Vacancy and Turnover 2017

The Hospital Nurse Staffing Survey (HNSS) assesses the size and effects of the nursing shortage in hospitals, Texas' largest employer of nurses. During the summer of 2017, the TCNWS administered the HNSS to 713 Texas hospitals. These included for-profit, nonprofit, public, and Texas Department of State Health Services-operated hospitals, as well as hospitals linked to academic institutions; military hospitals were not surveyed. The facilities surveyed were general acute care, psychiatric, special, and rehabilitation hospitals. 348 (48.8%) hospitals responded to the survey.

This report presents the findings of the 2017 HNSS related to vacancy and turnover in Texas hospitals. The vacancy rates reported measure the percentage of positions that were vacant over a one week period during one of the year's peak occupancy times (1/23/2017-1/29/2017). The turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2016-12/31/2016). 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. 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 hospitals due to the high cost associated with overtime or the use of agency nurses to fill vacant positions, as well as the cost associated with recruiting qualified nurses.

[1]American Association of Colleges of Nursing, "Nursing Shortage Fact Sheet", 2012, http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf

Note: Analyses by Texas region and geographic designation are not included in this report, as survey repondents were not representative of all Texas hospitals, but responding hospitals are still comparable to previous years' respondents. For more information, see the 2017 HNSS Design and Methods report.

Registered Nurses (RNs), Licensed Vocational Nurses (LVNs), and Nurse Aides (NAs)

Vacancy Rates

Table 1 presents the total number of occupied and vacant FTE positions in Texas by nursing staff type and the resulting position vacancy rate for each.

- RNs were the most numerous nursing staff type and had the highest position vacancy rate.

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

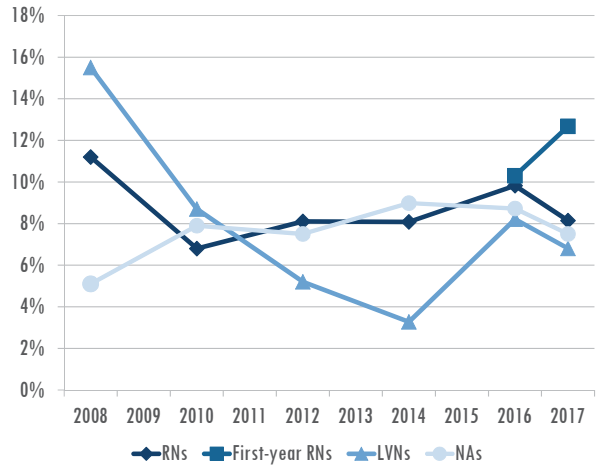
	n	Total Occupied FTE Positions	Total Vacant FTE Positions	Statewide Position Vacancy Rate	Number of Hospitals that Reported Zero Vacancies
All RNs	296	53,320.3	4,725.8	8.1%	60
First-year RNs	156	4,338.9	629.6	12.7%	91
LVNs	223	3,422.0	249.9	6.8%	137
NAs	260	13,484.4	1,093.3	7.5%	95

Note: First-year RNs are included in "All RNs" totals; n=number of hospitals in Texas that reported each nursing staff type

Figure 1 represents the position vacancy rates for Texas from 2008-2017 by nursing staff type.

- Vacancy rates for RNs and NAs have remained relatively steady since 2010, while rates for LVNs have fluctuated.

Figure 1. Position vacancy rates for RNs, first-year RNs, LVNs, and NAs, 2008- 2017



- Magnet or Pathway designated hospitals had a lower position vacancy rate than those without a designation for all RNs (6.8% vs. 9.6%) and first-year RNs (10.3% vs 15.6%).

Table 2 shows median facility vacancy rates, which represent the middle value among all position vacancy rates calculated for each individual hospital. Median facility vacancy rate gives a sense of how widespread an issue staff vacancy is.

- The median facility vacancy rate for first-year RNs, LVNs, and NAs was 0%.
- RNs had a median facility vacancy rate of 7.3%.

Table 2. Facility vacancy rate descriptive statistics

	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Mean
RNs	296	0%	2.7%	7.3%	13.7%	100%	10.9%
First-year RNs	156	0%	0%	0%	25.3%	100%	15.7%
LVNs	223	0%	0%	0%	7.1%	100%	6.2%
NAs	260	0%	0%	0%	15.3%	100%	11.3%

Note: n=number of hospitals in Texas that reported each nursing staff type

Turnover Rates

The numbers in Table 3 represent the median facility turnover rate in Texas by nursing staff type among responding hospitals that reported an average number of employees and the total number of separations for the reporting period. These numbers represent the middle value when turnover is calculated for each individual hospital facility. The median value is reported because it is less sensitive to outliers than the mean.

- Statewide, turnover rates were highest among NAs, followed by RNs.

Table 3. Median facility turnover rates in Texas by nursing staff type

	n	Average Full-time Employees	Average Part-time Employees	Separations	Median Facility Turnover Rate
All RNs	305	55,307.0	5,304.8	13,347	24.5%
First-year RNs	188	6,166.9	177.0	1,851	20.5%
LVNs	253	3,532.5	251.5	1,029	18.9%
NAs	274	14,453.0	1,163.5	5,355	34.1%

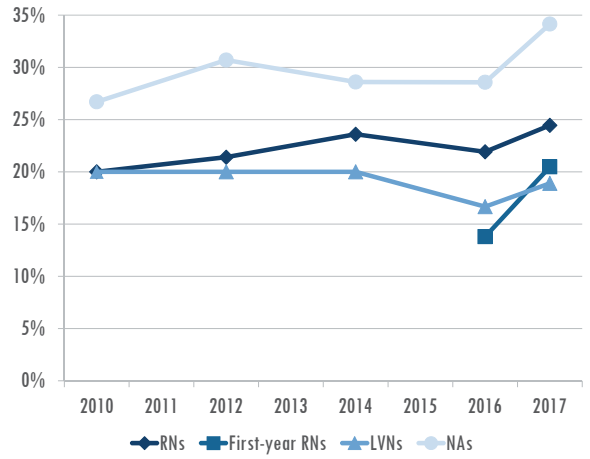
Note: First-year RNs are included in "All RNs" totals; n=number of hospitals in Texas that reported average number of employees and separations

- Magnet or Pathway designated hospitals had a lower median turnover rate than those without a designation for all RNs (19.9% vs. 27.8%).

Figure 2 shows that median facility turnover rates have increased for all nursing staff types from 2010 to 2017.

- Turnover for first-year RNs was lower than that for all RNs in 2016 and 2017.

Figure 2. Median facility turnover rates for RNs, first-year RNs, LVNs, and NAs, 2010-2017



Vacancy Rates

Table 4 presents the total number of occupied and vacant FTE positions in responding Texas hospitals by APRN type and the resulting position vacancy rate for each.

Table 4. Number of occupied and vacant FTE positions in Texas by APRN type

	n	Total Occupied FTE Positions	Total Vacant FTE Positions	Statewide Position Vacancy Rate	Number of Hospitals that Reported Zero Vacancies
NPs	105	1,250.5	143.8	10.3%	71
CNSs	22	168.4	16.2	8.8%	18
CRNAs	22	274.4	31.1	10.2%	15
CNMs	7	35.7	0.0	0.0%	7

Note: n=number of hospitals in Texas that reported each APRN type

- Nurse practitioners (NPs) were the most numerous APRN type in responding Texas hospitals and also had the highest position vacancy rate.

Figure 4 represents the position vacancy rates for Texas from 2008-2017 for APRN types.

- Rates for all APRN types decreased from 2016 to 2017.

Table 5 presents median facility vacancy rates for the different APRN types.

- The median facility vacancy rate for all APRN types was 0%.

Figure 4. Position vacancy rates for APRNs, 2008- 2017

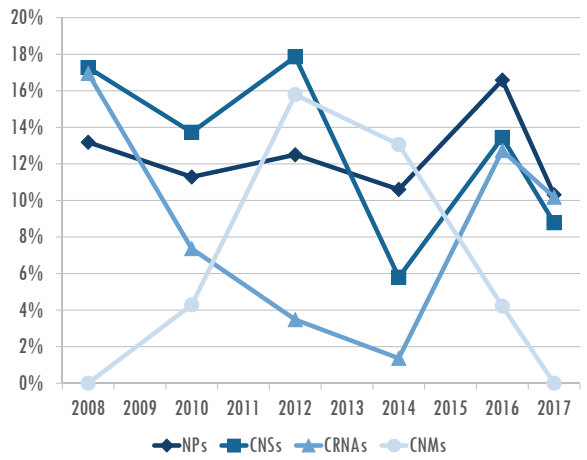


Table 6. Median facility turnover rates in Texas by APRN type

	n	Average Full-time Employees	Average Part-time Employees	Separations	Median Facility Turnover Rate
NPs	105	1,144.5	149.5	166	0.0%
CNSs	23	166.5	9.5	8	0.0%
CRNAs	21	239.0	19.0	25	0.0%
CNMs	5	31.0	1.5	3	0.0%

Note: n=number of hospitals in Texas that reported average number of employees and separations

Turnover Rates

The numbers in Table 6 represent the median facility turnover rate in responding Texas hospitals by APRN type among hospitals with APRNs.

- The median facility turnover rate in Texas was 0% for all APRN types.

Table 5. Facility vacancy rate descriptive statistics

	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Mean
NPs	105	0%	0%	0%	15.5%	100%	12.2%
CNSs	22	0%	0%	0%	0%	66.7%	5.1%
CRNAs	22	0%	0%	0%	10.9%	70.0%	9.7%
CNMs	7	0%	0%	0%	0%	0%	0%

Note: n=number of hospitals in Texas that reported each nursing staff type

Conclusion

Overall, the position vacancy rate for RNs in responding Texas hospitals was 8.1%, for LVNs was 6.8%, and for NAs was 7.5%. The majority of responding hospitals experienced vacancy rates of less than 25% for RNs, LVNs, and NAs, and zero vacancy for all APRN types. Vacancy rates for RNs and NAs have remained relatively steady since 2010, while rates for LVNs have fluctuated. Vacancy rates for all APRN types decreased from 2016 to 2017.

The median facility turnover rate among RN positions was 24.5%, among LVN positions was 18.9% and among NAs was 34.1%. Median turnover was 0% for all APRN types.

TCNWS Advisory Committee Recommendations

Turnover rates for RNs, LVNs, and CNAs increased between 2016 and 2017, and Texas continues to have higher vacancy and turnover rates than other states with comparable populations. High vacancy and turnover rates can lead to negative outcomes that affect quality of care, such as losing experienced staff and increasing the workload and stress levels of existing staff.[2] High vacancy and turnover is also costly to hospitals due to the high cost associated with overtime and recruiting qualified nurses. In order to decrease vacancy and turnover hospitals need to identify factors influencing recruitment and retention of nurses. Employers of nurses should invite practicing nurses' input to decrease vacancy and turnover rates for nurses in the workplace. Some of these strategies could include the following:

- Continue to improve work environment, including:
  - Care delivery models
  - Institute flexible work schedules and part-time or per diem work. 95.4% of responding hospitals used shift differentials and 62.4% used flexible scheduling and job sharing as retention strategies for full-time employees. Other creative work schedules could include seasonal employment (e.g., working winters with summers off), overlapping shifts, and self-scheduling.
- Continue to support endeavors to increase funding levels as well as provide resources such as mentors/preceptors and clinical space to nursing programs in order to increase capacity to admit and graduate nursing students.
- Explore a wide range of compensation models that align experience, workload, and positive patient outcomes.
- Develop and support health promotion and return-to-work programs (after an employee injury or illness).

[2] American Association of Colleges of Nursing. (2012). Nursing shortage fact sheet. http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf