



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.

Please refer to the full set of reports for more details on each topic. The following are highlights and recommendations from the findings of the 2016 Hospital Nurse Staffing Survey.

2016 HNSS: Vacancy and Turnover

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

The position vacancy rate describes the proportion of all full-time equivalent (FTE) positions vacant across all responding hospitals in an area. The median facility turnover rate describes the mid-point of responses for each hospital.

Vacancy Rates

RN Position Vacancy Rate (290 of 345 hospitals responded):

- The RN position vacancy rate increased between 2014 and 2014 from 8.1% to 9.8%.
- Regionally, RN position vacancy rates ranged from 8.0% in North Texas to 11.6% in the Rio Grande Valley.
- Of 51,744 RN FTE positions reported statewide, 5,637 were vacant.

First-Year RN Vacancy Rate (171 of 345 hospitals responded):

- The first-year RN position vacancy rate was 10.3% in 2016.
- Regionally, first-year RN position vacancy rates ranged from 0.8% in East Texas to 35.8% in the Panhandle.
- Of 5,204 first-year RN FTE positions reported statewide, 598 were vacant.

APRN Position Vacancy Rate (133 of 345 hospitals responded):

- Responding hospitals reported 285 vacant FTEs out of 1,543 total APRN FTEs across the state.
- The statewide position vacancy rate for NPs was 16.6%, 6 percentage points lower than the vacancy rate in 2014 (10.6%). Regional vacancy rates for NPs ranged from 7.9% in the South Texas to 32.7% in the Rio Grande Valley.
- For CNSs, the statewide position vacancy rate was 13.4%. This represents an increase from the 2014 vacancy rate for 5.8%. Regional position vacancy rates for CNSs ranged from 0% in East Texas, Central Texas, and West Texas to 18.6% in North Texas.
- The statewide CRNA position vacancy rate was 12.7%, which was significantly higher than the vacancy rate for this position in 2012 (1.4%). Regional rates ranged from 0% in West and South Texas to 57.1% in the Panhandle.
- The statewide position vacancy rate for CNMs was 4.2%, which was a decrease from 13.1% in 2014. These positions existed in 4 responding hospitals in the North Texas, East Texas, Gulf Coast, and South Texas regions.

LVN Position Vacancy Rate (223 of 345 hospitals responded):

- The position vacancy rate for LVNs was 8.2%. Vacancy rates for LVNs were on the decline from 2008 to 2014, but increased in 2016.
- Regionally, LVN vacancy rates ranged from 4.6% in North Texas to 18.7% in West Texas.
- Of a total 3,247 budgeted LVN FTE positions, 291 were vacant.

Nurse Aide Position Vacancy Rate (261 of 345 hospitals responded):

- The statewide position vacancy rate for NAs decreased from 9.0% in 2014 to 8.7% in 2016.
- Regionally, NA vacancy rates ranged from 6.3% in West Texas to 22.0% in the Panhandle.
- Of the 12,686 NA FTE positions reported statewide, 1,212 were vacant.

Turnover Rates

RN Median Facility Turnover Rate (259 of 345 hospitals responded):

- The median facility turnover rate among RNs in Texas hospitals was 21.9%.
- Across the 8 regions, the median facility turnover rate for RNs ranged from 16.1% in the Panhandle to 30.1% in West Texas.

First-Year RN Median Facility Turnover Rate (175 of 345 hospitals responded):

- The median facility turnover rate among first-year RNs in Texas hospitals was 13.8%.

- Across the 8 regions, the median facility turnover rate for first-year RNs ranged from 0% in East Texas to 29.8% in the Panhandle

APRN Median Turnover Rate (126 of 345 hospitals responded):

- The statewide median turnover rate was 0% for all APRN types with the exception of a 6.9% rate for CNMs.

LVN Turnover Rate (211 of 345 hospitals responded):

- The median facility turnover rate for LVNs was 16.7%.
- The turnover rate between regions ranged from 0% in the Gulf Coast to 28.6% in East Texas.

Nurse Aide Turnover Rate (233 of 345 hospitals responded):

- The statewide median facility turnover rate among Nurse Aides was 28.6%.
- Regionally it ranged from 19.8% in the Gulf Coast to 42.0% in East Texas.

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

2016 HNSS: Recruitment and Retention

Where Hospitals Recruit (4345 of 345 hospitals responded):

- 99.4% of hospitals reported recruiting in Texas, while 34.8% recruited in other states and 12.5% recruited internationally.

Filling Positions (345 of 345 hospitals responded):

- The majority of nursing position types are filled within 60 days, though most positions in OR/

Recovery Care and Pediatric ICU/CCU take longer to fill.

- In general, hospitals ranked past relevant nursing experience as the most important attribute when hiring new staff, followed by a bachelor's in nursing or higher education, past non-relevant nursing experience, and bilingual.
- Statewide, 58.1% of responding hospitals said that a bachelor's in nursing education for their RN staff is important or very important.

2016 HNSS: Hospital Staffing

In all, 112 hospitals responded to questions related to the hours and costs of interim staffing and reported spending a total of \$212 million on interim staffing methods to fill over 4.7 million hours of interim staffing needs. Reported interim staffing methods included voluntary overtime, in-house staffing pool, contract/traveling nurses, per diem nurses, temporary staffing agencies, and managerial staff to provide staffing coverage.

- Voluntary overtime was the most frequently method used by the most hospitals in providing staffing coverage with 87 hospitals reporting the use

of this method for over 1.3 million hours at a cost of over \$64 million.

- The use of contract/traveling nurses was the most costly method of interim staffing per hour, averaging \$61.39.
- As a means of gauging trends in employment, hospitals were asked if there had been changes in the number of RN positions at their facility over the past two years. 53.0% of hospitals reported an increase in RNs positions, 18.6% of those due to a staffing committee recommendation. 11.9% of hospitals reported a decrease.

- When asked how many additional FTEs expected to be added in the coming fiscal year, 127 responding hospitals reported plans to hire an additional 4,280

new FTE positions among all nurse types, mostly in the Rio Grande Valley and North Texas

2016 HNSS: Transition to Practice Programs for Newly Licensed RNs

- 225 hospitals (65.2%) reported having a transition to practice program.
- Orientation-based transition to practice programs were the most commonly used model by responding hospitals.
- Most hospitals reported that their transition to practice programs used employment models.
- The four most frequently cited outcomes of transition to practice programs were improved

clinical competence among first year nurses (56.9%), improved clinical decision-making abilities (48.0%), increased numbers of new graduates applying for RN position in their organizations (39.6%), and decreased turnover of newly licensed RNs in the first year of employment (38.7%).

TCNWS Advisory Committee Recommendations

Hospital Staffing

Texas is projected to face a shortage of nurses from 2015 through 2030.¹ By 2030, the supply of RN FTEs is expected to grow by 35.4% to 271,667, while demand will grow by 53.8% to 331,638, leaving a deficit of 59,970 RN FTEs. Based on these projections, 20% of the projected demand for RNs in 2030 will not be met. Between 2015 and 2030, the demand for RNs in inpatient hospital settings is projected to grow by 57%. This will account for more than half of the growth in demand for RNs across all settings. In order to meet the growing demand for RNs, employers should consider the following strategies:

- Provide safe working conditions for nurses by maintaining appropriate staffing levels and implementing work schedules that minimize fatigue. 72.2% of responding hospitals reported an increase in voluntary overtime, 61.2% reported increased workloads, and 53.9% reported using administrative staff to cover nursing duties in response to an inadequate supply of nurses.
- Encourage nurses to extend their work-life careers. Research suggests that states with larger proportions of nurses over 50 increase efforts to recruit new RNs and retain older RNs² and that retaining older, more experienced nurses is essential to curbing the nursing shortage.³ In 2015, 39.8% of RNs in Texas were 50 years or older, and 24.1% of direct care RNs in responding hospitals were over 50.
- 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. 46.3% of responding hospitals that reported having decreased budgeted direct patient care RN FTEs in the past 2 years did so because they were unable to fill existing RN positions.

- Continue the work that the Texas Team has begun on increasing nursing education capacity in Texas, including regional partnerships, with health care providers and participants (e.g. hospitals, health plans, and businesses) working in partnership with academic institutions to support development of the nursing workforce in Texas.⁴ A total of 4,743,025 hours of interim staffing were used by 112 responding facilities at a cost of over \$212 million, for a cost per hour of \$44.71. This is the highest cost per hour ever reported in the HNSS. In 2016, a larger percentage of hospitals reported an increase in voluntary overtime (72.2%) than in 2014 (61.0%).

Vacancy and Turnover

Vacancy and turnover rates for RNs and LVNs increased between 2014 and 2016, 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.⁵ 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. 87.8% of responding hospitals used shift differentials and 56.8% 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).

Recruitment and Retention

Employers of nurses should invite practicing nurses' input to promote recruitment and retention of nurses in the workplace. Some of these strategies could include the following:

- Continue to investigate mechanisms for recognition for the work and contributions that nurses provide. Employee recognition programs were the fourth most popular retention strategy for full-time employees, used by 81.4% of hospitals.
- Utilize recruitment and retention strategies outlined in the Magnet Recognition and Pathways to Excellence programs from the American Nurses Credentialing Center.⁶
- Support investigation and research in the retention of new graduates and experienced nurses in the work setting.
- Establish a forum for hospitals to share recruitment and retention best practices. Nursing stakeholder organizations should establish forums through

which hospitals can share best practices for recruitment and retention of nurses, in order to more fully implement the strategies identified through recommendation two. Several nursing organizations in Texas have regional workgroups:

- Texas Nurses Association (TNA) Districts
- Texas Organization of Nurse Executives (TONE) Regional Chapters
- Texas Team Regional Teams

Transition to Practice

In order to ease the transition of new nurse graduates and new APRN graduates and decrease high turnover rates among first-year nurses, employers of nurses should consider the following strategies:

- Continue to explore the implementation of comprehensive transition to practice programs for new nurse graduates and new APRN graduates that integrate clinical reasoning and decision making, setting priorities, use of technology, and reflection and feedback.⁷ The proportion of responding hospitals that offered transition to practice programs decreased slightly from 70.3% in 2014 to 65.2% in 2016.
- Develop a program for nurses to recruit and mentor prospective and new nurses.

¹ Texas Center for Nursing Workforce Studies. (2016). Nurse supply and demand projections, 2015-2030. <http://www.dshs.texas.gov/chs/cnws/WorkforceReports/SupplyDemand.pdf>

² Buerhaus, P.I., Auerbach, D.I., Staiger, D.O., & Muench, U. (2013). Projections of the long-term growth of the registered nurse workforce: A regional analysis. *Nursing Economics*, 31(1): 13-17.

³ Myer, Sharon K. and Amendolair, Darlene. (2014). Time is of the essence: Retain your older nurses. *Nursing Management*, 45(5). 12-16.

⁴ Texas Team. (2010). A strategic plan for the state of Texas to meet nursing workforce needs of 2013. Austin, TX. <http://www.dshs.state.tx.us/chs/cnws/TexasTeam/TexasStrategy.pdf>

⁵ American Association of Colleges of Nursing. (2012). Nursing shortage fact sheet. <http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf>

⁶ American Nurses Credentialing Center: <http://www.nursecredentialing.org/Magnet/ProgramOverview.aspx>.

⁷ Spector, N. Transition to practice: Promoting quality and safety. Texas Board of Nursing: Nursing Education and Transition into Practice Conference. Austin, TX. 10 February 2010.