

The Long Term Care Nurse Staffing Study (LTCNSS) assesses nurse staffing and related issues in the long term care setting. During the spring and summer of 2022, the Texas Center for Nursing Workforce Studies (TCNWS) administered the LTCNSS to directors of nursing (DONs) or facility administrators of 1,201 Texas nursing facilities. A total of 330 facilities participated for a final response rate of 27.5%. It is important to note that between the 2019 and 2022 LTCNSS, the COVID-19 pandemic occurred.

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.¹ 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.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 2022 LTCNSS vacancy rates reported herein measure the percentage of positions that were vacant at one point in time (01/21/2022). The 2022 LTCNSS turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2021-12/31/2021).

¹ American Association of Colleges of Nursing. (2019). Nursing shortage fact sheet. <https://www.aacnnursing.org/Portals/42/News/Factsheets/Nursing-Shortage-Factsheet.pdf>

² Waldman, J. D., Kelly, F., Sanjeev, A., & Smith, H. L. (2004). The shocking cost of turnover in health care. *Health Care Management Review*, 29:1, 2-7.

Vacancy Rates

Table 1 provides a breakdown of vacancy rates by staff type - registered nurses (RNs), licensed vocational nurses (VNs), advanced practice RNs (APRNs), certified nurse aides (CNAs), medication aides (CMAs), and restorative nurse aides (RNAs), both for direct resident care (DRC) staff and administrative staff. 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 and APRNs had the highest position vacancy rates in the state (27.3% and 32.6%). Comparatively, RNs in hospitals had a vacancy rate of 17.6% in 2022.
- A lower percentage of facilities reported zero vacancies for all staff types in 2022 compared to 2019. Only 20.6% of facilities reported 0 vacancies for CNAs.
- The statewide position vacancy rates for all direct resident care nursing staff have increased since 2019 (Figure 1, page 2).
- Direct resident care RNs saw the largest increase in position vacancy rate, increasing by more than 14 percentage points from 2019.

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

	n	Total Occupied FTE Positions	Total Vacant FTE Positions	Statewide Position Vacancy Rate	Number of Facilities that Reported Zero Vacancies
RNs - DRC	240	624.8	235.0	27.3%	104
RNs - Admin	233	404.0	71.0	14.9%	181
LVNs - DRC	292	2,552.1	616.9	19.5%	90
LVNs - Admin	249	591.5	66.0	10.0%	202
APRNs - DRC	23	29.0	14.0	32.6%	16
APRNs - Admin	12	19.0	0.0	0.0%	12
CNAs	291	5,430.2	1,457.5	21.2%	60
CMAs	227	800.0	182.5	18.6%	118
RNAs	183	252.5	58.5	18.8%	139

n=number of facilities in Texas that reported each nursing staff type

Table 2 provides the position vacancy rate by each public health region.

- East Texas had lower position vacancy rates than Texas at large, with the exception of DRC APRNs.
- The Rio Grande Valley reported the highest position vacancy rates for DRC RNs.
- Central Texas reported the highest position vacancy rates for DRC LVNs and CNAs.

Figure 1. Direct resident care staff position vacancy rates, by staff type, 2008 - 2022

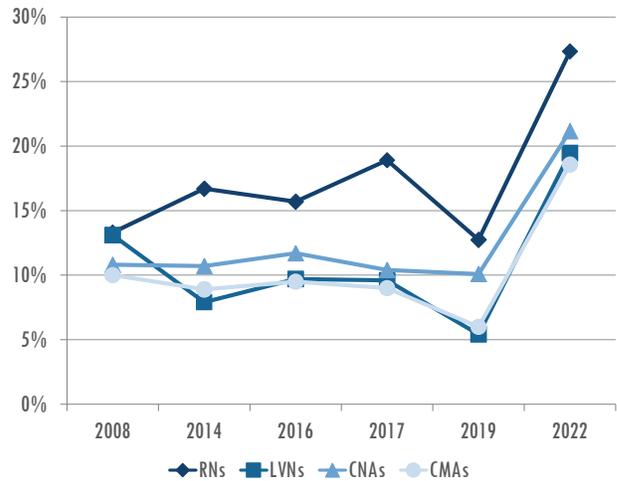


Table 2. Position vacancy rates by region and staff type

Region	Position Vacancy Rate									
	RNs - DRC	RNs - Admin	LVNs - DRC	LVNs - Admin	APRNs - DRC	APRNs - Admin	CNAs	CMAAs	RNAs	
Panhandle	29.3%	15.4%	16.4%	6.9%	100.0%	-	18.4%	36.4%	10.5%	
Rio Grande Valley	31.7%	8.8%	13.4%	5.3%	0.0%	-	14.8%	17.0%	23.5%	
North Texas	28.5%	19.9%	23.7%	10.8%	35.7%	0.0%	26.1%	24.6%	19.7%	
East Texas	16.4%	3.9%	14.8%	8.2%	40.0%	0.0%	15.9%	13.5%	11.8%	
Gulf Coast	30.7%	20.1%	19.6%	10.6%	0.0%	0.0%	19.5%	15.5%	11.8%	
Central Texas	26.8%	11.9%	25.1%	17.1%	45.5%	0.0%	26.2%	21.5%	23.5%	
South Texas	27.1%	15.2%	17.8%	7.3%	0.0%	0.0%	23.8%	11.7%	31.8%	
West Texas	26.5%	0.0%	14.9%	4.2%	0.0%	-	11.3%	12.2%	16.0%	
Texas	27.3%	14.9%	19.5%	10.0%	32.6%	0.0%	21.2%	18.6%	18.8%	

Table 3 displays descriptive statistics for facility vacancy rates.

- The majority of facilities reported zero vacancy for most staff types with the exception of DRC

RNs (20.0%), DRC LVNs (15.4%), and CNAs (16.7%).

- The mean and median facility vacancy rates for DRC RNs, DRC LVNs, and CNAs all increased from 2019 to 2022.

Table 3. Facility vacancy rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
RNs - DRC	240	0.0%	0.0%	20.0%	50.0%	100.0%	26.1%
RNs - Admin	233	100.0%	0.0%	0.0%	0.0%	100.0%	11.2%
LVNs - DRC	292	0.0%	0.0%	15.4%	28.6%	100.0%	18.7%
LVNs - Admin	249	50.0%	0.0%	0.0%	0.0%	100.0%	7.8%
APRNs - DRC	23	0.0%	0.0%	0.0%	50.0%	100.0%	21.2%
APRNs - Admin	12	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
CNAs	291	0.0%	7.4%	16.7%	30.8%	75.0%	20.4%
CMAAs	227	0.0%	0.0%	0.0%	33.3%	100.0%	18.0%
RNAs	183	0.0%	0.0%	0.0%	0.0%	100.0%	15.3%



Turnover Rates

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.

- 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 DRC RNs and APRNs (66.7%). To compare, RN turnover in hospitals was 28.3%.
- As seen in Figure 2, turnover rates for direct resident care nursing staff increased for RNs, LVNs, and CMAs between 2019 and 2022.

Figure 2. Median facility turnover rates for direct resident care staff, 2014 - 2022

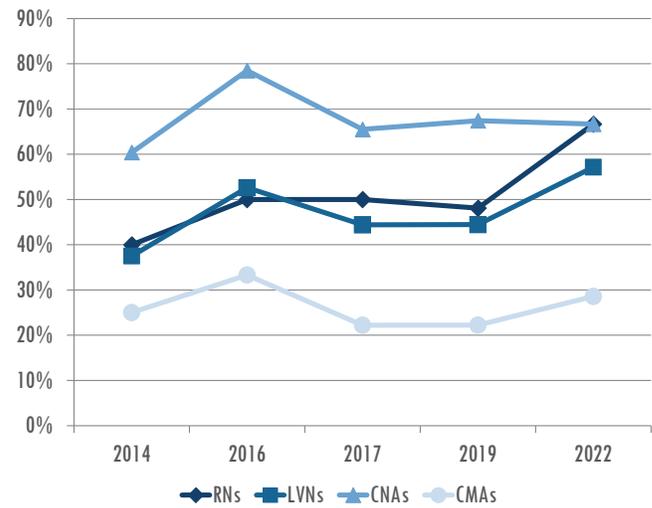


Table 4. Facility turnover rate descriptive statistics

Nurse Staff Type	n	Minimum	25th percentile	Median	75th percentile	Maximum	Mean
RNs - DRC	244	0.0%	19.7%	66.7%	120.0%	800.0%	86.6%
RNs - Admin	242	0.0%	0.0%	33.3%	100.0%	400.0%	59.8%
LVNs - DRC	259	0.0%	23.1%	57.1%	100.0%	928.6%	77.1%
LVNs - Admin	230	0.0%	0.0%	0.0%	66.7%	700.0%	45.9%
APRNs - DRC	257	0.0%	28.6%	66.7%	121.2%	392.6%	83.3%
APRNs - Admin	201	0.0%	0.0%	28.6%	66.7%	550.0%	49.9%
CNAs	167	0.0%	0.0%	0.0%	50.0%	300.0%	31.9%
CMAs	14	0.0%	0.0%	0.0%	6.3%	400.0%	33.9%
RNAs	10	0.0%	0.0%	0.0%	6.3%	50.0%	7.5%

Table 5 (page 4) reports the median turnover rate for each public health region.

- The Panhandle had the highest median turnover rates for RNs.
- The Gulf Coast had the highest median turnover rate for DRC LVNs.
- Median facility turnover rates in the Rio Grande Valley were at or below the statewide rate for all staff types.

Table 5. Median turnover rates by region

Region	Median Turnover Rate								
	RNs - DRC	RNs - Admin	LVNs - DRC	LVNs - Admin	APRNs - DRC	APRNs - Admin	CNAs	CMAs	RNAs
Panhandle	100.0%	66.7%	48.1%	0.0%	66.7%	25.0%	0.0%	0.0%	-
Rio Grande Valley	18.2%	0.0%	37.0%	0.0%	53.6%	28.6%	0.0%	-	-
North Texas	50.0%	34.8%	45.3%	22.2%	49.0%	40.0%	0.0%	0.0%	0.0%
East Texas	58.8%	0.0%	64.9%	0.0%	92.9%	36.4%	0.0%	25.0%	25.0%
Gulf Coast	89.9%	50.0%	79.0%	0.0%	92.4%	34.8%	0.0%	0.0%	0.0%
Central Texas	62.7%	50.0%	57.1%	0.0%	75.6%	22.2%	0.0%	25.0%	0.0%
South Texas	82.9%	47.2%	65.7%	22.5%	72.8%	11.8%	100.0%	0.0%	0.0%
West Texas	83.3%	0.0%	46.2%	0.0%	56.4%	0.0%	0.0%	0.0%	-
Texas	66.7%	33.3%	57.1%	0.0%	66.7%	28.6%	0.0%	0.0%	0.0%

Conclusion

Direct resident care RNs and APRNs had the highest position vacancy rates across all responding facilities. Less than a quarter of responding facilities reported having zero CNA vacancies. The highest overall median facility turnover rate was also among DRC RNs and APRNs. 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}

¹ 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.

² Gandhi, A., Yu, Huizi, & Grabowski, D.C. (2021). High nursing staff turnover in nursing homes offers important quality information. *Health Affairs*, 40:3, 384-391.

