



The Long Term Care Nurse Staffing Study (LTCNSS) assesses nurse staffing and related issues in the long term care setting. In 2015, approximately 27% of licensed vocational nurses (LVNs) and 3% of registered nurses (RNs) in Texas worked in the nursing home/extended care setting. Long term care facilities may also employ certified nurse aides (CNAs), certified medication aides (CMAs), and advanced practice registered nurses (APRNs). During the spring of 2016, the TCNWS administered the LTCNSS to 1,202 Texas nursing facilities. A total of 439 facilities participated, for a final response rate of 36.5%.

According to the Census Bureau, Americans over the age of 65 will represent 20% of the population by 2030, and the Department of Health and Human Services anticipates the number of older adults needing long term care services will double by 2050.^{1,2} As a result, the demand for nurses in long term care settings is expected to increase. This report provides information on staffing in Texas long term care nursing facilities, including staff mix, future staffing needs, staff characteristics, and temporary staff.

¹Census Bureau. (2012). 2012 national population projections: summary tables. Retrieved from <http://www.census.gov/population/projections/data/national/2012/summarytables.html>

²U.S. Department of Health and Human Services. (2003). The future supply of long-term care workers in relation to the aging baby boom generation. Retrieved from <https://aspe.hhs.gov/basic-report/future-supply-long-term-care-workers-relation-aging-baby-boom-generation>

Staff Mix

Table 1 presents the number of occupied and vacant FTE positions in Texas by staff type.

- CNAs were the most numerous staff type in Texas long term care facilities.
- 76.6% of facilities reported zero vacancies for administrative LVNs, compared to 15% of facilities that reported zero vacancies for CNAs.
- Direct resident care RNs and LVNs were more numerous than their administrative counterparts; however, the ratio of direct resident care RNs to administrative RNs is smaller than the ratio of direct resident care LVNs to administrative LVNs.
- The number of LVNs and CNAs employed in Texas was higher than the number of RNs in long term care settings at the national level; however, Texas had fewer RNs employed than the national average.^{3,4}

Direct resident care staff

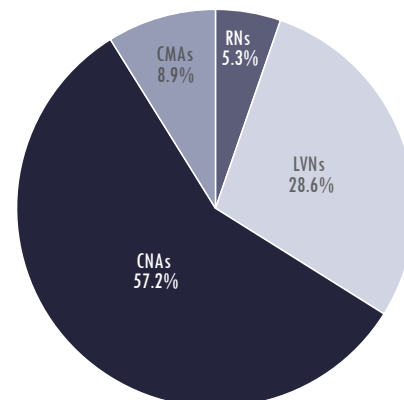
Figure 1 shows only the composition of staff providing direct resident care in Texas long term care facilities and is derived from the total number of FTE positions occupied.

Table 1. Number of occupied and vacant FTE positions in Texas by staff type⁵

	n	Occupied FTE positions	Total Vacant FTE Positions	Statewide Position Vacancy Rate	Number of Facilities that Reported Zero Vacancies
Direct resident care RNs	335	762	141.5	15.7%	199
Administrative RNs	355	615	65	9.6%	250
Direct resident care LVNs	349	4,107	439.9	9.7%	124
Administrative LVNs	346	857	46	5.1%	265
CNAs	346	8,216	1,092	11.7%	52
CMAs	310	1,272	134	9.5%	172

⁵Due to the low numbers of APRNs reported, APRNs are excluded from all analyses in this and all other 2016 LTCNSS reports.

Figure 1. Direct resident care staff mix



- LVNs accounted for 28.6% of direct care staff (See Figure 1).
- 15.5% of facilities did not employ any RNs in a direct care capacity.

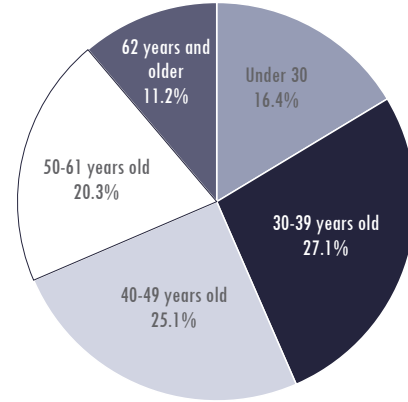
The 2016 LTCNSS introduced a question asking facilities to report the number of direct resident care RNs employed the week of 01/18/2016-01/24/2016 by age. The results are shown in Figure 2.

- 52.2% of direct resident care RNs were between the ages of 30 – 49.
- The proportion of direct resident care RNs over the age of 50 was 31.4%

Administrative staff

- LVNs comprised the majority of administrative staff, at 58.2%. The remaining 41.8% were RNs.
- The proportions of administrative staff comprised by LVNs and RNs changed from the 2014 findings, with the proportion of LVNs increasing.

Figure 2. Age of direct resident care RNs employed the week of 01-18/2016 - 01/24/2016



³Spetz, J., Trupin, L., Bates, B., & Coffman J.M. (2015) Future Demand For Long-Term Care Workers Will Be Influenced By Demographic And Utilization Changes. *Health Affairs*, 34, 936-945.

⁴Eliopoulos, C. (2015). The Clinical and Business Care For Improving Nurse Staffing In Long-Term Care. *Annals of Long-Term Care: Clinical Care and Aging*, 23, 12-13.

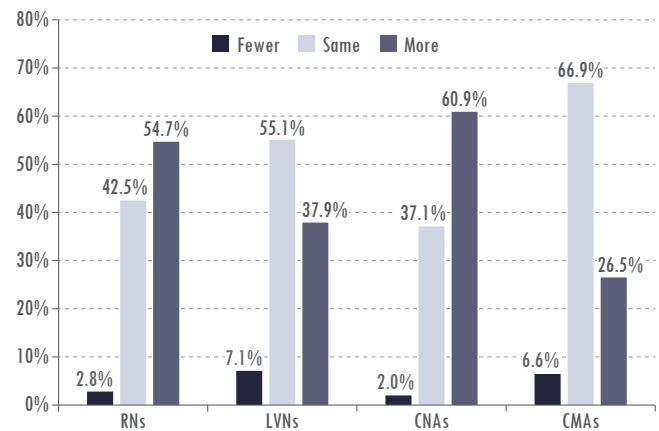
Additional Staff Needed

Respondents were asked to indicate whether their facility would need more, fewer, or the same number of staff in the next two years (see Figure 3). Additionally, qualitative analysis was performed on responses to the open-ended question, “explain why your facility will need more, fewer, or the same number of [personnel] over the next two years.” The following presents the results for these questions by staff type.

RNs

- 42.5% and 54.7% of facilities (n=351) reported they would need the same amount or more RNs over the next two years, respectively (see Figure 3). Increasing the number of RNs in Texas is imperative because the number of RNs employed in long term care facilities is below the national average and both the American Association for Long Term Care Nursing and Institute of Medicine recommend increasing the number of RNs employed in long term care facilities.⁴
- 52.4% of 176 responses for needing the same number of RNs indicated that current staffing levels were meeting patient needs adequately.
- Rising patient acuity was the most frequent response justifying the need for more RNs (45.1% of 184 responses).

Figure 3. Expectations of staffing needs by staff type



LVNs

- 55.1% of 354 respondents indicated they would need about the same number of LVNs.
- The top reason cited for needing fewer LVNs was that these personnel were slowly being replaced by RNs (50% of 20 responses).
- 43.3% of 120 responses indicated that growing patient census/expanding business was the reason for needing more LVNs over the next two years.



CNAs

- More than half (60.9%) of 410 respondents reported that their facility would need more CNAs in the next two years (see Figure 3).
- 32.6% of 95 responses for needing the same number of CNAs indicated that staffing levels were contingent on the census and/or budget.
- Among facilities that reported wanting to increase CNAs, the most frequent response as to why they would need more CNAs was due to increase in patient census (31.8% of 198 responses).

CMAs

- 66.9% of 332 facilities indicated they would need the same number of CMAs over the next two years (see Figure 3).
- 28.9% of 149 responses for needing the same number of CMAs indicated that current staffing levels were meeting patient needs adequately.

Staff Characteristics

Disciplines

The most common disciplines not required by law in Texas long term care facilities are listed by frequency in Table 2.

Table 2. Prevalence of disciplines in responding long term care facilities

Disciplines	% of facilities with listed discipline
Other Physicians (excluding medical director)	79.3%
Nurse Practitioners	79.0%
Physician Assistants	54.2%
Geriatricians	37.6%
Clinical Nurse Specialists	13.9%

RNs with specialty certifications

- 13.4% of 439 facilities reported having at least one RN with a specialty certification in nursing administration, which represented the highest reported specialty employed among facilities.
- 10.9% of facilities employed one or more RNs with a specialty certification in dementia.
- The number of RNs with a specialty certification was lower in 2016 (13.4%) than the number reported in the 2014 LTCNSS (30.5%).

Contract, Agency, and Traveling Staff

Respondents were asked to provide the number of contract, agency, and traveling staff FTEs used by their facility. Figure 4 displays only the direct resident care temporary staff. Responding facilities reported a total of 258.6 FTEs being utilized in this capacity.

Direct resident care staff

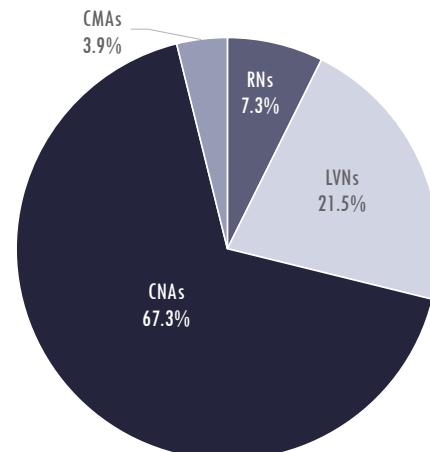
- CNAs comprise 67.3% of the 258.6 FTE direct resident care temporary staff used (see Figure 4).
- LVNs and RNs, combined, account for less than one-third of the 258.6 FTE direct care staff in responding facilities.

Administrative staff

- Of the 283.6 FTEs reported, 8.8% are comprised of administrative RNs and LVNs.

- Administrative RNs account for 60% of the 25 administrative temporary FTEs reported.

Figure 4. Contract, agency, and traveling direct resident care staff by staff type

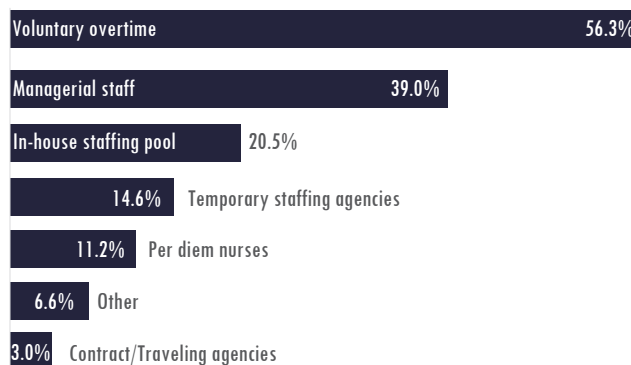


Methods of Interim Staffing

Respondents were asked to indicate which methods of interim staffing were utilized in their facility (Figure 5). The 2016 LCTNSS added per diem nurses and contract/traveling agencies as additional options for interim staffing methods. 72.4% of 439 respondents reported using interim staffing methods.

- Voluntary overtime was the most frequently used interim staffing method, with 56.3% of facilities reporting the use of this strategy.
- Temporary staffing agencies were used by 14.6% of responding facilities.

Figure 5. Percentage of facilities using interim staffing methods



Hours and Cost of Interim Staffing

Facilities were asked to detail the hours and costs of each interim staffing method.⁶ Table 3 includes the total hours and cost⁷ for each interim staffing method for all licensed direct resident care nursing staff. Facilities using interim staffing reported:

- A total of 455,388 hours of interim staffing coverage at a cost of almost \$10 million, which were both increases from the 2014 LCTNSS (351,547.2 hours and \$7,478,614.69).
- 39.2% of expenses for interim staffing are spent on voluntary overtime.

⁶All facilities whose average cost per hour for any interim staffing method that fell below minimum wage were excluded from the analyses.

⁷The analysis on cost of interim staffing is to demonstrate the cost differential between staffing methods, and is not intended for use in estimating nurse wages.

- Voluntary overtime is less costly, on average, than the use of temporary staffing agencies but is still more costly than other methods of interim staffing.

Table 3. Hours and Cost of Interim Staffing in Texas

	n	Hours	Cost	Average cost per hour
Per diem nurses	15	121,612.79	\$2,016,445.78	\$16.58
Voluntary overtime	59	168,603.13	\$3,906,996.32	\$23.17
In-house staffing pool	15	104,644.55	\$1,917,538.32	\$18.32
Managerial staff	33	31,533.74	\$1,245,163.81	\$39.49
Temporary staffing agencies	19	27,981.87	\$861,573.24	\$30.79
Contract/Traveling agencies	2	892.00	\$24,516.00	\$27.48
Other	1	120.00	\$3,200.00	\$26.67
Total	-	455,388.08	\$9,975,433.47	\$21.91

Conclusion and Recommendations

Conclusion

CNAs were the most numerous nursing care type employed in long term care settings in Texas followed by direct care LVNs. Direct care RNs only represented of 5.3% of direct care staff, which is lower than national averages.^{3,4} However, 54.7% of participating facilities reported they would need more RNs in the next two years and 60.9% of facilities claimed they would need more CNAs.

Voluntary overtime was the most frequently reported interim staffing method used among long term care facilities (56.3%). Interim staffing methods also cost responding facilities nearly \$10 million. Increasing nurse staffing levels, particularly RNs, will be cost effective and

alleviate some consequences of insufficient staffing such as poor outcomes and more rehospitalizations, especially with the anticipated increased demand for nurses in long term care settings.^{3,4}

TCNWS Advisory Committee Recommendations

Evaluate training standards required for nurse aide training instructors

Evaluate requirements for nurse aide training instructors. Consider decreasing requirement that instructors have 3 years of long term care experience to 1 year.

Fully involve CNAs in resident care planning and ensure continuity in CNA assignments

CNAs are the most numerous staff type in long term care facilities, comprising 57% of staff providing direct resident care. Facilities should therefore consider management changes and job redesign to allow CNAs to become essential members of resident care teams and to have increased input in decision making. This approach could include CNA involvement in resident care planning and continuity in CNA assignment to residents.

Promote a better understanding of nursing services in the long term care setting

To promote a better understanding of the long term care setting, facilities should join with other long term care facilities in partnerships with local community colleges and other educational programs to provide educational and clinical experiences for faculty and students.