



The Long Term Care Nurse Staffing Study (LTCNSS) assesses nurse staffing and related issues in the long term care setting. In 2018, 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 summer of 2019, the Texas Center for Nursing Workforce Studies (TCNWS) administered the LTCNSS to directors of nursing (DONs) or facility administrators of 1,205 Texas nursing facilities. A total of 314 facilities participated for a final response rate of 26.1%.

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 2019 LTCNSS vacancy rates reported herein measure the percentage of positions that were vacant at one point in time (01/25/2019). The 2019 LTCNSS turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2018-12/31/2018).

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. The position vacancy rate describes the proportion of all full-time equivalent (FTE) positions that are vacant across all responding facilities.

- Direct resident care RNs had the highest position vacancy rates in the state (12.7%). Comparatively, RNs in hospitals had a vacancy rate of 5.9% in 2019.

- The majority of facilities reported zero vacancies for all staff types, except CNAs. Less than half of facilities reported zero vacancies for CNAs.
- The statewide position vacancy rates for all direct resident care nursing staff have decreased since 2017 (Figure 1, page 2).
- Direct resident care RNs saw the largest decrease in position vacancy rate, falling 6.2 percentage points from 2017.

**Table 1. Position vacancy rates by staff type**

Nurse staff type	n	Total occupied FTE positions	Total vacant FTE positions	2019 statewide position vacancy rate	Number of facilities that reported zero vacancies
Direct resident care RNs	246	701.3	102.4	12.7%	174
Administrative RNs	287	512.1	34.1	6.2%	254
Direct resident care LVNs	286	3,114.6	178.3	5.4%	187
Administrative LVNs	264	674.0	17.0	2.5%	250
CNAs	281	6,532.3	733.2	10.1%	121
CMAs	232	1,018.7	65.0	6.0%	186

Note: n=number of respondents



Table 2 provides the position vacancy rate by each region.

- The Panhandle had lower position vacancy rates than Texas at large, with the exception of direct resident care LVNs, for whom it saw the highest position vacancy rate of the regions.
- Though the Rio Grande Valley reported the highest position vacancy rates for both RN types and for CMAs, it had the lowest position vacancy rate for both LVN types and for CNAs.

Figure 1. Direct resident care staff position vacancy rates, by staff type, 2008 - 2019

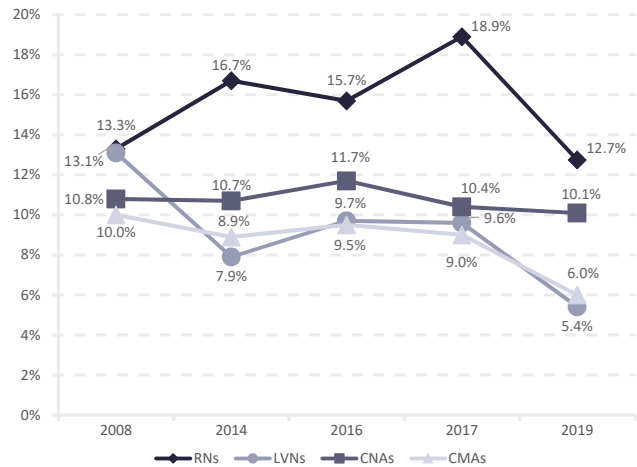


Table 2. Position vacancy rates by region

Region	Position Vacancy Rate					
	Direct resident care RNs	Administrative RNs	Direct resident care LVNs	Administrative LVNs	CNAs	CMAs
Central Texas	8.6%	7.8%	6.3%	2.4%	9.0%	7.4%
East Texas	10.8%	4.0%	5.2%	2.3%	12.5%	4.0%
Gulf Coast	12.8%	10.1%	4.1%	2.3%	8.7%	6.1%
North Texas	12.5%	4.6%	5.3%	2.7%	10.7%	5.7%
Panhandle	6.4%	4.5%	9.1%	0.0%	6.7%	0.0%
Rio Grande Valley	26.3%	15.0%	2.3%	0.0%	4.6%	10.0%
South Texas	16.1%	3.2%	6.0%	3.8%	12.2%	3.8%
West Texas	19.1%	5.7%	7.6%	2.5%	10.9%	9.8%
Texas	12.7%	6.2%	5.4%	2.5%	10.1%	6.0%

## Facility Vacancy Rates

Table 3 displays descriptive statistics for facility vacancy rates.

- The majority of facilities reported zero vacancy for most nurse types with the exception of CNAs.

- The median facility vacancy rate for CNAs was 6.3%.
- A higher proportion of long term care facilities reported a 0% facility vacancy rate than hospitals in 2019.

Table 3. Facility vacancy rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
Direct resident care RNs	246	0%	0%	0%	20.6%	100%	12.7%
Administrative RNs	287	0%	0%	0%	0%	100%	4.7%
Direct resident care LVNs	286	0%	0%	0%	9.3%	54.5%	5.6%
Administrative LVNs	264	0%	0%	0%	0%	60.0%	2.0%
CNAs	281	0%	0%	6.3%	17.5%	41.9%	9.7%
CMAs	232	0%	0%	0%	0%	100%	5.9%

Note: n=number of respondents



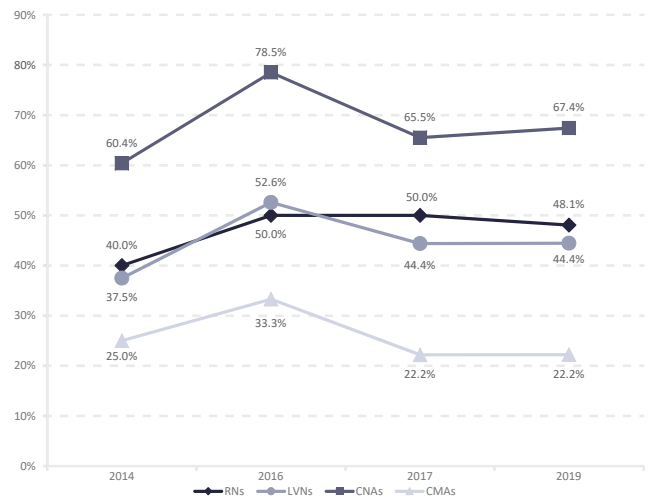
# Turnover

## 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 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 2019 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 (Table 4).
- The highest overall median facility turnover rate was among CNAs (67.4%). To compare, nurse aides also had the highest turnover rate among nursing staff in hospitals (31.3%).

Figure 2. Median facility turnover rates for direct resident care staff, 2014 - 2019



- As seen in Figure 2, turnover rates for direct resident care nursing staff changed little from 2017 to 2019.

Table 4. Facility turnover rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
Direct resident care RN	186	0%	0%	48.1%	100.0%	800.0%	75.4%
Administrative RN	182	0%	0%	21.1%	100.0%	400.0%	54.7%
Direct resident care LVN	221	0%	21.3%	44.4%	74.9%	525.0%	61.3%
Administrative LVN	175	0%	0%	0%	50.0%	333.3%	33.8%
CNA	219	0%	26.7%	67.4%	112.1%	729.4%	85.0%
CMA	162	0%	0%	22.2%	57.1%	400.0%	39.5%

Note: n=number of respondents

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

- The Rio Grande Valley had the highest median turnover rates for direct resident care RNs,

administrative LVNs, and CNAs.

- The Panhandle 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	CMAs
Central Texas	50.0%	40.0%	51.7%	0%	60.5%	32.8%
East Texas	45.3%	11.1%	50.1%	0%	66.7%	33.3%
Gulf Coast	50.0%	33.3%	46.0%	12.5%	59.6%	21.8%
North Texas	40.0%	36.7%	50.0%	0%	72.7%	23.6%
Panhandle	0%	0%	11.1%	0%	46.4%	0%
Rio Grande Valley	100.0%	0%	25.4%	25.0%	91.2%	20.0%
South Texas	50.0%	0%	33.3%	0%	52.2%	20.0%
West Texas	34.3%	16.7%	53.7%	0%	59.3%	7.1%
Texas	48.1%	21.1%	44.4%	0%	67.4%	22.2%



## Conclusion and Recommendations

### Conclusion

CNAs and direct resident care RNs had the highest position vacancy rates across all responding facilities. Less than half of responding facilities reported having zero CNA vacancies. Direct resident care RNs had the highest vacancy rate while CNAs had the highest turnover rate. 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.<sup>1</sup> This report confirms previous research stating that turnover in long term care settings is high.<sup>1,2</sup>

<sup>1</sup> Moyle, 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.

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

### TCNWS Advisory Committee Recommendations

Respondents reported vacancy rates for RNs in long-term care facilities were higher than vacancy rates for these positions within Texas hospitals. Turnover rates varied greatly by location across the state. To more fully understand the implications of these findings **nurse researchers should focus on the following issues for further study:**

- Effect of long term care nursing staff turnover on economic (e.g. costs of turnover, loss of human capital, cost of unrealized community/public health outcomes) and non-economic (e.g. quality of care) issues.
- 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.
- Provide competitive wages and benefits to long term care nurses.

