

DOCTOR OF NURSING PRACTICE PROGRAMS ACROSS THE UNITED STATES: A BENCHMARK OF INFORMATION. PART I: PROGRAM CHARACTERISTICS

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The number of doctor of nursing practice (DNP) programs in the United States has dramatically increased. To date, there is a lack of benchmark data regarding DNP program attributes; thus, the purpose of this investigation was to generate such a database. Because of the volume of information gathered, the results are presented in a two-part article. Part I consists of DNP program characteristics, which include location of program, type of program, delivery, plan of study, program length, number of credits, cost, program tracks, practice course name, review of programs still offering the master's degree for advanced practice nurses (APNs), and the availability of nursing education electives. Part II consists of information regarding DNP admission criteria.

A cross-sectional, descriptive design was used to explore 137 DNP programs across the United States. Data were collected exclusively via university Web sites. Descriptive statistics including frequencies, percentages, means, and standard deviations were calculated and presented in report, table, or figure format.

This comprehensive DNP program characteristic database is the first, to our knowledge, that is available for review. As universities prepare to develop, amend, and seek accreditation for their DNP programs, knowledge of these characteristics would be helpful to compare, contrast, and construct curricula. (Index words: Doctor of nursing practice; DNP; Program characteristics; Program information) *J Prof Nurs* 28:265–273, 2012. © 2012 Elsevier Inc. All rights reserved.

THE NURSING PROFESSION is entering a new era in education with the emergence of the doctor of nursing practice (DNP) degree. The DNP is a graduate,

terminal practice degree that prepares nurses to attain expertise at the highest level of advanced nursing practice to assume leadership roles in complex clinical environments, health care policy, evidence-based methodology, and health care delivery systems. The DNP graduate will serve as role models, visionaries, facilitators, consultants, and expert clinicians in the health care arena (American Association of Colleges of Nursing [AACN], 2004, 2010a). Advanced nursing practice includes, but not exclusively, the four advanced practice nurse (APN) roles of clinical nurse specialists, nurse anesthetists, nurse midwives, and nurse practitioners (AACN, 2006a). With

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a key focus on scholarship in the practice setting, innovation and testing of care delivery models, practice improvement, examination of health care outcomes, and proficiency in establishing clinical excellence, the DNP places less emphasis on theoretical underpinnings and conducting research and targets the evaluation and utilization of research to solve practice problems or to inform practice directly (AACN, 2004, 2010a).

On October 25, 2004, the AACN voted to endorse moving the current educational preparation necessary for advanced nursing practice from the master's to the doctorate level (DNP) by the Year 2015 (AACN, 2011b). In a 2005 report titled *Advancing the Nation's Health Needs: NIH Research Training Programs*, the National Academy of Sciences called for nursing to develop a "nonresearch practice doctorate" to prepare expert practitioners who could also serve as clinical faculty. Other developments fueling momentum for transition in graduate nursing education (NE) include the following: rapid expansion of technology, knowledge underlying practice, and complexity of patient care; national concerns about the quality of health care and patient safety; the need for a higher level of education to produce leaders who can design and assess care; shortages of doctoral-prepared nursing faculty, leaders in practice, and bench-to-bedside nurses; and educational parity with other members of the health care team (AACN, 2006a). In light of this call for change, schools of nursing began to create and implement DNP programs.

Background

The DNP actually traces its roots back to 1960, when Boston University developed the first clinical practice doctoral degree program that focused on the development of nursing theory for a practice discipline and conferred students with the doctor of nursing science degree (Chism, 2010, 2011). Thereafter, in 1975, the University of Alabama at Birmingham developed the doctor of science in nursing (DSN, DNSc), which was geared toward increasing the number of doctoral-prepared nursing faculty, administrators, and consultants (University of Alabama School of Nursing, n.d.). However, both of these degrees were practice-oriented, research-focused degrees that in essence were similar in curriculum to the doctor of philosophy degree (PhD). In 1979, Case Western Reserve University conceived the nursing doctorate (ND), a degree that focused on preparing a clinical leader, not a researcher. However, for reasons unknown, the ND was never universally accepted, and roughly only about 700 nurses attained this degree (Chism, 2010). In fall 2001, the University of Kentucky College of Nursing opened the first DNP program in the country, graduating six students in 2005. On close inspection, it was found that this program shared much of the same curricular components as the ND program (AACN, 2006a; Chism, 2010). Today, a number of universities have moved the DSN and DNSc to PhD programs and the ND degree to the DNP program (AACN, 2006b; Chism, 2011).

In spring 2005, AACN reported a total of 8 DNP programs in existence. By the summer of 2005, 80 DNP programs were being considered. In the fall of 2005, 20 programs offered DNP degrees, and 140 programs were in development (Chism, 2010). In 2008, there were 46 programs accepting DNP students (Apold, 2008). As of July 2011, AACN lists a total of 137 programs (AACN, 2011a). In just a 6-year period, DNP programs have increased by 85%, with a 66% increase over the past 3-year period. Enrollment numbers indicate that from 2008 to 2009, the number of students entering DNP programs increased from 3,415 to 5,165, and from 2009 to 2010 enrollment jumped to 7,034, with the number of DNP graduates increasing to 1,282 from 660 (AACN, 2010b, 2011b). In terms of accreditation, the Commission on Collegiate Nursing Education (CCNE) reported that 18 DNP programs had been accredited by February 2010 (C. Ledbetter, personal communication, February 23, 2010). As of June 2011, CCNE reported 65 accredited DNP programs (a 73% increase), 19 additional programs scheduled for review in fall 2011, and 20 more programs up for possible review in 2012 (J. Butlin, personal communication, June 28, 2011).

Purpose

The adoption of the DNP degree by the AACN has led to the exponential growth of DNP programs across the United States. Although all DNP programs must adhere to the *Essentials of Doctoral Education for Advanced Nursing Practice* (AACN, 2006b) and meet any competencies in place by specialty organizations, numerous ways in which to organize and deliver programs exist. Because the question is no longer *should* we move forward, but rather *how* do we move forward with the DNP, understanding the overall characteristics and regional trends will help universities better plan for their specific needs when developing and evaluating their DNP programs.

To date, there is a lack of benchmark data regarding DNP program attributes; thus, the purpose of this investigation was to generate such a database. Because of the volume of information gathered, the results are presented in a two-part article. Part I consists of DNP program characteristics, which include location of program, type of program, delivery, plan of study, program length, number of credits, cost, program tracks, practice course name, review of programs still offering the master's degree for APNs and, the availability of NE electives within the curriculum. Part II consists of DNP admission criteria, which include graduate record examination requirements, grade point average, national certification, degree requirements, specialty foci, clinical hours, and prerequisite courses.

Methodology

Design

A cross-sectional, descriptive design was employed.

Sample

DNP program listings were retrieved from the AACN DNP program Web site (AACN, 2011a). As of January 2011, AACN listed 136 DNP programs across the country. Of this list, 5 programs were not included because Web site information was not available at the time of data collection. An additional 6 DNP programs, found via Internet searches, were included into the sample resulting in a final sample size of 137 DNP programs.

Variables

Data collected from university Web sites were categorized by state, region, type of program, program delivery, program length, plan of study, number of credits, cost of the program, program track, practice course name, and review of programs offering the master's degree for the APN and NE electives.

State/Region. Schools of nursing were listed according to their location by state. States were then separated into five regions: west (Washington, Oregon, California, Utah, Nevada, Colorado, Montana, Wyoming, and Idaho), midwest (North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan), southwest (Arizona, New Mexico, Texas, and Oklahoma), southeast (Alabama, Louisiana, Mississippi, Alabama, Tennessee, Kentucky, Florida, Georgia, South Carolina, North Carolina, Virginia, and West Virginia), and northeast (Pennsylvania, New York, Vermont, New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, New Jersey, Delaware, Maryland, and District of Columbia).

Type of Program. Type of DNP program was identified as bachelor of science in nursing (BSN) to DNP (also known as postbaccalaureate) or master of science in nursing (MSN) to DNP (also known as postmaster's).

Program Delivery. Program delivery was the method of instruction used to deliver curricula and was classified using the verbiage cited on the university Web sites. *Online total* referred to programs using an entirely online format with no face-to-face meetings. *Online mandatory campus time* represented online learning experiences with mandatory face-to-face meetings at least once during degree obtainment. *Face to face* was used if the learning experience only occurred on campus in the classroom setting. The term *hybrid* was used if that was the description given by the institution representing some face-to-face learning blended with online technology-enhanced strategies. *Both online/face to face* was used if classes were offered in both formats, but the term *hybrid* was not used. *Unclear* was used if the program delivery method was not given or ambiguous.

Plans of Study. Plans of study were labeled as *full-time* or *part-time* according to the schools' listings. The plan of study was labeled *unclear* if it was not given or ambiguous.

Program Length. Program length, quantified in months, was the time needed to complete the BSN/MSN to DNP

program. When program length was given in months, the number was directly recorded; years were converted to months, and a three-semester plan of study (fall, spring, and summer) was assumed to consist of semesters with 14-week durations.

Number of Credits. Number of credits was the numerical total of credit hours required to complete a DNP program. If a credit range was given, the higher credit number was recorded.

Program Track. *Program track* was defined as the designated area of specialty within the DNP degree as specified by the information provided on the Web sites. The program track was identified as APN if it prepared graduates for roles as nurse practitioners, nurse midwives, nurse anesthetists, or clinical nurse specialists. The DNP program track was identified as *traditional* if no specific specialty was conferred. This was typically seen in the postmaster's programs. Other specialty track names were recorded directly from the university Web sites.

Practice Course Name. *Practice course name* was the term designated to label the practice component course of the DNP program.

NE Elective. *NE elective* was defined as an elective component of the DNP program that added additional course work specializing in NE (such as curriculum and instruction).

Master's Degree APN. This variable was identified as universities who offered the DNP degree, but also offered a master's-level APN in terms of a full master's degree, a postmaster's degree, or a postmaster's certificate.

Program Cost. Cost of the program was the cost of obtaining a DNP degree in U.S. dollars reported in cost per credit and total program cost. Cost per one credit was cited directly from the university Web site when possible. If the listing of cost per credit was provided in units greater than one credit, the cost was mathematically converted to cost per one credit. Total cost of the program was obtained by multiplying the cost per one credit by the total number of total credits required to complete the DNP program.

Data Collection Procedure

All data were collected exclusively via the university's Web pages. No information was obtained from telephone communication or written correspondence. This method was deemed exempt by two university institutional review boards. The 137 schools were divided equally among both investigators who collected the data via the Web sites over a 6-month period from July 2010 to January 2011. Thirty-five schools were randomly selected and checked to ensure data accuracy. The few inaccuracies ($n = 3$), were rectified.

Data Analysis

Data analysis was completed using PASW Statistics 18 (SPSS 18). Descriptive statistics including frequencies,

DNP Programs in the U.S.

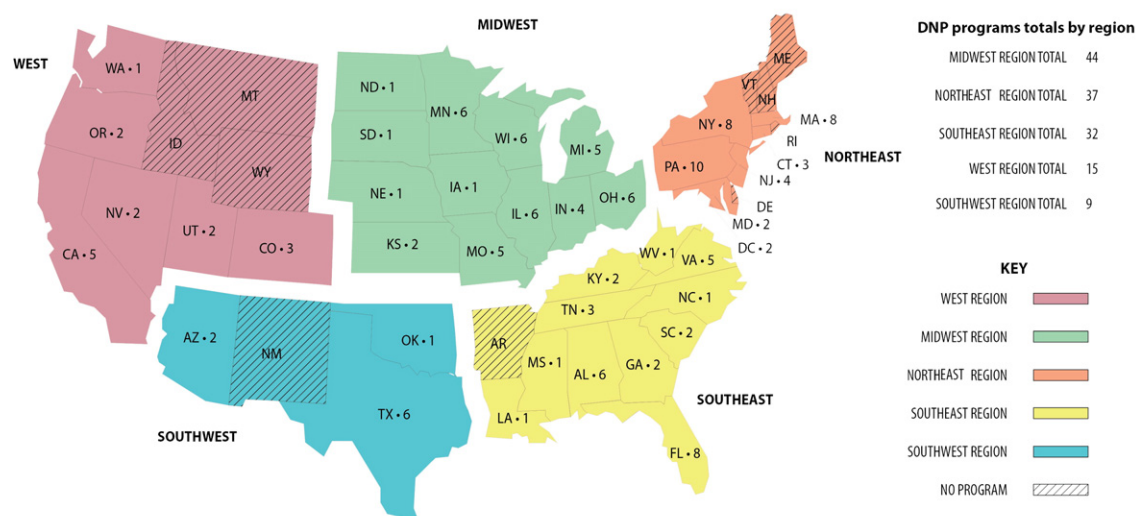


Figure 1. DNP programs by region.

percentages, means, and standard deviations were calculated for program characteristic variables and presented in report, table, or figure format.

Results

Figure 1 displays the geographical location of the 137 DNP programs in the contiguous United States. Twelve states currently do not offer a DNP program: Alaska, Arkansas, Delaware, Hawaii, Idaho, Maine, Montana, New Hampshire, New Mexico, Rhode Island, Vermont, and Wyoming. Most DNP programs ($n = 44$) are found in the midwest region of the United States; however, the northeast region ($n = 37$) has a higher concentration of DNP programs per geographical area.

Most programs across the United States (56%) offer only the MSN-to-DNP program, with 43% offering both a BSN-to-DNP and an MSN-to-DNP option. The type of DNP programs by region is depicted in Table 1.

A variety of delivery methods were used across programs ranging from completely online formats to the more traditional face to face. Approximately one third (34.3%) of programs used an online delivery method in conjunction with mandatory campus time. The use of either a hybrid or combination online /face-to-face method was equally used (34.3%). Few programs offered solely an online format (6.6%), with this

method more commonly seen in the southeast region (12.5%). The type of delivery method was not clearly stated in 15.3% of the programs surveyed. Most of the programs (55.5%) offered both full-time and part-time options, and the plan of study offered was unclear in 7.3% of the surveyed programs (Table 2).

The length of the various DNP programs was quantified in months and broken down into plans of study (full-time and part-time) as well as type of program (BSN-to-DNP and MSN-to-DNP). Overall, the average length of time for a full-time BSN-to-DNP program was 40.6 ± 8.9 months, whereas the part-time option was 60.6 ± 12.5 months. For the MSN-to-DNP, the average length of time for full-time study was 21.0 ± 5.9 months, whereas part-time study averaged 35.5 ± 15 months. Table 3 lists the various lengths of programs differentiating between region, type of program, and plan of study.

Table 4 shows the number of credits required to complete either a BSN-to-DNP or a MSN-to-DNP program. The number of credits needed to complete a BSN-to-DNP ranged from 52 to 130 and for an MSN-to-DNP ranged from 24 to 75.

Multiple tracks were offered within DNP programs across the nation. For BSN-to-DNP programs, most (91.5%) included an APN specialty track either exclusively or along with another type of advanced nursing practice specialty track, such as nurse administrator or

Table 1. Type of Program

Type of program	Region					
	All regions <i>f</i> (%)	Midwest <i>f</i> (%)	Northeast <i>f</i> (%)	Southeast <i>f</i> (%)	Southwest <i>f</i> (%)	West <i>f</i> (%)
BSN-to-DNP only	1 (0.7)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
MSN-to-DNP only	77 (56)	20 (45)	26 (70)	18 (56)	6 (67)	7 (47)
Both BSN-to-DNP and MSN-to-DNP	59 (43)	24 (55)	11 (30)	13 (41)	3 (33)	8 (53)
Total	137	44	37	32	9	15

Note. *f* = frequency; % = valid percentage.

Table 2. Program Delivery and Plans of Study

Program characteristics	Region					
	All regions (n = 137) f (%)	Midwest (n = 44) f (%)	Northeast (n = 37) f (%)	Southeast (n = 32) f (%)	Southwest (n = 9) f (%)	West (n = 15) f (%)
Delivery						
Online total	9 (6.6)	3 (6.8)	0 (0.0)	4 (12.5)	1 (11.1)	1 (6.7)
Online with mandatory campus time	47 (34.3)	10 (22.7)	15 (40.5)	11 (34.4)	3 (33.3)	8 (53.3)
Face to face	13 (9.5)	2 (4.5)	7 (18.9)	3 (9.4)	0 (0.0)	1 (6.7)
Hybrid	9 (6.6)	2 (4.5)	1 (2.7)	1 (3.1)	2 (22.2)	3 (20)
Both online and face to face	38 (27.7)	16 (36.4)	8 (21.6)	10 (31.3)	2 (22.2)	2 (13.3)
Delivery method unclear	21 (15.3)	11 (25)	6 (16.2)	3 (9.4)	1 (11.1)	0 (0.0)
Plans of study						
Full-time	20 (14.6)	4 (9.1)	6 (16.2)	5 (15.6)	2 (22.2)	3 (20)
Part-time	31 (22.6)	13 (29.5)	6 (16.2)	6 (18.8)	2 (22.2)	4 (26.7)
Both full- and part-time	76 (55.5)	22 (50.0)	23 (62.2)	21 (65.6)	4 (44.4)	6 (40.0)
Plan of study unclear	10 (7.3)	5 (11.4)	2 (5.4)	0 (0.0)	1 (11.1)	2 (13.3)

Note. f = frequency; % = valid percentage.

public health nursing. This pattern was consistent across regions of the United States, with the APN specialty being the most commonly cited DNP track. Informatics, community health, and clinical nurse leader were also reported as BSN-to-DNP tracks, but this was infrequent. At the MSN-to-DNP level, the *traditional* DNP program was offered most often (72.1%) overall and regionally. An exclusive APN or nurse administrator track was offered in 11% of the MSN-to-DNP programs overall and in 22.2% of the programs in the southwest region. Various other tracks less frequently offered (<3%) included the public health nurse, nurse leader, nurse executive, and clinical nurse leader.

Few universities offered an NE elective (11.7%), although it was unclear per the university Web site if the NE elective was available in 3.6% of the sample. Figure 2 displays the regional differences in NE elective offerings. The southeast (18.8%) and southwest (33.3%) offer NE electives more frequently than the midwest (9.1%), northeast (5.4%), and west (6.7%).

An assortment of course names and titles were identified as the term used to label the practice component of the DNP program (Figure 3). Although various titles such as *fellowship*, *project hours*, *internship*, and *capstone seminar* were cited in less than 3% of the programs surveyed, the term *residency* was cited most often (34.3%), with

Table 3. Program Length

Program length (months)	Region					
	All regions	Midwest	Northeast	Southeast	Southwest	West
Full-time BSN-to-DNP						
Average length	40.6	42.3	40.5	37.1	37.3	44.6
SD	8.9	10.2	6.2	4.7	6.1	13.4
Minimum	18	18	36	30	32	36
Maximum	72	56	48	48	44	72
Full-time MSN-to-DNP						
Average length	21.0	21.9	21.8	20.3	23.7	22.9
SD	5.9	6.2	6.1	5.8	4.4	6.0
Minimum	12	12	12	12	18	12
Maximum	36	36	36	36	32	36
Part-time BSN-to-DNP						
Average length	60.6	62.2	61.6	60.5	52.0	48.0
SD	12.5	12.7	9.2	15.4	0	0
Minimum	42	42	48	48	52	48
Maximum	96	84	72	96	52	48
Part-time MSN-to-DNP						
Average length	35.5	33.0	40.8	34.5	35.8	31.3
SD	15	11.4	17.5	16.5	16.9	10.6
Minimum	12	20	20	12	21	20
Maximum	96	72	84	96	60	48

Note. SD = standard deviation.

Table 4. Number of Credits

Credits	Region					
	All regions	Midwest	Northeast	Southeast	Southwest	West
BSN-to-DNP						
Average	80.2	78.8	78.6	79.9	78.0	87.0
SD	11.5	9.4	10.9	8.3	6.1	20.6
minimum	52	64	52	68	74	59
maximum	130	100	90	94	85	130
MSN-to-DNP						
Average	38.8	37.4	38.2	39.2	44.0	40.7
SD	7.7	10.1	5.4	5.7	6.7	8.3
Minimum	24	24	27	30	30	30
Maximum	75	75	49	52	54	62

Note. BSN = bachelor of science in nursing; MSN = master's of science in nursing; DNP = doctor of nursing practice; SD = standard deviation.

practicum being the second most commonly used term (18.2%). In the midwest, the term *practicum* was more common (29.5%), with *residency* being used in only 9.1% of DNP programs. Throughout the remainder of the regions, residency was the most frequent title of the practice component of the DNP program with the exception of the southwest, where residency and practicum were equally cited. The name of the practice component was unclear in 16.8% of the programs surveyed.

Table 5 displays the costs of DNP and MSN/APN programs throughout the United States in terms of approximate average cost per credit and total cost. This provides the opportunity to view the financial differences between acquiring a DNP versus an MSN for APNs.

Figure 4 displays regional data regarding schools that continue to offer an APN specialty at the master's level. Overall, 81.8% of schools continue to offer the master's-level APN degree. In examining only BSN-to-DNP programs ($n = 60$), 73.3% of programs still offer an APN specialization at the master's level. Regionally, the west offered the least, with 66.7% of schools continuing to offer the master's-level APN, whereas the northeast offered the most with 89.2% in this area.

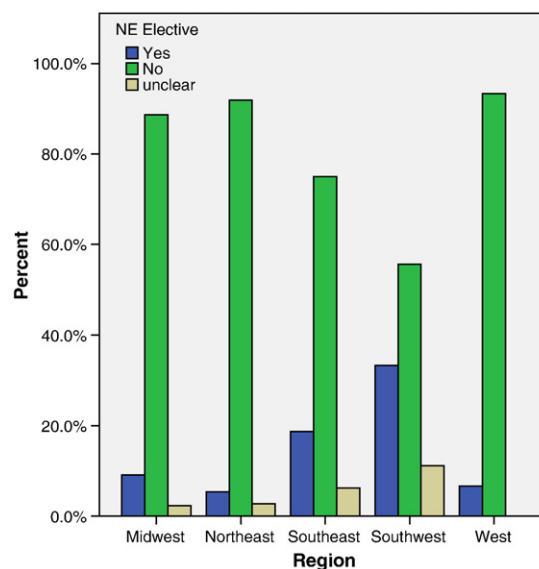
Discussion

With such a proliferation of DNP programs in the United States, many questions are bound to arise regarding program characteristics nationally and regionally. As universities prepare to develop, amend, and seek accreditation for their DNP programs, knowledge of these characteristics will be helpful to compare, contrast, and construct curricula.

Although the United States has seen dramatic growth in the number of DNP programs offered, per the July 2011 AACN DNP program list (AACN, 2011a), 12 states, namely, Alaska, Arkansas, Delaware, Hawaii, Idaho, Maine, Montana, New Hampshire, New Mexico, Rhode Island, Vermont, and Wyoming, do not offer any type of DNP program. The midwest is the only region in the United States where all states offer at least one DNP program and contains the most ($n = 44$) programs. The southwest offers the fewest programs ($n = 9$), with most ($n = 6$) concentrated in the state of Texas. Both BSN-to-

DNP and MSN-to-DNP programs are offered in every region, with a combination of full-time and part-time plans of study affording prospective students a variety of choices and options to meet their educational goals. Although not every state offers the DNP, few (6.6%) programs used a completely online format of delivery. Rather, most programs used a combination of face-to-face and online or mandatory campus time along with online course options. The mandatory campus time varied across programs from weekend-type offerings at the beginning and at the end of semester to intensive several week immersions during several semesters. This clearly demonstrates the trend to developing curricula conducive to individuals with work or personal commitments outside of academics while maintaining the rigor of doctoral education.

The DNP Roadmap Task Force Report by AACN had recommended a full-time BSN-to-DNP program plan be 36 months in length, including summers, or 48 months using the traditional academic calendar and a minimum of 12 months of full-time study at the MSN-to-DNP level. Although the BSN-to-DNP program length appears to be following the AACN recommendations with an average

**Figure 2.** Nursing elective option by region.

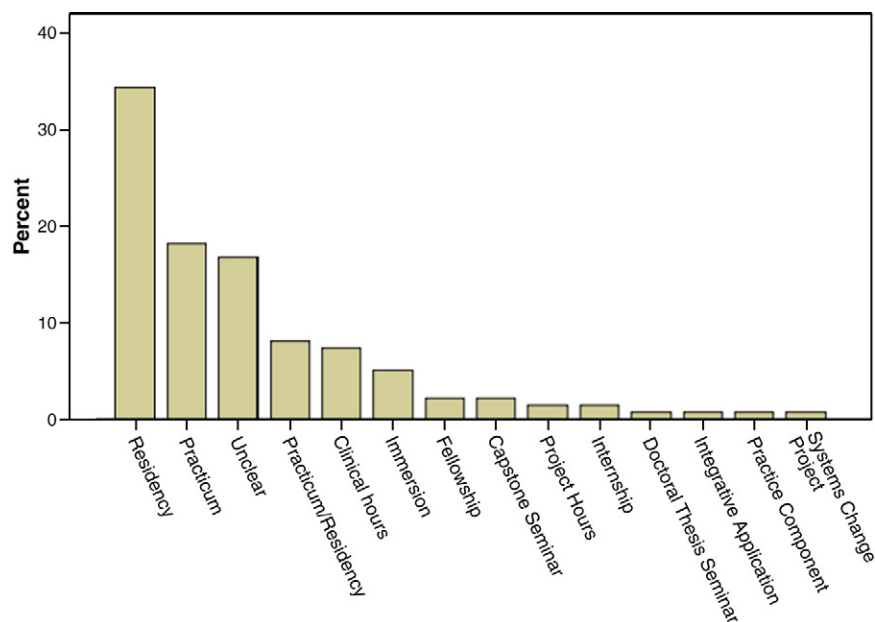


Figure 3. Practice course name.

full-time length of 40.6 ± 8.9 months, full-time MSN-to-DNP programs averaged 21 ± 5.9 months nationally. This may represent the difficulty in attaining the required end-of-program competencies within a 12-month period. It is imperative that nurse leaders monitor trends in DNP program length because avoiding unnecessary program length was a goal of AACN (AACN, 2006a).

Credit hours had various ranges across the country; however, trends in the average number of credits required to complete a DNP program were similar with a mean of 80 ± 11.5 credits required at the BSN-to-DNP level and 39 ± 7.7 at the MSN-to-DNP level. The credit requirement for master's-prepared APNs has increased over the years to where some are equivalent

Table 5. Program Cost

Cost	Region					
	All regions	Midwest	Northeast	Southeast	Southwest	West
Overall DNP						
Average cost per credit	\$708.92	\$620.61	\$864.78	\$561.58	\$779.69	\$854.17
SD	\$269.89	\$242.30	\$258.12	\$256.15	\$372.10	\$344.16
Minimum	\$190.48	\$215.85	\$445.00	\$257.00	\$190.48	\$460.00
Maximum	\$1,790.00	\$1,522.00	\$1,568.00	\$1,185.00	\$1,250.00	\$1,790.00
BSN-to-DNP						
Average total cost	\$59,016.33	\$51,733.21	\$68,064.64	\$48,481.26	\$60,608.33	\$83,532.50
SD	\$27,043.50	\$20,683.00	\$20,568.80	\$24,291.80	\$20,967.20	\$40,050.00
Minimum	\$20,560.00	\$22,866.55	\$36,140.00	\$20,560.00	\$44,400.00	\$35,040.00
Maximum	\$161,100.00	\$112,628.00	\$104,130.00	\$111,390.00	\$84,300.00	\$161,100.00
MSN-to-DNP						
Average total cost	\$27,678.45	\$22,898.12	\$33,353.00	\$22,753.28	\$33,816.61	\$33,324.13
SD	\$13,217.70	\$8,990.37	\$11,814.80	\$11,690.80	\$18,097.10	\$18,051.50
Minimum	\$4,233.00	\$9,262.40	\$17,355.00	\$10,608.00	\$8,762.08	\$4,233.00
Maximum	\$70,400.00	\$51,748.00	\$62,720.00	\$55,500.00	\$60,696.00	\$70,400.00
MSN/APN						
Average cost per credit	\$633.20	\$563.44	\$798.66	\$564.08	\$715.61	\$810.40
SD	\$309.34	\$260.30	\$260.94	\$260.76	\$464.99	\$451.99
Minimum	\$146.00	\$215.85	\$349.00	\$300.00	\$146.00	\$239.50
Maximum	\$1,790.00	\$1,496.00	\$1,309.00	\$1,185.00	\$1,250.00	\$1,790.00
MSN/APN						
Average total cost	\$31,637.61	\$27,571.43	\$37,499.87	\$25,737.73	\$33,537.60	\$41,316.35
SD	\$16,536.60	\$12,128.60	\$15,776.20	\$11,483.00	\$23,153.70	\$28,996.10
Minimum	\$7,008.00	\$10,576.65	\$15,705.00	\$13,760.00	\$7,008.00	\$11,496.00
Maximum	\$112,770.00	\$59,840.00	\$87,703.00	\$53,325.00	\$67,500.00	\$112,770.00

Note. BSN = bachelor of science in nursing; MSN = master's of science in nursing; DNP = doctor of nursing practice; APN = advanced practice nurse; SD = standard deviation.

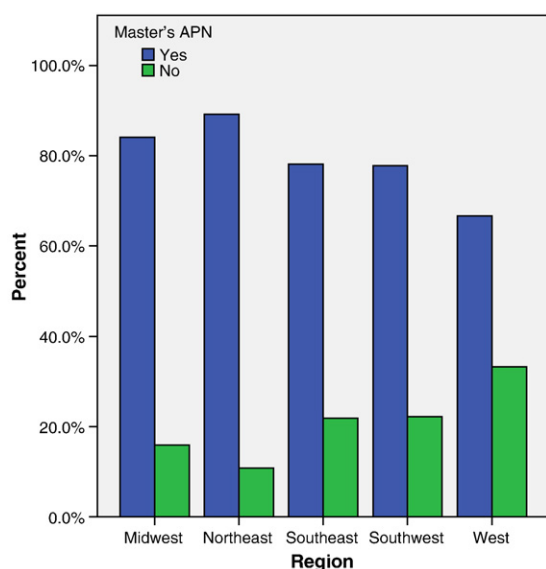


Figure 4. Master's-prepared APNs.

or even surpass the total credits in other doctoral programs (Lenz, 2005). Along with program length, trends in number of required credits should be monitored to ensure that program requirements do not overly extend length and credits.

With the recommendation that the four APN roles (clinical nurse specialists, nurse anesthetists, nurse midwives, and nurse practitioners) transition educational preparation to the DNP by 2015 (AACN, 2004), this group was assumed to be the first wave of DNP graduates (Clinton & Sperhac, 2006). Indeed, the APN specialty track is offered in most DNP programs across the nation. However, the DNP is not exclusive to APNs and includes areas of advanced nursing practice involving direct care, management of care, and development of health policy that affects health outcomes (AACN, 2006b). With this inclusive statement from the AACN, a variety of DNP specialty tracks are available, with nursing administration being the second most commonly offered track. Other tracks such as public health nursing, community health, informatics and various leadership-focused specialties are not prevalent but demonstrate the plethora of practice roles that can benefit from advanced doctoral knowledge and skills.

With the push to doctoral-level education for the APN, the continuation of master's programs conferring the APN specialty is in question. AACN (2006a) has advised that individual programs will need to weigh the pros and cons of maintaining APN offerings at the master's level, taking into consideration the viability and ethical aspects of this degree below a doctoral education. The 81.8% of programs still offering the master's-level APN specialty, along with the DNP degree, may have several explanations. First, the threat of losing students to other institutions who offer the APN specialty at the master's level may be a driving force behind the continuation of many MSN/APN programs. In addition, a *master's step-out* option may exist within the DNP APN specialty track; however, attrition once attaining the master's degree is anecdotally high. Another supposition may be the hesitation of embracing the DNP degree unreservedly and

abandoning a successful master's program. The controversy over the DNP degree (Chase & Pruitt, 2006; Meleis & Dracup, 2005) along with the history of the failed ND programs of the past may create a sense of *wait and see* for many universities. However, with now more than 1,000 DNP graduates, the momentum of the DNP degree is strong and continues to move forward (AACN, 2011b).

Shortages of doctoral-prepared nursing faculty were one of the driving factors for the development of the DNP (AACN, 2011a). DNP graduates are expected to bring practice expertise to the educator role and play a vital part in preparing future nurses, yet preparation as educators is not considered a specialty of the DNP but could be included in addition to an advanced NP specialty track (AACN, 2006b). Currently, very few programs (11.7%) offer any form of NE elective or minor that would help to develop educator skills in the DNP graduate.

The objectives of the required 1,000 postbaccalaureate practice hours are to achieve both the DNP Essentials and specialty-specific competencies (AACN, 2006b). Practice immersions are advocated by AACN to synthesize these skills and knowledge areas while developing competency in specialized nursing practice (AACN, 2006b). Although various names were used to label the practice component of the DNP programs, residency was most often cited (34.3%). However, data were not collected as to the number of hours or whether a residency represented an immersion-type experience. Thus, it is unclear if residency is synonymous with the AACN's description of immersion.

Cost was a difficult variable to generalize, and different regions and programs have varying financial restraints or leniencies. Some programs charged DNP-level credits for the complete program, whereas others only had a portion of their program at higher DNP credit charges beyond general *graduate* credit costs. However, from the data collected, it can be generalized that the average cost per credit difference between an MSN APN degree and DNP degree is roughly less than \$50 per credit. Allowing for institutional differences, it appears that the cost of attaining a DNP degree for nurses is reasonable. The benefits in terms of future earning potential and career advancement and/or opportunities are now starting to be explored with a recent 2009 salary survey conducted by *ADVANCE for Nurse Practitioners*, showing that DNP-prepared NPs earned \$7,688 more than master's-prepared NPs (Rollet, 2010).

Limitations

A limitation to these findings was that data were collected exclusively via university Web sites, and therefore, any information that may have been conveyed by other means (e-mailing for further information or directly contacting the university) was not gathered. Another limitation may be the accuracy of correctly converting units such as semester hours, credit hours, and cost per credit to standardized forms. Therefore, this database may over- or underrepresent the facts. All efforts were made by the authors ensure accuracy of the data and to not make assumptions with the information

provided on the Web sites, but rather to deem information unclear or overtly missing.

Conclusions

This comprehensive DNP program characteristic database is the first, to our knowledge, that is available for review. The aim of this research was to generate such a database and create a benchmark of information that can be used to compare and contrast programs throughout the United States. As the wave of change continues to flow over NE and the momentum behind the evolution to the DNP drives forward with a proliferation of new programs, it is interesting to monitor the trends in these data and developing educational requirements and competencies. Part II of this two-part article will present information regarding DNP admission criteria.

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