

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 2019, the Texas Center for Nursing Workforce Studies (TCNWS) administered the HNSS to the Chief Nursing Officers/Directors of Nursing of 715 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; outpatient or community-based clinics were not included. Respondents provided data for 404 hospitals for a response rate of 56.5%.

This report addresses attributes hospitals consider when hiring RNs and recruitment and retention strategies used by hospitals. Additionally, this report provides important data on the length (in days) that hospitals' RN positions remained unfilled.

2019 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 (354 of 404 hospitals responded):

- The RN position vacancy rate decreased from 8.1% in 2017 to 5.9% in 2019.
- Of 106,915 RN FTE positions reported statewide, 6,734 were vacant.

Advanced Practice Registered Nurses Position Vacancy Rate (153 of 404 hospitals responded):

- Responding hospitals reported 214 vacant FTEs out of 2,559 total APRN FTEs across the state.
- The statewide position vacancy rate for NPs decreased from 10.3% in 2017 to 8.3% in 2019.
- For CNSs, the statewide position vacancy rate also decreased, from 8.8% in 2017 to 7.1% in 2019.

- The statewide CRNA position vacancy rate was 5.2%, five percentage points lower than the vacancy rate for this position in 2017 (10.2%).
- The statewide position vacancy rate for CNMs was 0%.

LVN Position Vacancy Rate (271 of 404 hospitals responded):

- The position vacancy rate for LVNs decreased from 6.8% in 2017 to 5.5% in 2019.
- Of a total 3,636 budgeted LVN FTE positions, 210 were vacant.

Nurse Aide Position Vacancy Rate (311 of 404 hospitals responded):

- The statewide position vacancy rate for NAs increased from 7.5% in 2017 to 10.3% in 2019.
- Of the 17,415 NA FTE positions reported statewide, 2,010 were vacant.

Turnover Rates

RN Median Facility Turnover Rate (270 of 404 hospitals responded):

- The median facility turnover rate among RNs in Texas hospitals was 18.2%. RN turnover rates in Texas hospitals ranged from 0% (21 hospitals) to 266% (1 hospital) in 2019.

Advanced Practice Registered Nurse Median Turnover Rate (121 of 404 hospitals responded):

- The statewide median turnover rate was 0% for all APRN types.
- Facility turnover rates for APRNs ranged from 0% (79 hospitals) to 400% (1 hospital).

LVN Turnover Rate (253 of 348 hospitals responded):

- The median facility turnover rate for LVNs

increased from 18.9% in 2017 to 19.7% in 2019.

- Facility turnover rates for LVNs ranged from 0% (66 hospitals) to 200% (4 hospitals).

Nurse Aide Turnover Rate (274 of 348 hospitals responded):

- The statewide median facility turnover rate for NAs decreased from 34.1% in 2017 to 31.3% in 2019.
- Facility turnover rates for NAs ranged from 0% (40 hospitals) to 322% (1 hospital).

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

2019 HNSS: Staffing

In all, 170 hospitals responded to questions related to the hours and costs of interim staffing and reported spending a total of \$460 million on interim staffing methods to fill over 13 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 used method for providing staffing coverage with 138 respondents reporting the use of this method for over 3.9 million hours at a cost of over \$167 million.

- The use of temporary staffing agencies was the most costly method of interim staffing per hour, averaging \$64.10.
- 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 year. 43.9% of respondents reported an increase in RNs positions, while 11.7% reported a decrease.
- When asked how many additional FTEs expected to be added in the coming fiscal year, 124 responding hospitals reported plans to hire an additional 2,860 new FTE positions among all nursing staff types, mostly RNs.

2019 HNSS: Recruitment

Filling Positions (404 of 404 hospitals responded):

- The majority of nursing position types are filled within 60 days.
- In general, respondents 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.

- Adequate staffing was perceived to have the greatest impact on retention overall, followed by effective management/leadership, pay increase, and employee recognition.

2019 HNSS: Transition to Practice Programs

76.2% of hospitals reported having a transition to practice program.

- Mentorship/preceptorship was the most commonly used transition to practice program (68.0%), followed by nurse residency (53.1%), internship/externship (32.7%), "other" (12.7%) and nurse fellowship (12.4%).
- Most programs used an employment model.

- The most common outcomes of transition to practice programs were improved clinical competence in resident/patient care among first year nurses (55.6%), improved clinical decision-making abilities among first year nurses (45.9%), and decreased turnover of newly licensed nurses in the first year of employment (40.2%).

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. 64.5% of responding hospitals reported an increase in voluntary overtime, 58.7% reported increased workloads, and 44.9% reported using administrative staff to cover nursing duties in response to an inadequate supply of nurses.
- Based on the findings of the 2018 Workplace Violence Against Nurses Survey Employer survey, hospitals should create a culture of safety for all nurses, encourage reporting of violent events, encourage nurse staffing committees to consider incidents of workplace violence in their work, and establish and maintain ongoing surveillance.²
- Encourage nurses to extend their work-life careers. In 2018, 35.1% of RNs in Texas were over 50 years old. Research suggests that retirement of RNs is one of the biggest challenges facing the nursing workforce, and that facilities should work with RNs to delay their retirement by offering shortened work days/shifts, modifying work duties, and making ergonomic accommodations.³
- 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. 31.0% of responding hospitals that reported having decreased budgeted direct patient care RN FTEs in the past year 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 with academic institutions to support development of the nursing workforce in Texas.⁴ A total of 13,105,338 hours of interim staffing were used by 170 responding facilities at a cost of over \$460 million (\$35.13 per hour). In 2018, 64.5% percent of hospitals reported an increase in voluntary overtime as a consequence of inadequate nurse staffing.

Vacancy and Turnover

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, including professional practice models
 - Institute flexible work schedules and part-time or per diem work. 91.4% of responding hospitals used shift differentials and 58.4% 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).
- Develop and support programs for new and novice nurses beyond transition to practice.

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 fifth most popular recruitment and retention strategy for employees, used by 77.6% of hospitals.
- Utilize recruitment and retention strategies outlined in the Magnet Recognition and Pathways to Excellence programs from the American Nurses Credentialing Center.⁶
- Utilize resources provided by the National Academy of Medicine's Action Collaborative on Clinician Well-Being and Resilience.⁷
- 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 for Nursing Leadership (TONL) 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.⁸ The proportion of responding hospitals that offered transition to practice programs was 76.2% in 2019 and has been increasing for several years.
- 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 Texas Center for Nursing Workforce Studies. (2019). Workplace violence against nurses survey. https://www.dshs.texas.gov/chs/cnws/WorkforceReports/2018_WPVAN.pdf

³ Buerhaus, P.I., Skinner, L.E., Auerbach, D.I., and Staiger, D.O. (2017). Four challenges facing the nursing workforce in the United States. *Journal of Nursing Regulation*, 8(2). 40-46.

⁴ Green, A., Mancini, M.E., Flemming, S., Bingle, C., Jordan, C., Kishi, A., Fowler, C., Thomas, K., Sjoberg, E., and Walker, S. (2011). Building academic capacity through statewide partnerships. 27(6). 51-57.

⁵ American Association of Colleges of Nursing. (2019). Nursing shortage fact sheet. <https://www.aacnnursing.org/Portals/42/News/Factsheets/Nursing-Shortage-Factsheet.pdf>

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

⁷ National Academy of Medicine: <https://nam.edu/initiatives/clinician-resilience-and-well-being/>.

⁸ 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.

