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 2012, the TCNWS administered the HNSS to 603 Texas hospitals. These included for-profit, non-profit, 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. 373 (61.9%) hospitals responded to the survey. The hospitals that completed the 2012 HNSS were representative of all Texas hospitals by region and bed size.

### Highlights and Recommendations

The Hospital Nurse Staffing Survey (HNSS) was conducted in 2012 by the Texas Center for Nursing Workforce Studies. The survey assessed the size and effects of the nursing shortage in hospitals in Texas. The survey included 603 hospitals, which were representative of all Texas hospitals by region and bed size.

#### Hospital Characteristics

**Hospital Designations:**
- Twenty-four of the reporting hospitals are designated as Magnet hospitals. Most of the Magnet hospitals are located in Regions 2, 4, and 5. All 18 Magnet hospitals are located in metropolitan non-border counties.
- Forty-three responding hospitals are designated as Pathway to Excellence Hospitals. Over 80% of these are located in Regions 2, 4, and 5, and over 80% are located in metropolitan non-border counties.
- Two hundred eighteen of 373 reporting hospitals are designated as trauma centers. The greatest number are located in Region 2. 10.6% of the trauma centers are located in border counties.

#### Vacancy Rates

Vacancy rates were calculated in two ways, each with a different meaning: position vacancy rate describes the proportion of all Full-Time Equivalent (FTE) positions vacant among responding hospitals, whereas facility vacancy rate is calculated for each facility and given equal weight regardless of hospital or staff size in determining median facility vacancy rates.

**RN Position Vacancy Rate** (351 of 373 Hospitals responded):
- RN position vacancy rate was 8.1% in 2012. Of 60,955 RN FTE positions, 4,923 were vacant.
- From 2010 to 2012 there was a 20.9% increase in the position vacancy rate for RNs. However, the 2010 rate was the lowest reported vacancy rate for RNs since the inception of the Hospital Nurse Staffing Survey in 2004.

**RN Median Facility Vacancy Rate** (351 of 373 Hospitals responded):
- The median facility vacancy rate for RNs was 5.6% in 2012.
- This represents a decrease from 9.2% in 2008 and 6.2% in 2010.
- The vacancy rate among RN positions ranged from 4.5% in Region 4 to 7.5% in Region 6.

**Advanced Practice Registered Nurses Position Vacancy Rate** (144 of 373 Hospitals responded):
- One hundred forty-four hospitals reported 114 vacant FTEs out of 1,143.5 total APRN FTEs across the state.
- The statewide position vacancy rate for NPs was 12.5% while regional rates ranged from 5.0% in Region 1 to 42.9% in Region 7.
- For CNSs, the statewide position vacancy rate was 17.9%. Regional position vacancy rates ranged from 0% in Regions 4, 5, 6, and 7 to 60.0% in Region 8.
- The statewide CRNA position vacancy rate was 3.5%. Regional rates ranged from 0% in Regions 1, 5, 7, and 8 to 25.0% in Region 6.
- The statewide position vacancy rate for CNMs was 15.8%. Only regions 2, 3, and 4 reported CNM positions.

**Advanced Practice Registered Nurses Median Facility Vacancy Rate** (144 of 373 Hospitals responded):
- The median facility vacancy rate for Texas was 0% for all APRN types and 0% for all APRN types across most regions. Region 7 has a median facility vacancy rate of 50.0% for NPs. Region 8 had a median facility vacancy rate of 33.3% for CNS positions and Region 4 had a median facility vacancy rate of 8.3% for CNMs.
- There are two factors that contributed to a statewide median facility vacancy rate of 0% despite some regions having median facility vacancy rates higher than 0%: In some regions a small number of hospitals reported APRN budgeted positions and the overall number of APRN positions reported were smaller than the number of RN or LVN positions.

Note: RN= Registered Nurse, APRN= Advanced Practice Registered Nurse, NP= Nurse Practitioner, CNS= Clinical Nurse Specialist, CRNA= Certified Registered Nurse Anesthetist, CNM= Certified Nurse Midwife
2012 HNSS: Vacancy Rates (continued)

LVN Position Vacancy Rate (316 of 373 Hospitals responded):
- Overall, the position vacancy rate for LVNs decreased from 8.7% in 2010 to 5.2% in 2012. Of the 5,376 budgeted LVN FTE positions, 282 were vacant.

LVN Median Facility Vacancy Rate (316 of 373 Hospitals responded):
- For LVN positions, there was a statewide median facility vacancy rate of 0% among reporting hospitals and a 0% median facility vacancy rate across all regions.

Nurse Aide Position Vacancy Rate (329 of 373 Hospitals responded):
- From 2010 to 2012, the statewide position vacancy rate for NAs decreased from 7.9% to 7.5%. Of the 15,177 NA FTE positions, 1,145 positions were vacant.

Nurse Aide Median Facility Vacancy Rate (329 of 373 Hospitals responded):
- Among NA positions, the statewide median facility vacancy rate was 3.1%.

2012 HNSS: Turnover Rates

RN Median Turnover Rate (351 of 373 hospitals responded):
- Overall, there was a 21.4% median turnover rate among RN positions in Texas hospitals.
- Across the 8 regions, the median RN turnover rate ranged from 17.6% in Region 4 to 25.8% in Region 3.

Advanced Practice Registered Nurse Median Turnover Rate (145 of 373 Hospitals responded):
- The statewide median turnover rate was 0% for all APRN types with the exception of a 20.0% rate for CNMs.

LVN Turnover Rate (145 of 373 hospitals responded):
- There was also a 20.0% median turnover rate among LVN FTE positions. However, the turnover rate between regions ranged from 12.7% in Region 8 to 33.3% in Region 5.

Nurse Aide Turnover Rate (329 of 373 hospitals responded):
- The statewide median turnover rate among Nurse Aides was 30.7%.

Recruitment

Where Hospitals Recruit (373 of 373 Hospitals responded):
- 94.9% of hospitals reported recruiting in Texas, while 24.4% recruited in other states and 3.8% recruited internationally.

Filling Positions (356 of 373 Hospitals responded):
- The majority of nursing position types are filled within 60 days, though most positions in OR/Recovery Care and OB/GYN/Labor and Delivery take longer to fill.

Methods of Interim Staffing

In all, 234 hospitals responded to questions about interim staffing and reported spending a total of $409.6 million on interim staffing methods to fill over 11.5 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 method used by the most hospitals in providing staffing coverage with 187 (79.9%) hospitals reporting the use of this method for over 5.8 million hours at a cost of $203,199,298.
- In-house staffing pools and per diem were used by 133 hospitals (56.8%) that reported 3,713,345 hours at a cost of $130,800,117.
- Contract/traveling nurses were employed by 91 hospitals (38.9%), totaling 1,475,680 hours at a cost of $56,311,006.
- Temporary staffing agencies were reported being used by 76 hospitals (32.5%), with 396,531 hours provided by temporary staffing agencies at a cost of $16,023,123.
- Fifty-seven (24.4%) hospitals used managerial staff for 64,002 hours worked at a cost of $2,351,488.
- Ten hospitals (4.3%) reported using other methods not specified. These methods accounted for 11,577 hours at a cost of $927,311. These other methods were by far the most costly per hour.

Note: RN= Registered Nurse, APRN= Advanced Practice Registered Nurse, LVN= Licensed Vocational Nurse, NA= Nurse Aide, CNM= Certified Nurse Midwife
Hospital Staffing

- 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. 51.7% of hospitals reported an increase in RNs positions, while just 13.1% reported a decrease.
- When asked how many positions are expected to be added in the coming fiscal year, responding hospitals reported plans to hire an additional 5,826 new positions, mostly in Central and South Texas.

Transition to Practice Programs for Newly Licensed RNs

In 2012, the HNSS introduced a section regarding hospitals’ efforts to hire, acclimate, and retain newly licensed RNs for the first time. Two hundred twelve hospitals (60.9%) reported having transition to practice programs.
- A majority of hospitals with transition to practice programs reported improved clinical competence of new RNs (79.2%), improved clinical decision-making abilities (54.7%), and decreased employment turnover of newly licensed RNs (51.4%).

Discussion of Findings and Conclusion

The findings of the 2012 Hospital Nurse Staffing Survey are consistent with the hospital employment trends occurring throughout the country and described by Buerhaus, Auerbach, and Staiger (2009), whose research findings have shown that there is an increase in nurse participation in the labor market during recessions. In Texas, an increase in the size of the nursing workforce may be attributed to household economic need, delayed retirements of tenured nurses, and relocation of nurses to Texas from states experiencing more severe impacts of the recession, among other possibilities. The National Bureau of Economic Research reports that the United States has experienced two recessions since 2001. The current recession started in December 2007 and lasted longer than the 10 month average of all recessions since World War II. Buerhaus et al. report that the relief from the current nursing shortage is temporary and driven by the recession. With the continued increase in the aging population, high numbers of uninsured and underinsured citizens, high demand for care needed by the critically and chronically ill, and the impacts of the Patient Protection and Affordable Care Act, long-term demand for more nurses will continue to increase.

In 2010, the statewide position vacancy rate for RNs reached a low of 6.7%, but has since increased to 8.1% in 2012. This may indicate that the remedial effects of the economic recession on Texas’ nursing shortage have ended and those nurses who had reentered or remained part of the workforce during the recession have since begun to exit. Hospitals in Texas continue to have a higher statewide position vacancy rate than those seen in California (3.3%) and Florida (5.6%), underscoring the state’s need for more qualified nurses to fill currently vacant patient care positions.

Moreover, the median facility turnover rates in Texas hospitals among RNs (21.4%), LVNs (20.0%), and nurse aides (30.7%) are higher than RN turnover rates reported by Florida (14.8%) and California (2.2%). The increase in hospital turnover rates indicates that retention of nurses continues to be an issue for Texas hospitals, one that is being addressed in part by transition to practice programs for newly licensed RNs. High turnover rates also present an important economic concern as evidenced by the 234 hospitals that reported spending at least $409.6 million on interim staffing during the 2012 HNSS reporting year in order to provide over 11.5 million hours of interim staff coverage.

While Texas’ and the nation’s recent economic recession provided a brief easing of the ongoing nursing shortage, stakeholders and policymakers must continue to strengthen the current nursing workforce and find ways of expanding the long-term supply of nurses by:
- Improving work and nursing practice environments through recruitment and retention measures;
- Addressing safety and quality issues;
- Opening educational pipelines and removing barriers in order to encourage nurses to continue their education; and
- Continuing to investigate and monitor the infrastructure and social barriers to increase capacity and output of nursing education programs including the need to infuse resources into nursing education.

2 Florida Center for Nursing, Nurse Employer Industry Reports, February 2012
3 2010 Allied for Health Quarterly Turnover and Vacancy Report, 2nd Quarter, Hospital Council of Southern California
Future Plans for the Texas Center for Nursing Workforce Studies

1. Work with stakeholders to help define best methods for recruiting and retaining the hospital nursing workforce.
2. Work with various stakeholders to expand the staffing survey to home health, public health, long term care, and other settings.
3. Work with the Texas Hospital Association and Texas Nurses Association in studying the effects that the Texas Nurse Staffing Rules may have on quality indicators of patient care and nurse staffing.
4. Continue to collect and analyze regional hospital data to address regional variations.

Recommendations

Based upon the high turnover rates reported by Texas hospitals, retention of nurses continues to be an issue. Also, the majority of hospitals reported difficulty in recruiting experienced nurses. Consistent with these findings, hospitals should establish a high priority of implementing retention strategies as reflected in the following evidence-based recommendations:

1. Employers of nurses should invite practicing nurses’ input to develop strategies to encourage nurses to extend their careers. Some of these strategies could include the following:
   A. Design healthy work environments that allow nurses to provide safe, high-quality care.
   B. Institute flexible work schedules and part-time or per diem work. Other creative work schedules could include seasonal employment (e.g., working winters with summers off), overlapping shifts, and self-scheduling.
   C. Explore a wide range of compensation models that align experience, workload, and positive patient outcomes.
   D. Develop and support health promotion and return-to-work programs (after an employee injury or illness).
   E. Reduce costly strategies for interim staffing by offering a variety of incentives for covering difficult-to-staff shifts and to replace sick and absent nurses.
   F. Develop a program for nurses to recruit and mentor prospective and new nurses.

2. 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:
   A. Utilize recruitment and retention strategies outlined in the Magnet Recognition and Pathways to Excellence programs from the American Nurses Credentialing Center.  
   B. Provide safe working conditions for nurses by maintaining appropriate staffing levels, prohibiting long work hours that jeopardize the nurse’s ability to provide safe patient care, and establishing policies and strategies to prevent and address harassment and violence in the workplace.
   C. Continue to investigate mechanisms for recognition of the work and contributions that nurses provide.
   D. Explore the implementation of a comprehensive transition to practice program for new nurse graduates that integrates clinical reasoning and decision making, setting priorities, use of technology, and reflection and feedback.  
   E. Support investigation and research in the retention of new graduates in the work setting.

3. Through the Texas Hospital Association and Texas Nurses Association, establish a forum in which hospitals can share best practices for recruitment and retention of nurses.

4. Especially in light of over $409 million spent on interim staffing in hospitals, the work that the Texas Team has begun on increasing nursing education capacity in Texas including regional partnerships should continue 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.

5. Texas hospitals should continue to support endeavors to increase funding levels as well as provide resources to nursing programs in order to increase capacity to admit and graduate nursing students.

Source:
1 American Nurses Credentialing Center: http://www.nursecredentialing.org/Magnet/ProgramOverview.aspx.
3 Texas Team. (Updated April 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