The RCT also provided new and valuable experience in cross-site care. Hospital admitting privileges were sought to eliminate variables between the two groups and to allow the NPs to establish the same continuity of care and authoritative relationships with their patients as physicians (Mundinger et al., 2000). Admitting privileges proved to be far more valuable than a simple leveling of the playing field for an RCT. Most patients admitted to a hospital—especially an academic health center hospital—require specialist care, usually for a specific episode of illness within the boundaries of that specialty. Rare is the patient, however, who only needs that specialist perspective. With an aging population and more chronic illness in every age range, protective, coordinated, and comprehensive care adds value in every hospitalization. DNP clinicians are the resource to provide these benefits, and admitting privileges give them the access and authority to do so.

Understanding that it was essential to mainstream this proven practice model, Columbia Nursing sought direct reimbursement for commercially insured beneficiaries in a proposed NP practice from Oxford Health Plans, the largest commercial insurer in Manhattan. The case was made that NPs would offer additional primary care provider choices to their beneficiaries. Reimbursement at the same rate as physicians was also requested, with the rationale that if NPs were reimbursed at a lower rate, a lower premium should be charged to beneficiaries, placing NPs in direct price competition with physicians. This could also imply that the less expensive NP care was inferior. In 1997, the new practice, Columbia Advanced Practice Nurses Associates (CAPNA), opened its doors in midtown Manhattan and subsequently signed contracts with 11 private insurers at rates on par with physicians and with Medicare. With admitting privileges for faculty NPs assured in the hospital bylaws, the new practitioners provided a valid alternative to primary care physicians.
A new and more sophisticated role for NPs was developed at CAPNA, and the curriculum and graduate competencies for the clinical doctorate were derived from this evolving practice. Several federal and state agencies, along with the Robert Wood Johnson Foundation, the Fan Fox and Leslie R. Samuels Foundation, the Kellogg Foundation, the Commonwealth Fund, and the Kaiser Foundation, all helped to fund the development and evaluation of this new model of practice.

The UTHSC-H initiated a plan for faculty practice in the early 1980s using a model of providing contractual faculty services to hospitals and health care agencies. In 1991, UTHSC-H School of Nursing opened its first primary care clinic, named the University of Texas Health Services (UTHS). The second clinic opened in 2006, and several more are in the planning stage. The services delivered are 95% NP and 5% physician. Other staff, such as nutritionists, are hired on a contractual basis. The clinic focuses on comprehensive primary care across the life span, occupational health care, travel medicine, student and employee health, health education, and radiological and laboratory services. The clinic maintains contractual agreements with several preferred provider organization and managed care plans. From the beginning, the clinic has had an electronic patient record. The clinic contains a class D pharmacy, providing patients with immediate access to medications, lower costs, and improved patient education at the time of dispensing. Most notably, the clinic has 63 contracts with businesses and industries, including Chevron Phillips Petroleum; Marriott Management Services; Toyota Tsusho America, Inc.; and Union Pacific Railroad. Local city entities such as Firefighters, the Police Department, and the Metropolitan Transit Authority are also contractual clients. Not-for-profit agencies such as the local chapter of the American Red Cross, Planned Parenthood, and Senior Centers receive the UTHS on a contractual basis. A number of state agencies, including Texas Parks and Wildlife, are clients. Services are delivered not only at clinic sites but also at worksites and other settings. The clinics have a fine reputation and a 95% collection rate.

At the UIC, plans for direct clinical practice were begun in 1996. State legislative statute changes were negotiated, and bylaws for a nursing service plan were approved by the Board of Trustees in 1998 to serve the University of Illinois Nursing and Healthcare Associates practice group. Growing over time, faculty practice sites, seen to be the sites for integrating teaching, research, and practice, include primary care at health centers in schools, primary care integrated with mental health care with a mental health rehabilitation organization for people with severe mental illness, follow-up medical and surgical management aligned with medical center clinics, and contracts for faculty clinicians to be the hospitalists for a community hospital.

The University of Tennessee Health Science Center College of Nursing faculty has been engaged in various forms of practice for many years. Beginning in 1983, a formal plan was developed and put into place. This coincided with the beginning development of the faculty research program, and both were designed to subsequently form the foundation of the two different doctoral programs—DNP and PhD. Described in early documents as spanning from the nursery to the nursing home, the primary form of activity was contractual agreements for the services of faculty in hospitals, primary care clinics, home health agencies, student health services, the International Airport Authority, private industry, and nursing homes. Direct billing for fee for service was not usually possible in these early days. In 1990, the State of Tennessee gained approval from the federal government to discontinue traditional Medicaid services and to move to an 1115 waiver program called TennCare. For the first time, faculty members of the College of Nursing were named as primary care case managers under this program, leading to substantial expansion of the practice in primary care. This change in state law also led to the faculty being named as providers in most private insurance plans as well.

Today, the practice activities of the faculty include a variety of different sites with payments including contracts for service, fee for service, and capitation. The mix of services includes primary care, hospital-based acute care, specialty practices, occupational health services, and forensic services through the mid South. The practices of the faculty support the clinical and research scholarship of the College and earn additional income for the College.

Although the University of Washington School of Nursing does not have a faculty practice plan, for many years, its faculty have contracted individually with existing clinical service agencies to provide clinical care. Currently, the faculty have participated in the development of a community-based primary health care clinic in which NPs deliver the majority of care. This clinic provides opportunities for faculty to practice as well as an excellent environment in which to educate students.

**Resources Development**

In almost all cases, new resources were required to begin DNP programs. Most of the schools reallocated existing resources, some specifically shifting MS resources to clinical doctoral program development. Success relied on faculty’s willingness to create core courses and expand clinical competency outcomes in clinical and didactic courses. Access to new and better sites for clinical placements, a final project commensurate with a research dissertation, and residency/leadership experiences all required development by a dedicated faculty. A major resource, beyond faculty practice, was the availability of clinical faculty in schools of medicine and public health. Nursing schools at academic health centers have a distinct advantage in advancing the new clinical doctorate due to the ready availability of these resources, which are similar to those needed for physician training. All five deans noted that their universities and health science centers were persuaded to support DNP development with existing shared resources because of the ease of identifying the new level of nursing and the added
value these practitioners would bring to the clinical environment. As a recommendation, nursing schools in colleges and universities that reside outside academic health science centers might consider partnering with nursing schools that do have this context and experience.

Public universities more often than private ones rely on the institution or state agency to fund new faculty lines to open new programs. Entrepreneurial deans and faculties in public schools establishing innovative new programs (University of Washington and University of Tennessee at Memphis, for example) have transformed old programs into promising new ones. Private schools are more often able to open new faculty positions if school-based financial resources (tuition, grants) are available. In all cases, assessing how many new faculty are necessary and careful delineation of their needed clinical skill set are crucial to developing a successful program.

Building a Culture of Clinical Scholarship

The cornerstone of clinical scholarship is the translation of best evidence into practice and guiding DNP students as they lead these efforts. Faculty who are grounded in research scholarship must be involved in the preparation of DNP students to ensure transfer of research into clinical practice. DNP graduates must be sophisticated evaluators of evidence in adopting research into practice. Researchers can teach DNP students how to assess the validity of design, methods, and data analysis of research found in the extant literature—a necessary guide to adopting new practice recommendations. All faculty need to understand the importance and value of practice inquiry and its relationship to translational science and evidence-based practice. Just as nursing schools require faculty who are prepared as researchers, they also need faculty who are educated as expert clinicians and who can collaborate with research scientists in the accumulation of evidence for practice and translation into practice. In addition, it is anticipated that many DNP graduates will combine teaching and practice, and thus, the DNP will provide a rich new source of faculty, which will be fundamental to reducing the nursing shortage.

Developing a shared vision among faculty, usually through multiple faculty fora and discussions, is essential in respect to all scholars and to quantifying clinical scholarship. Doctoral graduates, regardless of type of program, are expected to reach certain levels of excellence in scholarship. The focus for faculty and students should be on the translation of evidence to improve the quality of care and patient outcomes and on the development of a scholarly partnership between DNP and PhD graduates. Schools with research and practice doctorates are learning that students in both programs are enriched by the interaction and by sharing courses such as “Assessing Clinical Evidence,” in which research students learn to design reliable studies and clinician students learn how to identify the best research to support clinical decisions. At Columbia, this course in particular led to fruitful discussions among students and helped educate them about the roles and responsibilities of both research and clinical scholars and how they could collaborate in the future. Other shared courses include advanced informatics and evidence-based practice. Students in both programs are expected to publish in peer-reviewed journals, to present at professional meetings, and to contribute to the scholarly work of their colleagues. Similar experiences among DNP and PhD students and with shared courses were reported by the other schools participating in the council panel.

Building a culture of clinical practice scholarship within conventional academia requires a reshaped mindset and new policies. Clinician scholars earning the DNP merit a comparable salary by rank as research scholar faculty with a PhD degree. They also warrant having comparable requirements for promotion and tenure, that is, publications in peer-reviewed journals, collaborations with leaders in the field, outstanding teaching, generation of grant revenue or practice revenue, and highly visible contributions for advancing the science or practice of nursing. The clinician scholar’s work might also seed other theory-building scholarship or impact policy. For example, a methodical review of their clinical encounters could yield themes of patient care outcomes suitable to further research or a change in treatment policy.

Curriculum Development and Approval Issues

Schools offering the DNP are moving closer together in terms of curricula and competencies. Most schools are contemplating two entry points into the DNP: post bachelor of science (BS) and post-MS. Regardless of whether a school starts a new DNP program, transitions from an MS degree in advanced practice to the DNP or transitions an existing doctoral degree to a DNP focused on entry into advanced nursing practice, new curricula must be created. Sophisticated, independent practice and management of patients require formal courses and mentored clinical experience to enable students to achieve measurable doctoral-level competencies. DNP competencies have been jointly developed and adopted by the council, and model curricula have been derived from them to assure that students are appropriately prepared for independent practice. Model curricula are posted on the Web sites of Columbia (http://www.nursing.columbia.edu/programs), the UTHSC-H (http://son.uth.tmc.edu/), and the University of Tennessee Health Science Center at Memphis (http://www.utmem.edu/nursing).

There is considerable variation regarding the capstone project. Most DNP programs utilize the clinical residency so that students may develop broad evidence of achieving all the designated clinical competencies agreed on in the monograph, “Competencies of a Clinical Doctorate,” first published in 2003 (Columbia University School of Nursing, 2003). Requirements range from a portfolio of sophisticated evidence-based case studies drawn from residency experiences (University of Texas, Columbia) to a practice-driven project that addresses issues derived from students’ clinical residency or related sites and is
designed to improve patient care and/or outcomes (University of Tennessee, University of Washington, University of Illinois at Chicago). As the DNP matures, there will no doubt be an evolution to a common method of assuring common standards of achievement.

Approval issues were very similar at the five council schools. All began with a faculty task force, which was charged with development of a proposal, and ended with state approval. Steps in between varied by state and university system. Most took several years, and all involved extensive time convincing others of the necessity and importance of this for the future for nursing. Faculty were required to address additional internal issues such as revising committee structure, clarifying rules regarding course content, and solving potential conflicts of interest for current faculty who would be DNP students. In schools where there were two entry points for admission (post-BS and post-MS), different time lines for implementation were required. To facilitate the approval process, one school (UIC) wrote Health Resources and Administration grants, which provided a structured framework for program development and encouraged approval by their university. In all schools, many faculty were involved in the process of obtaining approvals, including multiple efforts and dialogues with different constituencies. Research scholars were particularly influential in promulgating this new clinical doctorate to their university colleagues. Many schools found it easier to convince their universities if they received federal/state/foundation support for development or evaluation of the proposed new program.

Conclusion

Until now, nursing doctorates were only available in research, education, or administration. Today, nurses have the opportunity to obtain a doctorate in clinical care—nursing’s core mission. We can learn from other disciplines that have won the public’s trust and support by providing our many constituencies with the means of clearly identifying the DNP graduates who are clinical experts. The public needs access to these highly skilled nurse clinicians. Payers want cost-effective, high-quality care. Physicians need highly skilled nurses as a foundation on which to build their increasingly complex areas of specialty. Nursing professionals need to stand together to develop a degree that represents unequivocal competencies for providing superior health care. The DNP movement is a nursing opportunity to transform the health care system into one with broad access to comprehensive care.

References

