Program Characteristics of Vocational Nursing Programs 2016

This update presents data for the 88[1] vocational nursing (VN) programs in Texas during the 2016 reporting year, including:

- 83 generic programs
  - 64 in public colleges/universities
  - 14 in career schools/colleges
  - 2 in private colleges/universities
  - 3 in private/public hospitals
- 5 Multiple Entry/Exit Programs (MEEP)
  - All in public colleges/universities

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 3, 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.

[1]Data collected from the military-based VN program were excluded from these analyses.

Geographic Location of Vocational Nursing Programs

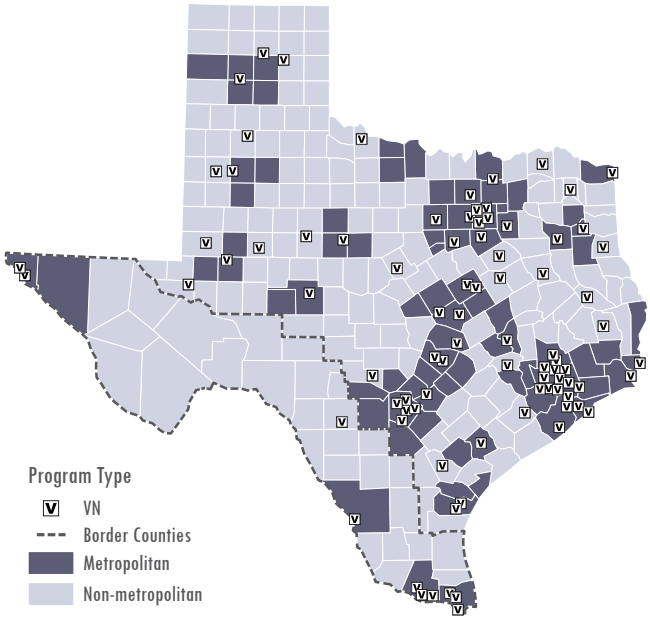
Table 1 summarizes the location of VN programs by setting and geographic designation. Figure 1 presents the locations of the 88 VN program main campuses in Texas by metropolitan and non-metropolitan counties.

- The majority (56.8%) of VN programs were located in a metropolitan, non-border area.
- 29.5% of VN programs were located in a non-metropolitan, non-border area.
- 10 (11.4%) VN programs were located in a metropolitan, border area.
- 2 (2.3%) VN programs were located in a non-metropolitan, border area.

Table 1. Geographic Designation of Main Campuses, 2016

Program Setting	Geographic Designation				Total
	Metro Border	Metro Non-Border	Non-Metro Border	Non-Metro Non-Border	
Public College/University	6	38	2	23	69
Private College/University	0	1	0	1	2
Public/Private Hospital	1	0	0	2	3
Career Schools/Colleges	3	11	0	0	14
Total	10	50	2	26	88

Figure 1. Geographic Location of VN Programs, Main Campuses, 2016



Changes in the Number of Vocational Nursing Programs

Table 2 shows the number of newly opened, closed, and total VN programs by year.[2]

- In 2016, there were 88 VN programs. There were 3 closures between 2015 and 2016, and no new programs.[3]

Table 2. Number of Opened, Closed, and Total VN Programs, 2006-2016

Year	Newly Opened Programs	Closed Programs	Total Programs
2006	-	-	115
2007	2	25	92
2008	4	7	89
2009	3	0	92
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

[2]Between 2006 and 2008, many programs consolidated/merged, leading to a decrease in total number of programs.

[3]One program which closed during the survey period was considered a closed program for 2016; data from this program were unverified and incomplete, and, therefore, excluded from analyses.

Governing Institutions

The 88 VN programs were governed by different types of institutions. These were mutually exclusive categories.

- 6 programs were governed by private/non-profit institutions.
- 13 programs were governed by private/for-profit institutions.
- 69 programs were governed by public institutions.

Length of Curriculum in Vocational Nursing Programs

In the 2016 NEPIS, programs were asked to report the length of their VN curriculum in months.

- Length of curriculum ranged from 9 to 16 months among VN programs.
- 76 (86.4%) VN programs were 12 months in length.
- 7 programs (8.0%) had a curriculum longer than 12 months, and 5 programs (5.7%) reported a curriculum less than 12 months in length.

Online Availability of Vocational Nursing Programs[4]

38 of 88 VN education programs indicated that they offered nursing courses via online technology:

- Similar to 2015, 1 program offered the entire didactic portion online in 2016.
- 22 programs offered only select nursing courses entirely online, which was 3 more programs than in 2015.
- 31 programs offered select nursing courses as blended/hybrid courses. This was an increase from 26 programs that offered select nursing courses as blended/hybrid courses in 2015.

[4]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.

Table 3 and Figure 2 report 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.

- The didactic contact hours included face-to-face or online delivery of classroom instruction. BON rules require a minimum of 558 didactic hours in VN programs.[5] The mean number of didactic hours reported by VN programs was 622.8 hours. The median number of hours was 576.
- The mean and median total clinical contact hours reported by VN programs were 893.3 and 867 hours, respectively. The highest number of hours reported was 1,088. BON rules require a minimum of 840 total hours in clinical learning experiences for VN programs.[5]

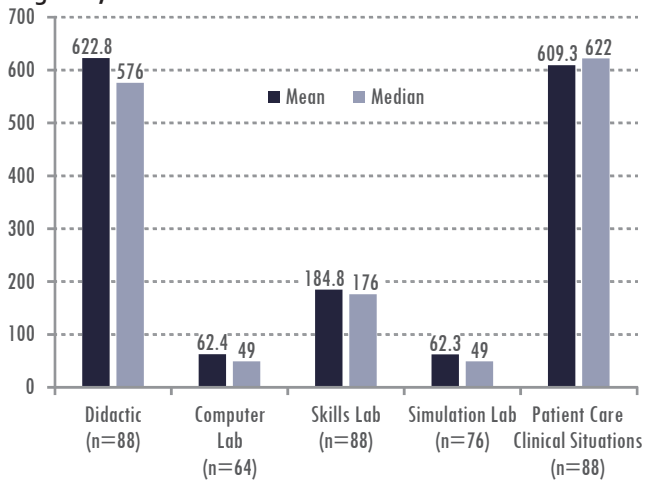
Table 3. Didactic and Clinical Contact Hours among VN Programs, 2016

		Mean Contact Hours	Median Contact Hours
Didactic	Didactic Total (n=88)	622.8	576
Clinical	Clinical Total (n=88)	893.3	867
	Computer Lab (n=64)	62.4	49
	Skills Lab (n=88)	184.8	176
	Simulation Lab (n=76)	62.3	49
	Patient Care Clinical Situations (n=88)	609.3	622

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

- Computer lab was an optional component of clinical hours that included interactive tutorials and learning modules. The mean and median hours reported by 64 VN programs for computer lab were 62.4 and 49 hours, respectively.
- Skills lab was defined as low- and medium-fidelity simulations and task training. The mean and median hours reported by all 88 programs for skills lab were 184.8 and 176 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 76 programs for simulation lab were 62.3 and 49 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 88 programs for patient care clinical situations were 609.3 and 622 hours, respectively.

Figure 2. Didactic and Clinical Contact Hours among VN Programs, 2016



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

Programs were asked to indicate whether they used Dedicated Education Units (DEUs)[6] as a clinical format. 8 programs stated they used DEUs, doubling in number from 2015.

Programs were also asked to provide additional information on their simulation lab hours. As seen in Table 4:

- 40 programs (45.5%) reported planning to increase simulation lab hours over the next academic year.
- 75 programs (85.2%) indicated that simulation lab hours were not weighted differently than hands-on clinical hours.

Table 4. VN Programs and Simulation Hours, 2016

	n	Yes	No
Plan to Increase Simulation Lab Hours	88	40 (45.5%)	48 (54.5%)
Simulation Lab Hours Weighted Differently	88	13 (14.8%)	75 (85.2%)

Note: n is the number of responding programs

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 1:20 (1 program).
- The most frequently reported faculty-to-student ratio was 1:10 (41 programs).
- 1:5 was the second most frequently reported faculty-to-student ratio (11 programs).

[5]22 Tex. Admin. Code § 214.9. Retrieved from: https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=22&pt=11&ch=214&rl=9

[6]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.

Table 5 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 an average of 45.9% of clinical time spent, followed by long term care, with an average of 32.9% of clinical time spent.

The 2016 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 44.0 and 36 hours, respectively.

Table 5. Average Percentage of Hands-On Clinical Time Spent by Setting, 2016

Clinical Setting	Average % of Time Spent
Acute Care	45.9%
Long Term Care	32.9%
Community	12.4%
Other	8.8%

- Programs reported a mean of 58.3 and a median of 40 hands-on clinical contact hours devoted to maternity nursing.

Interprofessional Collaboration in Vocational Nursing Programs

Based on the recommendation of the Institute of Medicine's Future of Nursing report,[7] the 2016 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 other graduate-level health professional students, such as medical students, physician assistant students, and pharmacy students.

- 30 of 88 programs (34.1%) reported a nursing course requirement offering interprofessional collaboration experience.
- These programs reported anywhere from 1 course (5 programs) to 14 courses (1 program).

[7]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 2016 VN NEPIS asked programs about options for high school students.

- 9 programs reported offering options for high school students.
- These options included dual credit courses[8] and/or the option to take nursing courses.

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

- The 8 programs with students in a dual credit high school track reported a total of 695 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 2016, 3 programs reported having such a track and 6 reported having plans to implement one.
- Only 1 program had students in a military track (2 students).

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

- The programs with a military track did not report any challenges.
- Programs planning to implement a military track described challenges including issues with funding, curriculum, faculty, and obtaining detailed education history.
- Programs that do not currently have plans for a military track identified challenges such as determining course equivalency or assessing prior experience, and a lack of resources, such as funding or personnel.

[8]Programs offered dual credit courses for prerequisites, nursing courses, or a combination of both nursing and prerequisites courses.