This update presents information for the 124 pre-licensure registered nursing (RN) programs in Texas during the 2019 reporting year, including:

- 1 diploma program;
- 68 Associate Degree in Nursing (ADN) programs, including 57 generic ADN programs and 11 licensed vocational nurse (LVN) to ADN stand-alone programs;
- 54 Bachelor of Science in Nursing (BSN) programs; and
- 1 Master of Science in Nursing Alternate Entry (MSN AE) program.

The Texas Center for Nursing Workforce Studies (TCNWS) collected data using the 2019 Board of Nursing's (BON) Nursing Education Program Information Survey (NEPIS) that was available online as of September 30, 2019. The reporting period was academic year (AY) 2018-2019 (September 1, 2018 – August 31, 2019) unless otherwise noted. TCNWS collaborated with the BON in the design and dissemination of the survey.
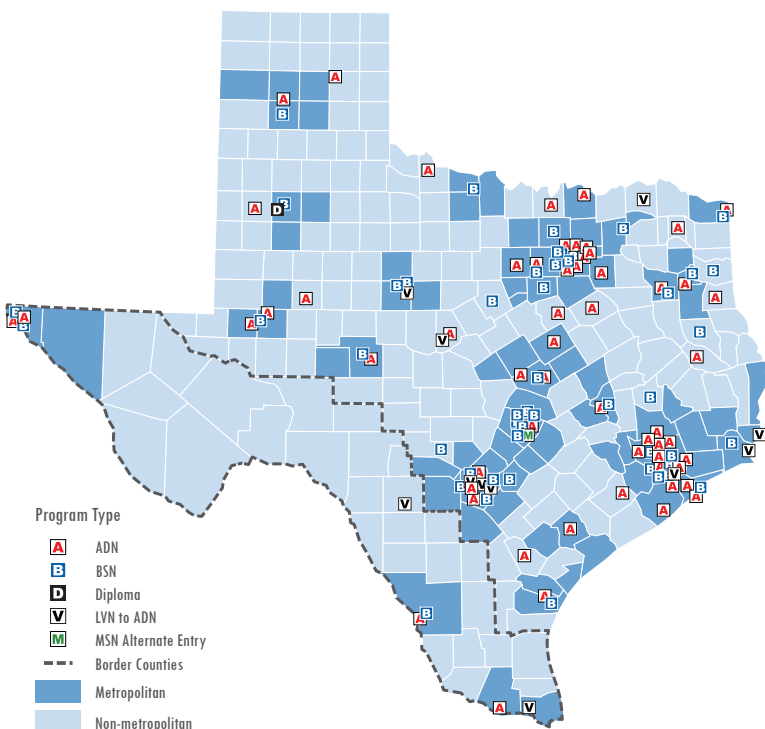
Geographic Location of Professional Nursing Programs

Figure 1 presents the locations of the 124 professional nursing programs in Texas by metropolitan and non-metropolitan counties. Table 1 summarizes the location of programs by type and geographic designation.

Table 1. Geographic Designation of Main Campuses

Program Type	Geographic Designation				Total
	Metro Border	Metro Non-Border	Non-Metro Border	Non-Metro Non-Border	
Diploma	0	1	0	0	1
ADN	5	39	1	12	57
LVN to ADN	2	6	0	3	11
BSN	5	44	0	5	54
MSN AE	0	1	0	0	1
Total	12	91	1	20	124

- 91 programs (73.4%) were located in metropolitan, non-border counties.
- 20 programs (16.1%) were located in non-metropolitan, non-border counties.
- 12 programs (9.7%) were located in metropolitan, border counties.
- Only 1 program (0.8%) was located in a non-metropolitan, border county.

Figure 1. Geographic Location of RN Programs by Type

Program Type
- **A** ADN
- **B** BSN
- **D** Diploma
- **V** LVN to ADN
- **M** MSN Alternate Entry
- - - Border Counties
- Metropolitan
- Non-metropolitan

Changes in the Number of Professional Nursing Programs

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

- During AY 2018-2019, 4 new programs opened and 2 programs closed.

Table 2. Changes in the Number of Professional Nursing Programs, 2010-2019

	New Programs	Closed Programs	Total Programs
2010	5	2	96
2011	9	0	105
2012	2	1	106
2013	9	2	113
2014	3	2	114
2015	6	1	119
2016	3	6	116
2017	6	3	119
2018	3	0	122
2019	4	2	124

Table 3 shows the number of professional nursing programs, by program type, over the past 10 years.

- The number of diploma and MSN AE programs has remained the same from 2010 to 2019.

- The number of LVN to ADN stand-alone programs has remained relatively steady since 2009 and has stayed the same from 2017 to 2019.
- The number of ADN programs has remained relatively steady since 2010.
- The number of BSN programs has increased by 68.8% from 2010 to 2019. From 2018 to 2019, 2 BSN programs opened.

Table 3. Number of Professional Nursing Programs by Program Type, 2010-2019

	Diploma	LVN to ADN	ADN	BSN	MSN AE
2010	1	8	54	32	1
2011	1	8	58	37	1
2012	1	9	57	38	1
2013	1	10	58	43	1
2014	1	10	58	44	1
2015	1	9	60	48	1
2016	1	8	59	47	1
2017	1	11	57	49	1
2018	1	11	57	52	1
2019	1	11	57	54	1

Institution Types

The 124 professional nursing programs operating in Texas during AY 2018-2019 were classified as follows:

- 57 community colleges
- 2 state colleges
- 2 technical colleges
- 23 public universities
- 5 health-related institutions
- 16 private/independent institutions of higher education
- 19 private postsecondary educational institutions

These were mutually exclusive categories.

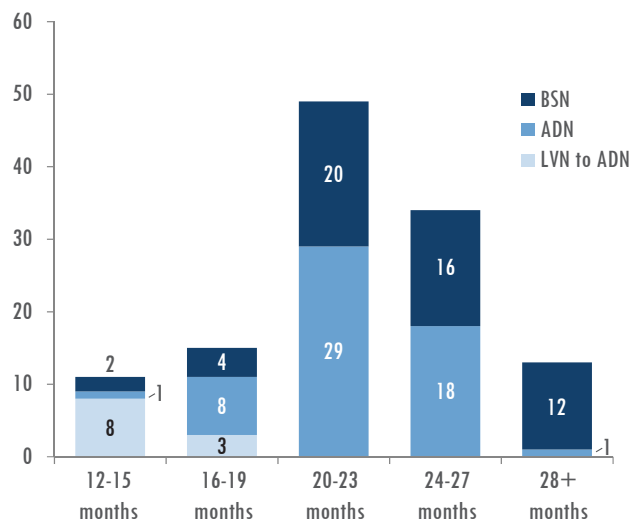## Length of Curriculum in Professional Nursing Programs

In the 2019 NEPIS, programs were asked to report the length of their nursing curriculum in months, not including nursing prerequisites.

- The diploma program was 20 months in length and the MSN AE program was 12 months.
- ADN programs ranged from 15 to 28 months in length. The mean and median lengths for ADN programs were 21.4 and 22 months, respectively.
- LVN to ADN programs ranged from 12 to 19 months in length. The mean and median lengths for LVN to ADN programs were 13.5 and 12 months, respectively.
- BSN programs ranged from 12 to 36 months in length. The mean and median lengths for BSN programs were 23.7 and 24 months, respectively.

Figure 2 shows the number of programs that reported each nursing curriculum length.

- 18 ADN programs and 15 BSN programs reported a nursing curriculum length of 24 months.

Figure 2. Frequency of Nursing Curriculum Length by Program Type

- 11 ADN and 12 BSN programs reported a 21-month curriculum.
- 1 BSN, 1 MSN AE, and 8 LVN to ADN programs reported a 12-month curriculum.

Program Tracks in Professional Nursing Programs

Program tracks are alternate pathways for students to meet the nursing program's objectives or outcomes. 98 of the 124 RN programs (79.0%) offered tracks in addition to their basic program.

- 61 programs (49.2%), including the 11 stand-alone LVN to ADN programs, offered an LVN to ADN track.
- 41 programs (33.1%) offered an RN to BSN track, including 28 programs that offered the entire didactic portion online.
- 4 programs (3.2%) offered a pre-licensure RN track that offers the entire didactic portion online.
- 18 programs (14.5%) offered a paramedic/EMT to ADN track.
- 9 programs (7.3%) offered a bachelor's degree to BSN track.
- 11 programs (8.9%) offered an accelerated/compressed curriculum.

Programs were asked about tracks that give active duty, former, or retired military personnel nursing credit for allied health care training or experience.

- 9 programs currently offered such a track, while 5 are planning to implement one.
- These 9 programs included 4 BSN programs, 4 ADN programs, and 1 LVN to ADN program.
- Programs cited challenges to implementing military tracks, such as the difficulty of evaluating military transcripts (8 programs) and lack of faculty (1 program).

Programs were also asked about options for high school students.

- 1 ADN program reported offering options for high school students.
- The program specified that it admits seniors in high school using the same standards they would to admit other students.

Some professional nursing programs offer advanced placement for students.[1] Students with prior VN or RN nursing education, paramedics, students with a background in allied health, LVNs, or students who hold a baccalaureate or master's degree in a discipline other than nursing may be eligible for advanced placement.

- As shown in Table 4, 49.2% of programs offered advanced placement to LVNs and 40.3% of programs offered advanced placement to students with some prior VN or RN education.

- 14.5% of programs offered advanced placement to paramedics/EMTs, 8.1% offered advanced placement to military healthcare personnel, 2.4% of programs offered advanced placement to allied health professionals, and 3.2% offered advanced placement to those with baccalaureate/master's degrees in other disciplines.

- 29.0% of programs did not grant advanced placement. These included 24 BSN, 6 ADN, 4 LVN to ADN, 1 Diploma, and 1 MSN AE program.

There were several mechanisms used by programs to grant advanced placement to students. Such mechanisms included direct transfer of credit or granting credit with a transition course, the completion of designated courses, passing written exam(s), or tech prep courses.[2] Table 5 indicates the types of mechanisms used to grant advanced placement by program type.

- Direct transfer of credit was the most widely used mechanism to grant advanced placement to pre-licensure nursing students across all program types (53.2% of programs), followed by granting credit with a transition course (37.9% of programs).

Table 4. Number of Programs that Grant Different Types of Students Advanced Placement[1] by Program Type

Program Type	Type of Advanced Placement					
	Students with prior VN or RN nursing education	Paramedic/EMT	Allied health	LVN	Baccalaureate/ master's in discipline other than nursing	Military healthcare personnel
Diploma	0	0	0	0	0	0
ADN	27	18	3	49	2	6
LVN to ADN	3	0	0	4	0	1
BSN	20	0	0	8	2	3
MSN AE	0	0	0	0	0	0
Total	50	18	3	61	4	10

Table 5. Number of Programs Using Different Mechanisms to Grant Advanced Placement[1] by Program Type

Program Type	Type of Advanced Placement				
	Direct transfer of credit	Grant credit with transition course	Grant credit with completion of designated courses	Grant credit with passing written exam(s)	College credit for active duty, former, and retired military personnel
Diploma	0	0	0	0	0
ADN	36	38	12	10	1
LVN to ADN	4	2	1	1	1
BSN	26	7	7	15	2
MSN AE	0	0	0	0	0
Total	66	47	20	26	4

[1]Advanced placement is defined as a mechanism by which students with relevant prior education and/or experience may be offered course credit by meeting certain other requirements.

Online Availability of Professional Nursing Programs[2]

Programs were asked whether they offered nursing courses via online technology. Of the 124 professional nursing programs:

- 2 programs (1.6%) offered the entire didactic program curriculum online. Of these, 1 was an LVN to ADN program and 1 was a BSN program.
- 56 programs (45.2%) offered select courses online. Of these, 18 were ADN, 2 were LVN to ADN, and 36 were BSN programs.
- 72 programs (58.1%) offered blended/hybrid courses (courses partially online and partially face-to-face). Of these, 1 was a diploma program, 32 were ADN, 3 were LVN to ADN, 35 were BSN, and 1 was an MSN AE program.

- 35 programs (28.2%) had no online course availability. These included 19 ADN, 6 LVN to ADN, and 10 BSN programs.

Since 2010, the percent of programs that offered the entire didactic curriculum online or offered web-enhanced sections of courses online has remained relatively steady. The percent of programs offering select courses online has decreased (down from 61.5% in 2010).

[2]Please note that programs may offer select courses entirely online and select courses as hybrids. Also note that all programs, whether or not they offered any portion of their program online, offered 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.
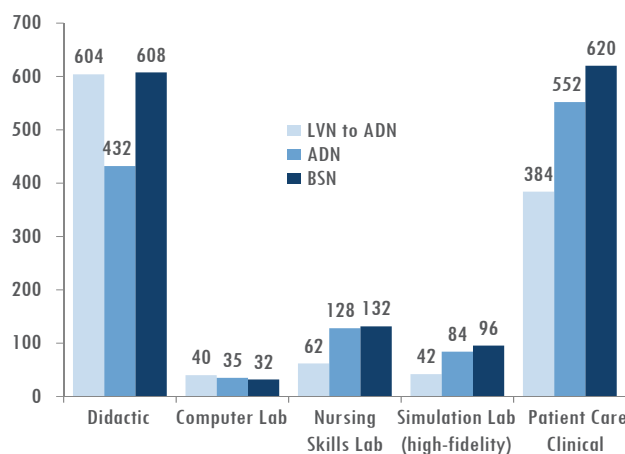
Program Hours in Professional Nursing Programs

In the 2019 NEPIS, programs were asked to provide information regarding the number of contact hours required in each of the following areas in their program of study: didactic, computer lab, skills lab, simulation lab, and patient care clinical situations. Figure 3 graphs the median value for each of the program activities for ADN, LVN to ADN, and BSN programs. Please note that there was only one diploma program and one MSN AE program so the median value was equal to the actual value reported by each program. For that reason, they are not graphed in Figure 3.

As evidenced by Figure 3, there was variation in the hours required by professional nursing programs both between and within program types. Some reasons for the variation may include: inherent differences between the program types (e.g., LVN to ADN programs are generally more abbreviated programs of study than ADN or BSN programs), differences between the operational definitions used in the NEPIS and how programs define these activities, or variations in the accuracy of self-reporting these hours by professional nursing programs.

Didactic Contact Hours

In this report, didactic includes actual hours of classroom instruction in nursing and non-nursing Board-required

Figure 3. Median Contact Hours Reported by Program Type

courses/content. The didactic hours reported by professional nursing programs ranged from 19 to 2,513 hours.

Programs were asked what type of curriculum they used. 63 (50.8%) reported using a block curriculum,[3] 28 (22.6%) used an integrated curriculum,[4] and 29 (23.4%) used a concept-based curriculum.[5] 4 programs (3.2%) reported using some combination of curriculum types.

Computer Lab

Computer lab is defined as interactive tutorials and learning modules that are part of a curriculum that is separate from didactic. 98 programs (79.0%) reported computer lab hours for their program of study. The computer lab hours reported ranged from 2 to 438 hours. The median number of computer lab hours reported by all programs has not changed substantially since 2011, but the percent of programs offering computer lab hours has increased from 66.7% to 79.0%.

Nursing Skills Lab (low- and moderate-fidelity simulations and task training)

In this report, nursing skills lab is defined as low- and medium-fidelity simulations[6] and task training. All but one program reported skills lab hours as part of their nursing curriculum. The skills lab hours reported by professional nursing programs ranged from 6 to 400 hours. The median number of nursing skills lab hours reported by all programs has decreased from 144 in 2011 to 128 in 2019.

High-Fidelity Simulation Lab

Simulation lab refers to high-fidelity situations which are defined as structured learning experiences with computerized mannequins that are anatomically precise and reproduce physiologic responses. The environment mimics the clinical setting. All but 2 programs (98.4%) reported simulation lab hours for their programs of study. This percentage has been increasing since 2010, when 81.3% of programs required simulation lab hours. The simulation lab hours reported ranged from 10 to 438 hours. The median number of simulation lab hours reported by all programs has increased from 48 in 2011 to 86.5 in 2019, and the percent of programs offering simulation lab hours has increased from 82.9% to 98.4%.

55 programs (44.4%) reported that they had plans to increase the number of simulation lab hours over the next academic year. 46 programs (37.1%) reported that they weight simulation lab hours differently from hands-on clinical practice hours.

Programs were asked to provide their faculty-to-student ratios in simulation activities.

- The ratio varied from 1:2 in 1 program to 1:20 in 1 program.
- The most commonly reported ratio was 1:10 (62 programs).

Patient Care Clinical Situations

In this report, patient care clinical situations were defined

Figure 4. Median Total Clinical Contact Hours Reported by Program Type
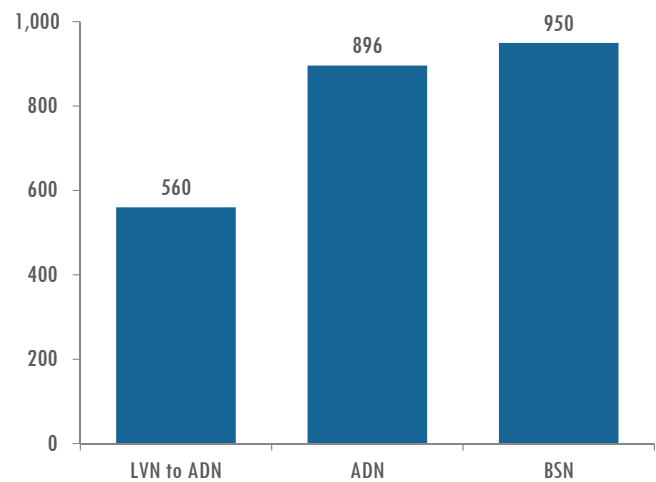
as hands-on clinical practice with actual patients in a clinical setting including all faculty-supervised activities in the clinical setting, such as direct care, observational experiences, and clinical conferences. The patient care clinical situations hours reported ranged from 192 to 1,440 hours. The median number of patient care clinical situations hours reported by all programs has decreased from 712 in 2011 to 582 in 2019. Between 2018 and 2019, 35 programs (29.2%) decreased their patient care clinical situations hours. Of those 35, 20 programs (57.1%) increased simulation lab hours at the same time.

Total Clinical Contact Hours

Figure 4 displays the median total clinical contact hours reported by program type. Total clinical contact hours includes patient care clinical situations, nursing skills lab, simulation lab, and computer lab hours.

- Diploma and MSN AE represent 1 program each, so they were not included in Figure 4. The diploma program reported total clinical contact hours of 1,368 and the MSN AE program reported 946 total clinical contact hours.
- BSN programs reported the highest median clinical contact hours (950). The mean clinical contact hours for BSN programs was 935.0. BSN program clinical contact hours ranged from 659 to 1,526.
- ADN programs reported a median of 896 and a mean of 900.0 total clinical contact hours. ADN programs reported a range of total clinical contact hours from 416 to 1,584.
- LVN to ADN programs had a median of 560 and a mean of 625.6 clinical contact hours. Hours varied among LVN to ADN programs from 384 to 848.

- 14 programs (11.3%) reported that they used Dedicated Education Units (DEUs) as a clinical format.[7]

Table 6 displays the percentage of hands-on clinical practice time programs reported students spent in a variety of settings.

Table 6. Percentage of Hands-On Clinical Time Spent by Setting

Clinical Setting	Mean % of Time Spent	Median % of Time Spent
Acute Care	76.1%	80.0%
Long Term Care	8.0%	5.0%
Community Settings	11.7%	10.0%
Other	4.2%	0.0%

- The majority of hands-on clinical practice hours were spent in the acute care setting, with programs reporting an average of 76.1% of clinical practice hours spent in the acute care setting.
- The next most used setting was the community setting, with an average of 11.7% of clinical practice hours.
- "Other" settings included psych/mental health (1 program) and long term acute care (3 programs).
- The percentage of time spent in these settings has not changed significantly since 2014, when these categories were first introduced.

[3] Block curriculum: blocks or chunks of nursing content that are structured around particular clinical specialty areas, patient population, pathology, or physical systems. The content and focus of each course tends to be unique to that course. Content commonly is specific to areas such as medical-surgical nursing, mental health nursing, pediatric nursing, maternity nursing, gerontological nursing, and community nursing.

[4] Integrated curriculum: curriculum pattern where nursing content is woven across courses in the curriculum rather than being based on body systems or specific health problems.

[5] Concept-based curriculum: curriculum based upon faculty-identified concepts that are considered core to nursing practice and threaded across the curriculum. Each concept is presented through application to exemplars of each concept.

[6] Low-fidelity simulation allows the user to practice skills in isolation. Moderate-fidelity simulation offers more realism than low-fidelity simulation, but does not have the user completely immersed in the situation.

[7] A Dedicated Education Unit is a nursing education model based upon a contractual agreement between a hospital and a nursing education program. Staff nurses on a specific hospital unit function as the primary instructors for nursing students during clinical learning experiences, and nursing program faculty serve as mentors and education resources for the staff nurses.

Interprofessional Collaboration in Professional Nursing Programs

Based on the recommendation of the Institute of Medicine's Future of Nursing report,[8] the 2019 NEPIS included a question on the amount of interprofessional collaboration pre-licensure RN students experience.

Programs were asked to report the number of required nursing courses that offered clinical or simulation experiences for both entry-level RN students and one or more types of graduate-level health professional students, such as physicians, physician assistants, or pharmacists.

- 61 programs reported zero required nursing courses that offered interprofessional collaboration experiences.
- 63 programs reported requiring anywhere from one course (11 programs) to 11 courses (2 programs).
  - These included 32 BSN programs, 26 ADN, 4 LVN to ADN, and 1 MSN AE.

[8] The Institute of Medicine of the National Academy of Sciences. (2010). *The Future of Nursing: Leading Change, Advancing Health.* Retrieved from: http://www.iom.edu/Reports/2010/The-Future-of-Nursing-Leading-Change-Advancing-Health.aspx