

This update presents data for the 86<sup>1</sup> vocational nursing (VN) programs and the military-based VN program<sup>1</sup> in Texas during the 2020 reporting year, including:

- 81 generic programs
- 5 Multiple Entry/Exit Programs (MEEPs)

The Texas Center for Nursing Workforce Studies (TCNWS) collected data using the 2020 Board of Nursing’s (BON) Nursing Education Program Information Survey (NEPIS) that was available online as of October 5, 2020. The reporting period was academic year (AY) 2019-2020 (September 1, 2019 – August 31, 2020) unless otherwise noted. TCNWS collaborated with the BON in the design and dissemination of the survey.

<sup>1</sup>Data collected from the military-based VN program were analyzed separately.

### Geographic Location of Vocational Nursing Programs

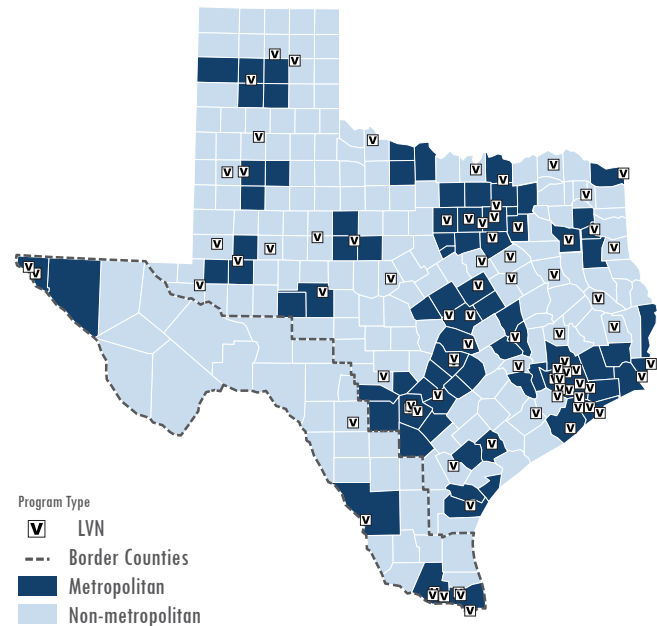
Table 1 summarizes the location of VN programs by setting and geographic designation. Figure 1 presents the geographic locations of the 86 VN program main campuses in Texas by metropolitan and non-metropolitan counties.

- 50 (58.1%) VN programs were located in a metropolitan, non-border area.
- 25 (29.1%) VN programs were located in a non-metropolitan, non-border area.
- 10 (11.6%) VN programs were located in a metropolitan, border area.
- 1 (1.2%) VN program was located in a non-metropolitan, border area.

**Table 1. Geographic Designation of Main Campuses, 2020**

Program Setting	Geographic Designation				Total
	Metro Border	Metro Non-Border	Non-Metro Border	Non-Metro Non-Border	
Community, State, or Technical College	6	40	1	23	70
Independent College or University	0	0	0	1	1
For Profit and other institutions	4	10	0	1	15
<b>Total</b>	<b>10</b>	<b>50</b>	<b>1</b>	<b>25</b>	<b>86</b>

**Figure 1. Geographic Location of VN Programs, Main Campuses, 2020**



## Changes in the Number of Vocational Nursing Programs

Table 2 shows the number of newly opened, closed, and total VN programs by year.<sup>2</sup>

- In 2020, there were 86 VN programs. There were no closures between 2019 and 2020, and 1 new program opened.
- In the past 10 years, there has been a reduction of 10 programs.

<sup>2</sup>One program was approved to conduct a teach-out for VN students who were near graduation but attended a VN program that closed in 2016.

**Table 2. Number of Opened, Closed, and Total VN Programs, 2010-2020**

Year	Newly Opened Programs	Closed Programs	Total Programs
2010	6	2	96
2011	2	1	97
2012	2	2	97
2013	1	0	98
2014	0	6	92
2015	1	2	91
2016	0	3	88
2017	2	1	90 <sup>2</sup>
2018	0	1	89 <sup>2</sup>
2019	1	5	85
2020	1	0	86

## Institution Types

- The 86 VN programs operating in Texas were classified as follows:
  - 70 community, state, and technical colleges
  - 1 independent college or university
  - 15 for profit or other institutions

These were mutually exclusive categories.

## Length of Curriculum in Vocational Nursing Programs

In the 2020 NEPIS, programs were asked to report the length of their VN curriculum in months.

- Length of curriculum ranged from 9 to 18 months among VN programs.
- 72 (83.7%) VN programs were 12 months in length.
- 9 programs (10.5%) had a curriculum longer than 12 months, and 5 programs (5.8%) reported a curriculum less than 12 months in length.

## Online Availability of Vocational Nursing Programs<sup>3</sup>

41 of 86 VN education programs indicated that they offered nursing courses via online technology:

- Similar to previous years, 1 program offered the entire didactic portion online in 2020.
- 25 programs offered only select nursing courses entirely online, an increase from 21 in 2019.
- 27 programs offered hybrid courses (greater than 50% but less than 85% online).<sup>3</sup> This was mostly unchanged from previous years.

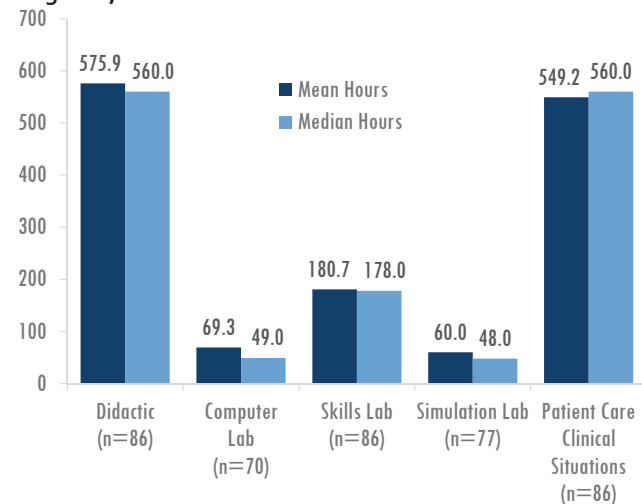
<sup>3</sup> Please note that programs may offer select courses entirely online and select courses as hybrids. Also note that all programs, whether or not they offered any portion of their program online, offered hands-on, face-to-face clinical experiences. Didactic curriculum is defined as including actual hours of classroom instruction in nursing and non-nursing Board-required courses/content.

## Program Hours in Vocational Nursing Programs

Programs were asked to report the total number of hours students were required to participate in didactic and clinical portions of the program of study. The clinical portion is the sum of computer lab, skills lab, simulation lab, and patient care clinical situation hours. Responses to this section reflected programs' operation during the pre-coronavirus period from the start of academic year 2019-2020 through mid-March 2020.

Figure 2 reports the mean and median number of contact hours (didactic and clinical) reported by VN programs. Clinical hours are further broken down by computer lab, skills lab, simulation lab, and patient care clinical situation hours.

**Figure 2. Didactic and Clinical Contact Hours among VN Programs, 2020**



Note: n is the number of programs reporting more than zero hours for that type of activity.

- The didactic contact hours included face-to-face or online delivery of classroom instruction. The mean number of didactic hours reported by VN programs was 575.9 hours. The median number of hours was 560.
- The mean and median total clinical contact hours reported by VN programs were 852.2 and 850 hours, respectively. The highest number of hours reported was 1,384.
- Computer lab was an optional component of clinical hours that included interactive tutorials and learning modules. The mean and median hours reported by 70 VN programs for computer lab were 69.3 and 49 hours, respectively.

- Skills lab was defined as low- and medium-fidelity simulations and task training. The mean and median hours reported by 86 programs were 180.7 and 178 hours, respectively.
- Simulation lab was defined as high-fidelity situations including orientation, learning objectives, simulation experience, debriefing, and evaluation. The mean and median hours reported by 77 programs for simulation lab were 60.0 and 48 hours, respectively.
- Patient care clinical situations were hands-on clinical practice with actual patients in a clinical setting, including all faculty-supervised activities in the clinical setting, observational experiences, and clinical conferences. The mean and median number of hours reported by all 86 programs for patient care clinical situations were 549.2 and 560 hours, respectively.

Programs were asked what type of curriculum they used. 64 (74.4%) reported using a block curriculum,<sup>4</sup> 13 (15.1%) used an integrated curriculum,<sup>5</sup> and 7 (8.1%) used a concept-based curriculum.<sup>6</sup> 2 programs (2.3%) reported using a traditional curriculum.

Programs were asked to indicate whether they used Dedicated Education Units (DEUs)<sup>7</sup> as a clinical format.

- 7 programs stated they used DEUs, the same as in 2019.

Programs were also asked to provide additional information on their simulation lab hours. As seen in Table 3:

**Table 3. Simulation Hours, 2020**

	n	Yes	No
Plan to Increase Simulation Lab Hours	86	45 (52.3%)	41 (47.7%)
Simulation Lab Hours Weighted Differently	86	20 (23.3%)	66 (76.7%)

Note: n is the number of responding programs

- 45 programs (52.3%) reported planning to increase simulation lab hours over the next academic year.
- 66 programs (76.7%) indicated that simulation lab hours were not weighted differently than hands-on clinical hours.

Programs were also asked to report the faculty-to-student ratio in simulation activities.

- The faculty-to-student ratios reported ranged from 1:2 (2 programs) to 1:15 (1 program).

- The most frequently reported faculty-to-student ratio was 1:10 (48 programs).
- 1:5 was the second most frequently reported faculty-to-student ratio (9 programs).

Table 4 shows the percentage of hands-on clinical practice time programs reported students spent in several different clinical settings.

- The largest percentage of hands-on clinical time was spent in acute care, with a mean of 43.0% of clinical time spent, followed by long term care, with a mean of 38.5% of clinical time spent.

The 2020 NEPIS asked how many hands-on clinical contact hours in the VN program were devoted to the nursing care of children and maternity nursing.

- The mean and median number of hands-on clinical contact hours devoted to the nursing care of children were 38.7 and 32 hours, respectively.

**Table 4. Average Percentage of Hands-On Clinical Time Spent by Setting, 2020**

Clinical Setting	Mean % of Time Spent	Median % of Time Spent
Acute Care	43.0%	50.0%
Long Term Care	38.5%	30.0%
Community	11.3%	10.0%
Other	7.2%	0.0%

- Programs reported a mean of 40.8 and a median of 36 hands-on clinical contact hours devoted to maternity nursing.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> 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.

<sup>7</sup> 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 Vocational Nursing Programs

Based on the recommendation of the Institute of Medicine's Future of Nursing report,<sup>8</sup> the 2020 NEPIS included a question on the amount of interprofessional collaboration VN students experience.

Programs were asked to report the number of required nursing courses that offered clinical or simulation experiences for both VN students and one or more types of health professional students, such as professional nursing students, physician assistant students, pharmacy students, etc.

- 21 of 86 programs (24.4%) reported that at least one required nursing course included interprofessional collaboration.
- These 21 programs reported requiring anywhere from 1 course (5 programs) to 16 courses (1 program).

<sup>8</sup> 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>

## High School and Military Tracks in Vocational Nursing Programs

The 2020 VN NEPIS asked programs about options for high school students.

- 7 programs reported offering options for high school students.
- These options included dual credit courses<sup>9</sup> and/or the option to take nursing courses.

Programs that currently had a dual credit high school track were asked how many students were in the track.

- The 7 programs with students in a dual credit high school track reported a total of 282 students in those tracks.

Programs were asked to report whether they had implemented a track that gives active duty, former, or retired military personnel nursing credit for allied health care training and/or experience.

- In 2020, 3 programs reported having such a track and 2 reported having plans to implement one.
- 1 program reported 8 students enrolled, and the other 2 that had a military track reported no students were enrolled in the track.

Programs that reported having a military track were asked to indicate if the track was accelerated (shorter completion time than a traditional vocational nursing program).

- 2 programs indicated that their track was accelerated.

Programs were also asked to explain any challenges they have experienced while either planning for or implementing a military track.

- 2 of the 3 programs with a military track reported not experiencing any challenges.
- 1 program with a military track reported not having any qualified applicants.
- Programs planning to implement a military track described challenges including issues with aligning credits for military education.

<sup>9</sup> Programs offered dual credit courses for prerequisites, nursing courses, or a combination of both nursing and prerequisites courses.