



The Home Health and Hospice Care Nurse Staffing Study (HHHCNSS) assesses nurse staffing and related issues in home health and hospice agencies. During the summer of 2015, the TCNWS administered the HHHCNSS to 3,148 Texas home health and hospice agencies. 1,023 (32.5%) agencies responded to the survey. The agencies that completed the 2015 HHHCNSS were representative of all Texas home health and hospice agencies by metropolitan and border status, census bin, and agency type.

This report presents the findings of the 2015 HHHCNSS related to position vacancies and staff turnover at Texas home health and hospice agencies. It includes rates of each across Texas geographic designations and nurse types.

According to a 2013 TCNWS report, our state faces a continuing nursing shortage.<sup>1</sup> 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 2015 HHHCNSS vacancy rates reported herein measure the percentage of positions that were vacant on one day during one of the year’s peak occupancy times (April 30, 2015). The 2015 HHHCNSS turnover rates measure the frequency of staff separations, both voluntary and involuntary, over a one year period (1/1/2014-12/31/2014). 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.<sup>2</sup> High vacancy and turnover is also costly to agencies 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.

<sup>1</sup> Center for Nursing Workforce Studies, “Nursing Workforce in Texas—2013 Demographics and Trends,” <http://www.dshs.state.tx.us/chs/cnws/2013-Demographics-and-Trends-Report.pdf>

<sup>2</sup> American Association of Colleges of Nursing, “Nursing Shortage Fact Sheet,” 2012, <http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf>

## Methods of Calculation

This vacancy and turnover report provides the position vacancy rate and the median facility vacancy rate for each of the nurse types. TCNWS has chosen to report both methods in order to compare our data to work being done by other entities across the state and country. The two methods for calculating vacancy rates describe two different considerations: the position vacancy rate describes the proportion of all full-time equivalent (FTE) positions that are vacant across all responding home health and hospice agencies, whereas the median facility vacancy rate provides the midpoint of vacancy rates among all agencies, regardless of hospital or staff size.

In this report, the **regional position vacancy rate** was calculated by taking the sum of all vacant direct patient care RN FTE positions in each region, dividing it by the total of all FTE positions, occupied or vacant, in each region and multiplying by 100.

### Regional position vacancy rate =

$$\frac{(\sum \text{Vacant FTE positions being recruited, on hold or frozen in a region})}{(\sum \text{Occupied and vacant FTE positions in a region})} \times 100$$

This was also done for the **statewide position vacancy rate**. FTE positions are defined as the total number of occupied and vacant FTE positions in the agency. Vacant FTE positions are defined as the total number of FTE positions that were vacant in the hospital regardless of whether they were being actively recruited or were on hold or frozen.

### Statewide position vacancy rate =

$$\frac{(\sum \text{Vacant FTE positions being recruited, on hold or frozen across the state})}{(\sum \text{Occupied and vacant FTE positions across the state})} \times 100$$

The facility vacancy rate was calculated by dividing the number of vacant FTE positions in a agency by the total number of FTE positions (occupied and vacant) in that agency and multiplying by 100. Some researchers prefer

median value over mean values because medians are less sensitive to outliers. This is because 50% of agencies have a turnover rate that is less than the median value and the other 50% of agencies have a turnover rate higher than the median value.

**Facility vacancy rate =**

$$\frac{(\sum \text{ Vacant FTEs being recruited, on hold or frozen in a facility})}{(\sum \text{ Occupied and vacant FTE positions in a facility}) \times 100}$$

When vacancy rate is calculated for each individual agency, the median facility vacancy rate represents the median value for all agencies.

The facility turnover rate was calculated by dividing the total number of separations by the average number

of employees (both full-time and part-time) the agency had during the reporting period. That number was then multiplied by 100. The survey instrument asked agencies to provide the number of full and part-time positions at two points (1/1/2013 and 12/31/13) and the numbers provided were then averaged to calculate the average number of employees.

**Facility turnover rate =**

$$\frac{\text{Total Number of Separations}}{(\text{Average \# Full-time} + \text{Average \# Part-time}) \times 100}$$

When turnover rate is calculated for each individual agency, the median facility turnover rate represents the median value for all agencies.

## Vacancy

### Position Vacancy Rates

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

**Table 1. Number of occupied and vacant FTE positions in Texas by nurse type**

	n	Total Occupied FTE Positions	Total Vacant FTE Positions	Statewide Position Vacancy Rate	Number of Agencies that Reported Zero Vacancies
RNs	990	3,992	801	16.7%	598
LVNs	805	2,762	614	18.2%	529
APRNs	69	92	23	19.9%	61
HHA/NA/CNAs	745	2,812	517	15.5%	513

n=number of agencies in Texas that reported each nurse type

- RNs were the most numerous nurse type in Texas home health and hospice agencies, while APRNs had the highest position vacancy rate.
- 60.4% of agencies reported zero RN vacancies, 65.7% reported zero LVN vacancies, and 68.9% reported zero HHA vacancies.

The position vacancy rates in Table 2 represent the total percentage of vacancies for a position across geographic designations.

- Overall, the position vacancy rate for RNs in Texas was 16.7% in 2015, though the position

vacancy rates for RNs ranged from 8.0% in non-metropolitan, non-border counties to 18.2% in metropolitan, non-border and non-metropolitan, border counties.

**Table 2. Position vacancy rates in Texas by geographic designation and nurse type**

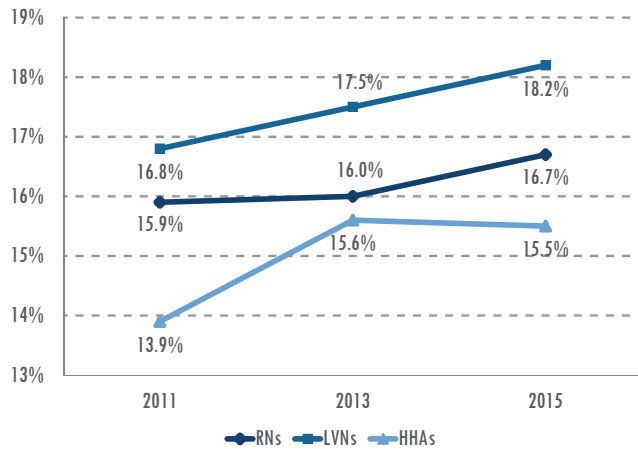
	RNs	LVNs	HHA
Metro Border	12.6%	10.4%	7.9%
Metro Non-Border	18.2%	20.9%	16.8%
Non-Metro Border	18.2%	11.9%	19.2%
Non-Metro Non-Border	8.0%	5.8%	9.5%

- For LVNs in Texas, the position vacancy rate was 18.2% in 2015, ranging from 5.8% in non-metropolitan, non-border counties to 20.9% in metropolitan, non-border counties.
- For HHAs in Texas, the position vacancy rate was 15.5% in 2015 with a range from 7.9% in metropolitan, border counties to 19.2% in non-metropolitan, border counties.
- The position vacancy rates in metropolitan, non-border counties exceeded the state rates for all three nurse types.
- In metropolitan, border counties and non-metropolitan, non-border counties position vacancy rates were below the state rates for all three nurse types.



Figure 1 shows the position vacancy rates in Texas home health and hospice agencies from 2011-2015 for RNs, LVNs, and HHAs.

**Figure 1. Position vacancy rates for RNs, LVNs, and HHAs, 2011-2015**



- Overall position vacancy rates for RNs and LVNs have increased slightly since 2011.
- The position vacancy rate for HHAs stayed steady from 2013 to 2015.

## Facility Vacancy Rates

Table 3 presents the percent of agencies experiencing various levels of vacancy for the different nurse types.

**Table 3. Vacancy rate categories for all agencies by staff type**

	n	Vacancy Rate Categories				
		0%	≥0% and <25%	≥25% and <50%	≥50% and <75%	≥75%
RNs	990	60.4%	11.7%	15.6%	11.2%	1.1%
LVNs	805	65.7%	6.8%	10.3%	11.6%	5.6%
HHAs	745	68.9%	6.6%	8.3%	11.5%	4.7%

n=number of agencies in Texas that reported each nurse type

- The majority of agencies experienced zero vacancy for each of the nurse types.
- A higher proportion of agencies experienced vacancy rates of 75% or greater for LVNs (5.6%) and HHAs (4.7%) than RNs (1.1%).
- Over two-thirds of the 392 agencies that reported RN vacancies (68.9%) reported rates of less than 50%.

## Turnover

Table 4 shows the median facility turnover rates in Texas by geographic designation and nurse type among agencies that reported an average number of employees and the total number of separations for the reporting period. These numbers represent the middle value when self-reported turnover is calculated for each individual agency. The median value is reported because it is less sensitive to outliers than the mean.

- Overall, there was an 18.2% median facility turnover rate for RN positions among the 976 agencies that responded to this question. This number means that roughly half of all agencies had a turnover rate for RNs greater than 18.2% and roughly half had a turnover rate lower than 18.2%.
- The median facility turnover rate among LVN positions was 13.3%. However, the turnover rate ranged from 6.3% in metropolitan, non-border counties to 27.8% in non-metropolitan, border counties.
- The lowest overall turnover rate was among HHAs (0.0%). This nurse type also had the lowest turnover rate in all geographic designations.

**Table 4. Median facility turnover rates in Texas by geographic designation and nurse type**

	RNs	LVNs	HHAs
n	976	839	826
Metro Border	23.5%	20.0%	0.0%
Metro Non-Border	16.7%	6.3%	2.9%
Non-Metro Border	0.0%	27.8%	0.0%
Non-Metro Non-Border	25.0%	16.0%	0.0%
Texas	18.2%	13.3%	0.0%

n=number of agencies in Texas that reported average number of employees and total separations for each nurse type

Table 5 (page 4) presents the percent of agencies experiencing various levels of turnover for the different nurse types.

- A large proportion of agencies reported zero turnover for each of the nurse types.
- Of agencies that reported turnover, around half reported rates of 50% or higher (49.1% for RNs, 53.2% for LVNs, and 56.2% for HHAs).



**Table 5. Facility turnover rate categories for all agencies by staff type**

	n	Turnover Rate Categories				
		0%	≥0% and <25%	≥25% and <50%	≥50% and <75%	≥75%
RNs	976	42.8%	10.7%	18.4%	12.6%	15.5%
LVNs	839	46.7%	10.7%	14.2%	13.0%	15.4%
HHAs	826	53.0%	9.1%	11.5%	11.7%	14.6%

n=number of agencies in Texas that reported average number of employees and total separations for each nurse type

Table 6 shows the differences in characteristics of agencies that experienced turnover for RNs, LVNs, or HHAs, versus agencies that did not.

- Agencies that experienced no turnover were more likely to be smaller (150 or fewer unique clients per year).

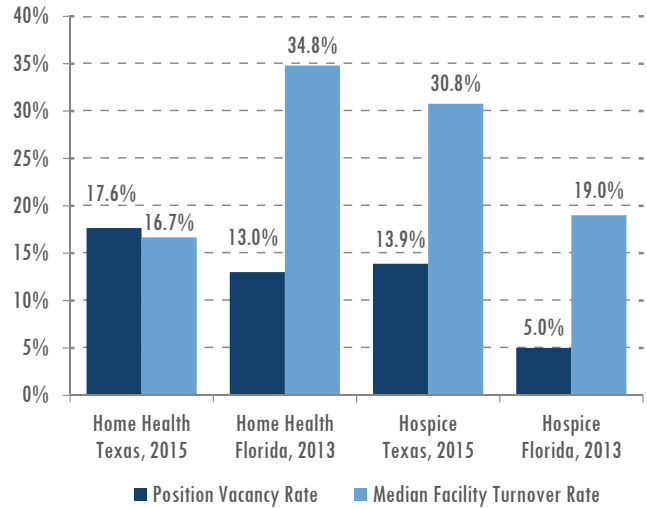
**Table 6. Characteristics of agencies that experienced turnover vs. those that did not**

	No Turnover	Experienced Turnover
<b>Patient Census</b>		
0-150	63.9%	48.7%
151+	36.1%	51.3%
<b>Agency Type</b>		
Home Health	86.8%	78.1%
Hospice	11.3%	19.6%
Combined	1.9%	2.3%
<b>Geographic Designation</b>		
Metro Border	11.5%	13.4%
Metro Non-Border	78.1%	76.3%
Non-Metro Border	2.0%	1.2%
Non-Metro Non-Border	8.4%	9.1%

- Agencies that experienced no turnover were also more likely to be home health agencies.

Figure 2 compares Texas vacancy and turnover rates to those of Florida<sup>3</sup> in 2013, broken down by agency type.

**Figure 2. Vacancy and turnover rates in Texas and Florida**



- Position vacancy rates in Texas home health (17.6%) and hospice (13.9%) agencies in 2015 were higher than those in Florida home health (13.0%) and hospice (5.0%) agencies in 2013.
- The median facility turnover rate in home health agencies was over twice as high in Florida in 2013 (34.8%) than in Texas in 2015 (16.7%), but the turnover rate in hospice agencies was lower in Florida (19.0%) than in Texas (30.8%).

<sup>3</sup> Florida Center for Nursing, "Demand for Nurses in Florida: The 2013 Survey of Florida's Nurse Employers," January 2014, <http://www.flcenterfornursing.org/StatewideData/FCNNurseDemandReports.aspx>

## Conclusion

Overall, the position vacancy rate for RNs in Texas was 16.7%, for LVNs was 18.2%, and for HHAs was 15.5%. The majority of agencies experienced zero vacancies for each of the nurse types. Since 2011, position vacancy rates for RNs and LVNs have increased slightly. The position vacancy rate for HHAs stayed steady from 2013 to 2015.

The median facility turnover rate among RN positions was 18.2%, among LVN positions was 13.3%, and among HHAs was 0.0%. A large proportion of agencies reported zero turnover for each of the nurse types. Agencies that experienced no turnover were more likely to be smaller and more likely to be home health agencies.



### **Recommendation Three: Research ways to decrease stress and increase job satisfaction in home health and hospice nurses.**

Home health and hospice nurses experience unique stressors, including long drive times in rural areas and the pressure of practicing in an independent environment. This in addition to inadequate staffing led 16.1% of responding agencies to say they had experienced low nursing staff morale. Home health and hospice agencies are also unique in that they serve many high acuity patients and experience surges in admissions. This means that in the case of inadequate staffing, 37.5% of responding agencies had experienced an increase in nursing workload and 21.7% had to use administrative staff to cover nursing visits.

Stress and poor job satisfaction cause nurses to move around from agency to agency. This can be seen through the high vacancy and turnover rates in home health and hospice. Vacancy rates have been rising, from 15.9% in 2011 to 16.7% in 2015 for RNs and from 16.8% in 2011 to 18.2% in 2015 for LVNs. Of agencies that experienced turnover, around half reported rates of 50% or higher.

In order to reduce turnover and improve retention, managers and leaders in home health and hospice should pay attention to the work environment to determine why nurses move from job to job. Most research on drivers of job satisfaction has been done in the acute care/inpatient setting. Further research is needed on:

- Drivers of job satisfaction in the home health and hospice setting
- Better mechanisms to cover workloads when vacancies exist
- Flexible staffing models to accommodate patient churn in the home health and hospice setting

### **Recommendation Four: Identify factors influencing recruitment and retention of nurses.**

Turnover rates continue to be high for RN and LVN positions, and of agencies that experienced turnover, around half reported rates of 50% or higher. 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.<sup>1</sup> High vacancy and turnover is also costly to agencies due to the high cost associated with overtime and recruiting qualified nurses. Over half of responding agencies found it difficult or very difficult to recruit RNs with home health and hospice experience (61.1% of home health agencies and 71.6% of hospice agencies).

In order to decrease vacancy and turnover and compete with hospitals and other employment settings, home health and hospice agencies need to offer more recruitment and retention incentives. Responding agencies reported using the following strategies to recruit and retain nursing staff:

- Paid vacation days – 57.3% of agencies (vs. 90.7% of hospitals)
- Health insurance – 42.9% of agencies (vs. 90.9% of hospitals)
- Retirement plan – 20.8% of agencies (vs. 79.4% of hospitals)

Home care administrators and managers should identify and evaluate specific factors influencing workforce recruitment and retention and implement innovative strategies that would further improve recruitment and retention of their nursing staff. Since most home health and hospice agencies in Texas are relatively small (58.2% had 150 or fewer unique clients in a 12-month period), these strategies could involve collaborations or affiliations with professional associations, with multiple agencies working together to provide insurance pools and other incentives.

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