



The Long Term Care Nurse Staffing Study (LTCNSS) assesses nurse staffing and related issues in the long term care setting. In 2016, approximately 26% 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 2017, the TCNWS administered the LTCNSS to 1,213 Texas nursing facilities. A total of 439 facilities participated, for a final response rate of 36.2%.

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.
- 272 of 439 (62.0%) of facilities reported zero vacancies for administrative LVNs, compared to 58 out of 439 (13.2%) of facilities that reported zero vacancies for CNAs.

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.

- LVNs accounted for 26.7% of direct care staff (See Figure 1).
- 15.9% of facilities did not employ any RNs in a direct care capacity.

Administrative staff

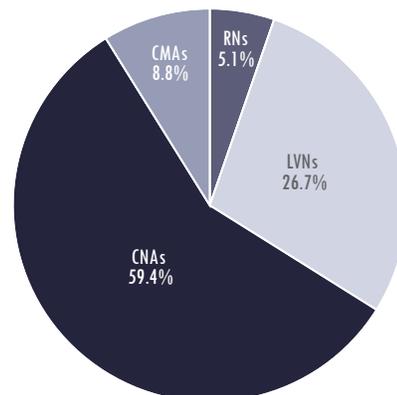
- LVNs comprised the majority of administrative staff, at 59.2%. The remaining 40.8% were RNs.
- The proportions of administrative staff comprised by LVNs and RNs changed from the 2016 findings, with the proportion of LVNs increasing.

Table 1. Number of occupied and vacant FTE positions in Texas by staff type³

| | n | Occupied FTE positions | Total Vacant FTE Positions | Statewide Position Vacancy Rate | Number of Facilities that Reported Zero Vacancies |
|---------------------------|-----|------------------------|----------------------------|---------------------------------|---|
| Direct resident care RNs | 371 | 790 | 183.7 | 18.9% | 208 |
| Administrative RNs | 377 | 631.8 | 69 | 9.8% | 268 |
| Direct resident care LVNs | 381 | 4,124 | 440.3 | 9.6% | 139 |
| Administrative LVNs | 377 | 917.8 | 58 | 5.9% | 272 |
| CNAs | 382 | 9,182.7 | 1,063.8 | 10.4% | 58 |
| CMAs | 345 | 1,352.7 | 133.5 | 9.0% | 175 |

³Due 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 (n=382)

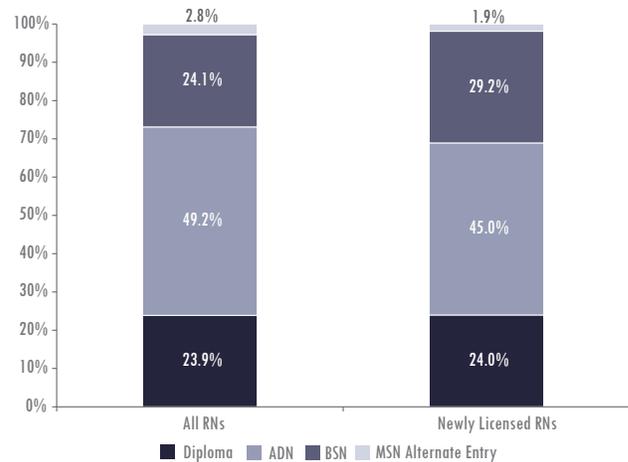


RN Degree Type

Respondents reported the degrees of newly licensed RNs and of all RNs employed during the facility's last fiscal year (Figure 2).

- 107 out of 367 (29.2%) of newly licensed RNs had a BSN and 289 out of 1200 (24.1%) of all RNs had a BSN.
- All RNs had a higher proportion of nurses with an ADN than newly licensed RNs.

Figure 2. Newly licensed RNs and all RNs employed last fiscal year by degree type



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, the 2017 LTCNSS introduced a new question asking facilities to indicate whether patient census, patient acuity, budget concerns, or other were reasons for needing fewer, the same, or more of each nurse type. The following presents the results for these questions by staff type.

RNs

- 250 out of 426 (58.7%) facilities (n=426) reported they would need more RNs over the next two years.
- 171 out of 126 (40.1%) facilities indicated that they would need the same number of RNs over the next two years.

LVNs

- 244 out of 427 (57%) respondents indicated they would need about the same number of LVNs.

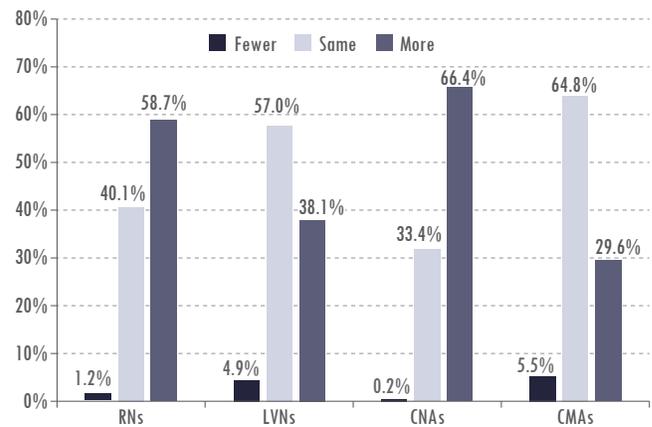
CNAs

- 282 out of 425 (66.4%) respondents reported that their facility would need more CNAs.
- Only 1 facility (0.2%) reported needing fewer CNAs over the next two years.

CMA's

- 258 out of 398 (64.8%) facilities indicated they would need the same number of CMA's over the next two years.

Figure 3. Expectations of staffing needs by staff type



Respondents were also asked why they would need fewer, more, or about the same number of nursing personnel over the next two years (Table 2).

- The most common reason for LVNs, CNAs, and CMA's selected was patient census. The most common reason selected for RNs was patient acuity.
- 18 out of the 53 (18.9%) "other" responses indicated that increasing the facility's state star rating was a reason for needing fewer, more, or about the same number of RNs.

Table 2. Reasons agencies need fewer, more, or about the same number of nursing personnel over the next 2 years

| Nurse Staff Type | Patient Census | Patient Acuity | Budget Concerns |
|------------------|----------------|----------------|-----------------|
| RNs | 42.7% | 46.0% | 11.2% |
| LVNs | 55.1% | 34.2% | 10.7% |
| CNAs | 62.6% | 37.4% | 0% |
| CMA's | 54.7% | 54.7% | 54.7% |



Staff Characteristics

Disciplines

Table 3 reports the most common disciplines in Texas long term care facilities.

RNs with specialty certifications

- 20% of 370 facilities reported having at least one RN with a specialty certification in nursing administration, which represented the highest reported specialty employed among facilities.
- 12.2% of 370 facilities employed one or more RNs with a specialty certification in dementia.
- Only 4 of 356 responding facilities reporting have a nurse with rehabilitation certification.

Table 3. Prevalence of disciplines in responding long term care facilities

| Disciplines | % of facilities with listed discipline |
|--|--|
| Nurse Practitioners | 83.5% |
| Clinical Nurse Specialists | 14.4% |
| Geriatricians (MD/DO) | 42.9% |
| Physician Assistants | 54.7% |
| Other Primary Care Physicians (excluding Medical Director) | 79.9% |
| Other Specialist Physicians (such as podiatrists) | 88.0% |

Table 4. RN specialties in responding long term care facilities

| Specialties | n | # of RNs |
|---------------------------------|-----|----------|
| Gerontological | 361 | 32 |
| Rehabilitation | 356 | 14 |
| Certified Dementia Practitioner | 370 | 67 |
| Nursing Administration | 370 | 123 |
| Other | 266 | 50 |

Methods of Interim Staffing

Respondents were asked to indicate which methods of interim staffing were utilized in their facility (Figure 4). 49.7% of 439 respondents reported using interim staffing methods.

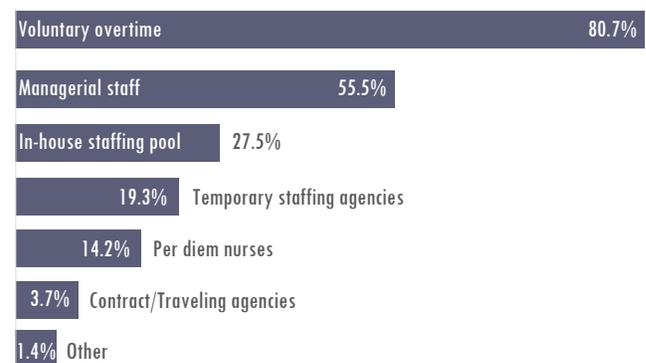
- Voluntary overtime was the most frequently used interim staffing method, with 80.7% of facilities reporting the use of this strategy.
- Temporary staffing agencies were used by 19.3% of responding facilities.

Respondents were asked to provide the number of contract, agency, and traveling staff FTEs used by their facility. Figure 5 (Page 4) displays only the direct resident care temporary staff. Responding facilities reported 326 direct resident care FTEs and 39 administrative FTEs being utilized in this capacity.

Direct resident care staff

- CNAs comprise 197 of the 326 (60.4%) FTE direct resident care temporary staff used (see Figure 5).
- LVNs and RNs, combined, account for about one-third of the 326 FTE direct care staff among responding facilities.

Figure 4. Percentage of facilities using interim staffing methods



Administrative staff

- Of the 365 total temporary FTEs reported, 10.7% are comprised of administrative RNs and LVNs.
- Administrative LVNs account for 53.8% of the 39 administrative temporary FTEs reported.

Facilities were asked to detail the hours and costs of each interim staffing method.⁶ Table 5 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 424,216.44 hours of interim staffing were used by 97 responding facilities coverage at a cost of almost \$7.5 million, which were both decreases from the 2016 LCTNSS (455,388 hours and \$9,975,433.47).
- 57.2% of expenses for interim staffing were spent on voluntary overtime.
- 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.

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.

Figure 5. Contract, agency, and traveling direct resident care staff by staff type

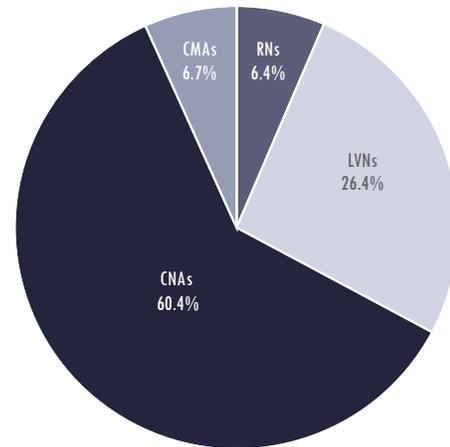


Table 5. Hours and Cost of Interim Staffing in Texas

| | n | Hours | Cost | Average cost per hour |
|-----------------------------|----|-------------------|-----------------------|-----------------------|
| Per diem nurses | 19 | 28,098.75 | \$561,758.24 | \$19.99 |
| Voluntary overtime | 76 | 256,092.60 | \$4,278,010.28 | \$16.70 |
| In-house staffing pool | 24 | 29,246.25 | \$262,483.14 | \$8.97 |
| Managerial staff | 49 | 12,037.35 | \$219,772.90 | \$18.26 |
| Temporary staffing agencies | 37 | 95,582.24 | \$2,077,326.00 | \$21.73 |
| Contract/Traveling agencies | 17 | 2,140.25 | \$50,097.75 | \$23.41 |
| Other | 15 | 1,019 | \$34,208.00 | \$33.57 |
| Total | | 424,216.44 | \$7,483,656.31 | \$17.64 |

Consequences of Inadequate Staffing

Respondents were asked to select all that apply from a list of consequences their agency experienced in the past year as a result of an inadequate supply of nursing staff. Table 6 displays the results from this question.

- 13.6% of the 383 survey respondents indicated that they experienced no negative impact from a lack of adequate supply of staff, which is an increase from the 2016 LCTNSS (8.0%).
- Increased workloads, increase in voluntary overtime, using administrative staff to cover nurse duties, and low staffing morale were all reported by more than half of respondents as consequences of inadequate staffing.

Table 6. Reported consequences of inadequate staffing (n=383)

| | # of respondents | % of respondents |
|--|------------------|------------------|
| Increased workloads | 267 | 69.7 |
| Increase in voluntary overtime | 248 | 64.8 |
| Using administrative staff to cover nurse duties | 227 | 59.3 |
| Low nursing staff morale | 202 | 52.7 |
| Increased nursing staff turnover | 187 | 48.8 |
| Difficulty completing required documentation on time | 153 | 39.9 |
| Increased absenteeism | 133 | 34.7 |
| Using medication aide staff to cover nurse aide duties | 116 | 30.3 |
| Increased resident/family complaints | 113 | 29.5 |
| Delays in providing care | 87 | 22.7 |
| Wage increases | 86 | 22.5 |
| Increased number of incident reports | 83 | 21.7 |
| Inability to expand services | 80 | 20.9 |
| Increased use of temporary/agency nurses | 58 | 15.1 |
| Declined Referrals | 55 | 14.4 |
| None - We had an adequate supply of personnel | 52 | 13.6 |
| Delayed admissions | 41 | 10.7 |
| Other consequences | 12 | 3.1 |

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 5.1% of direct care staff, which is lower than national averages.^{3,4} However, 58.7% of participating facilities reported they would need more RNs in the next two years and 66.4% of facilities claimed they would need more CNAs. 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

Voluntary overtime was the most frequently reported interim staffing method used among responding long term care facilities (80.7%). Interim staffing methods also cost responding facilities nearly \$7.5 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 59.4% 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.