NURSING HOME SURVEY ON PATIENT SAFETY CULTURE

2019 User Database Report

Agency for Healthcare Research and Quality

PATIENT SAFETY

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Nursing Home Survey on Patient Safety Culture: 2019 User Database Report

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Appendixes cited in this report are provided electronically at https://www.ahrq.gov/sops/databases/nursing-home/index.html.

Executive Summary

Surveys on Patient Safety Culture™

EXECUTIVE SUMMARY

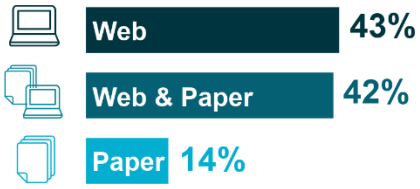
2019 NURSING HOME SURVEY DATABASE REPORT

This overview of survey results summarizes how nursing home providers and staff perceive patient safety culture based on the 2019 Nursing Home Survey on Patient Safety Culture Database.

HIGHLIGHTS

- **10,499** nursing home providers & staff responded
- **12** areas or composite measures of patient safety culture were assessed in the survey
- **67%** is the average percent positive score for all 12 composite measures of patient safety culture

How Nursing Homes Administered The Survey



OVERALL RESULTS

AREAS OF STRENGTH

Overall Perceptions of Resident Safety

85% indicated that residents are well cared for and safe

Feedback and Communication About Incidents

85% reported that staff discuss ways to keep residents safe and incidents from happening again

AREAS FOR POTENTIAL IMPROVEMENT

Staffing

46% indicated that there are enough staff to handle the workload and meet residents' needs during shift changes

Communication Openness

55% reported that staff can speak up about problems they see and their suggestions are valued

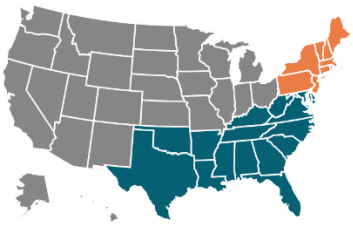
OTHER RESULTS by

Bed Size

Smaller Nursing Homes
with 1-49 beds had the **highest** scores when averaging all composite measures (**71% positive**)

Larger Nursing Homes
with 200+ beds had the **lowest** scores when averaging all composite measures (**63% positive**)

Census Region



South
Nursing homes in the South had the **highest** scores when averaging all composite measures (**72% positive**)

Northeast
Nursing homes in the Northeast had the **lowest** scores when averaging all composite measures (**65% positive**)

Shifts Worked Most Often

Days
Day shift staff had the **highest** scores when averaging all composite measures (**70% positive**)

Nights
Night shift staff had the **lowest** scores when averaging all composite measures (**63% positive**)

Job Title

Administrators/Managers
had the **highest** scores when averaging all composite measures (**79% positive**)

Nursing Assistants/Aides
had the **lowest** scores when averaging all composite measures (**64% positive**)

What's Next? Action planning for patient safety improvement

1. Define your goals
2. Plan your initiatives
3. Communicate your action plan

The *Action Planning Tool for the AHRQ Surveys on Patient Safety Culture* provides step-by-step guidance on how to develop an action plan to improve patient safety culture, available at www.ahrq.gov/sops.

Purpose and Use of This Report

In response to requests from nursing homes interested in comparing their results with those of other nursing homes on the *Surveys on Patient Safety Culture™ (SOPS™) Nursing Home Survey*, the Agency for Healthcare Research and Quality (AHRQ) established the *Nursing Home Survey on Patient Safety Culture* user database.

Nursing homes do not necessarily administer the nursing home patient safety culture survey every year. They may administer it on an 18-month, 24-month, or other cycle. Therefore, the database is a "rolling" indicator that contains data from January 2016 to July 2018. The 2019 database retains data for up to 2.5 prior years when a nursing home does not have new data to submit, replaces older data with more recent data when available, and adds data from nursing homes submitting for the first time.

The report presents statistics (averages, standard deviations, minimum and maximum scores, and percentiles) on the patient safety culture composite measures and items from the survey.

This report has two appendixes:

- Appendix A presents results by nursing home characteristics (bed size, ownership, and census region).
- Appendix B presents results by respondent characteristics (job title, nursing home work area, interaction with residents, shift worked most often, and tenure in nursing home).

Chapter 1. Introduction

Organizational culture refers to the beliefs, values, and norms shared by staff throughout the organization that influence their actions and behaviors. Patient safety culture is the extent to which these beliefs, values, and norms support and promote patient safety. Patient safety culture can be measured by determining what is rewarded, supported, expected, and accepted in an organization as it relates to patient safety.

Figure 1. Definition of Patient Safety Culture

Survey Content

The Agency for Healthcare Research and Quality (AHRQ) funded the development of the *Nursing Home Survey on Patient Safety Cultur*e. The survey includes 42 items that measure 12 composite measures of patient safety culture. The 12 patient safety culture composite measures are listed and defined in Table 1-1.

Table 1-1. Patient Safety Culture Composite Measures and Definitions

Patient Safety Culture Composite Measure	Definition: *The extent to which…*
Communication openness	Staff speak up about problems and their ideas and suggestions are valued.
Compliance with procedures	Staff follow standard procedures to care for residents and do not use shortcuts to get their work done faster.
Feedback and communication about incidents	Staff discuss ways to keep residents safe, tell someone if they see something that might harm a resident, and talk about ways to keep incidents from happening again.
Handoffs	Staff are told what they need to know before taking care of a resident or when a resident's care plan changes and have all the information they need when residents are transferred from the hospital.
Management support for resident safety	Nursing home management provides a work climate that promotes resident safety and shows that resident safety is a top priority.
Nonpunitive response to mistakes	Staff are not blamed when a resident is harmed, are treated fairly when they make mistakes, and feel safe reporting their mistakes.
Organizational learning	There is a learning culture that facilitates making changes to improve resident safety and evaluates changes for effectiveness.
Overall perceptions of resident safety	Residents are well cared for and safe.
Staffing	There are enough staff to handle the workload, meet residents' needs during shift changes, and keep residents safe, because there is not much staff turnover.
Supervisor expectations and actions promoting resident safety	Supervisors listen to staff ideas and suggestions about resident safety, praise staff who follow the right procedures, and pay attention to safety problems.
Teamwork	Staff treat one another with respect, support one another, and feel like they are part of a team.
Training and skills	Staff get the training they need, have enough training on how to handle difficult residents, and understand the training they get in the nursing home.

The survey also includes two questions that ask respondents whether they would tell friends that this is a safe nursing home for their family (also called "willingness to recommend") and to provide an overall rating on resident safety for their nursing home. In addition, respondents are asked to provide limited background demographic information.

Chapter 2. Survey Administration Statistics

This chapter presents descriptive information on how the 2019 database nursing homes administered the survey.

Highlights

- The 2019 database consists of data from 10,499 nursing home staff respondents across 191 participating nursing homes.
- The average nursing home response rate was 52 percent, with an average of 55 completed surveys per nursing home.
- The highest percentage of nursing homes (43 percent) administered *web only surveys*.
- Nursing homes that administered *paper only* surveys had a higher average response rate (60 percent) than nursing homes that administered by *web only* (55 percent) or *paper and web* (46 percent).

Overall statistics included in the 2019 database are shown in Tables 2-1 and 2-2.

Table 2-1. Overall Statistics—2019 Database Nursing Homes

Response Rate Information	Number or Rate
Number of nursing homes	191
Number of respondents	10,499
Average number of respondents per nursing home (range: 10 to 229)	55
Average number of surveys administered per nursing home (range: 10 to 485)	126
Overall average nursing home response rate (range: 5% to 100%)	52%

Table 2-2. Survey Administration Mode Statistics—2019 Database Nursing Homes

	Database Nursing Homes		Average Nursing Home Response Rate
Survey Administration Mode	Number	Percent	Percent
Paper only	27	14%	60%
Web only	83	43%	55%
Both paper and web (mixed mode)	81	42%	46%
Total	191	100%	

Note: Percentages of nursing homes do not add to 100 percent due to rounding.

Chapter 3. Nursing Home Characteristics

This chapter presents information about the distribution of database nursing homes by bed size, ownership, and geographic region. Although the nursing homes that submitted data to the database do not constitute a statistically selected sample, the characteristics of these nursing homes are fairly consistent with the distribution of nursing homes included in the Centers for Medicare & Medicaid Services (CMS) Nursing Home Compare database.[i]

The characteristics of database nursing homes by bed size, ownership, and geographic region[ii] are presented in Table 3.1 and are compared with the distribution of nursing homes in the CMS Nursing Home Compare database.

Highlights

- Nursing homes with *50-199 beds* made up the largest percentage of SOPS database nursing homes (78 percent).
- There was an equal distribution of *For profit* and *Nonprofit/Government* SOPS database nursing homes.
- Nursing homes in the *Midwest* made up one-third of SOPS database nursing homes (36 percent)
- Except for ownership, the characteristics of the 191 SOPS database nursing homes are fairly consistent with the nursing homes in Nursing Home Compare.

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[i] CMS Nursing Home Compare data were obtained from Nursing Home Compare, available at: https://data.medicare.gov/data/nursing-home-compare (accessed November 8, 2018).

[ii] States and territories are categorized into regions as follows:

- Northeast Region: CT, MA, ME, NH, NJ, NY, PA, RI, VT
- Midwest Region: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI
- South Region: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, PR, SC, TN, TX, VA, WV
- West Region: AK, AZ, CA, CO, GU, HI, ID, MT, NM, NV, OR, UT, WA, WY

Table 3-1. Distribution of 2019 Database Nursing Homes by Nursing Home Characteristics

Nursing Home Characteristics	CMS Nursing Home Compare Nursing Homes (N = 15,613)		Database Nursing Homes (N = 191)	
Bed Size	**Number**	**Percent**	**Number**	**Percent**
1-49	1,947	12%	32	17%
50-99	5,914	38%	85	45%
100-199	6,841	44%	63	33%
200 or more	911	6%	11	6%
Ownership	**Number**	**Percent**	**Number**	**Percent**
For profit	10,942	70%	96	50%
Nonprofit/Government	4,671	30%	95	50%
Census Bureau Region	**Number**	**Percent**	**Number**	**Percent**
Northeast	2,591	17%	45	24%
Midwest	5,141	33%	69	36%
South	5,457	35%	53	28%
West	2,424	16%	24	13%

Note: Percentages may not add to 100 percent due to rounding.

Chapter 4. Respondent Characteristics

This chapter describes respondent characteristics within the participating nursing homes.

Highlights

- The top two job titles of respondents were:
  - *Nursing Assistant/Aide* (32 percent).
  - *Licensed Nurse* (20 percent).
- Most respondents indicated they worked in *many different areas/no specific area or unit* (36 percent). *Skilled nursing unit* was the second highest work area (26 percent).
- Most respondents (74 percent) indicated they had *direct interaction* with residents.
- Most respondents indicated they worked *25 to 40 hours* per week (62 percent). The second largest group of respondents worked *more than 40 hours* per week (24 percent).
- Most respondents (71 percent) indicated they worked the *day shift.*
- *Tenure* in the nursing home was evenly distributed across the range of years of employment, with a range of 17 to 21 percent of respondents in each category.
- Nearly all respondents indicated they were *not paid by a staffing agency* (94 percent).

Table 4-1. Distribution of 2019 Database Nursing Homes by Respondent Characteristics

Respondent Characteristics	Database Respondents	
Job Title	**Number**	**Percent**
Nursing assistant/aide	2,979	32%
Licensed nurse	1,860	20%
Support staff	1,344	14%
Direct care staff	994	11%
Administrator/manager	883	9%
Administrative support staff	614	7%
Other job title	318	3%
Physician/other provider	308	3%
Total	9,300	100%
Missing	1,199	
Overall	10,499	
Work Area	**Number**	**Percent**
Many different areas/no specific area or unit	3,355	36%
Skilled nursing unit	2,441	26%
Other work area	1,741	19%
Rehab unit	1,066	12%
Alzheimer's/dementia unit	636	7%
Total	9,239	100%
Missing	1,260	
Overall	10,499	
Interaction With Residents	**Number**	**Percent**
YES, I work directly with residents most of the time	7,040	74%
NO, I do NOT work directly with residents most of the time	2,468	26%
Total	9,508	100%
Missing	991	
Overall	10,499	
Hours Worked Per Week	**Number**	**Percent**
15 or fewer	421	4%
16 to 24	885	9%
25 to 40	5,765	62%
More than 40	2,288	24%
Total	9,359	100%
Missing	1,140	
Overall	10,499	

Note: Percentages may not add to 100 percent due to rounding.

Table 4-1. Distribution of 2019 Database Nursing Homes by Respondent Characteristics (continued)

Respondent Characteristics	Database Respondents	
Shift Worked Most Often	**Number**	**Percent**
Days	6,541	71%
Evenings	1,727	19%
Nights	986	11%
Total	9,254	100%
Missing	1,245	
Overall	10,499	
Tenure in Nursing Home	**Number**	**Percent**
Less than 1 year	1,915	21%
1 to 2 years	1,894	20%
3 to 5 years	1,942	21%
6 to 10 years	1,576	17%
11 years or more	1,990	21%
Total	9,317	100%
Missing	1,182	
Overall	10,499	
Staffing Agency Status	**Number**	**Percent**
Paid by a staffing agency	560	6%
Not paid by a staffing agency	8,761	94%
Total	9,321	100%
Missing	1,178	
Overall	10,499	

Note: Percentages may not add to 100 percent due to rounding.

Chapter 5. Overall Results

This chapter presents the overall survey results for the database, showing the average percentage of positive responses across the database nursing homes on each of the survey's items and composite measures, as well as the average percent positive[iii] across composite measures. Reporting the average across nursing homes ensures that each nursing home receives an equal weight that contributes to the overall average. Reporting the data at the nursing home level in this way is important because culture is considered to be a group characteristic and is not considered to be a solely individual characteristic.

An alternative method would be to report a straight percentage of positive responses across all respondents, but this method would give greater weight to respondents from larger nursing homes (the number of respondents from larger nursing homes is twice that from smaller nursing homes).

Highlights

- The areas of strength or the composites with the highest average percent positive responses were:
  - *Overall Perceptions of Resident Safety*—85 percent.
  - *Feedback and Communication About Incidents*—85 percent.
  - *Supervisor Expectations and Actions Promoting Resident Safety*—81 percent
- The areas with potential for improvement or the composites with the lowest average percent positive responses were:
  - *Staffing*—46 percent.
  - *Communication Openness*—55 percent.
  - *Nonpunitive Response to Mistakes*—56 percent.
- On average, most respondents within nursing homes (73 percent) indicated they would recommend the nursing home (i.e., tell their friends that this was a safe nursing home for their family).
- On average, most respondents within nursing homes (59 percent) gave their nursing home a rating of "Excellent" (24 percent) or "Very good" (35 percent) on resident safety.

[iii] The average percent positive response is the average of the percent positive response for each item across nursing homes. Percent positive response at the nursing home level for each item is calculated for positively worded items as the combined percentage of respondents within a nursing home who answered "Strongly agree" or "Agree," or "Always" or "Most of the time." For negatively worded items, it is the combined percentage of respondents within a nursing home who answered "Strongly disagree" or "Disagree," or "Never" or "Rarely," depending on the response categories used for the item.

Composite- and Item-Level Charts

This section provides the overall composite and item-level results. The methods for calculating the percent positive scores at the item and composite level are described in the Notes section of this document.

Composite-Level Results

Chart 5-1 shows the average percent positive response for each of the 12 patient safety culture composite measures across nursing homes in the database.[iv] The patient safety culture composite measures are shown in order from the highest average percent positive response to the lowest.

Item-Level Results

Chart 5-2 shows the average percent positive response for each of the 42 survey items. The survey items are grouped by the patient safety culture composite measure they are intended to measure. Within each composite measure, the items are presented in the order in which they appear in the survey.

Willingness To Recommend

Chart 5-3 shows the results from the item that asked respondents whether they would tell their friends that this was a safe nursing home for their family.

Overall Rating on Resident Safety

Chart 5-4 shows the results from the item that asked respondents to give their nursing home an overall rating on resident safety.

[iv] Some nursing homes excluded one or more survey items and are therefore excluded from composite-level calculations when the omitted items pertain to a particular composite measure. For the 2019 report, two nursing homes were excluded from one or more composite-level calculations for this reason.

Chart 5-1. Composite-Level Average Percent Positive Response—2019 Database Nursing Homes

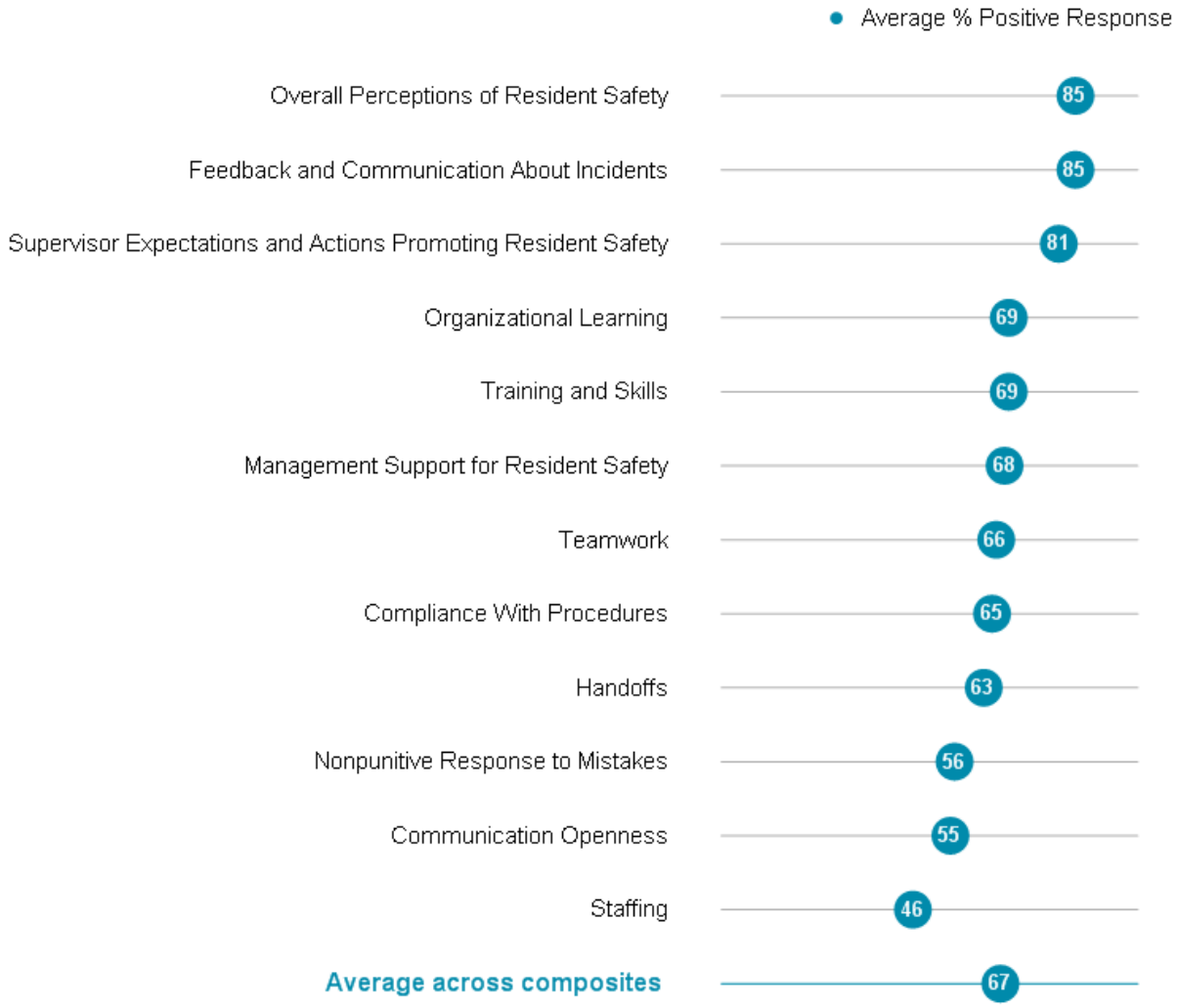
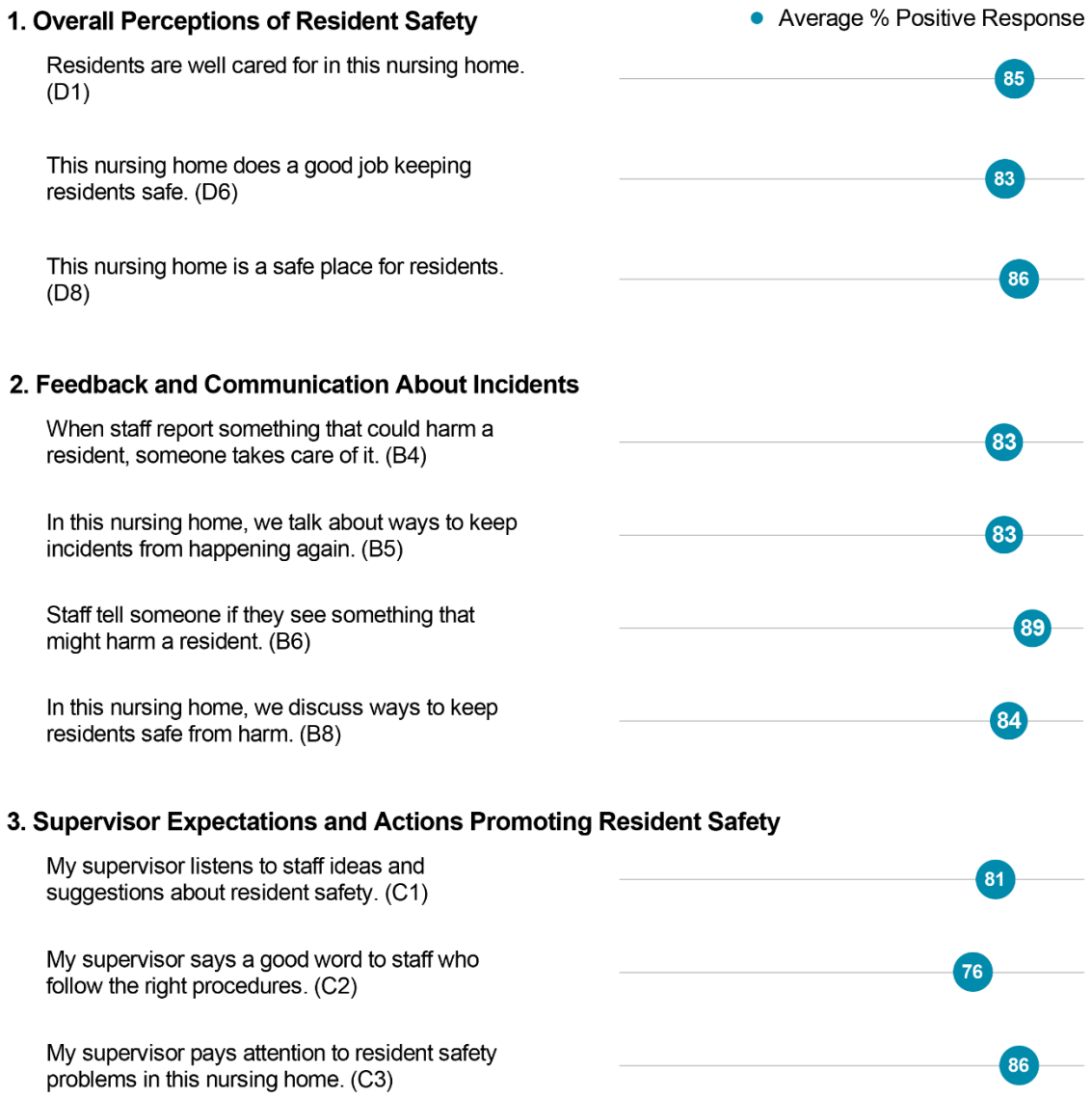
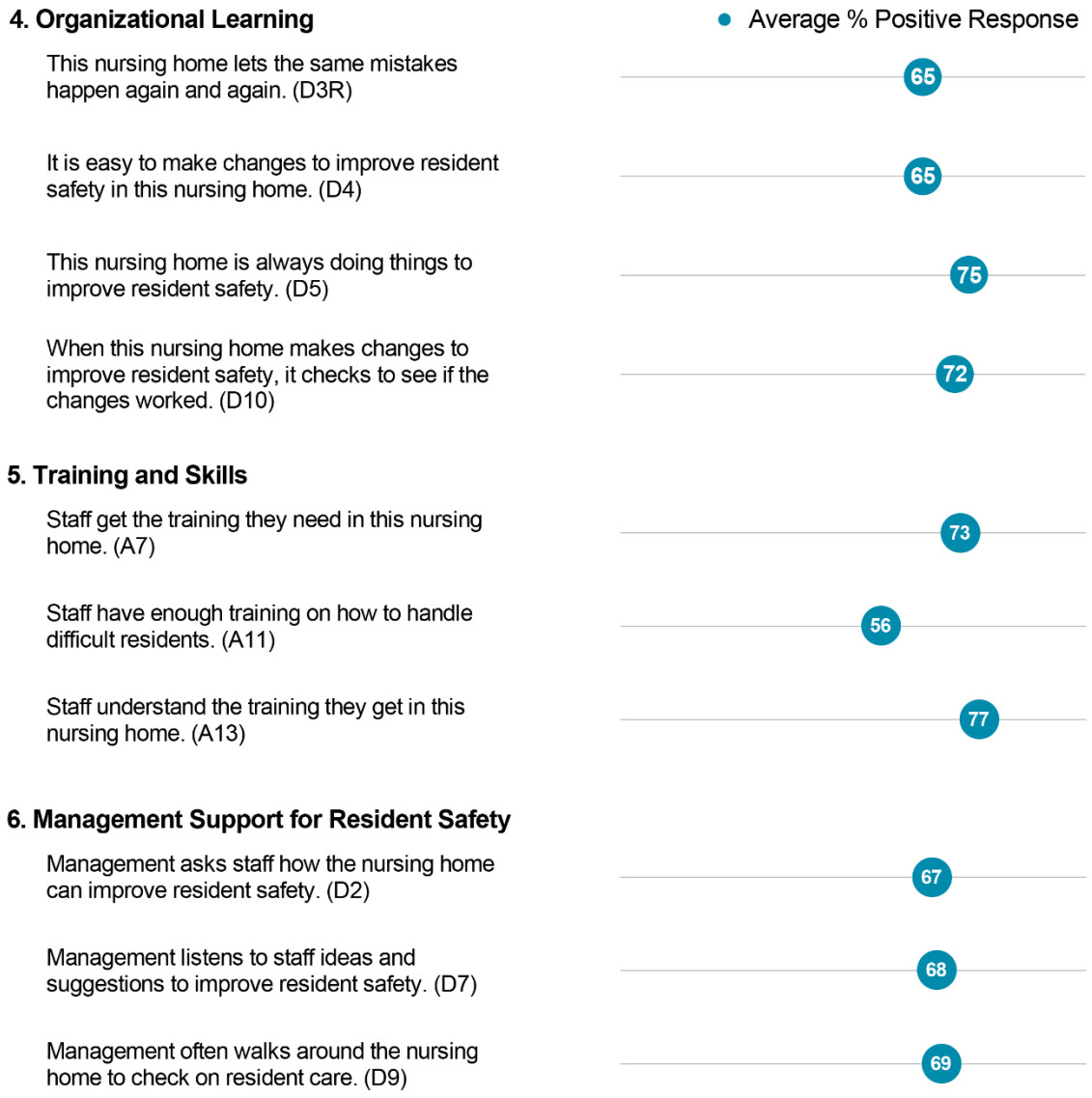


Chart 5-2. Item-Level Average Percent Positive Response—2019 Database Nursing Homes (Page 1 of 4)



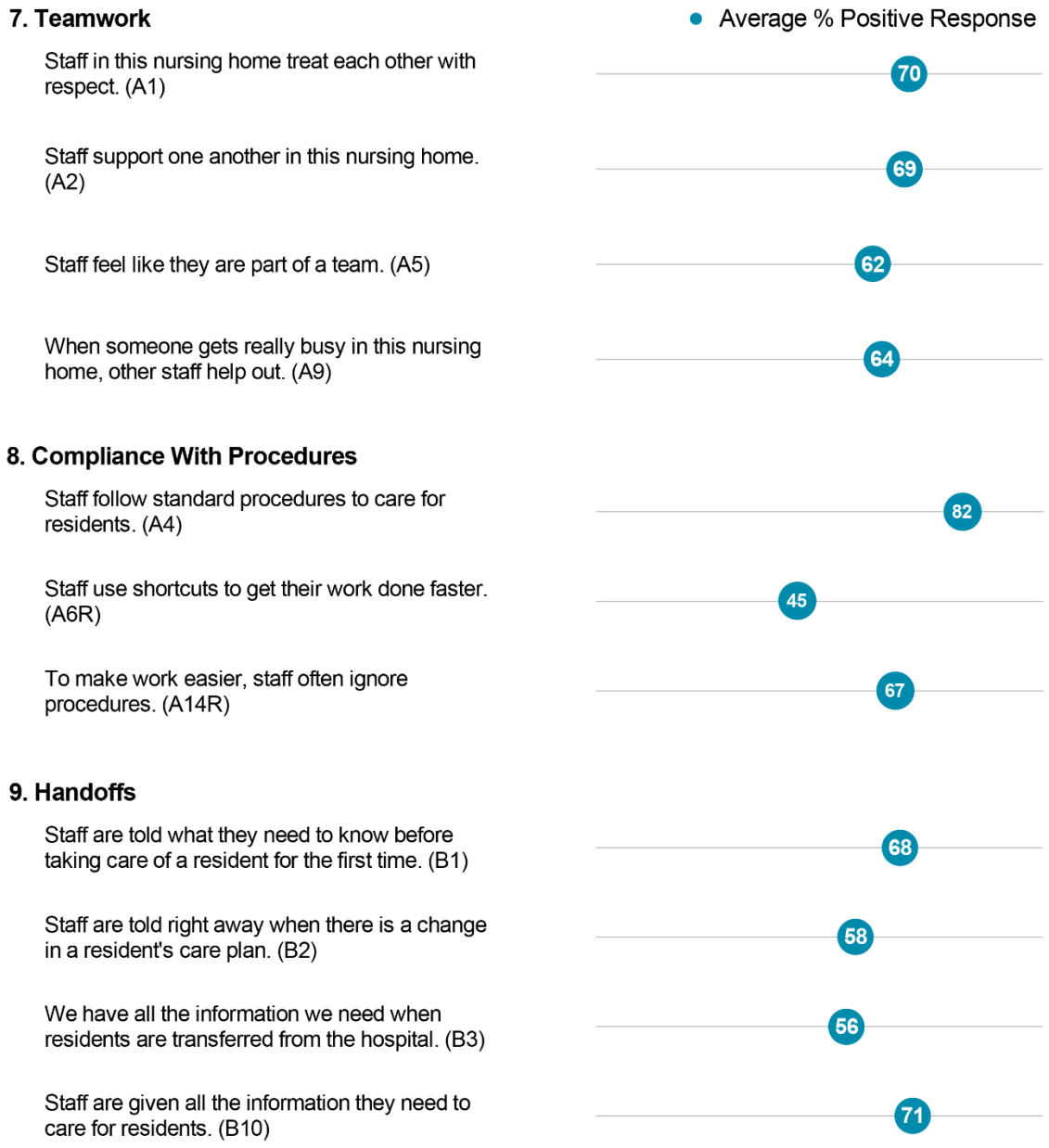
Note: The item's survey location is shown after the item text.

Chart 5-2. Item-Level Average Percent Positive Response—2019 Database Nursing Homes (Page 2 of 4)



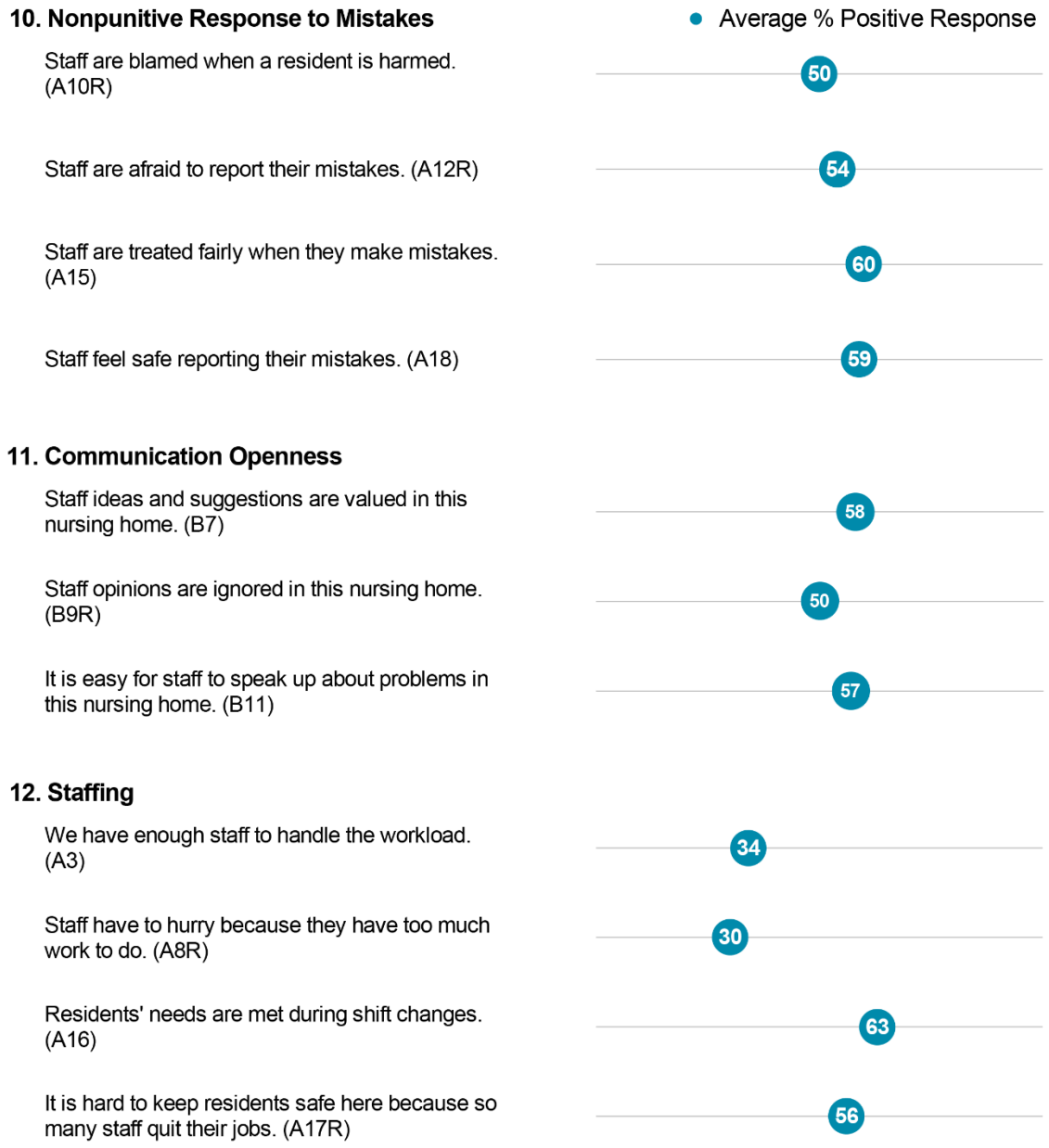
Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Chart 5-2. Item-Level Average Percent Positive Response—2019 Database Nursing Homes (Page 3 of 4)



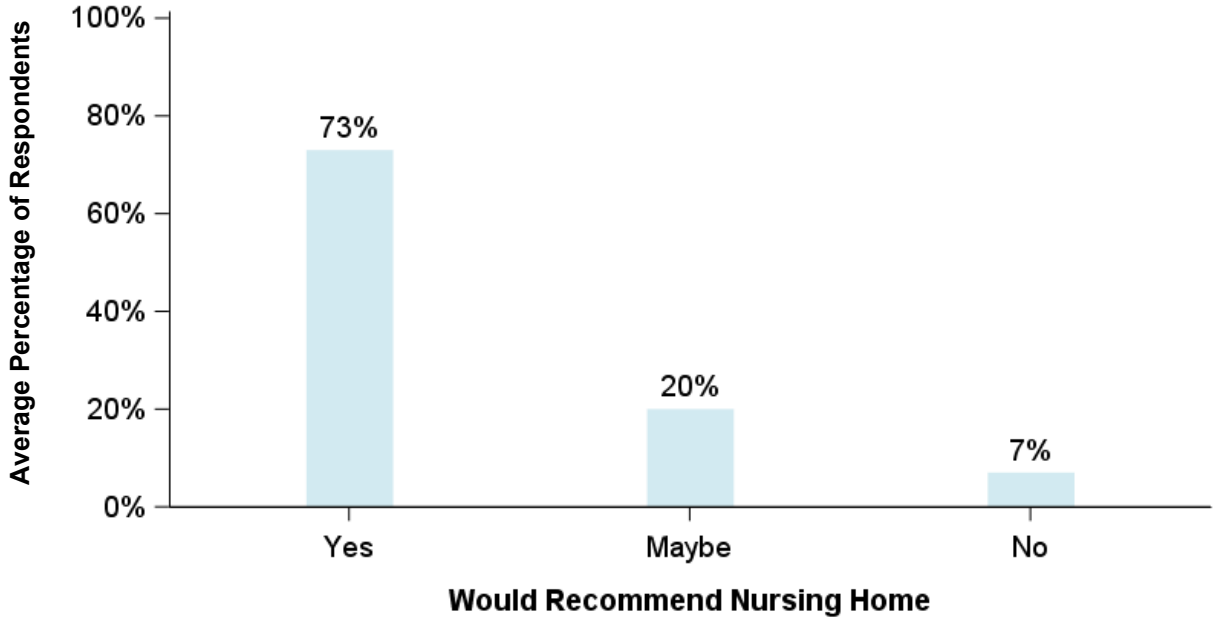
Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Chart 5-2. Item-Level Average Percent Positive Response—2019 Database Nursing Homes (Page 4 of 4)



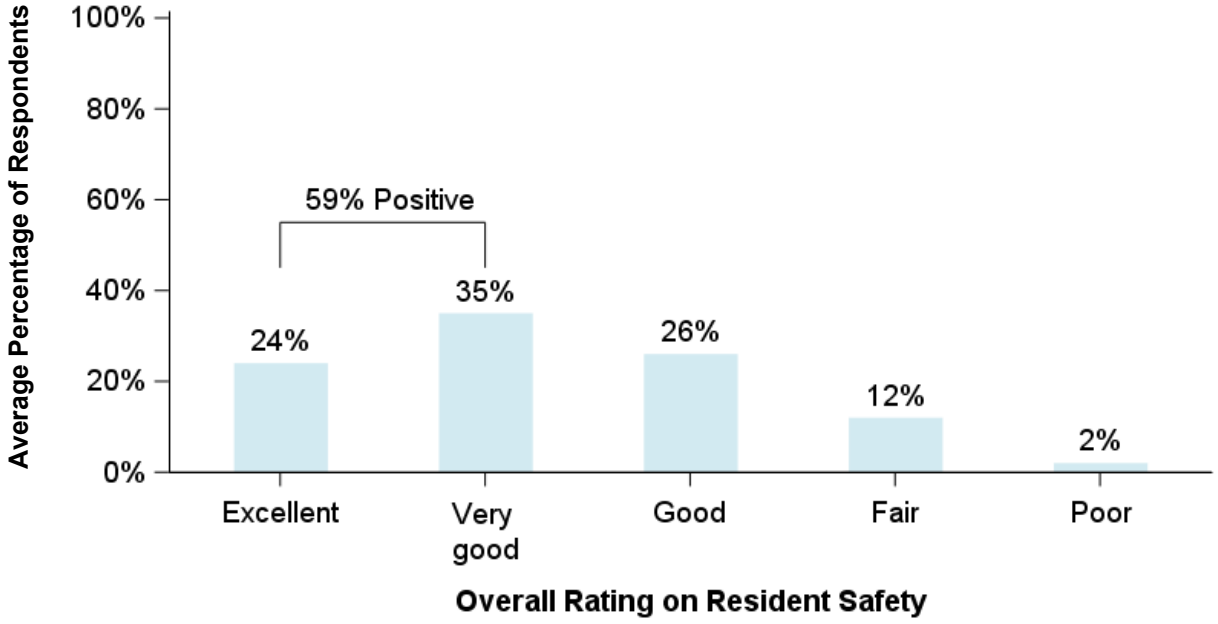
Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Chart 5-3. Average Percentage of 2019 Nursing Home Database Respondents Willing To Recommend Their Nursing Home



Note: Percentages may not add to 100 percent due to rounding.

Chart 5-4. Average Percentage of 2019 Nursing Home Database Respondents Giving Overall Rating on Resident Safety



Note: Percentages may not add to 100 percent due to rounding.

Chapter 6. Comparing Your Results

To compare your nursing home's survey results with the results from the database, you will need to calculate your nursing home's percent positive response on the survey's 12 composite measures and other survey items, including the two questions on willingness to recommend the nursing home and resident safety grade. The Notes section at the end of this report describes how to calculate these percent positive scores, as well as a number of other statistics to facilitate comparisons with the nursing home database. You can then compare your nursing home's results with the database averages and examine the percentile scores to place your nursing home's results relative to the distribution of database nursing homes.

When comparing your nursing home's results with results from the database, keep in mind that the database only provides *relative* comparisons. Even though your nursing home's survey results may be better than the database statistics, you may still believe there is room for improvement in a particular area within your nursing home in an *absolute* sense.

As you will notice from the database results, there are some patient safety composite measures that even the highest scoring nursing homes could improve upon. Therefore, the data provided in this report should be used to supplement your nursing home's own efforts to identify areas of strength and areas on which to focus patient safety culture improvement efforts.

Highlights

- The *Handoffs*, *Communication Openness*, and *Nonpunitive Response to Mistakes* composite measures showed the largest variability across nursing homes, ranging from 21 percent to 97 percent; from 21 percent to 96 percent; and from 19 percent to 93 percent, respectively.
- Willingness to recommend one's nursing home also had a wide range of responses, with a minimum of 0 percent and a maximum of 100 percent.
- Overall rating on resident safety showed a wide range of responses as well, from 12 percent giving their unit a rating of "Excellent" or "Very good" to 100 percent.

Composite- and Item-Level Tables

Table 6-1 presents statistics (average percent positive and standard deviation, minimum and maximum scores, and percentiles) for each of the 12 patient safety culture composite measures.

Table 6-2 presents statistics for each of the 42 survey items. The survey items are grouped by the patient safety culture composite measure they are intended to assess. Within each composite measure, the items are presented in the order in which they appear in the survey.

Table 6-3 presents statistics for respondent's willingness to recommend their nursing home. Results are presented for respondents who would tell friends that the nursing home is safe for their family.

Table 6-4 presents statistics for respondent's overall rating of resident safety. Results are presented for respondents who gave the nursing home an overall rating on resident safety of "Excellent" or "Very good."

Table 6-1. Composite-Level Results - 2019 Database Nursing Homes

Patient Safety Culture Composite Measures	Average % Positive	s.d.	Composite Average % Positive Response: Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Overall Perceptions of Resident Safety	85%	11.38%	50%	71%	78%	87%	94%	98%	100%
2. Feedback and Communication About Incidents	85%	9.39%	54%	72%	79%	86%	92%	96%	100%
3. Supervisor Expectations and Actions Promoting Resident Safety	81%	10.46%	52%	67%	74%	82%	89%	94%	100%
4. Organizational Learning	69%	13.73%	38%	53%	60%	69%	79%	88%	100%
5. Training and Skills	69%	13.76%	29%	50%	59%	69%	79%	87%	100%
6. Management Support for Resident Safety	68%	13.79%	33%	48%	58%	69%	78%	86%	100%
7. Teamwork	66%	14.88%	29%	48%	55%	67%	76%	86%	100%
8. Compliance With Procedures	65%	13.47%	32%	48%	55%	64%	74%	83%	97%
9. Handoffs	63%	14.36%	21%	46%	53%	62%	74%	84%	97%
10. Nonpunitive Response to Mistakes	56%	14.35%	19%	37%	45%	56%	65%	77%	93%
11. Communication Openness	55%	14.98%	21%	37%	44%	54%	64%	76%	96%
12. Staffing	46%	14.95%	17%	28%	35%	44%	56%	67%	86%

Table 6-2. Item-Level Results - 2019 Database Nursing Homes (Page 1 of 4)

Survey Items By Patient Safety Culture Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Overall Perceptions of Resident Safety									
Residents are well cared for in this nursing home. (D1)	85%	12.26%	44%	70%	78%	89%	94%	100%	100%
This nursing home does a good job keeping residents safe. (D6)	83%	12.18%	47%	69%	76%	86%	93%	97%	100%
This nursing home is a safe place for residents. (D8)	86%	11.25%	50%	71%	80%	89%	95%	98%	100%
2. Feedback and Communication About Incidents									
When staff report something that could harm a resident, someone takes care of it. (B4)	83%	10.46%	46%	69%	76%	84%	91%	95%	100%
In this nursing home, we talk about ways to keep incidents from happening again. (B5)	83%	11.48%	38%	67%	77%	85%	92%	97%	100%
Staff tell someone if they see something that might harm a resident. (B6)	89%	8.69%	45%	77%	84%	90%	95%	98%	100%
In this nursing home, we discuss ways to keep residents safe from harm. (B8)	84%	11.11%	36%	70%	78%	87%	92%	97%	100%
3. Supervisor Expectations and Actions Promoting Resident Safety									
My supervisor listens to staff ideas and suggestions about resident safety. (C1)	81%	10.99%	55%	63%	72%	83%	89%	94%	100%
My supervisor says a good word to staff who follow the right procedures. (C2)	76%	12.48%	37%	59%	69%	78%	85%	92%	100%
My supervisor pays attention to safety problems in this nursing home. (C3)	86%	10.04%	57%	71%	80%	89%	94%	97%	100%

Note: The item's survey location is shown after the item text.

Table 6-2. Item-Level Results - 2019 Database Nursing Homes (Page 2 of 4)

Survey Items By Patient Safety Culture Composite	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
4. Organizational Learning									
This nursing home lets the same mistakes happen again and again. (D3R)	65%	16.69%	11%	45%	55%	66%	76%	88%	100%
It is easy to make changes to improve resident safety in this nursing home. (D4)	65%	14.78%	24%	47%	53%	64%	76%	84%	100%
This nursing home is always doing things to improve resident safety. (D5)	75%	14.42%	42%	55%	66%	75%	86%	93%	100%
When this nursing home makes changes to improve resident safety, it checks to see if the changes worked. (D10)	72%	14.33%	31%	53%	62%	70%	84%	91%	100%
5. Training and Skills									
Staff get the training they need in this nursing home. (A7)	73%	14.78%	33%	51%	62%	74%	84%	91%	100%
Staff have enough training on how to handle difficult residents. (A11)	56%	17.10%	9%	34%	45%	56%	67%	79%	100%
Staff understand the training they get in this nursing home. (A13)	77%	12.76%	31%	61%	70%	78%	87%	93%	100%
6. Management Support for Resident Safety									
Management asks staff how the nursing home can improve resident safety. (D2)	67%	14.44%	30%	47%	58%	67%	78%	86%	100%
Management listens to staff ideas and suggestions to improve resident safety. (D7)	68%	14.79%	32%	48%	58%	68%	78%	88%	100%
Management often walks around the nursing home to check on resident care. (D9)	69%	16.53%	11%	47%	59%	70%	82%	88%	100%

Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Table 6-2 Item-Level Results - 2019 Database Nursing Homes (Page 3 of 4)

Survey Items By Patient Safety Culture Composite	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
7. Teamwork									
Staff in this nursing home treat each other with respect. (A1)	70%	16.65%	4%	49%	60%	71%	82%	91%	100%
Staff support one another in this nursing home. (A2)	69%	15.89%	29%	48%	58%	71%	79%	91%	100%
Staff feel like they are part of a team. (A5)	62%	16.78%	20%	40%	50%	62%	73%	84%	100%
When someone gets really busy in this nursing home, other staff help out. (A9)	64%	14.39%	20%	46%	54%	64%	72%	82%	100%
8. Compliance With Procedures									
Staff follow standard procedures to care for residents. (A4)	82%	11.89%	40%	67%	74%	83%	91%	96%	100%
Staff use shortcuts to get their work done faster. (A6R)	45%	16.78%	7%	25%	34%	43%	57%	70%	92%
To make work easier, staff often ignore procedures. (A14R)	67%	15.11%	22%	49%	57%	67%	77%	87%	100%
9. Handoffs									
Staff are told what they need to know before taking care of a resident for the first time. (B1)	68%	15.13%	24%	46%	57%	68%	78%	88%	100%
Staff are told right away when there is a change in a resident's care plan. (B2)	58%	16.41%	10%	38%	45%	57%	71%	81%	100%
We have all the information we need when residents are transferred from the hospital. (B3)	56%	16.61%	12%	36%	45%	53%	67%	80%	91%
Staff are given all the information they need to care for residents. (B10)	71%	14.27%	33%	52%	61%	72%	81%	90%	100%

Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Table 6-2. Item-Level Results - 2019 Database Nursing Homes (Page 4 of 4)

Survey Items By Patient Safety Culture Composite	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
10. Nonpunitive Response to Mistakes									
Staff are blamed when a resident is harmed. (A10R)	50%	15.78%	14%	29%	40%	49%	60%	71%	87%
Staff are afraid to report their mistakes. (A12R)	54%	16.42%	18%	34%	43%	53%	66%	75%	93%
Staff are treated fairly when they make mistakes. (A15)	60%	14.63%	18%	41%	52%	59%	71%	80%	100%
Staff feel safe reporting their mistakes. (A18)	59%	16.15%	20%	37%	47%	59%	69%	81%	100%
11. Communication Openness									
Staff ideas and suggestions are valued in this nursing home. (B7)	58%	15.17%	27%	39%	47%	58%	69%	79%	100%
Staff opinions are ignored in this nursing home. (B9R)	50%	16.51%	0%	30%	37%	50%	60%	74%	93%
It is easy for staff to speak up about problems in this nursing home. (B11)	57%	15.53%	8%	38%	47%	57%	67%	77%	100%
12. Staffing									
We have enough staff to handle the workload. (A3)	34%	18.86%	3%	11%	19%	31%	44%	59%	100%
Staff have to hurry because they have too much work to do. (A8R)	30%	16.13%	4%	11%	17%	26%	39%	54%	73%
Residents' needs are met during shift changes. (A16)	63%	16.89%	7%	42%	52%	63%	75%	84%	100%
It is hard to keep residents safe here because so many staff quit their jobs. (A17)	56%	17.31%	18%	33%	43%	57%	70%	79%	94%

Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response category used for the item).

Table 6-3. Percentage of Respondents Willing To Recommend Nursing Home—2019 Database Nursing Homes

				Percentage of Responses						
Item	Willingness To Recommend Nursing Home	Average % Positive	s.d.	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
E1	**Yes**	73%	16.73%	0%	50%	65%	75%	86%	93%	100%

Note: For the full distribution of results, see Chart 5-3.

Table 6-4. Percentage of Respondents Giving Their Nursing Home an Overall Rating on Resident Safety of Excellent or Very Good—2019 Database Nursing Homes

				Percentage of Responses						
Item	Overall Rating on Resident Safety	Average % Positive	s.d.	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
E2	**Excellent/Very good**	59%	18.57%	12%	34%	45%	58%	71%	84%	100%

Note: For the full distribution of results, see Chart 5-4.

Chapter 7. What's Next? Action Planning for Improvement

The AHRQ Surveys on Patient Safety Culture are important sources of information for health care organizations striving to improve patient safety and can be used as an effective starting point for action planning to achieve changes in culture. Organizations may find it useful to brainstorm the potential barriers that make it difficult to implement initiatives and strategies to overcome them.

AHRQ Action Planning Tool

The *Action Planning Tool for the AHRQ Surveys on Patient Safety Culture* is intended for use after your organization administers the survey and analyzes the results. The first step toward improving the patient safety culture in your organization, facility, unit, or department is to develop an action plan using the Action Plan Template. You can develop a plan by answering 10 key questions to help you record your goals, initiatives, resources needed, process and outcome measures, and timelines.

Define your goals and select your initiatives:

1. What areas do you want to focus on for improvement?
2. What are your goals?
3. What initiatives will you implement?

Plan your initiatives:

1. Whom will be affected, and how?
2. Who can lead the initiative?
3. What resources will you need?
4. What are possible barriers, and how can you overcome them?
5. How will you measure progress and success?
6. What is the timeline?

Communicate your action plan:

1. How will you share your action plan and with whom?

Your action plan should be flexible. You do not need to answer the questions in order. Keep in mind that as you begin to implement your plan, it may change. The complete Action Planning Tool, including the template in Microsoft® Word, can be found here: https://www.ahrq.gov/sops/resources/planning-tool/index.html.

Resource List for Users of the AHRQ Nursing Home Survey

The AHRQ *Resource List for Users of the AHRQ Nursing Home Survey on Patient Safety Culture* contains references to websites that provide practical resources nursing homes can use to implement changes to improve patient safety culture and patient safety. The resource list is not exhaustive but gives initial guidance to nursing homes looking for information about patient safety initiatives.

References

Action planning tool for the AHRQ Surveys on Patient Safety Culture. Rockville, MD: Agency for Healthcare Research and Quality; February 2018. AHRQ Publication No. 16-0008-EF. https://www.ahrq.gov/sops/resources/planning-tool/index.html. Accessed January 17, 2019.

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Notes: Description of Data Cleaning, Calculations, and Data Limitations

This section provides additional detail regarding data calculations and data limitations.

Data Cleaning

Each participating nursing home submitted respondent-level survey data. Once the data were submitted, response frequencies were run on each nursing home's data to look for out-of-range values, missing variables, or other data anomalies. When data problems were found, nursing homes were contacted and asked to make corrections and resubmit their data. In addition, each participating nursing home received a copy of its data frequencies to verify that the dataset received was correct. Nursing homes were not required to submit data for all the background characteristic questions.

The data were also cleaned for straight-lined answers, which is when respondents give the same answer for both a positively worded item (such as, "This nursing home does a good job keeping residents safe") and a negatively worded item (such as, "This nursing home lets the same mistakes happen again and again") in the same section of the survey. Positively worded and negatively worded items are in sections A, B, and D. When respondents supplied the same answers for all items in sections A, B, and D, the items in those sections were set to missing because the sections had negatively worded items.

After this initial cleaning, respondents with missing values across sections A, B, and D were deleted before analyses. Respondents who supplied "Don't know" answers or who had missing answers to all items across sections A, B, C, D, and E were also deleted before analysis. Nursing homes were included in the database only if they had at least 10 survey respondents after all data cleaning steps.

Response Rates

As part of the data submission process, nursing homes were asked to provide the number of completed, returned surveys (numerator) as well as the total number of surveys distributed minus the ineligibles (denominator). If survey responses were removed based on data cleaning, the numerator was updated based on remaining responses for that nursing home. Ineligibles include deceased individuals or those who were no longer employed at the nursing home during data collection. Response rates were then calculated using the formula below:

$$Response\ Rate = \frac{\text{Number of complete, returned surveys}}{\text{Number of surveys distributed } - \text{Ineligibles}}$$

Calculation of Percent Positive Scores

Most of the survey's items ask respondents to answer using 5-point response categories in terms of agreement (Strongly agree, Agree, Neither, Disagree, Strongly disagree) or frequency (Always, Most of the time, Sometimes, Rarely, Never). Three of the 12 patient safety culture composites use the frequency response option (*Handoffs, Feedback and Communication About Incidents*, and *Communication Openness*) while the other nine composites use the agreement response option.

Item-Level Percent Positive Response

Both positively worded items (such as "Staff support one another in this nursing home") and negatively worded items (such as "Staff use shortcuts to get their work done faster") are included in the survey. Calculating the percent positive response on an item is different for positively and negatively worded items:

- **For positively worded items**, percent positive response is the combined percentage of respondents within a nursing home who answered "Strongly agree" or "Agree," or "Always" or "Most of the time," depending on the response categories used for the item.

  For example, for the item "Staff support one another in this nursing home," if 50 percent of respondents within a nursing home *Strongly agree* and 25 percent *Agree*, the item-level percent positive response for that nursing home is 50% + 25%= 75% positive.
- **For negatively worded items**, percent positive response is the combined percentage of respondents within a nursing home who answered "Strongly disagree" or "Disagree," or "Never" or "Rarely," because a *negative* answer on a negatively worded item indicates a *positive* response.

  For example, for the item "Staff use shortcuts to get their work done faster," if 60 percent of respondents within a nursing home "Strongly disagree" and 20 percent "Disagree," the item-level percent positive response is 80 percent (i.e., 80 percent of respondents *do not* believe staff use shortcuts to get their work done faster).

Composite-Level Percent Positive Response

The 12 patient safety culture composites are composed of three or four survey items. Composite scores were calculated for each nursing home by averaging the percent positive response on the items within a composite. For example, for a 3-item composite, if the item-level percent positive responses were 50 percent, 55 percent, and 60 percent, the nursing home's composite-level percent positive response would be the average of these three percentages, or 55 percent positive.

Item and Composite Measure Percent Positive Scores

The average percent positive scores for each of the 12 patient safety culture composite measures and for the 42 survey items were calculated by averaging composite-level percent positive scores across all nursing homes in the database, as well as averaging item-level percent positive scores across nursing homes. Since the percent positive is displayed as an overall average, scores from each nursing home are weighted equally in their contribution to the calculation of the average.

To calculate your nursing home's composite score, average the percentage of positive response to each item in the composite measure. Table N1 shows an example of computing a composite-level score for *Nonpunitive Response to Mistakes*:

1. This composite measure has four items. Two are positively worded (items A15 and A18) and two are negatively worded (items A10 and A12). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.
2. Calculate the percentage of positive responses at the item level (see example in Table N1).

Table N1. Example of Computing Item and Composite-Level Percent Positive Scores

Four Items Measuring "Nonpunitive Response to Mistakes"	For Positively Worded Items, Count the # of "Strongly agree" or "Agree" Responses	For Negatively Worded Items, Count the # of "Strongly disagree" or "Disagree" Responses	Total # of Responses to the Item	Percent Positive Response on Item
Item A10 - negatively worded "Staff are blamed when a resident is harmed."	NA*	120	260	120/260=46%
Item A12 - negatively worded "Staff are afraid to report their mistakes."	NA*	130	250	130/250=52%
Item A15 - positively worded "Staff are treated fairly when they make mistakes."	110	NA*	240	110/240=46%
Item A18 - positively worded "Staff feel safe reporting their mistakes."	140	NA*	250	140/250= 56%
	Composite Score % Positive = (46% + 52% + 46% + 56%)/4 = **50%**			

*NA = Not applicable.

This example includes four items, with percent positive response scores of 46 percent, 52 percent, 46 percent, and 56 percent. Averaging these item-level percent positive scores results in a composite score of .50 or 50 percent on *Nonpunitive Response to Mistakes*. In this example, an average of about 50 percent of the respondents responded positively to the survey items in this composite.

Once you calculate your nursing home's percent positive response for each of the 12 patient safety culture composite measures, you can compare your results with the composite-level results from all of the database nursing homes.

Statistically "Significant" Differences Between Scores

You may be interested in determining the statistical significance of differences between your scores and the averages in the database, or between scores in various breakout categories (nursing home bed size, ownership, etc.). Statistical significance is greatly influenced by sample size; as the number of observations in comparison groups increases, small differences in scores become statistically significant. While a 1 percentage point difference between percent positive scores might be "statistically" significant (that is, not due to chance), the difference is not likely to be meaningful or "practically" significant.

Keep in mind that statistically significant differences are not always important, and nonsignificant differences are not always trivial. We provide the average, standard deviation, range, and percentile information so that you can compare your data with the database in different ways.

Standard Deviation

The standard deviation (s.d.), a measure of the spread or variability of nursing home scores around the average, displayed in Chapter 6, tells you the extent to which nursing homes' scores differ from the average:

- If scores from all nursing homes were exactly the same, the average would represent all their scores perfectly and the standard deviation would be zero.
- If scores from all nursing homes were very close to the average, the standard deviation would be small and close to zero.
- If scores from many nursing homes were very different from the average, the standard deviation would be a large number.

When the distribution of nursing home scores follows a normal, bell-shaped curve (where most of the scores fall in the middle of the distribution, with fewer scores at the lower and higher ends of the distribution), the average, plus or minus the standard deviation, will include about 68 percent of all nursing home scores. For example, if an average percent positive score across the database nursing homes were 70 percent with a standard deviation of 10 percent (and scores were normally distributed), about 68 percent of all the database nursing homes would have scores between 60 percent and 80 percent.

Minimum and Maximum Scores

The minimum (lowest) and maximum (highest) percent positive scores are presented for each composite and item. These scores provide information about the range of percent positive scores obtained by nursing homes in the database and are actual scores from the lowest and highest scoring nursing homes. When comparing with the minimum and maximum scores, keep in mind that these scores may represent nursing homes that are extreme outliers (indicated by large differences between the minimum score and the 10th percentile score, or between the 90th percentile score and the maximum score).

Percentiles

Percentiles provide information about the distribution of nursing home scores. A specific percentile score shows the percentage of nursing homes that scored at or below a particular score.

Percentiles were computed using the SAS® Software default method. The first step in this procedure is to rank order the percent positive scores from all the participating nursing homes, from lowest to highest. The next step is to multiply the number of nursing homes (n) by the percentile of interest (p), which in our case would be the 10th, 25th, 50th, 75th, or 90th percentile.

For example, to calculate the 10th percentile, one would multiply 191 (the total number of nursing homes) by .10 (10th percentile). The product of n x p is equal to "j+g" where "j" is the integer and "g" is the number after the decimal. If "g" equals 0, the percentile is equal to the percent positive value of the nursing home in the jth position plus the percent positive value of the nursing home in the jth +1 position, divided by 2 $[(X_{(j)} + X_{(j+1)})/2]$. If "g" is not equal to 0, the percentile is equal to the percent positive value of the nursing home in the jth +1 position.

The following examples show how the 10th and 50th percentiles would be computed using a sample of percent positive scores from 12 nursing homes (using fake data shown in Table N2). First, the percent positive scores are sorted from low to high on Composite "A."

Table N2. Data Table for Example of How To Compute Percentiles

Nursing Home	Composite "A" % Positive Score	
1	33%	
2	48%	←10th percentile score = 48%
3	52%	
4	60%	
5	63%	
6	64%	←50th percentile score = 65%
7	66%	
8	70%	
9	72%	
10	75%	
11	75%	
12	78%	

10th percentile

1. For the 10th percentile, we would first multiply the number of nursing homes by 0.10: (n x p = 12 x 0.10 = 1.2).
2. The product of n x p = 1.2, where "j" = 1 and "g" = 2. Since "g" is not equal to 0, the 10th percentile score is equal to the percent positive value of the nursing home in the jth +1 position:

   a. "j" equals 1.
   b. The 10th percentile equals the value for the nursing home in the 2nd position = 48%.

50th percentile

1. For the 50th percentile, we would first multiply the number of nursing homes by 0.50: (n x p = 12 x 0.50 = 6.0).
2. The product of n x p = 6.0, where "j" = 6 and "g" = 0. Since "g" = 0, the 50th percentile score is equal to the percent positive value of the nursing home in the jth position plus the percent positive value of the nursing home in the jth +1 position, divided by 2:

   a. "j" equals 6.
   b. The 50th percentile equals the average of the nursing homes in the 6th and 7th positions (64%+66%)/2 = 65%.

When the distribution of nursing home scores follows a normal bell-shaped curve (where most of the scores fall in the middle of the distribution with fewer scores at the lower and higher ends of the distribution), the 50th percentile, or median, will be very similar to the average score. Table N3 provides an interpretation of the percentile scores.

Table N3. Interpretation of Percentile Scores

Percentile Score	Interpretation
10th percentile This score represents the lowest scoring nursing homes.	10% of the nursing homes scored the same or lower. 90% of the nursing homes scored higher.
25th percentile This score represents lower scoring nursing homes.	25% of the nursing homes scored the same or lower. 75% of the nursing homes scored higher.
50th percentile (or median) This score represents the middle of the distribution of nursing homes.	50% of the nursing homes scored the same or lower. 50% of the nursing homes scored higher.
75th percentile This score represents higher scoring nursing homes.	75% of the nursing homes scored the same or lower. 25% of the nursing homes scored higher.
90th percentile This score represents the highest scoring nursing homes.	90% of the nursing homes scored the same or lower. 10% of the nursing homes scored higher.

To compare with the database percentiles, compare your nursing home's percent positive scores with the percentile scores for each composite and item. See examples in Table N4.

Table N4. Sample Percentile Statistics

	Survey Item % Positive Response						
Survey Item	**Min**	**10th %ile**	**25th %ile**	**Median/ 50th %ile**	**75th %ile**	**90th %ile**	**Max**
Item 1	8%	10%	25%	35%	49%	62%	96%

If your nursing home's score is 55%, your score falls here:

If your nursing home's score is 65%, your score falls here:

If your nursing home's score is 55 percent positive, it falls above the 75th percentile (but below the 90th), meaning that your nursing home scored higher than at least 75 percent of the nursing homes in the database.

If your nursing home's score is 65 percent positive, it falls above the 90th percentile, meaning your nursing home scored higher than at least 90 percent of the nursing homes in the database.

Data Limitations

The survey results presented in this report represent the largest compilation of nursing home patient safety culture survey data currently available and therefore provide a useful reference for comparison. However, several limitations to these data should be kept in mind.

First, only nursing homes that administered the survey on their own and were willing to submit their data to the database, are included. Thus, the nursing homes that submitted data to the database are not a statistically selected sample of all U.S. nursing homes. However, the characteristics of the database nursing homes are fairly consistent with the distribution of nursing homes in the Centers for Medicare & Medicaid Services Nursing Home Compare database and are described further in Chapter 3.

Second, nursing homes that administered the survey were not required to undergo any training and administered the survey in different ways. Some nursing homes used a paper-only survey, others used web-only surveys, and others used a combination of these two methods to collect the data. It is possible that these different modes could lead to differences in survey responses; further research is needed to determine whether and how different modes affect the results.

In addition, some nursing homes conducted a census, surveying all staff, while others administered the survey to a sample of staff. In cases in which a sample was drawn, no data were obtained to determine the methodology used to draw the sample. Survey administration statistics obtained about the database nursing homes, such as survey administration modes and response rates, are provided in Chapter 2.

Finally, the data nursing homes submitted have been cleaned for out-of-range values (e.g., invalid response values due to data entry errors), straight-lined records in sections A, B, and D, and blank records (where responses to all survey items were missing). In addition, some logic checks were made. Otherwise, data are presented as submitted. No additional attempts were made to verify or audit the accuracy of the data submitted.

Appendixes A and B: Overall Results by Nursing Home and Respondent Characteristics

In addition to the overall results on the database nursing homes presented, Part II of the report presents data tables showing average percent positive scores on the survey composites and items across database nursing homes, broken down by the following nursing home and respondent characteristics.

Appendix A: Results by Nursing Home Characteristics

- Bed size
- Ownership
- Census region

Appendix B: Results by Respondent Characteristics

- Job title
- Work area
- Interaction with residents
- Shift worked most often
- Tenure in nursing home

The breakout tables are included as appendixes because there are a large number of them. Highlights of the findings from the breakout tables in these appendixes are provided on the following pages. The appendixes are available on the web at: https://www.ahrq.gov/sops/databases/nursing-home/index.html.

Highlights From Appendix A: Overall Results by Nursing Home Characteristics

Bed Size (Tables A-1, A-3, A-4)

- Nursing homes with *49 beds or fewer* had the highest average percent positive across all 12 patient safety culture composite measures (71 percent) compared with *200 beds or more* (63 percent).
- Nursing homes with *49 beds or fewer* had the highest average percentage of respondents who were willing to recommend their nursing home (79 percent); nursing homes with *200 beds or more* had the lowest (64 percent).
- Nursing homes with *49 beds or fewer* had the highest average percentage of respondents who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (65 percent); nursing homes with *200 beds or more* had the lowest (44 percent).

Ownership (Tables A-5, A-8)

- *Nonprofit/Government* nursing homes had higher average percent positive scores (5 percentage points or more) on the Training and Skills, Teamwork, Compliance With Procedures, Communication Openness, and Nonpunitive Response to Mistakes composite measures
- *Nonprofit/Government* nursing homes had a higher average percentage of respondents who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (63 percent) than *For Profit* nursing homes (55 percent).

Census Region (A-9, A-11, A12)

- Nursing homes in the *South* had the highest average percent positive response across the patient safety culture composite measures (72 percent); nursing homes in the *Northeast* had the lowest (65 percent).
- Nursing homes in the *South* had the highest average percentage of respondents who were willing to recommend their nursing home (78 percent); nursing homes in the *Midwest* had the lowest (70 percent).
- Nursing homes in the *South* had the highest average percentage of respondents who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (64 percent); nursing homes in the *West* had the lowest (56 percent).

Highlights From Appendix B: Overall Results by Respondent Characteristics

Job Title (Tables B-1, B-3, B-4)

- *Administrators/Managers* had the highest average percent positive response across the patient safety culture composite measures (79 percent); *Nursing Assistants/Aides* had the lowest (64 percent).
- *Administrators/Managers* had the highest average percentage of respondents who were willing to recommend their nursing home (88 percent); *Physicians/Other Providers and Nursing Assistants/Aides* had the lowest (69 percent).
- *Administrators/Managers* had the highest average percentage of respondents who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (78 percent); *Physicians/Other Providers* had the lowest (52 percent).

Work Area (Tables B-5, B-7)

- Both *Rehabilitation units* and *Many different areas or units/No specific areas or units* had higher average percent positive scores (5 percentage points or more) on the Communication Openness composite measure.
- *Rehabilitation units* had higher average percent positive scores (7 percentage points) on the Supervisor Expectations and Actions Promoting Resident Safety composite measure than *Alzheimer's/Dementia units*.
- *Rehabilitation units* had higher average percent positive scores (6 percentage points) on the Teamwork composite measure compared with *Alzheimer's/Dementia units* and *Skilled Nursing units*.

- *Many different areas or units/No specific areas or units* had a higher average percent positive score compared with *Alzheimer's/Dementia units* (5 percentage points) on the Handoffs composite measure.
- *Rehabilitation units* had the highest average percentage of respondents who were willing to recommend their nursing home (77 percent); those who work in *Alzheimer's/Dementia units* had the lowest (70 percent).

Interaction With Residents (Tables B-9, B-11, B-12)

- Respondents *without* direct interaction with residents had a higher average percent positive response across the patient safety culture composite measures (74 percent) than those *with* direct interaction with residents (66 percent).
- Respondents *without* direct interaction with residents had a higher average percentage of respondents who were willing to recommend their nursing home (81 percent) than respondents *with* direct interaction with residents (72 percent).
- Respondents *without* direct interaction with residents had a higher average percentage of respondents who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (68 percent) than respondents *with* direct interaction with residents (57 percent).

Shift Worked Most Often (Tables B-13, B-15, B-16)

- Respondents working the *day shift* had the highest average percent positive response across the patient safety culture composite measures (70 percent); respondents working the *night shift* had the lowest (63 percent).
- Respondents working the *day shift* had the highest average percentage who were willing to recommend their nursing home (77 percent); respondents working the *night shift* had the lowest (68 percent).
- Respondents working the *day shift* had the highest average percentage who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (64 percent); respondents working the *night shift* had the lowest (53 percent).

Tenure in Nursing Home (Tables B-17, B-19, B-20)

- Respondents who had worked in the nursing home *less than 1 year* had the highest average percent positive responses across the patient safety culture composite measures (74 percent); respondents who had worked in the nursing home *3 to 5 years* had the lowest (64 percent).
- Respondents who had worked in the nursing home *11 years or more* had the highest average percentage who were willing to recommend their nursing home (80 percent); respondents working *3 to 5 years* had the lowest (71 percent).
- Respondents who had worked in their nursing home *less than 1 year* had the highest average percentage who gave their nursing home an overall rating on resident safety of "Excellent" or "Very good" (67 percent); respondents who had worked in their nursing home *3 to 5 years* had the lowest (55 percent).