

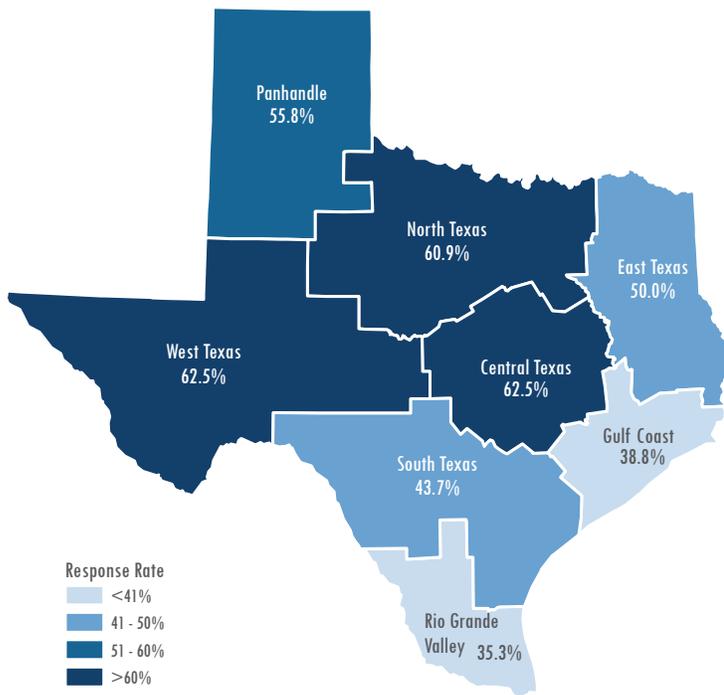


The Hospital Nurse Staffing Survey (HNSS) assesses the size and effects of the nursing shortage in hospitals, Texas' largest employer of nurses. During the spring of 2016, the TCNWS administered the HNSS to 666 Texas hospitals. These included for-profit, nonprofit, public, and Texas Department of State 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. 345 (51.8%) hospitals responded to the survey.

The hospitals that completed the 2016 HNSS were representative of all Texas hospitals by region, geographic designation, and bed size. This report provides survey response rates by region and bed size. It also includes relevant hospital characteristics such as the number and distribution of teaching, rural, Magnet, Pathway to Excellence, and trauma center designated hospitals in the 2016 HNSS sample.

Geographic Characteristics of Hospitals

Figure 1. Response rate by region



- Central Texas and West Texas had the highest response rates (62.5%), while the Rio Grande Valley had the lowest (35.3%) (Table 1).
- Analysis found that there was not a significant difference between responding hospitals and all Texas hospitals by region.¹

Table 1. 2016 HNSS response rate by region

Region	# of Respondents in Region	Total # of Hospitals in Region	Response Rate
Panhandle	24	43	55.8%
Rio Grande Valley	18	51	35.3%
North Texas	120	197	60.9%
East Texas	25	50	50.0%
Gulf Coast	52	134	38.8%
Central Texas	45	72	62.5%
South Texas	31	71	43.7%
West Texas	30	48	62.5%
Texas	345	666	51.8%

The overall response rate for 2016 was 51.8%, which was a decrease from the 2014 response rate of 69.1%.

Table 2 shows the number of responding hospitals by geographic designation.

- Non-metropolitan, border counties had the highest response rate (69.2%), while metropolitan, border counties had the lowest (42.6%).
- Analysis found that there was not a significant difference between responding hospitals and all Texas hospitals by geographic designation.²

Table 2. 2016 HNSS response rate by geographic designation

Geographic Designation	# of Respondents in Designation	Total # of Hospitals in Designation	Response Rate
Metro Border	20	47	42.6%
Metro Non-Border	227	468	48.5%
Non-Metro Border	9	13	69.2%
Non-Metro Non-Border	89	138	64.5%

Table 3 displays information on the proportion of hospitals responding to the survey by region and bed size categories.

- Hospitals with greater than 499 beds had the highest response rate (59.4%), while those with between 50 and 99 beds had the lowest (42.3%).
- Analysis found that there was not a significant

difference between responding hospitals and all Texas hospitals by bed size categories.³

Table 3. Number of responding hospitals over total number of hospitals by region and bed size

Region	Bed Size					Total
	<50	50-99	100-299	300-499	>499	
Panhandle	16/27	5/8	2/4	1/3	0/1	24/43
Rio Grande Valley	6/17	3/10	5/15	1/5	3/4	18/51
North Texas	45/90	25/48	32/40	10/10	8/9	120/197
East Texas	11/19	3/11	6/12	5/8	0/0	25/50
Gulf Coast	23/49	7/27	13/33	5/14	4/11	52/134
Central Texas	21/31	7/14	11/19	5/6	1/2	45/72
South Texas	17/34	3/9	7/16	1/7	3/5	31/71
West Texas	17/29	2/3	6/9	5/7	0/0	30/48
Texas	156/296	55/130	82/148	33/60	19/32	345/666

¹ ($\chi^2(7, N = 666) = 13.9, p = 0.052$)

² ($\chi^2(3, N = 666) = 6.8, p = 0.078$)

³ ($\chi^2(3, N = 666) = 3.2, p = 0.533$)

Hospital Designations

Hospitals were asked to indicate applicable hospital designations from the following choices: teaching hospital, Magnet hospital, Pathway to Excellence hospital, trauma hospital, and rural hospital. For hospital designation definitions, please see the 2016 HNSS Appendices.

Table 4 shows the percentage of responding hospitals in each class of hospital designation by region.

- 52.9% of responding teaching hospitals were located in North Texas and the Gulf Coast.
- 78.3% of responding Magnet hospitals and 56.4% of responding Pathway to Excellence hospitals were located in North Texas.
- The Panhandle had the greatest percentage of responding rural hospitals (70.8% of responding hospitals in the Panhandle), while the Gulf Coast had the lowest percentage (19.2% of responding hospitals in the Gulf Coast).

Trauma Centers

Trauma facilities are hospitals that are designated by the Texas Department of State Health Services to provide emergency and specialized intensive care to critically ill and injured patients. They range from Level 1, which is a comprehensive trauma facility that manages major and severe trauma patients, to Level 4, a basic trauma facility that transfers major and severe trauma patients to a higher-level trauma facility. There are a total of 290 trauma centers (TCs) in Texas as of July 28, 2016.

- Of 17 level 1 TCs, 47.1% responded.
- Of 14 level 2 TCs, 42.9% responded.
- Of 57 level 3 TCs, 40.4% responded.
- Of 202 level 4 TCs, 59.9% responded.

Table 5 shows the percentage of responding hospitals in each region that were designated to be certain trauma center levels.



Table 4. Number and percentage of responding hospitals in each hospital designation by region

		Region								
		Panhandle	Rio Grande Valley	North Texas	East Texas	Gulf Coast	Central Texas	South Texas	West Texas	Texas
Teaching	n	2	3	11	2	7	2	4	3	34
	%	8.3%	16.7%	9.2%	8.0%	13.5%	4.4%	12.9%	10.0%	9.9%
Magnet	n	0	0	18	0	2	2	1	0	23
	%	0.0%	0.0%	15.0%	0.0%	3.8%	4.4%	3.2%	0.0%	6.7%
Pathway to Excellence	n	1	0	22	1	5	5	0	5	39
	%	4.2%	0.0%	18.3%	4.0%	9.6%	11.1%	0.0%	16.7%	11.3%
Trauma Center	n	15	6	46	13	13	30	18	17	158
	%	62.5%	33.3%	38.3%	52.0%	25.0%	66.7%	58.1%	56.7%	45.8%
Rural	n	17	6	33	14	10	17	16	16	129
	%	70.8%	33.3%	27.5%	56.0%	19.2%	37.8%	51.6%	53.3%	37.4%

Table 5. Level of responding trauma centers by region

Trauma Center Level		Region								
		Panhandle	Rio Grande Valley	North Texas	East Texas	Gulf Coast	Central Texas	South Texas	West Texas	Texas
1	n	1	0	4	0	0	1	1	1	8
	%	4.2%	0.0%	3.3%	0.0%	0.0%	2.2%	3.2%	3.3%	2.3%
2	n	0	0	4	1	0	1	0	0	6
	%	0.0%	0.0%	3.3%	4.0%	0.0%	2.2%	0.0%	0.0%	1.7%
3	n	0	2	7	4	5	1	2	2	23
	%	0.0%	11.1%	5.8%	16.0%	9.6%	2.2%	6.5%	6.7%	6.7%
4	n	14	4	31	8	8	27	15	14	121
	%	58.3%	22.2%	25.8%	32.0%	15.4%	60.0%	48.4%	46.7%	35.1%
Non-Trauma Centers	n	9	12	74	12	39	15	13	13	187
	%	37.5%	66.7%	61.7%	48.0%	75.0%	33.3%	41.9%	43.3%	54.2%



Nurses on Boards

The Institute of Medicine has recommended preparing and enabling nurses to lead change to advance health, which includes having representation on boards and other key leadership positions.⁴

- 167 out of 345 (48.4%) responding hospitals reported having RNs on their boards, a slight increase from 46.3% in 2014.

- 110 out of 167 (65.9%) respondents that did have RN board members reported that RNs had voting privileges, also a slight increase from 64.6% in 2014.

⁴ Institute of Medicine, Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing. (2011). Front matter. *The future of nursing: Leading change, advancing health.*

Conclusion

In 2016, the HNSS response rate was 51.7%. Central Texas and West Texas had the highest response rates (62.5%), while the Rio Grande Valley had the lowest (35.3%). Response rates were also higher in non-metropolitan counties. Responding agencies were representative of the agency population by region, geographic designation, and bed size categories.

Nearly half of responding hospitals were designated trauma centers (45.8%), most of which were level 4 trauma centers. 48.4% of responding facilities reported having RNs on their boards, and 65.9% of these RNs had voting privileges.