Introduction

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.

This report summarizes the various measures reported in the HNSS reports as they pertain to critical access hospitals (CAHs) in Texas. The salient findings presented here highlight points of concern and differences between CAH nurse staffing measures and those in other hospitals.

Critical Access Hospital Designation

A facility that meets the following criteria may be designated by the Center for Medicare and Medicaid Services as a CAH:

- Is located in a state that has established a Medicare rural hospital flexibility program with the Center for Medicare and Medicaid Services; and
- Is located in a rural area or is treated as rural; and
- Is located more than a 35-mile drive from any other hospital or CAH (in mountainous terrain or in areas with only secondary roads available, the mileage criterion is 15 miles); and
- Maintains no more than 25 inpatient beds; and
- Maintains an annual average length of stay of 96 hours per patient for acute inpatient care; and
- Complies with all CAH Conditions of Participation, including the requirement to provide 24-hour emergency care services seven days per week; and
- Has been designated by the State as a CAH; and
- Is currently participating in Medicare as a rural public, non-profit or for-profit hospital; or was a participating hospital that ceased operation during the ten year period from November 29, 1989 to November 29, 1999; or is a health clinic or health center that was downsized from a hospital.

Figure 1. Geographic Location of CAHs

Hospital Characteristics

Critical access hospitals are located in 73 counties in Texas (see Figure 1).

- Sixty-three of 80 critical access hospitals (78.8%) in Texas responded to the 2012 HNSS.
- The majority of the responding critical access hospitals (46) were in non-metropolitan non-border counties. 13 were in metropolitan non-border counties and four hospitals were in non-metropolitan border counties.
- Two of the reporting hospitals were designated as Pathway to Excellence hospitals. None are Magnet hospitals.
- Fifty-five of the 63 reporting hospitals (87.3%) were designated as trauma centers. All 55 were classified as Level 4 centers which is a basic facility that transfers major and severe trauma patients to a higher-level trauma facility.

Source: 1 Center for Medicare and Medicaid Services: https://www.cms.gov/  
For more information see: 2 American Nurses Credentialing Center: http://www.nursecredentialing.org/Pathway.aspx  
3 American Nurses Credentialing Center: http://www.nursecredentialing.org/Magnet.aspx
**Vacancy Rates**

Table 1 provides information on position and median facility vacancy rates at CAH and non-CAH hospitals.

- The position vacancy rates in CAHs ranged from 1.8% among APRNs to 10.3% among NAs.
- The position vacancy rate for RN positions among CAHs (7.9%) was similar to other reporting hospitals in Texas (8.1%).
- The position vacancy rate for APRNs in CAHs was notably lower than among other reporting hospitals in Texas.
- There was a 1.6% median facility vacancy rate among RN positions in 62 critical access hospitals in Texas. This is lower than the median facility vacancy rate of 5.7% among non-CAH reporting hospitals.
- For APRN, LVN, and NA positions, there was an overall facility vacancy rate of 0% among the CAHs, meaning at least half of CAHs had zero vacancies for these nurse types.

Table 1. Vacancy Rates in CAHs and non-CAHs

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<tr>
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</thead>
<tbody>
<tr>
<td>RNs</td>
<td>62 289 7.9%</td>
<td>8.1%</td>
<td>1.6%</td>
<td>5.7%</td>
</tr>
<tr>
<td>APRNs</td>
<td>27 117 1.8%</td>
<td>10.4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>LVNs</td>
<td>61 255 6.9%</td>
<td>5.0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>NAs</td>
<td>57 272 10.3%</td>
<td>7.5%</td>
<td>0%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

Note: n = # of hospitals that responded to this question.

RN = Registered Nurse, APRN = Advanced Practice Registered Nurse, LVN = Licensed Vocational Nurse, NA = Nurse Aide

For more information on vacancy rates and how they are calculated please see the 2012 HNSS Vacancy and Turnover Report or the 2012 HNSS Design and Methods Report.

**Turnover Rates**

Data in Figure 2 represent the median turnover rate for RNs, LVNs, and NAs among those hospitals providing employee and separation numbers for the reporting period.

- Among 62 critical access hospitals, there was a 22.2% median turnover rate among RN FTE positions compared to 21.1% among other hospitals.
- The median facility turnover rate among LVNs in critical access hospitals was 18.8% compared to 21% in non-CAH hospitals.
- The turnover rate among Nurse Aides in CAHs was 19.5%, lower than the non-CAH turnover rate of 32%.
- The median turnover rate among APRNs in CAHs was 11.4%, lower than the non-CAH turnover rate of 15.8%.

For more information on turnover rates and how they are calculated please see the 2012 HNSS Vacancy and Turnover Report or the 2012 HNSS Design and Methods Report.

**Changes in Budgeted FTEs**

Table 2 displays the number of hospitals reporting changes in budgeted direct patient care RN FTEs.

- 25.4% of the hospitals reported an increase in budgeted direct patient care RN FTEs, a rate lower than that seen among non-CAH hospitals (57.1%).
- 60.3% of the critical access hospitals reported no change.

Table 2. Number and Percentage of CAHs Reporting Changes, if any, in Budgeted Direct Patient Care RN FTEs

<table>
<thead>
<tr>
<th>Changes</th>
<th># of Hospitals</th>
<th>% of Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>16</td>
<td>25.4%</td>
</tr>
<tr>
<td>Decreased</td>
<td>9</td>
<td>14.3%</td>
</tr>
<tr>
<td>No change</td>
<td>38</td>
<td>60.3%</td>
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</table>
Types of Interim Staffing Methods Used

Figure 3 shows the percentage of CAHs using each type of interim staffing method.
- Voluntary overtime was the most commonly used method for providing interim staffing coverage with 77.8% (n=49) of CAHs using this method.
- CAHs least commonly used contract/traveling nurses among those types of interim staffing listed on the 2012 HNSS. 15.9% of the CAHs used this method compared to 37.3% of overall hospitals in Texas.

Methods of Interim Staffing

Table 3 shows the total hours and cost* for each interim staffing method.
- Sixty critical access hospitals spent nearly $6 million on voluntary overtime, in-house staffing pools, contract/traveling nurses, per diem nurses, temporary staffing agencies, and managerial staff providing staffing coverage over a total of 194,922 hours. This averaged $30.10 per hour.
- Per hour costs at CAHs were highest for contract/traveling nurses ($60.40) followed by other methods of interim staffing ($49.66), and managerial staff ($39.25).
- Per hour costs among CAHs were lower than among non-CAH hospitals in Texas for all interim staffing methods except use of managerial staff and contract/traveling nurses.

<table>
<thead>
<tr>
<th>Table 3. Hours and Costs of Interim Staffing in CAHs</th>
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<tbody>
<tr>
<td>CAH</td>
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<tr>
<td>-----</td>
</tr>
<tr>
<td>Voluntary overtime</td>
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<tr>
<td>In-house staffing pool/per diem</td>
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<tr>
<td>Use of managerial staff</td>
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<tr>
<td>Temporary staffing agencies</td>
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<tr>
<td>Contract/Traveling nurses</td>
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<tr>
<td>Other</td>
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<tr>
<td>Total</td>
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Note: n = # of CAH hospitals that responded to this question.

* - The analysis on cost of interim staffing is to demonstrate the cost differential between staffing methods, and is not intended for use in estimating nurse wages.

For more information on methods of interim staffing please see the 2012 HNSS Methods of Interim Staffing Report or the 2012 HNSS Design and Methods Report.