



Program Characteristics in Graduate Nursing Education Programs

2016

This update presents data for the 32 of 33 universities/colleges that offer one or more graduate nursing education programs. There are 35 programs that prepare graduates for licensure as advanced practice nurses (APRN) and there are 29 programs that are not designed for licensure as an APRN, but for roles in nursing administration, informatics, research, leadership, clinical specialty areas, and public health, as indicated below:

APRN Programs	<ul style="list-style-type: none"> ■ 4 Nurse Anesthetist programs, ■ 2 Nurse Midwife programs, ■ 26 Nurse Practitioner programs, ■ 3 Clinical Nurse Specialist programs, 	<ul style="list-style-type: none"> ■ 7 Nursing research programs, ■ 6 Nursing Practice programs, ■ 22 Nursing Education programs, ■ 5 Clinical Nurse Leader programs,
non-APRN Programs	<ul style="list-style-type: none"> ■ 19 Nursing Administration programs, ■ 4 Nursing Informatics programs, 	<ul style="list-style-type: none"> ■ 1 Public Health program, and ■ 7 Other programs.

The Texas Center for Nursing Workforce Studies (TCNWS) collected data in the 2016 Board of Nursing's (BON) Nursing Education Program Information Survey (NEPIS) that was available online as of October 1, 2016. The reporting period was academic year (AY) 2015-2016 (September 1, 2015 – August 31, 2016) unless otherwise noted. TCNWS collaborated with the BON in the design and dissemination of the survey.

Geographic Location of Graduate Programs

Figure 1 shows the ratio of APRNs to population in counties with different metropolitan/border designations. Table 1 and Figure 2 present the location of schools that offered graduate programs in Texas by geographic designation.

- The 32 schools were located in 25 different counties in Texas. All schools were located in metropolitan areas.
- The majority of schools (88.5%) were located in a metropolitan non-border county and 3 schools offered programs in a metropolitan border county.
- Within the 2016 APRN workforce, there was a lower ratio of APRNs per 100,000 population in non-metropolitan counties (38.5 APRNs per 100,000 population) compared to metropolitan counties (70.1 APRNs per 100,000 population). There was also a disparity in the ratio of APRNs per 100,000 population in border counties (46.2) compared to the ratio of APRNs per 100,000 population in non-border counties (68.9).

Table 1. Geographic Designation of Graduate Main Campuses

Geographic Designation	# of Schools	% of Schools
Metropolitan Border	3	9.4%
Non-Metropolitan Border	0	0%
Metropolitan Non-Border	28	87.5%
Non-Metropolitan Non-Border	1	3.1%

Figure 1. APRNs per 100,000 population by Metropolitan, Non-Metropolitan, Border, and Non-Border Counties, 2013-2016

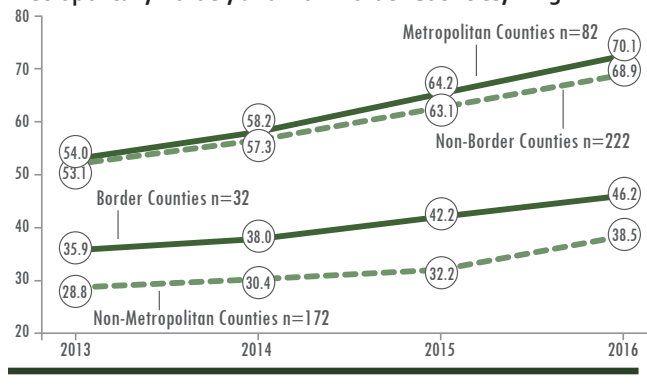
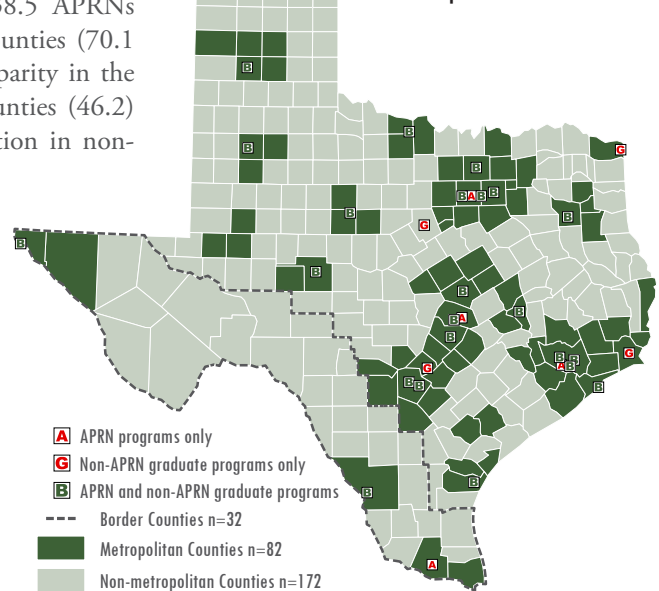


Figure 1. Geographic Location of Graduate Main Campuses



Changes in the Number of APRN Programs

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

- During the academic year 2015-2016, 2 programs opened.¹

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
2016	2	0	35

¹One nurse practitioner program was not new but was previously not included in previous NEPIS years.

- The number of nurse anesthetist programs and the number of nurse-midwife programs have remained steady from 2010 to 2016.
- The number of nurse practitioner programs increased by 2 programs from 2014 to 2015, and by 3 from 2015 to 2016.
- The number of clinical nurse specialist (CNS) programs steadily decreased from 2010 to 2013. There were half as many programs from 2013-2015 as there were in 2010, and the number of CNS programs remained at 3 for 2016.

Table 3. Number of APRN Programs by Program Type, 2010-2016

	2010	2011	2012	2013	2014	2015	2016
Nurse Anesthetist	4	4	4	4	4	4	4
Nurse-Midwife	2	2	2	2	2	2	2
Nurse Practitioner	18	19	19	21	21	23	26
Clinical Nurse Specialist	8	7	5	4	4	3	3

Population Focus Areas in Graduate 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 26 of the 32 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 (29 out of 32) reported tracks that did not lead to licensure for advanced practice in Texas²: 22 schools offered a nursing education track, 20 schools offered a nursing administration track, 7 schools offered a nurse research track, 5 schools offered a clinical nurse leader track, 4 schools offered a nursing informatics track and 6 schools listed offered “other” graduate tracks.

Table 4. Clinical Nurse Specialist Population Focus Areas

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

Table 5. Nurse Practitioner Population Focus Areas

Nurse Practitioner (n= 26 schools)	
Population Focus Area	Number of Programs
Acute Care Adult / Gerontology	6
Acute Care Pediatric	3
Adult / Gerontology	4
Family	26
Neonatal	3
Pediatric	6
Psychiatric / Mental Health	7
Women's Health	1

- Schools were also asked if they offered any dual-track programs. None of the schools offered dual-track programs.

²Some schools reported having multiple tracks.

Programs of Study: Diagnosis and Management

In the 2016 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 and reported that the course was required.

Programs of Study: Interprofessional Collaboration

The 2016 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.

- 17 schools reported that they do not require any nursing courses that include other graduate level health professional students.

- 15 schools required nursing courses that included other graduate level health professional students.
- The number of courses involving interprofessional collaboration ranged from 1 course to 13 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	2	5
Nurse Practitioner	13	1-13
Clinical Nurse Specialist	2	2-4
Nurse-Midwife	1	5

Programs of Study: Online Availability³

Programs were asked whether they offered nursing courses via online technology. Of the 32 schools that offered graduate nursing education programs:

- 11 schools (34.4%) offered select courses entirely online.
- 22 schools (68.8%) offered web-enhanced sections

of courses online (blended/hybrid courses).

- 2 schools had no online course availability.

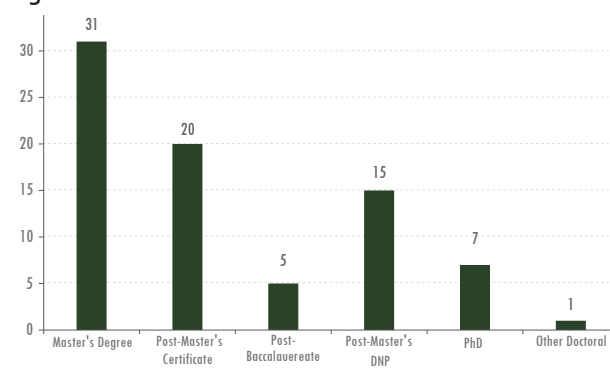
³Please note that programs may offer select courses entirely online and select courses as hybrids. Also note that all programs, whether or not they offer any portion of their program online, require hands-on, face-to-face clinical experiences. Didactic curriculum is defined as including actual hours 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 graduate tracks.

- 31 schools provided a master's degree model.
- 20 schools provided a post-master's certificate.
- 5 schools offered a post-baccalaureate practice doctorate (DNP/DNAP⁴).
- 15 schools offered a post-master's practice doctorate (DNP/DNAP⁴).
- 7 schools provided a PhD and 1 school offered a doctoral degree not listed for their nurse anesthetists.

Figure 2. Models of Graduate Education



⁴Doctorate of Nurse Anesthesia Practice

Precepted Practice Hours in APRN Programs

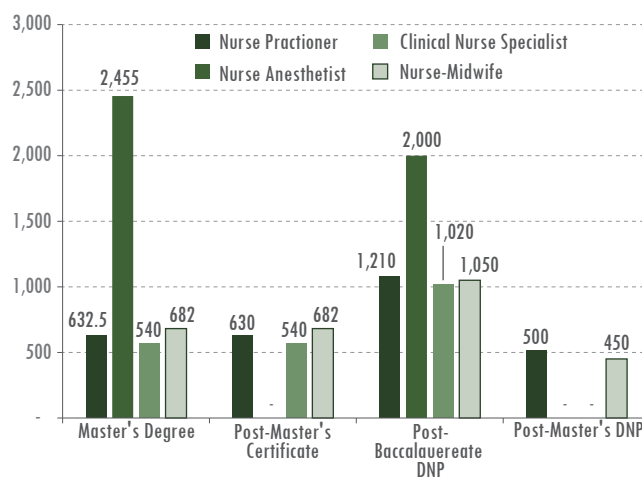
In the 2016 NEPIS, schools were asked to report the total number of precepted practice hours required (including assessment labs, simulation, and clinical practice) for their APRN programs of study. In this report, precepted practice hours were defined as the designated portion of a formal advanced practice 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 from 2,000 to 2,900 hours).
- The median required precepted practice hours in post-master's certificate programs ranged from 540 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, 1,210 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.

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



Length of Curriculum in Graduate Programs

In the 2016 NEPIS, the 32 graduate 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.

- 31 of the 32 schools offered a master's degree program. Nurse anesthetist programs required the most hours for the master's degree with an average of 78 credit hours.
- 20 of 32 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 these programs are not awarded another master's degree. The average number of credit hours ranged from 21.7 in nursing education programs to 33 in nurse-midwife programs.

- 5 of 26 schools offered a post-baccalaureate DNP program (BSN to DNP).
- 15 of 32 schools offered a post-master's DNP program.
- Nurse anesthetist programs reported the highest average number of credit hours for BSN to DNP at 110.3, while nurse informatics programs required the highest average number of credit hours for a post master's DNP/DNAP at 50.
- Among degrees that did not lead to APRN certification, nursing informatics required the most hours for a master's degree with an average of 43.5 hours.

Table 7. Length of Curriculum in Credit Hours

Master's					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	38.0	49.0	40.0	41.8	3
Nurse Anesthetist	66.0	90.0	78.0	78.0	2
Nurse-Midwife	51.0	51.0	51.0	51.0	1
Nurse Practitioner	41.0	62.0	48.0	47.1	23
Nursing Administration	33.0	48.0	38.0	38.6	19
Nursing Education	30.0	54.0	38.0	38.5	22
Nursing Informatics	39.0	48.0	43.5	43.5	2
Nursing Leadership	33.0	43.0	40.0	39.6	5
Nursing Research	-	-	-	-	0
Nurse Practice	-	-	-	-	0
Other ⁵	40	43	41.3	41.3	2

Post-Baccalaureate DNP					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	65.0	65.0	65.0	65.0	1
Nurse Anesthetist	87.0	132.0	112.0	110.3	3
Nurse-Midwife	75.0	75.0	75.0	75.0	1
Nurse Practitioner	69.0	80.0	75.0	75.8	3
Nursing Administration	-	-	-	-	0
Nursing Education	-	-	-	-	0
Nursing Informatics	-	-	-	-	0
Nursing Leadership	-	-	-	-	0
Nursing Research	-	-	-	-	0
Nurse Practice	-	-	-	-	0
Other	-	-	-	-	0

PhD					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	-	-	-	-	0
Nurse Anesthetist	-	-	-	-	0
Nurse-Midwife	-	-	-	-	0
Nurse Practitioner	-	-	-	-	0
Nursing Administration	-	-	-	-	0
Nursing Education	-	-	-	-	0
Nursing Informatics	-	-	-	-	0
Nursing Leadership	-	-	-	-	0
Nursing Research	48.0	81.0	60.0	63.9	7
Nurse Practice	-	-	-	-	0
Other	-	-	-	-	0

Post-Master's Certificate					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	13.0	28.0	18.0	19.3	3
Nurse Anesthetist	-	-	-	-	0
Nurse-Midwife	33.0	33.0	33.0	33.0	1
Nurse Practitioner	21.0	42.0	30.0	30.6	18
Nursing Administration	9.0	25.0	21.0	18.1	7
Nursing Education	9.0	34.0	12.0	15.7	12
Nursing Informatics	15.0	21.0	18.0	18.0	2
Nursing Leadership	13.0	30.0	15.0	19.3	3
Nursing Research	-	-	-	-	0
Nurse Practice	-	-	-	-	0
Other	-	-	-	-	0

Post-Master's DNP					
Program Type	Min	Max	Median	Mean	n
Clinical Nurse Specialist	-	-	-	-	0
Nurse Anesthetist	44.0	44.0	44.0	44.0	1
Nurse-Midwife	38.0	38.0	38.0	38.0	1
Nurse Practitioner	42.0	45.0	42.0	40.9	6
Nursing Administration	42.0	42.0	42.0	42.0	1
Nursing Education	-	-	-	-	0
Nursing Informatics	50.0	50.0	50.0	50.0	1
Nursing Leadership	-	-	-	-	0
Nursing Research	-	-	-	-	0
Nurse Practice	30.0	48.0	45.0	41.3	7
Other ⁶	36.0	45.0	45.0	42.0	3

Please note “-” indicates these data were not available.

⁵“Other” master degrees reported included RNPB/MS, comprehensive, adult health, child health, and maternity.

⁶“Other” post-master’s DNP degrees reported included executive leadership, generic leadership, and generic non-APRN DNP.

Program Characteristics Continued

APRN programs were asked to select the criteria that applied to their school. Table 8 shows each school's responses for the individual programs to the 6 different criteria.

- All of the schools selected having each criteria for all 4 APRN programs, with the exception of one nurse practitioner program which did not select one of the criteria.

Table 8. Program Criteria

Program Criteria	Nurse Anesthetist n=4	Nurse Practitioner n=25 ⁴	Clinical Nurse Specialist n=3	Nurse-Midwife n=2
	Number of Programs	Number of Programs	Number of Programs	Number of Programs
The program includes a minimum of 500 separate, non-duplicated hours for each advanced role and specialty.	4	25	3	2
The program content contains professional and legal implications of the advanced practice role.	4	25	3	2
The program content contains separate courses in pharmacotherapeutics, advanced assessment and pathophysiology at the graduate level.	4	25	3	2
The program content contains pharmacotherapeutics across the lifespan.	4	24	3	2
The program content contains advanced health assessment across the lifespan.	4	25	3	2
The program content contains pathophysiology across the lifespan.	4	25	3	2

⁴One nurse practitioner program did not respond to the question on program criteria.