



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 2014, the TCNWS administered the HNSS to 619 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. 428 (69.1%) hospitals responded to the survey. The hospitals that completed the 2014 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) and other rural hospitals in Texas. The salient findings presented here highlight points of concern and differences between rural and non-rural nurse staffing measures and those in other hospitals.

Rural Designations

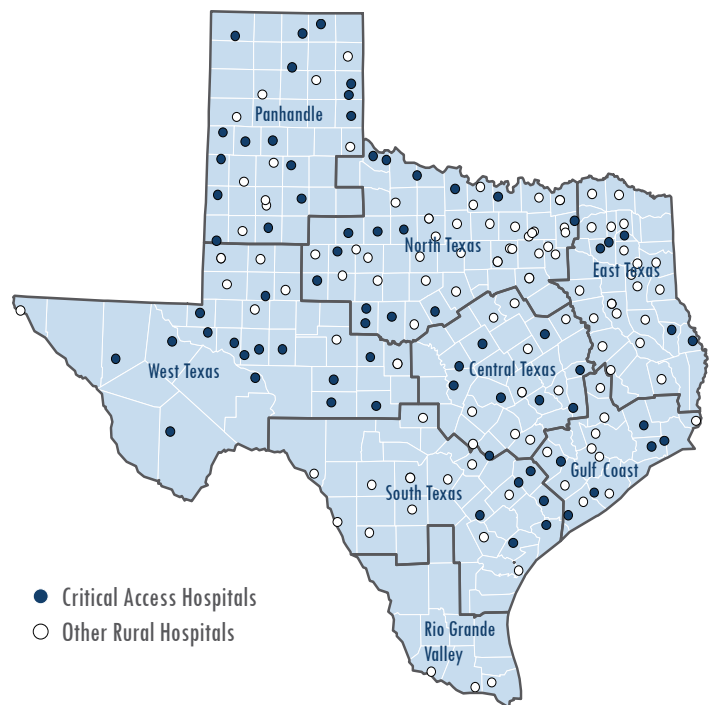
The HNSS asks respondents to identify whether or not their facility is a rural hospital. Rural hospitals must have 100 or fewer beds, 4,000 or fewer admissions, or be located outside a metropolitan statistical area. Rural hospitals do not receive federal funding unless they are also designated critical access hospitals.

Critical Access Hospitals

A facility that meets the following criteria may be designated by the Center for Medicare and Medicaid Services¹ 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

Figure 1. Geographic location of CAHs and other rural hospitals



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.

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

¹Center for Medicare and Medicaid Services: <https://www.cms.gov/>

- Sixty-three of 79 critical access hospitals (79.7%) in Texas responded to the 2014 HNSS.
- The majority of the responding critical access hospitals (47) were in non-metropolitan, non-border counties. Twelve were in metropolitan, non-border counties and four were in non-metropolitan, border counties.
- Two of the reporting hospitals were designated as Pathway to Excellence hospitals.² None were Magnet hospitals.³

Table 1 shows the overlap between critical access hospitals and rural hospitals in Texas. All CAHs are rural hospitals, but there are 108 rural hospitals that do not have a CAH designation.

²American Nurses Credentialing Center: <http://www.nursecredentialing.org/Pathway.aspx>

³American Nurses Credentialing Center: <http://www.nursecredentialing.org/Magnet.aspx>

Table 1. Critical access hospitals and rural hospitals in Texas

	CAH	Non-CAH	Total
Rural	63	108	171
Non-rural	0	257	257
Total	63	365	428

This report will compare the 63 CAHs, 108 rural non-CAHs (hospitals that reported that they were rural but do not have a critical access hospital designation), and 257 non-rural hospitals (hospitals that are not rural and do not have a critical access designation).

Vacancy and Turnover Rates

Table 2 provides information on position vacancy rates at CAHs, rural non-CAHs, and non-rural hospitals.

- The position vacancy rates in CAHs ranged from 4.1% among LVNs to 14% among RNs.
- The position vacancy rate for RN positions among CAHs was higher than rural non-CAHs (5.9%) and non-rural hospitals (8.3%).
- The position vacancy rates for APRNs, LVNs, and NAs in CAHs were similar to those for other reporting hospitals in Texas.

Table 2. Position vacancy rates in CAHs, rural non-CAHs, and non-rural hospitals

	CAH		Rural Non-CAH		Non-rural	
	n	Position Vacancy Rate	n	Position Vacancy Rate	n	Position Vacancy Rate
RNs	60	14.0%	95	5.9%	232	8.3%
APRNs	27	8.5%	34	10.9%	92	8.6%
LVNs	60	4.1%	95	6.1%	216	2.4%
NAs	58	8.2%	92	7.3%	227	9.3%

Table 3 provides information on median facility vacancy rates at CAHs, rural non-CAHs, and non-rural hospitals.

- There was a 1.5% median facility vacancy rate among RN positions in CAHs in Texas. This is lower than the median facility vacancy rates of

4.8% among rural non-CAHs and 7.5% in non-rural 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 3. Median facility vacancy rates in CAHs, rural non-CAHs, and non-rural hospitals

	CAH		Rural Non-CAH		Non-rural	
	n	Median Facility Vacancy Rate	n	Median Facility Vacancy Rate	n	Median Facility Vacancy Rate
RNs	60	1.5%	95	4.8%	232	7.5%
APRNs	27	0.0%	34	0.0%	92	0.0%
LVNs	60	0.0%	95	0.0%	216	7.7%
NAs	58	0.0%	92	3.7%	227	0.0%

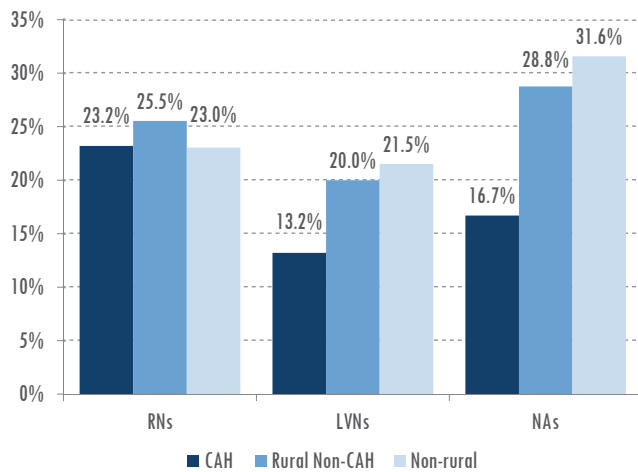
Data in Figure 2 represent the median turnover rates for RNs, LVNs, and NAs among those hospitals providing employee and separation numbers for the reporting period.

- In the 63 critical access hospitals, there was a 23.2% median turnover rate among RN FTE positions compared to 25.5% in rural non-CAHs and 23% in non-rural hospitals.



- The median facility turnover rate among LVNs in critical access hospitals was 13.2%, lower than the rural non-CAH turnover rate of 20% and the non-rural rate of 21.5%.
- The turnover rate among Nurse Aides in CAHs was 16.7%, lower than the rural non-CAH rate of 28.8% and the non-rural rate of 31.6%.
- The median turnover rate among APRNs in all hospital types was 0%, meaning at least half of hospitals had turnover rates of 0% for APRNs.

Figure 2. Turnover rates in CAHs, rural non-CAHs, and non-rural hospitals



For more information on vacancy and turnover rates and how they are calculated please see the 2014 HNNS Vacancy and Turnover Report or the 2014 HNNS Design and Methods Report.

Changes in Budgeted FTEs

Table 4 displays the number of hospitals reporting changes in budgeted direct patient care RN FTEs.

- 30.2% of CAHs reported an increase in budgeted direct patient care RN FTEs, a rate lower than that seen among rural non-CAHs (41.7%) and non-rural hospitals (49%).
- Rural non-CAHs reported the highest proportion of facilities that decreased the number of RN FTEs (26.9%).
- 54% of CAHs reported no change, a rate higher than that seen in both rural non-CAHs (31.5%) and non-rural hospitals (34.6%).

Table 4. Percentage of CAHs, rural non-CAHs, and non-rural hospitals reporting changes in budgeted direct patient care RN FTEs

	% of CAHs	% of Rural Non-CAHs	% of Non-rural Hospitals
Increased	30.2%	41.7%	49.0%
Decreased	15.9%	26.9%	16.3%
No Change	54.0%	31.5%	34.6%

Methods of Interim Staffing

Figure 3 shows the percentage of CAHs and other rural hospitals using each type of interim staffing method.

- Voluntary overtime was the most commonly used method for providing interim staffing coverage with 57 (90.5%) CAHs using this method.
- Contract/traveling nurses were the least frequently used method of interim staffing among CAHs. 14.3% of the CAHs used this method compared to 40.9% of all hospitals in Texas.
- Rural non-CAHs used voluntary overtime (74.1%) and use of managerial staff (47.2%) less often than CAHs while using in-house staffing pools (33.3%) and contract/traveling nurses (32.4%) more often than CAHs.

Figure 3. Percentage of CAHs using interim staffing methods

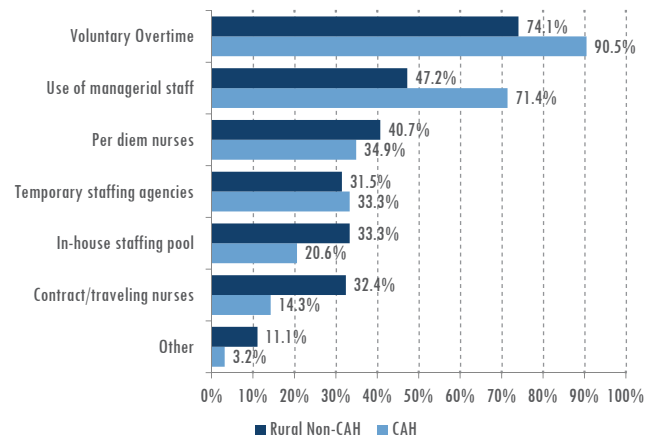


Table 5 shows the total hours and cost* for each interim staffing method.

Critical access hospitals spent over \$10 million over a total of 389,375 hours of interim staffing for an average of \$26.66 per hour.

- Per hour costs at CAHs were highest for contract/traveling nurses (\$60.01) followed by temporary staffing agencies (\$48.20), and use of managerial staff (\$38.38).

- Per hour costs among CAHs were lower than among non-rural hospitals in Texas for all interim staffing methods except contract/traveling nurses.
- Per hour costs among CAHs were lower than among rural non-CAHs for all interim staffing methods except contract/traveling nurses, temporary staffing agencies, and use of managerial staff.

Table 5. Hours and cost of interim staffing in CAHs

	n	CAH Hours	CAH Cost*	CAHs Cost/Hr	Rural Non-CAHs Cost/Hr	Non-rural Hospitals Cost/Hr
Voluntary Overtime	42	218,931	\$5,571,771	\$25.45	\$37.25	\$34.03
In-house Staffing Pool	12	85,611	\$1,819,225	\$21.25	\$29.72	\$32.72
Contract/Traveling Nurses	3	2,638	\$158,292	\$60.01	\$52.71	\$58.87
Per Diem Nurses	16	53,047	\$1,506,174	\$28.39	\$33.71	\$38.88
Temporary Staffing Agencies	14	21,983	\$1,059,522	\$48.20	\$29.77	\$52.65
Use of Managerial Staff	18	6,815	\$261,567	\$38.38	\$37.81	\$52.90
Other	1	350	\$5,250	\$15.00	\$48.77	\$40.84
Total	-	389,375	\$10,381,801	\$26.66	\$36.09	\$38.35

*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.

