Hospital Nurse Staffing Study

Rural and Critical Access Hospitals 2017

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 2017, the TCNWS administered the HNSS to 713 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. 348 (48.8%) hospitals responded to the survey.

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 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 73 counties in Texas.

- 54 of 82 CAHs (65.9%) in Texas responded to the 2017 HNSS.
- The majority of the responding CAHs (46) were in non-metropolitan, non-border counties. Six were in metropolitan, non-border counties and two were in non-metropolitan, border counties.
- One of the reporting hospitals was designated as a Pathway to Excellence hospital. None were Magnet Hospitals.

Table 1 shows the overlap between CAHs and rural hospitals in Texas. All CAHs are rural hospitals, but there are 77 rural hospitals that do not have a CAH designation.

Table 1. Critical access hospitals and rural hospitals in Texas

	CAH	Non-CAH	Total
Rural	54	77	131
Non-rural	0	217	217
Total	54	294	348

This report will compare the 54 CAHs, 77 rural non-CAHs (hospitals that reported that they were rural but do not have a CAH designation), and 217 non-rural hospitals (hospitals that are not rural and do not have a CAH designation).

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

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

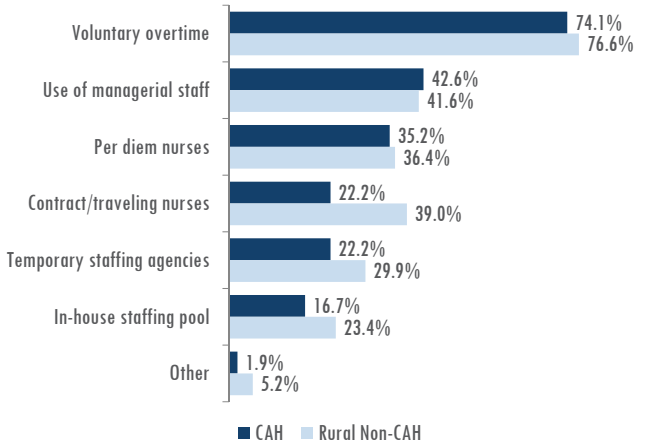
Table 2. Percentage of CAHs, rural non-CAHs, and non-rural hospitals reporting changes in budgeted direct patient care RN FTEs in the past year

	% of CAHs	% of Rural Non-CAHs	% of Non-rural Hospitals
Increased	25.9%	41.6%	55.3%
Decreased	5.6%	15.6%	11.1%
No Change	68.5%	42.9%	33.6%

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

- Voluntary overtime was the most commonly used method in CAHs and other rural hospitals.

Figure 1. Percentage of rural hospitals using interim staffing methods



- Responding CAHs were less likely than other rural hospitals to use contract/traveling nurses, staffing agencies, and in-house staffing pools.

Table 3 shows the total hours and cost* for each interim staffing method.

- The total cost per hour of interim staffing in responding CAHs was lower than that in rural non-CAHs and non-rural hospitals.

Table 3. 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	14	34,150	$1,187,729.34	$34.78	$42.35	$41.08
In-house Staffing Pool	5	10,720	$214,998.50	$20.06	$41.48	$26.26
Contract/Traveling Nurses	6	10,744	$632,136.43	$58.84	$70.42	$65.33
Per Diem Nurses	5	15,447	$489,090.42	$31.66	$34.78	$40.16
Temporary Staffing Agencies	2	3,411	$153,205.87	$44.92	$46.03	$50.22
Use of Managerial Staff	10	4,269	$178,490.34	$41.81	$50.63	$36.42
Other	0	-	-	-	$42.41	$43.18
Total	-	78,740	$2,855,650.90	$36.27	$51.95	$42.80

*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	50	9.6%	69	8.1%	177	8.1%
First-year RNs*	17	15.0%	36	26.0%	103	11.7%
APRNs	26	15.8%	28	12.9%	66	9.6%
LVNs	50	8.7%	60	4.1%	113	7.6%
NAs	42	8.9%	62	5.4%	156	7.9%

* First-year RNs are included in the "all RNs" totals.

- The position vacancy rates in CAHs ranged from 8.7% among LVNs to 15.8% among APRNs.
- The position vacancy rates in CAHs were higher than in rural non-CAHs and non-rural hospitals for all nurse types except first-year RNs.

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

- Turnover for all position types 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	50	20.5%	72	27.2%	183	24.5%
First-year RNs*	19	0.0%	41	16.0%	128	24.8%
LVNs	51	16.7%	65	22.2%	136	18.2%
NAs	44	26.8%	64	36.0%	166	34.3%

* First-year RNs are included in the "all RNs" totals.

Conclusion

54 of 82 CAHs (65.9%) in Texas responded to the 2017 HNSS. 68.5% of responding CAHs reported no change in the number of budgeted direct care RN FTEs in the past year. Responding CAHs were much 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 lower than that in rural non-CAHs and non-rural hospitals.

The position vacancy rates in responding CAHs ranged from 8.7% among LVNs to 15.8% among APRNs. Position vacancy rates in responding CAHs were higher than in rural non-CAHs and non-rural hospitals for all nurse types except first-year RNs, while turnover for all position types was lower in responding CAHs than in other rural hospitals or non-rural hospitals.