



The Hospital Nurse Staffing Survey (HNSS) assesses the size and effects of the nursing shortage in hospitals, Texas' largest employer of nurses. During the spring of 2016, the TCNWS administered the HNSS to 666 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. 345 (51.8%) hospitals responded to the survey.

This report contains trends on vacancy and turnover, staffing numbers, and recruitment and hiring practices from the past six HNSS surveys, as data were available. The time period covered by this data overlapped with the recent U.S. economic recession, providing insights into its impacts on Texas hospitals' nursing workforce. For information on each year's HNSS and other nursing workforce data, visit: <http://www.dshs.texas.gov/chs/cnws/Publications/>

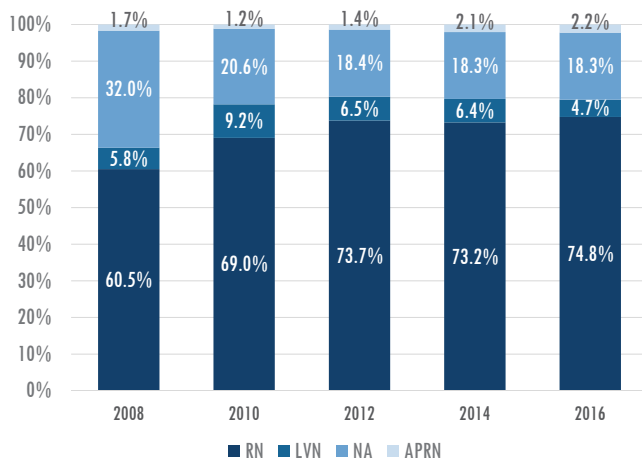
It is important to note that this report covers every hospital that has ever responded to the HNSS, instead of only the hospitals that responded every year. Comparisons with past HNSS Trends reports are not recommended.

## Nurse Staffing

### Hospital Staff Mix

Figure 1 shows the percent of filled hospital staff positions in responding facilities by nurse type.

Figure 1. HNSS nursing staff mix, 2008-2016



- Registered nurses (RNs) have made up the largest proportion of nurses in hospitals, followed by nurse aides (NAs), since 2008.
- The proportion of LVNs in hospitals has been decreasing since 2010, while the proportion of APRNs has been increasing.

### Interim Staffing

When hospitals experience vacancies and turnover, they often use interim staffing methods to ensure continued quality of patient care. The extent of interim coverage used provides data on the ability of responding hospitals to maintain full staffing levels, while consideration of the types of interim staffing methods can identify potential stresses on hospital nursing staff and measure the magnitude of use of externally contracted nurses.

- Average per hour cost of interim staffing remained relatively steady, from 2006 to 2014 but increased to a high of \$46.88 in 2016 (Figure 2).

Figure 2. Average hourly cost of interim staffing, 2006-2016

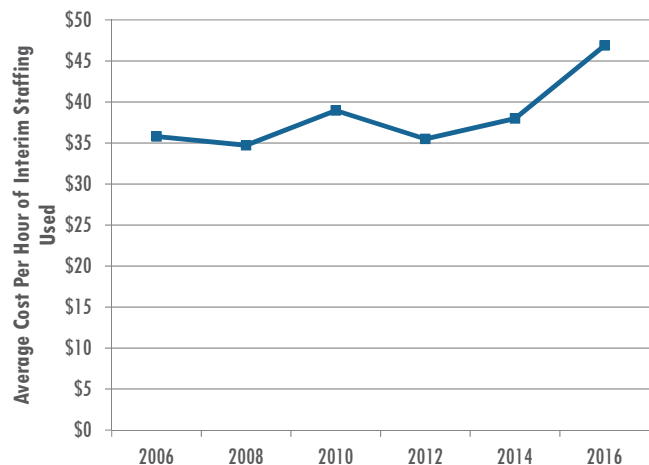
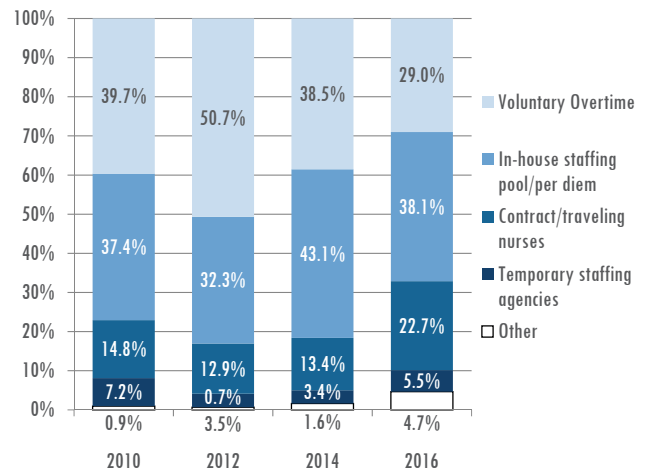


Figure 3 shows the percentage of interim staffing hours used by each method since 2010. 2010 was the first year that the same seven interim staffing methods were offered as choices on the survey, although in 2012 numbers for in-house staffing pools and per diem nurses were combined.

- Voluntary overtime peaked in 2012, with 50.7% of all interim staffing hours used. Use of in-house staffing pools/per diem nurses hit a low point this same year, at 32.3% of all hours.
- Use of temporary staffing agencies decreased from 7.2% of all hours in 2010 to 5.5% in 2016.

**Figure 3. Usage and distribution of interim staffing methods, 2010-2016**



## Vacancy and Turnover Rates

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. TCNWS reports both position vacancy rates and median facility vacancy rates to allow for comparison with data being collected by other entities across the state and country. These two methods reflect two different considerations: position vacancy rate describes the proportion of all full-time equivalent (FTE) positions that are vacant across all responding hospitals, while median facility vacancy rate provides the midpoint of vacancy rates among responding hospitals, regardless of hospital or staff size.

Due to changes in methodology, vacancy rates cannot be compared prior to 2008, and turnover rates cannot be compared prior to 2010.

### Position Vacancy Rate

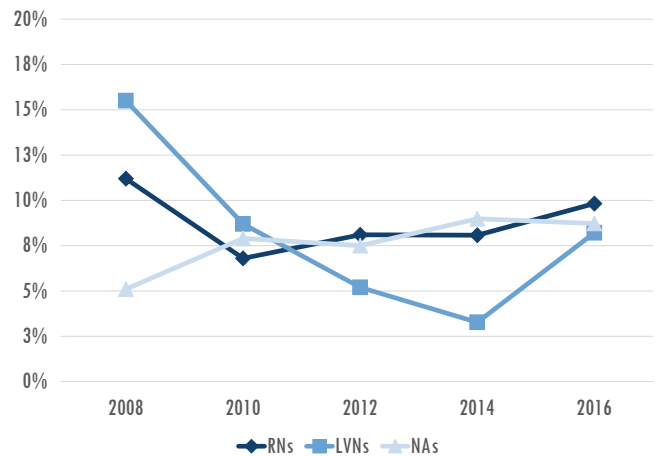
Figure 4 represents the position vacancy rates for Texas from 2008-2016 for RNs, LVNs, and NAs.

- Vacancy rates for RNs and NAs have remained relatively steady since 2010, while rates for LVNs more than doubled from 2014 to 2016. This was driven by large increases in vacancy rate in the Panhandle, West Texas, and Central Texas.

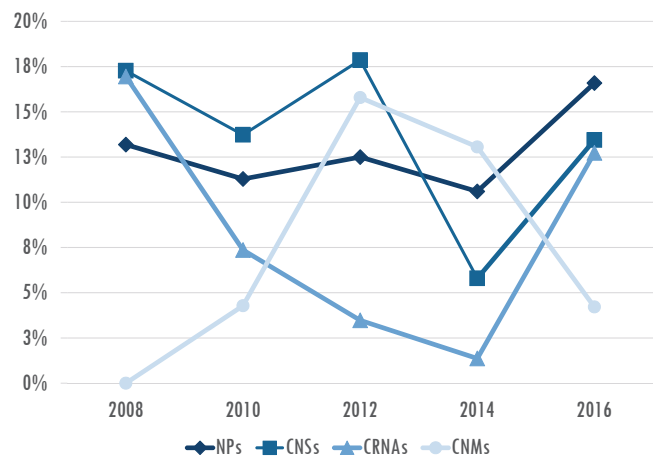
Figure 5 represents the position vacancy rates for Texas from 2008-2016 for APRN types.

- Rates for all APRN types except CNMs increased from 2014 to 2016.

**Figure 4. Position vacancy rates for RNs, LVNs, and NAs, 2008-2016**



**Figure 5. Position vacancy rates for APRNs, 2008-2016**

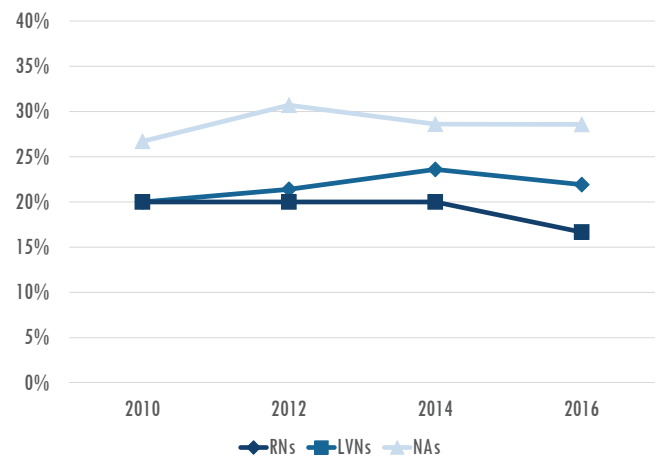


## Median Facility Turnover Rate

Figure 6 shows that median facility turnover rates for RNs, LVNs and NAs have remained fairly stable over the past four HNSS measurements.

The median facility turnover rates in Texas were 0% for all APRN types but CNMs from 2010 to 2016, but very few hospitals reported turnover rates for CNMs.

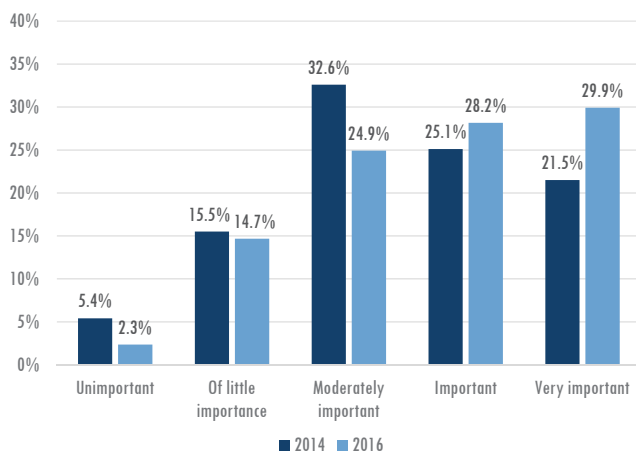
Figure 6. Median facility turnover rates for RNs, LVNs, and NAs, 2010-2016



## Recruitment and Hiring

Hospitals were asked to rate the importance of a Bachelor of Science degree in nursing (BSN) for their staff (Figure 6). The perceived importance of a BSN increased between 2014 and 2016.

Figure 6. Importance of a BSN for RN staff, 2014-2016



- Between 2014 and 2016, the percentage of hospitals responding that a BSN was important or very important increased from 46.6% to 58.1%.

Data in Table 1 represent the percentage of hospitals in Texas recruiting RN staff within Texas, in states outside of Texas, or internationally.

Table 1. Where hospitals recruit RN positions, 2012-2016

	2012	2014	2016
Texas	94.9%	98.4%	99.4%
States Outside of Texas	24.4%	27.1%	34.8%
Internationally	3.8%	10.7%	12.5%

- The percentages of hospitals recruiting in from all three locations have increased since 2012.

## Conclusion

Since 2010 the proportion of LVNs in hospitals has been decreasing, while the proportion of APRNs has been increasing. Voluntary overtime peaked in 2012, with 50.7% of all interim staffing hours used. Use of in-house staffing pools/per diem nurses hit a low point this same year, at 32.3% of all hours. Average per hour cost of interim staffing remained relatively steady, from 2006 to 2014 but increased to a high of \$46.88 in 2016.

Vacancy rates for RNs and NAs have remained relatively steady since 2010, while rates for LVNs, NPs, CNSs, and CRNAs all increased from 2014 to 2016. Median facility turnover rates for RNs, LVNs and NAs have remained fairly stable over the past four HNSS measurements.

Between 2014 and 2016, the percentage of hospitals responding that a BSN was important or very important increased from 46.6% to 58.1%.

