



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%.

This report provides information on vacancy and turnover across geographic units and types of staff.

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 2016 LTCNSS vacancy rates reported herein measure the percentage of positions that were vacant at one point in time (02/26/16). The 2016 LTCNSS turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2015-12/31/2015).

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 (15.7%). RNs in hospitals had a vacancy rate of 9.8% in 2016.
- CNAs had higher position vacancy rates than direct resident care and administrative LVNs, and had the second highest position vacancy rate in the state.

- The majority of facilities reported zero vacancies for all staff types, except CNAs and direct care LVNs. Less than one-quarter of facilities reported zero vacancies for CNAs.
- The statewide position vacancy rates for most direct resident care staff have increased since 2014 (Figure 1, page 2), with the only exceptions being direct resident care RNs.
- The statewide position vacancy rate for direct resident care RNs has decreased by 6.0% since 2014.

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

	n	Total occupied FTE positions	Total vacant FTE positions	Number of facilities that reported zero vacancies	2016 Statewide position vacancy rate
Direct Resident Care RNs	335	762	141.5	199	15.7%
Administrative RNs	355	615	65	250	9.6%
Direct Resident Care LVNs	349	4107	439.9	124	9.7%
Administrative LVNs	346	857	46	265	5.1%
CNAs	346	8216	1092	52	11.7%
CMAs	310	1271.9	134	172	9.5%



## Facility Vacancy Rates

Table 2 presents the percent of facilities experiencing various levels of vacancy for the different nurse types.

- The majority of facilities reported zero vacancy for most nurse types with the exception of direct resident care LVNs and CNAs. Almost half of responding facilities reported between 1% and 24% vacancy rate for direct resident care LVNs, and 62.7% of facilities had a CNA vacancy rate in the same category.
- Long term care facilities had a higher proportion of facilities who reported 0% facility vacancy rate than hospitals in 2016.
- There were few facilities that reported a vacancy rate over 75%, regardless of nurse type.

Figure 1. Direct resident care staff position vacancy rates, by staff type, 2014 and 2016

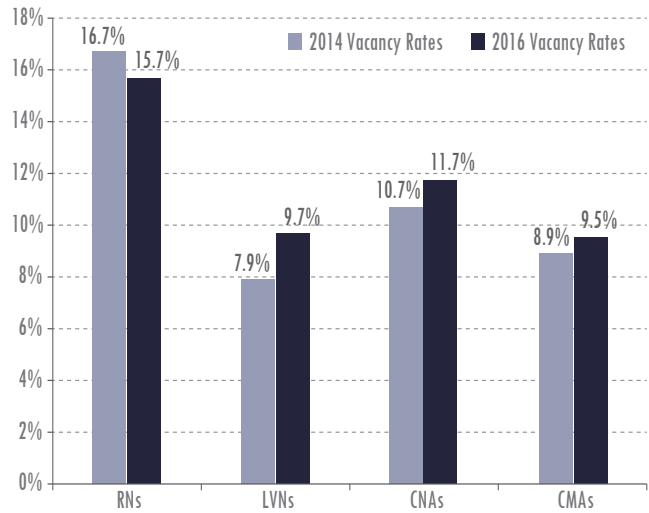


Table 2. Facility vacancy rate descriptive statistics

	n	0%	>0 and <25%	≥25% and <50%	≥50% and <75%	≥75%
Direct resident care RN	228	67.1%	4.8%	13.6%	12.3%	2.2%
Administrative RN	270	83.0%	0.7%	4.1%	10.7%	1.5%
Direct resident care LVN	273	42.5%	46.5%	9.2%	1.8%	0%
Administrative LVN	249	88.8%	2.0%	3.6%	4.8%	0.8%
CNA	268	17.9%	62.7%	18.3%	0.7%	0.4%
CMA	216	66.2%	11.6%	15.7%	5.6%	0.9%

## Turnover

### Median Facility Turnover Rate

The facility turnover rate is calculated by dividing the total number of separations by a headcount of employees. This 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 2016 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 (78.5%). To compare, nurse aides also had the highest turnover rate in hospitals (28.6%).

Table 3. Facility turnover rate descriptive statistics

	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
Direct resident care RN	241	0%	0%	50.0%	120.0%	466.7%	75.2%
Administrative RN	261	0%	0%	0%	100.0%	400.0%	47.6%
Direct resident care LVN	260	0%	23.6%	52.6%	100.0%	384.6%	69.1%
Administrative LVN	249	0%	0%	0%	50.0%	300.0%	35.3%
CNA	256	0%	39.0%	78.5%	126.0%	405.0%	97.4%
CMA	209	0%	0%	33.3%	77.5%	350.0%	51.6%



### 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 second highest vacancy rate and the highest turnover rate, but the vacancy rate for direct resident care RNs decreased since the 2014 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.<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

#### 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 57.2% 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.