Program Characteristics in Advanced Practice Nursing Education Programs 2015

This update presents data for the 26 schools with advanced practice nursing education programs that participated in the 2015 NEPIS. These schools offer advanced practice nursing education programs leading to advanced practice registered nurse (APRN) licensure in Texas. These schools represent 32 programs:

- 4 Nurse Anesthetist programs,
- 2 Nurse Midwife programs,
- 23 Nurse Practitioner programs, and
- 3 Clinical Nurse Specialist programs.

The 26 schools that reported a total of 32 APRN programs offered up to 4 models of education for each of the 4 APRN program types:

- 32 Master's degrees offered by 25 schools
- 28 Post-master's certificates offered by 19 schools
- 29 Post-baccalaureate DNP/DNAP offered by 5 schools
- 23 Post-master's DNP/DNAP offered by 4 schools

The Texas Center for Nursing Workforce Studies (TCNWS) collected data in the 2015 Board of Nursing's (BON) Nursing Education Program Information Survey (NEPIS) that was available online as of October 1, 2015. The reporting period was academic year (AY) 2014-2015 (September 1, 2014 – August 31, 2015) unless otherwise noted. TCNWS collaborated with the BON in the design and dissemination of the survey.

Geographic Location of APRN Programs

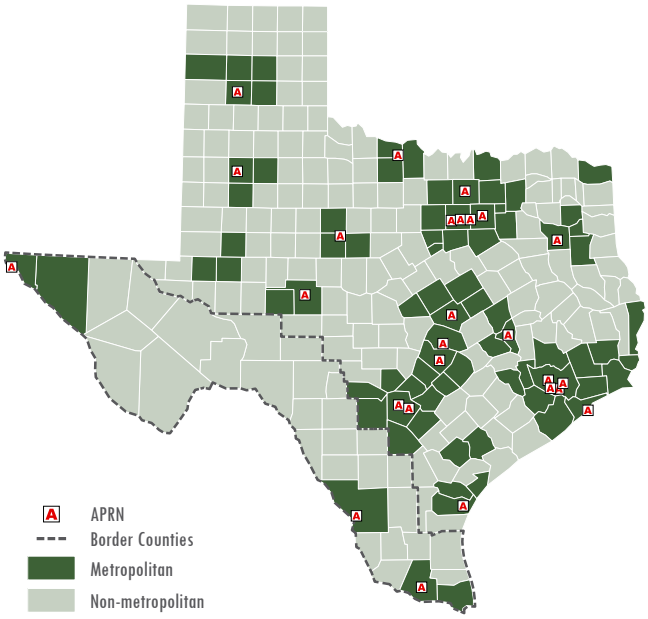
Table 1 and Figure 1 present the location of schools that offered APRN programs in Texas by geographic designation.

- The 26 schools were located in 21 different counties in Texas. All schools were located in metropolitan areas.
- 3 schools offered programs in a metropolitan border county.
- The remaining schools (88.5%) were located in a metropolitan non-border county.
- Within the 2015 APRN workforce, there was a lower ratio of APRNs per 100,000 population in non-metropolitan counties (32.2 APRNs per 100,000 population) compared to metropolitan counties (64.2 APRNs per 100,000 population). There was also a disparity in the ratio of APRNs per 100,000 population in border counties (42.2) compared to the ratio of APRNs per 100,000 population in non-border counties (63.1).
- Although the location of APRN programs does not necessarily affect the location of the APRN workforce, it is important to consider the possible effects of program location on the geographic distribution of the workforce.

Table 1. Geographic Designation of APRN Main Campuses

Geographic Designation	# of Schools	Percent of Schools
Metropolitan Border	3	11.5%
Non-Metropolitan Border	0	0%
Metropolitan Non-Border	23	88.5%
Non-Metropolitan Non-Border	0	0%

Figure 1. Geographic Location of APRN Main Campuses



Changes in the Number of APRN Programs

Table 2 displays the changes over time in the number of APRN programs.

- During the academic year 2014-2015, 1 program closed and 2 programs opened.
- The total number of APRN programs available increased by 1 program from 2012 to 2013. There was no increase from 2013 to 2014. From 2014 to 2015 there was an increase of 1 program.

Table 3 shows the number of APRN programs, by program type, over the past 6 years.

Table 2. Changes in the Number of APRN Programs, 2010-2015

	New Programs	Closed Programs	Total Programs
2010	-	-	32
2011	1	1	32
2012	0	2	30
2013	2	1	31
2014	1	1	31
2015	2	1	32

- The number of nurse anesthetist programs and the number of nurse-midwife programs have remained steady from 2010 to 2015.
- Nurse practitioner programs increased by 1 program from 2010 to 2011, and increased by 2 programs from 2012 to 2013. From 2014 to 2015 there was an increase by 2 programs.
- The number of clinical nurse specialist (CNS) programs steadily decreased from 2010 to 2013. There were half as many programs in 2013 and 2014 as there were in 2010. 2014 to 2015 saw another decrease as well.

Table 3. Number of APRN Programs by Program Type, 2010-2015

	2010	2011	2012	2013	2014	2015
Nurse Anesthestist	4	4	4	4	4	4
Nurse-Midwife	2	2	2	2	2	2
Nurse Practitioner	18	19	19	21	21	23
Clinical Nurse Specialist	8	7	5	4	4	3

Population Focus Areas in APRN Programs

A population focus area is the section of the population for which the student has been prepared to apply for licensure to practice by the Texas Board of Nursing. Tables 4 and 5 list the number of schools that offered clinical nurse specialist and nurse practitioner programs, respectively, in each population focus area.

- 3 schools offered a clinical nurse specialist program. Of these programs, population focus areas offered included adult/gerontology and pediatric.
- Nurse practitioner (NP) programs were offered by 23 of the 26 schools, with tracks in 8 population focus areas. The most commonly offered population focus area was family, which was offered by all schools with an NP program.
- Most schools (23 out of 26) also reported that they offered tracks that did not lead to licensure for advanced practice in Texas: 15 schools offered a nursing education track, 12 schools offered a nursing administration track, and 5 schools offered a clinical nurse leader track.
- Schools were also asked if they offered any dual-track programs. None of the programs offered dual-track programs.

Table 4. Clinical Nurse Specialist Population Focus Areas

Clinical Nurse Specialist (n= 3 schools)	
Population Focus Area	Number of Schools
Adult / Gerontology	3
Pediatric	1

Table 5. Nurse Practitioner Population Focus Areas

Nurse Practitioner (n= 23 schools)	
Population Focus Area	Number of Schools
Acute Care Adult / Gerontology	6
Acute Care Pediatric	3
Adult / Gerontology	4
Family	23
Neonatal	3
Pediatric	7
Psychiatric / Mental Health	5
Women's Health	1

Programs of Study: Diagnosis and Management

In the 2015 NEPIS, clinical nurse specialist programs were asked to report whether they offer a course on diagnosis and management. The course prepares the clinical nurse specialist to make medical diagnoses and medically manage individuals within the specialty area. This is also one of the courses that APRNs are required to take in order to be approved for prescriptive authority by the Board of Nursing.

- All 3 clinical nurse specialist programs offered a course on diagnosis and management.
- 2 programs reported that a course on diagnosis and management was required and 1 school indicated that the course on diagnosis and management was optional.

Programs of Study: Interprofessional Collaboration

The 2015 NEPIS again included a question on interprofessional collaboration, based on a recommendation from the Institute of Medicine's Future of Nursing report. Programs were asked to indicate the number of required nursing courses that offer clinical or simulation experiences for both APRN students and one or more types of other graduate level health professional students. "Other graduate level health professional students" may include physicians, physician assistants, pharmacists, etc.

- 34.4% (11) of programs comprising 10 schools reported that they do not require any nursing courses that include other graduate level health professional students. This is much less than the 54.8% (17) reported for 2014.
- 65.6% (21) of programs from 18 schools, required nursing courses that included other graduate level health professional students. This is much more than the 42.5% (14) reported for 2014.
- The number of courses involving interprofessional collaboration ranged from 1 courses to 24 courses.

Table 6. Programs Requiring Courses that Offer Clinical or Simulation Experiences for Both APRN Students and One or More Types of Other Graduate Health Professional Students

Program Type	Programs Participating	Range of required classes
Nurse Anesthetist	4	5-24
Nurse Practitioner	13	1-9
Clinical Nurse Specialist	3	1-2
Nurse-Midwife	1	6

Programs of Study: Online Availability

Programs were asked whether they offered nursing courses via online technology. Of the 26 schools that offered advanced practice nursing education programs:

- 4 schools (15.4%) offered the entire didactic curriculum online.
- 12 schools (46.1%) offered select courses entirely online.
- 17 schools (65.4%) offered web-enhanced sections of courses online (blended/hybrid courses).
- 1 school had no online course availability.

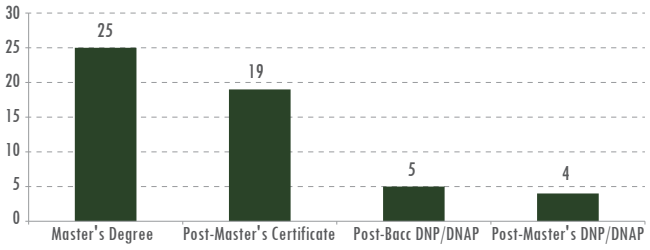
Please note that programs may offer select courses entirely online and select courses as hybrids. Also note that all programs, whether or not they offer any portion of their program online, require hands-on, face-to-face clinical experiences. Didactic curriculum is defined as including actual hours of classroom instruction in nursing and non-nursing Board-required courses/content.

Models of Education

Programs were also asked to select the models of education they provided for their APRN tracks.

- 25 schools provided a master's degree model.
- 19 schools provided a post-master's certificate.
- 5 schools offered a post-baccalaureate practice doctorate (DNP/DNAP).
- 4 schools offered a post-master's practice doctorate (DNP/DNAP).

Figure 2. Models of APRN Education



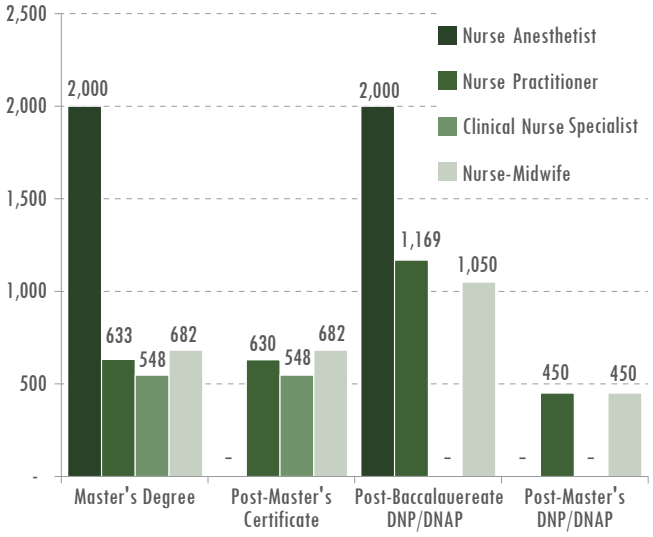
Precepted Practice Hours in APRN Programs

In the 2015 NEPIS, schools were asked to report the total number of precepted practice hours required (including assessment labs, simulation, and clinical practice) for their APRN programs of study. In this report, precepted practice hours were defined as the designated portion of a formal advanced practice registered nurse education program that is offered in a health care setting and affords students the opportunity to integrate theory and role preparation in both the population focus area and advanced nursing practice through direct patient care/client management. Precepted practice hours are planned and monitored by either a designated faculty member or qualified preceptor.

Figure 3 shows the median number of precepted practice hours by program type and level of education.

- Nurse anesthetist programs required the most precepted practice hours for the master's degree program, the range of hours in nurse anesthetist master's programs was narrow (from 2,000 to 2,250 hours).
- The median required precepted practice hours in post-master's certificate programs ranged from 548 in CNS programs to 682 in nurse-midwife programs.
- Post-Baccalaureate DNP/DNAP programs required a range of median precepted practice hours from 1,050 in nurse-midwife, 1,169 in nurse practitioner programs to 2,000 hours in nurse anesthetist programs.
- Post-master's DNP/DNAP programs reported the lowest median precepted practice hours. Nurse-midwife programs required a median of 450 hours and NP programs required 450.

Figure 3. Median Precepted Practice Hours in APRN Programs by Degree Type



Length of Curriculum in APRN Programs

In the 2015 NEPIS, the 26 APRN schools were asked to report the length of their nursing curriculum in credit hours. An average was used when a range was provided. Table 7 shows the range (minimum and maximum value), median, and mean value of length of curriculum by program type and level of education.

- 25 of 26 schools offered a master's degree program, the entry-level degree required to become an APRN. Nurse anesthetist programs required the most hours for the master's degree with an average of 72 hours.
- 19 of 26 schools offered a post-master's certificate program. Post-master's certificate programs prepared registered nurses with master's degrees for clinical practice in a specialty area. Graduates of this program are not awarded another master's degree. The average number of credit hours ranged from 21.7 in clinical nurse specialist programs to 33 in nurse-midwife programs.
- 5 of 26 schools offered a post-baccalaureate DNP/DNAP program (BSN to DNP/DNAP).
- 4 of 24 schools offered a post-master's DNP/DNAP program. Graduates of these programs are awarded a DNP/DNAP degree and are eligible to take the APRN certification exam in a specialty area.
- Nurse anesthetist programs reported the highest average number of credit hours for BSN to DNP/DNAP at 109.7, while nurse practitioner programs required the highest average number of credit hours for a Post Master's DNP at 44.8.

Table 7. Length of Curriculum in Credit Hours

Master's					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	40.0	49.0	42.0	43.7	3
Nurse Anesthetist	60.0	90.0	66.0	72.0	3
Nurse-Midwife	51.0	51.0	51.0	51.0	1
Nurse Practitioner	36.0	53.0	48.0	47.1	22

Practice Doctorate (Post-Baccalaureate)					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	-	-	-	-	0
Nurse Anesthetist	87.0	130.0	112.0	109.7	3
Nurse-Midwife	75.0	75.0	75.0	75.0	1
Nurse Practitioner	75.0	80.0	77.5	77.5	2

Post-Master's Certificate					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	13.0	34.00	18.0	21.7	3
Nurse Anesthetist	-	-	-	-	0
Nurse-Midwife	33.0	33.0	33.0	33.0	1
Nurse Practitioner	14.0	37.0	29.0	28.6	17

Practice Doctorate (Post-Master's)					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	-	-	-	-	0
Nurse Anesthetist	-	-	-	-	0
Nurse-Midwife	38.0	38.0	38.0	38.0	1
Nurse Practitioner	38.0	60.0	40.5	44.8	4

Please note "-" indicates these data were not available.

Program Characteristics Continued

New for the 2015 NEPIS, the 26 APRN schools were asked to select "yes" or "no" in response to 6 different program criteria. Table 8 shows each school's responses for the individual programs to the 6 different criteria.

- All of the programs answered "Yes" to the program specifics with the exception of the nurse-midwife programs which responded "No" to 3 of the criteria.

Table 8. Program Criteria

Program Criteria	Nurse Anesthetist n=4		Nurse Practitioner n=23		Clinical Nurse Specialist n=3		Nurse-Midwife n=2	
	Yes	No	Yes	No	Yes	No	Yes	No
The program includes a minimum of 500 separate, non-duplicated hours for each advanced role and specialty.	4	-	23	-	3	-	2	-
The program content contains professional and legal implications of the advanced practice role.	4	-	23	-	3	-	2	-
The program content contains separate courses in pharmacotherapeutics, advanced assessment and pathophysiology at the graduate level.	4	-	23	-	3	-	2	-
The program content contains pharmacotherapeutics across the lifespan.	4	-	23	-	3	-	1	1
The program content contains advanced health assessment across the lifespan.	4	-	23	-	3	-	1	1
The program content contains pathophysiology across the lifespan.	4	-	23	-	3	-	1	1

In the 2015 NEPIS, the 26 APRN schools were asked to report how many years of nursing practice are required to be eligible for admission into APRN programs.

Table 9 shows for each program type the number of responses for number of years of nursing practice required for the different models of education.

- All schools required 1 year of nursing experience to be eligible for admission for any of the nurse anesthetist programs.
- Clinical nurse specialist programs did not require any nursing practice to be eligible for admission.
- Of the 2 nurse-midwife programs, 1 school required a year of nursing practice for both of its models of education, the master's degree and post-master's certificate. The other school did not require practice experience for admission to its model of education, post-baccalaureate DNP/DNAP.
- For nurse practitioner (NP) programs, 5 schools did not require applicants to have nursing practice experience prior to entering a master's degree or post-master's certificate program. 14 schools required at least 1 year to enter a master's degree program and 9 required 1 year to enter a post-master's degree program.
- None of the education models required more than 1 year of practice experience for post-baccalaureate DNP/DNAP and post-master's DNP/DNAP for all programs.
- None of the models of education required more than 2 years of practice experience for all programs.

Table 9. Nursing Practice Experience Required for Admission to Nurse Anesthetist, Nurse Practitioner, Clinical Nurse Specialist and Nurse-Midwife Programs by Education Model, 2015

Nurse Anesthetist-Nursing practice required for admission	Master's Degree	Post-Master's	Post-bacc DNP/DNAP	Post-Master's DNP/DNAP
	# of responses by model of education			
0	-	-	-	-
1 Year	3	-	3	-
2 Years	-	-	-	-
Nurse Practitioner-Nursing practice required for admission	**Master's Degree**	**Post-Master's**	**Post-bacc DNP/DNAP**	**Post-Master's DNP/DNAP**
	# of responses by model of education			
0	6	6	1	2
1 Year	8	5	1	2
2 Years	5	3	-	-
Clinical Nurse Specialist-Nursing practice required for admission	**Master's Degree**	**Post-Master's**	**Post-bacc DNP/DNAP**	**Post-Master's DNP/DNAP**
	# of responses by model of education			
0	3	3	-	-
1 Year	-	-	-	-
2 Years	-	-	-	-
Nurse-Midwife Nursing practice required for admission	**Master's Degree**	**Post-Master's**	**Post-bacc DNP/DNAP**	**Post-Master's DNP/DNAP**
	# of responses by model of education			
0	-	-	1	-
1 Year	1	1	-	-
2 Years	-	-	-	-