



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%.

This report provides information on vacancy and turnover across geographic location and by staff type.

Nurse vacancy and turnover rates are among the key measures for assessing a nursing workforce shortage, the severity of the shortage, and changes in the nursing labor market over time. The 2017 LTCNSS vacancy rates reported herein measure the percentage of positions that were vacant at one point in time (01/27/17). The 2017 LTCNSS turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2017-12/31/2017).

High vacancy and turnover rates can lead to negative outcomes that can affect quality of care such as losing experienced staff and increasing the workload and stress levels of existing staff. High vacancy and turnover is also costly to facilities due to the expense associated with overtime or the use of agency nurses to fill vacant positions as well as the cost associated with recruiting qualified nurses.

Vacancy

Position Vacancy Rates

Table 1 provides a breakdown of vacancy rates by staff type. Note that position vacancy rates can be interpreted as the total percentage of vacancies across all responding facilities. The position vacancy rate describes the proportion of all full-time equivalent (FTE) positions that are vacant across all responding agencies.

- Direct resident care RNs had the highest position vacancy rates in the state (18.9%). Comparatively, RNs in hospitals had a vacancy rate of 8.1% in 2017.

- The majority of facilities reported zero vacancies for all staff types, except CNAs and direct care LVNs. Less than one-fifth of facilities reported zero vacancies for CNAs and just over one-third of facilities reported zero vacancies for direct resident care LVNs.
- The statewide position vacancy rates for most direct resident care staff have decreased since 2016 (Figure 1, page 2), with the exception of direct resident care RNs.
- The statewide position vacancy rate for direct resident care RNs has increased by 20.7% since 2016.

Table 1. Position vacancy rates by staff type

Nurse Staff Type	n	Total occupied FTE positions	Total vacant FTE positions	2017 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

Table 2 provides the position vacancy rate by each region.

- South Texas had a higher position vacancy rate than the statewide position rate for each nurse type.
- The Rio Grande Valley reported lower position vacancy rates across most nurse types, with the exception of administrative RNs.

Figure 1. Direct resident care staff position vacancy rates, by staff type, 2008 - 2017

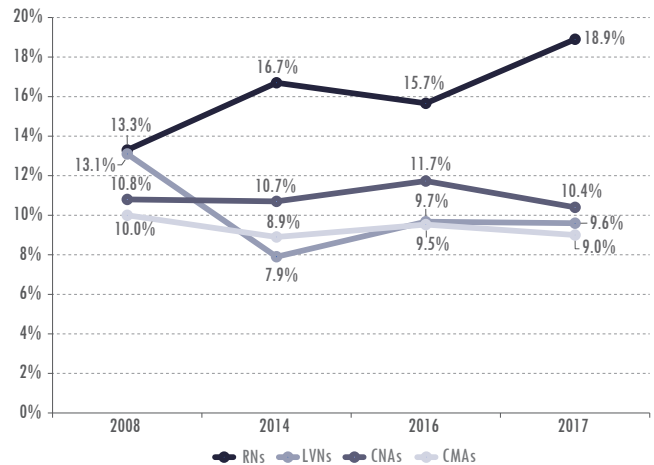


Table 2. Position vacancy rates by region

Region	Position Vacancy Rate					
	Direct Resident Care RNs	Administrative RNs	Direct Resident Care LVNs	Administrative LVNs	CNAs	CMAs
Central Texas	14.7%	5.9%	10.1%	5.5%	12.2%	8.5%
East Texas	15.3%	10.1%	9.0%	5.7%	8.7%	11.2%
Gulf Coast	16.8%	9.2%	10.3%	5.7%	9.8%	8.0%
North Texas	19.1%	11.9%	9.9%	5.9%	10.2%	9.0%
Panhandle	26.1%	8.5%	7.3%	6.3%	8.7%	7.4%
Rio Grande Valley	11.9%	5.0%	4.4%	0.0%	4.5%	5.0%
South Texas	31.4%	17.4%	12.1%	9.4%	17.0%	10.1%
West Texas	18.6%	2.2%	7.7%	5.2%	6.7%	10.7%
Texas	18.9%	9.8%	9.6%	5.9%	10.4%	9.0%

Facility Vacancy Rates

- The majority of facilities reported zero vacancy for most nurse types with the exception of direct resident care LVNs and CNAs.
- Direct resident care LVNs reported a median facility vacancy rate of 7.3%.

- Long term care facilities had a higher proportion of facilities who reported 0% facility vacancy rate than hospitals in 2017.

Table 3. Facility vacancy rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
Direct resident care RN	236	0%	0%	0%	33.3%	6.8%	18.8%
Administrative RN	257	0%	0%	0%	0%	1.2%	7.0%
Direct resident care LVN	264	0%	0%	7.3%	3.8%	16.7%	10.7%
Administrative LVN	253	0%	0%	0%	3.6%	0%	4.5%
CNA	267	0%	3.7%	12.2%	3.4%	20.0%	13.8%
CMA	214	0%	0%	0%	5.6%	16.7%	10.8%

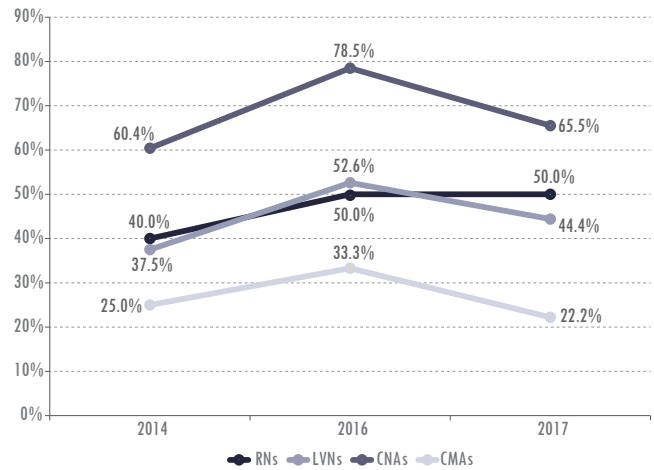


Median Facility Turnover Rate

The facility turnover rate is calculated by dividing the total number of separations by a headcount of employees. The median turnover rate was used which represents the middle value when turnover is calculated for each individual long term care facility. The median value is reported because it is less sensitive to outliers than the mean. For a more in-depth explanation of the calculation of median facility turnover rate, please see the 2017 Design and Methods report.

- At the state level, the median facility turnover rates for administrative RNs and LVNs were lower than the turnover rates for their direct resident care counterparts.
- The highest overall median facility turnover rate was among CNAs (65.5%). To compare, nurse aides also had the highest turnover rate among nursing staff in hospitals (34.1%).

Figure 2. Median facility turnover rates for direct resident care staff, 2014 - 2017



- As seen in Figure 2, turnover rates for direct resident care nursing staff dropped from 2016 to 2017, with the exception of RNs which did not change.

Table 4. Facility turnover rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
Direct resident care RN	258	0	0%	50.0%	100.0%	500.0%	71.4%
Administrative RN	280	0	0%	0%	66.7%	400.0%	37.0%
Direct resident care LVN	281	0	23.0%	44.4%	89.2%	440.0%	66.0%
Administrative LVN	267	0	0%	0%	50.0%	400.0%	27.3%
CNA	271	0	38.1%	65.5%	115.1%	326.3%	85.2%
CMA	229	0	0%	22.2%	56.3%	600.0%	41.7%

Table 5 reports the median turnover rate for each health service region.

- South Texas had higher turnover rates than the state median turnover rate for all nurse types.

- The Panhandle and Rio Grande Valley had lower turnover rates than the state median turnover rate for all direct resident care nurses.

Table 5. Median turnover rates by region

Region	Median Turnover Rate					
	Direct Resident Care RNs	Administrative RNs	Direct Resident Care LVNs	Administrative LVNs	CNAs	CMA's
Central Texas	33.3%	0.0%	44.4%	0.0%	52.8%	27.3%
East Texas	66.7%	0.0%	59.9%	0.0%	74.1%	33.3%
Gulf Coast	50.0%	0.0%	55.6%	0.0%	88.7%	16.7%
North Texas	50.0%	0.0%	42.3%	0.0%	65.5%	4.2%
Panhandle	0.0%	0.0%	40.0%	0.0%	50.0%	0.0%
Rio Grande Valley	0.0%	0.0%	20.2%	0.0%	47.1%	0.0%
South Texas	66.7%	50.0%	66.0%	26.7%	81.3%	47.2%
West Texas	47.6%	0.0%	37.5%	0.0%	57.0%	12.5%
Texas	50.0%	0.0%	44.4%	0.0%	65.5%	22.2%



Conclusion and Recommendations

Conclusion

CNAs and direct care LVNs had the highest position vacancy rates across all responding facilities. Less than a quarter of responding facilities reported having zero CNA vacancies. Direct resident care RNs had the highest vacancy rate and the second highest turnover rate, and the vacancy rate for direct resident care RNs increased since the 2016 LTCNSS. Long term care facilities must identify and address issues that cause turnover, especially for RNs. One possible cause of high turnover is increased workload, and more than half of facilities reported increased workload as a consequence of inadequate staffing.¹ This report confirms previous research stating that turnover in long term care settings is high.^{1,2}

¹Moyle, W., Skinner, J., Rowe, R., & Gork, C. (2003). Views of job satisfaction and dissatisfaction in Australian long-term care. *Journal of Clinical Nursing*, 12, 168-176.

²Castle, N. G. (2006) Measuring staff turnover in nursing homes. *The Gerontologist*, 46, 210-219.

TCNWS Advisory Committee Recommendations

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.

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.