Hospital Nurse Staffing Study

Rural and Critical Access Hospitals 2019

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 summarizes the various measures reported in the HNSS reports as they pertain to critical access hospitals (CAHs) and other rural hospitals in Texas. The findings presented here highlight points of concern and differences between staffing measures in rural and non-rural 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 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.

CAHs are located in 75 counties in Texas.

- 55 of 82 CAHs (67.1%) in Texas responded to the 2019 HNSS.
- The majority of the responding CAHs (43) were in non-metropolitan, non-border counties. Eight were in metropolitan, non-border counties and four were in non-metropolitan, border counties.
- Two of the reporting hospitals was designated as Pathway to Excellence hospitals. None were Magnet Hospitals.

Table 1 shows the overlap between CAHs and rural hospitals in Texas. All CAHs are rural hospitals, but there are 30 rural hospitals that do not have a CAH designation.

Table 1. Critical access hospitals and rural hospitals in Texas

	CAH	Non-CAH	Total
Rural	55	30	85
Non-rural	0	276	276
Total	55	306	361

This report will compare the 55 CAHs, 30 rural non-CAHs (hospitals that reported that they were rural but do not have a CAH designation), and 276 non-rural hospitals (hospitals that are not rural and do not have a CAH designation).

Table 2 presents the nursing staff mix in responding CAHs, rural non-CAHs, non-rural hospitals.

Table 2. Figure 1. Nursing staff mix in CAHs, rural non-CAHs, and non-rural hospitals

	CAHs	Rural Non-CAHs	Non-rural Hospitals
RNs	55.5%	67.9%	82.4%
LVNs	19.9%	17.1%	2.4%
NAs	19.8%	12.0%	13.3%
APRNs	4.9%	3.0%	1.9%

- CAHs and rural non-CAHs had a lower proportion of RNs and a higher percentage of LVNs and NAs than non-rural hospitals.

Table 3 displays the percentage of responding hospitals reporting changes in budgeted direct patient care RN FTEs.

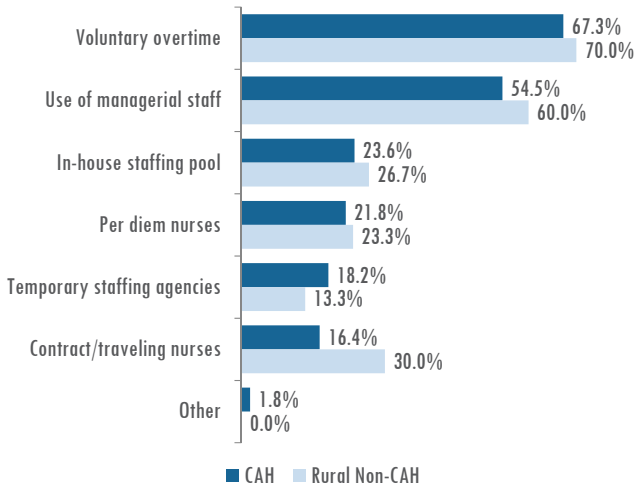
Table 3. Percentage of CAHs, rural non-CAHs, and non-rural hospitals reporting changes in budgeted direct patient care RN FTEs in the past year

	% of CAHs	% of Rural Non-CAHs	% of Non-rural Hospitals
Increased	40.0%	33.3%	45.8%
Decreased	7.3%	16.7%	12.0%
No Change	52.7%	50.0%	42.2%

- Responding CAHs were more likely to report no change in budgeted FTEs than rural non-CAHs and non-rural hospitals.

Figure 1 shows the percentage of responding CAHs and other rural hospitals using each type of interim staffing method.

Figure 1. Percentage of rural hospitals using interim staffing methods



- Voluntary overtime was the most commonly used method in CAHs and other rural hospitals.
- Responding CAHs were less likely than other rural hospitals to use all interim staffing methods except temporary staffing agencies.

Table 4 shows the total hours and cost* for each interim staffing method.

- The total cost per hour of interim staffing in responding CAHs was higher than that in rural non-CAHs and non-rural hospitals.
- Although very similar numbers of hospitals used the methods of interim staffing in 2017, they reported using many more hours and at a higher hourly cost in 2019.

Table 4. 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	15	133,269	$7,229,607.55	$54.25	$41.37	$42.58
In-house Staffing Pool	5	12,600	$372,562.00	$29.57	$33.39	$35.52
Contract/Traveling Nurses	6	21,673	$1,287,863.00	$59.42	$83.57	$35.76
Per Diem Nurses	8	26,351	$796,432.21	$30.22	$27.52	$23.72
Temporary Staffing Agencies	4	28,011	$2,103,535.25	$75.10	$54.84	$63.30
Use of Managerial Staff	11	3,482	$80,862.93	$23.23	$45.20	$43.74
Total	-	225,385	$11,870,862.94	$52.67	$49.19	$34.66

*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; Note: n=the number of CAHs that reported hours and cost for the interim staffing method.

Vacancy and Turnover Rates

Table 4 provides information on position vacancy rates in responding CAHs, rural non-CAHs, and non-rural hospitals.

Table 4. 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	54	7.8%	29	5.8%	271	5.9%
APRNs	31	10.5%	18	3.8%	104	7.7%
LVNs	54	5.7%	28	5.8%	188	5.4%
NAs	50	7.4%	25	5.0%	236	10.5%

- The position vacancy rates in CAHs ranged from 5.7% among LVNs to 10.5% among APRNs.
- The position vacancy rates in CAHs were higher than in rural non-CAHs and non-rural hospitals for RNs and APRNs.

Data in table 5 represent the median turnover rates in responding CAHs, rural non-CAHs, and non-rural hospitals.

- Turnover for LVNs and NAs was lowest in CAHs.

Table 5. Median facility turnover rates in CAHs, rural non-CAHs, and non-rural hospitals

	CAH		Rural Non-CAH		Non-rural	
	n	Median Facility Turnover Rate	n	Median Facility Turnover Rate	n	Median Facility Turnover Rate
RNs	51	18.2%	26	16.7%	238	19.4%
LVNs	48	11.4%	24	19.1%	165	20.5%
NAs	44	20.5%	19	28.6%	208	32.2%

Conclusion

55 of 82 CAHs (67.1%) in Texas responded to the 2019 HNSS. 52.7% of responding CAHs reported no change in the number of budgeted direct care RN FTEs in the past year. Responding CAHs were more likely to report no change in budgeted FTEs than rural non-CAHs and non-rural hospitals. Voluntary overtime was the most commonly used method in responding CAHs and other rural hospitals. The total cost per hour of interim staffing in responding CAHs was higher than that in rural non-CAHs and non-rural hospitals.

The position vacancy rates in responding CAHs ranged from 5.7% among LVNs to 10.5% among APRNs. Position vacancy rates in responding CAHs were higher than in rural non-CAHs and non-rural hospitals for RNs and APRNs, while turnover for LVNs and NAs was lower in responding CAHs than in other rural hospitals or non-rural hospitals.