

SURVEYS ON PATIENT SAFETY CULTURE



Surveys on
Patient Safety
Culture™

Nursing Home Survey: 2023 User Database Report



AHRQ
Agency for Healthcare
Research and Quality

PATIENT
SAFETY

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Surveys on Patient Safety Culture™ (SOPS®) Nursing Home Survey: 2023 User Database Report

Part I

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Overview

Surveys on Patient Safety Culture™

Findings From the 2023 Nursing Home Survey Database



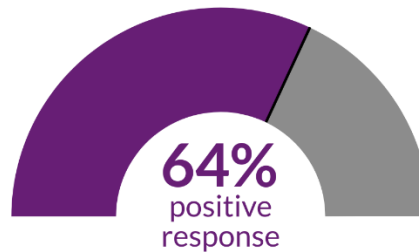
3,224
nursing home staff
respondents

Average Response Rate by Survey Administration Mode



Overall Results

Average percent positive score across
12 composite measures of patient
safety culture



Highest Scoring Composite Measure:

Feedback and Communication About Incidents



83%

reported that staff "always" or "most of the time" 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.

Lowest Scoring Composite Measure:

Staffing



39%

reported they "strongly agree" or "agree" 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.

Composite Measure Average Score by Respondent Characteristics

Shift worked most often

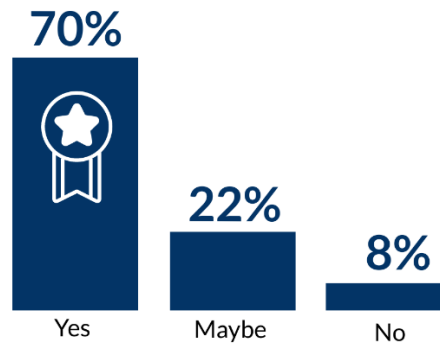


Job title

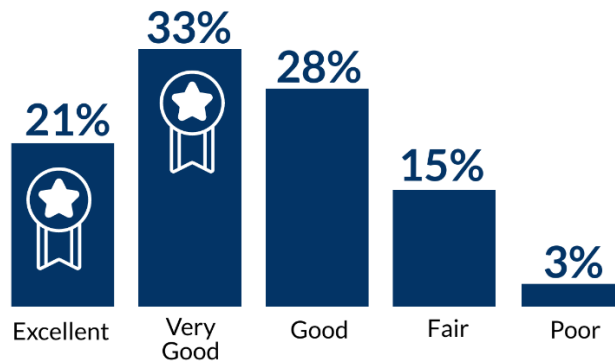


Willingness To Recommend

I would tell friends that this is a safe nursing home for their family.



Overall Rating on Resident Safety



Note: Percentages indicate the database average percent response for each response option.

What's Next? Action planning for patient safety improvement

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/resources/planning-tool/index.html

Purpose and Use of This Report

In response to requests from nursing homes interested in comparing 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 SOPS Nursing Home Survey Database.

The 2023 SOPS Nursing Home User Database Report contains data from 62 nursing homes and includes 3,224 respondents. Participating nursing homes, which include nursing homes that participated in the pilot study of the Workplace Safety Supplemental Item Set, administered the survey between January 2022 and September 2022.

Results from the pilot study of the Workplace Safety Supplemental Item Set for Nursing Homes are available in a separate report.

This report presents statistics (averages, standard deviations, minimum and maximum scores, and percentiles) on the patient safety culture composite measures and items from the SOPS Nursing Home Survey.

In addition to the overall nursing home database results presented in this report, Part II of the report (Appendixes A and B) presents data tables showing results by the following nursing home and respondent characteristics:

Appendix A: Results by Nursing Home Characteristics

- Bed size
- Ownership

Appendix B: Results by Respondent Characteristics

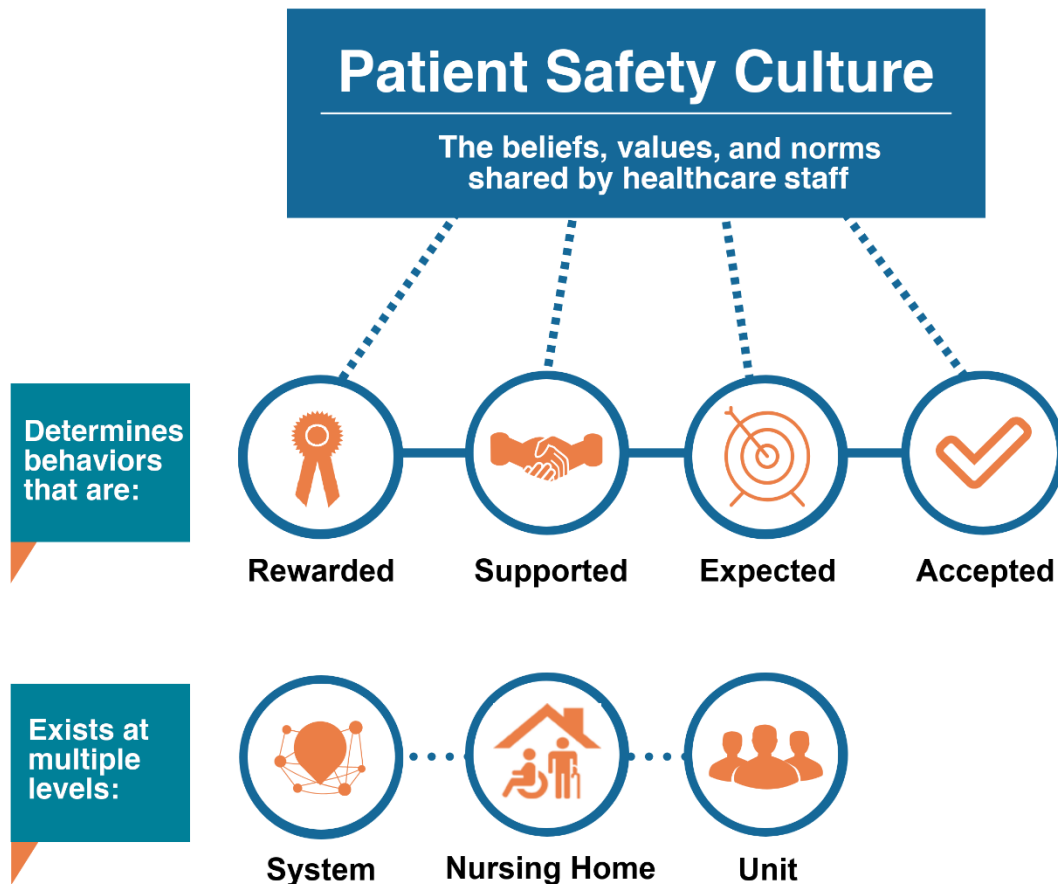
- Job title
- Work area
- Interaction with residents
- Shift worked most often
- Tenure in nursing home

The appendixes in Part II are available online at ahrq.gov/sops/databases/nursinghome.

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).

Figure 1. Definition of Patient Safety Culture



Survey Content

AHRQ funded the development of the SOPS Nursing Home Survey, which includes 42 items that make up 12 composite measures of patient safety culture. Table 1-1 defines each of the 12 SOPS Nursing Home Survey composite measures.

Table 1-1. SOPS Nursing Home Survey Composite Measures and Definitions

SOPS Nursing Home Composite Measures	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.

In addition to items that make up these composite measures, the survey includes two single-item measures asking respondents if 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. Respondents are also asked to provide answers to seven background demographic questions.

2 Survey Administration Statistics

This chapter presents descriptive information on the number of survey respondents, overall and average response rates (Table 2-1), as well as information about how nursing homes administered the survey (Table 2-2) for the 2023 SOPS Nursing Home Database.

Highlights



Table 2-1. Response Rate Statistics—2023 SOPS Nursing Home Database

Overall Response Information		Statistic
Number of respondents		3,224
Number of surveys distributed		8,018
Overall response rate		40%
Average Response Information		Statistic
Average number of respondents per nursing home (range: 10 to 149)		52
Average number of surveys administered per nursing home (range: 24 to 712)		129
Average nursing home response rate (range: 5% to 95%)		49%

Table 2-2. Survey Administration Mode Statistics—2023 SOPS Nursing Home Database

Survey Administration Mode	Nursing Homes		Respondents		Average Response Rate
	Number	Percent	Number	Percent	Percent
Paper only	39	63%	2,023	63%	52%
Web only	23	37%	1,201	37%	45%
Total	62	100%	3,224	100%	--

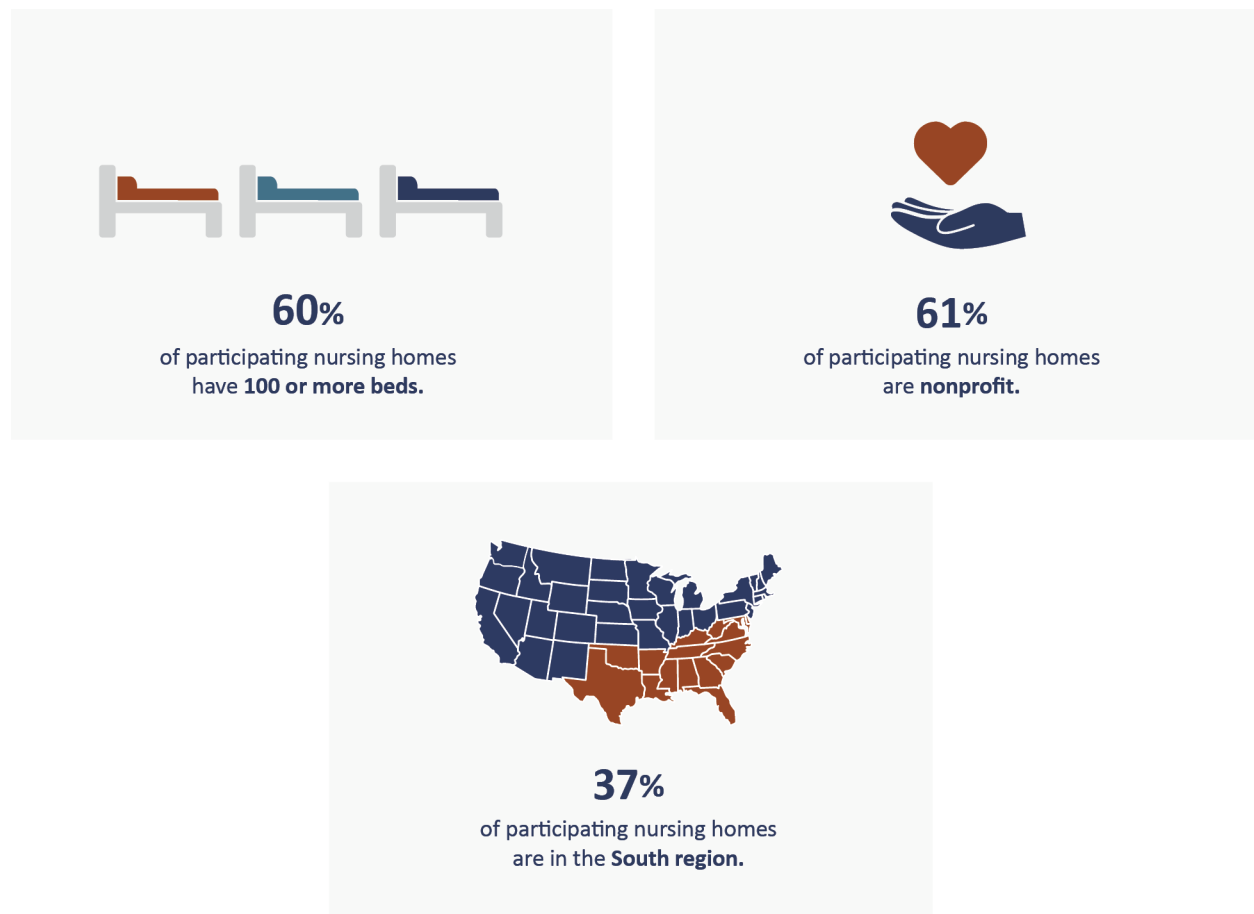
Note: Percentages may not add to 100 due to rounding.

3 Nursing Home Characteristics

This chapter presents information about the characteristics of nursing homes included in the 2023 SOPS Nursing Home Database, including bed size, ownership, and geographic region (Table 3-1).

To provide some context, the characteristics of database nursing homes by bed size, ownership, and geographic region are compared with the distribution of nursing homes included in the Centers for Medicare & Medicaid Services (CMS) Nursing Home Compare database.ⁱ

Highlights



ⁱ CMS Nursing Home Compare data were obtained from Nursing Home Compare, available at <https://data.medicare.gov/data/nursing-home-compare> (accessed December 21, 2022).

Table 3-1. Distribution of 2023 SOPS Nursing Home Database and CMS Nursing Home Compare Nursing Homes by Nursing Home Characteristics

Nursing Home Characteristics	CMS Nursing Home Compare Nursing Homes (n = 15,190)		Database Nursing Homes (n = 62)		Database Respondents (n = 3,224)	
	Number	Percent	Number	Percent	Number	Percent
Bed Size						
1-49	1,835	12%	9	15%	321	10%
50-99	5,804	38%	16	26%	718	22%
100-199	6,677	44%	31	50%	1,615	50%
200 or more	874	6%	6	10%	570	18%
Ownership						
For profit	10,754	71%	16	26%	930	29%
Nonprofit	3,477	23%	38	61%	1,846	57%
Government	959	6%	8	13%	448	14%
Geographic Region						
Northeast	2,494	16%	19	31%	983	30%
Midwest	4,955	33%	16	26%	901	28%
South	5,390	35%	23	37%	1,212	38%
West	2,351	15%	4	6%	128	4%

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

4 Respondent Characteristics

This chapter describes the characteristics of the 3,224 respondents in the 2023 Nursing Home Database.

Highlights



Largest two respondent job titles

28% Nursing Assistant/Aide
18% Licensed Nurse (RN, LPN, Wound Care Nurse)



75% of respondents work day shift.



26% of respondents have worked in their nursing home **11 years or more**.



54% of respondents work **25 to 40 hours per week** in their nursing home.



66% of respondents have direct interaction with residents.

**Table 4-1. Distribution of 2023 SOPS Nursing Home Database by Respondent Characteristics
(Page 1 of 2)**

Respondent Characteristics	Respondents	
	Number	Percent
Job Title		
Nursing assistant/aide	842	28%
Licensed nurse	539	18%
Support staff	512	17%
Administrator/manager	345	12%
Direct care staff	335	11%
Administrative support staff	255	9%
Other job title	96	3%
Other provider	39	1%
Physician	7	<1%
Total	2,970	100%
Missing	254	--
Overall Total	3,224	--
Work Area	Number	Percent
Many different areas/no specific area or unit	1,370	47%
Skilled nursing unit	576	20%
Other work area or unit	569	20%
Alzheimer's/dementia unit	205	7%
Rehab unit	192	7%
Total	2,912	100%
Missing	312	--
Overall Total	3,224	--
Interaction with Residents	Number	Percent
YES, I work directly with residents most of the time	2,003	66%
NO, I do NOT work directly with residents most of the time	1,017	34%
Total	3,020	100%
Missing	204	--
Overall Total	3,224	--
Hours Worked Per Week	Number	Percent
15 or fewer	122	4%
16 to 24	254	8%
25 to 40	1,622	54%
More than 40	1,021	34%
Total	3,019	100%
Missing	205	--
Overall Total	3,224	--

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

**Table 4-1. Distribution of 2023 SOPS Nursing Home Database by Respondent Characteristics
(Page 2 of 2)**

Respondent Characteristics	Respondents	
	Number	Percent
Shift Worked Most Often		
Days	2,208	75%
Evenings	404	14%
Nights	343	12%
Total	2,955	100%
Missing	269	--
Overall Total	3,224	--
Tenure in Nursing Home	Number	Percent
Less than 1 year	603	20%
1 to 2 years	529	18%
3 to 5 years	608	20%
6 to 10 years	489	16%
11 years or more	785	26%
Total	3,014	100%
Missing	210	--
Overall Total	3,224	--
Staffing Agency Status	Number	Percent
Paid by a staffing agency	143	5%
Not paid by a staffing agency	2,869	95%
Total	3,012	100%
Missing	212	--
Overall Total	3,224	--

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

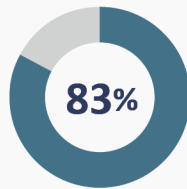
5 Overall Results

This chapter presents overall findings for the 2023 SOPS Nursing Home Database. We present the average percentage of positive responses for each of the survey’s composite measures and items, summarized for all nursing homes. Reporting the average for all nursing homes ensures each nursing home’s scores receive equal weight, regardless of the nursing home’s size. An alternative method would be to report the percentage of positive responses summarized for all respondents, but this method would give greater weight to those nursing homes with a larger number of staff. Reporting the data at the nursing home level, rather than respondent level, is important because culture is considered a group characteristic, not an individual characteristic.

Highlights

HIGHEST Scoring Composite Measure

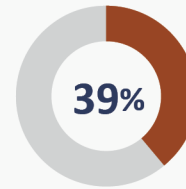
Feedback and Communication About Incidents



of respondents reported that staff “always” or “most of the time” 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.

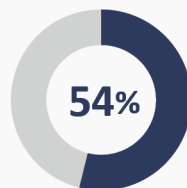
LOWEST Scoring Composite Measure

Staffing



of respondents “strongly agreed” or “agreed” that 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.

Overall Rating on Resident Safety



of respondents gave their nursing home a resident safety rating of “Excellent” or “Very Good.”

Composite Measure and Item Charts

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

Composite Measure Results

Chart 5-1 shows the average percent positive response for each of the 12 SOPS Nursing Home composite measures, summarized for all nursing homes in the database. The SOPS Nursing Home composite measures are shown in order from the highest average percent positive response to the lowest.

Item Results

Chart 5-2 shows the average percent positive response for each of the 42 survey items. Items are listed in their respective composite measure, grouped by positively and negatively worded items, and then in the order in which they appear in the survey.

Willingness To Recommend

Chart 5-3 shows results from the item that asks respondents whether or not they would tell their friends that this is a safe nursing home for their family.

Overall Rating on Resident Safety

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

Chart 5-1. Composite Measure Results
Average Percent Positive Response—2023 SOPS Nursing Home Database



Chart 5-2. Item Results

Average Percent Positive Response—2023 SOPS Nursing Home Database (Page 1 of 4)

1. Feedback and Communication About Incidents

Average % Positive Response

When staff report something that could harm a resident, someone takes care of it. (Item B4)

81%

In this nursing home, we talk about ways to keep incidents from happening again. (Item B5)

82%

Staff tell someone if they see something that might harm a resident. (Item B6)

86%

In this nursing home, we discuss ways to keep residents safe from harm. (Item B8)

82%

2. Overall Perceptions of Resident Safety

Residents are well cared for in this nursing home. (Item D1)

80%

This nursing home does a good job keeping residents safe. (Item D6)

81%

This nursing home is a safe place for residents. (Item D8)

83%

3. Supervisor Expectations and Actions Promoting Resident Safety

My supervisor listens to staff ideas and suggestions about resident safety. (Item C1)

79%

My supervisor says a good word to staff who follow the right procedures. (Item C2)

75%

My supervisor pays attention to resident safety problems in this nursing home. (Item C3)

83%

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

Chart 5-2. Item Results

Average Percent Positive Response—2023 SOPS Nursing Home Database (Page 2 of 4)

4. Organizational Learning

It is easy to make changes to improve resident safety in this nursing home. (Item D4)

60%

This nursing home is always doing things to improve resident safety. (Item D5)

71%

When this nursing home makes changes to improve resident safety, it checks to see if the changes worked. (Item D10)

67%

This nursing home lets the same mistakes happen again and again. (Item D3*)

60%

5. Training and Skills

Staff get the training they need in this nursing home. (Item A7)

68%

Staff have enough training on how to handle difficult residents. (Item A11)

51%

Staff understand the training they get in this nursing home. (Item A13)

72%

6. Management Support for Resident Safety

Management asks staff how the nursing home can improve resident safety. (Item D2)

62%

Management listens to staff ideas and suggestions to improve resident safety. (Item D7)

64%

Management often walks around the nursing home to check on resident care. (Item D9)

61%

Note: The item's survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Chart 5-2. Item Results

Average Percent Positive Response—2023 SOPS Nursing Home Database (Page 3 of 4)

7. Handoffs

Staff are told what they need to know before taking care of a resident for the first time. (Item B1)

68%

Staff are told right away when there is a change in a resident's care plan. (Item B2)

56%

We have all the information we need when residents are transferred from the hospital. (Item B3)

55%

Staff are given all the information they need to care for residents. (Item B10)

71%

8. Teamwork

Staff in this nursing home treat each other with respect. (Item A1)

64%

Staff support one another in this nursing home. (Item A2)

64%

Staff feel like they are part of a team. (Item A5)

58%

When someone gets really busy in this nursing home, other staff help out. (Item A9)

59%

9. Compliance with Procedures

Staff follow standard procedures to care for residents. (Item A4)

77%

Staff use shortcuts to get their work done faster. (Item A6*)

38%

To make work easier, staff often ignore procedures. (Item A14*)

60%

Note: The item's survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Chart 5-2. Item Results

Average Percent Positive Response—2023 SOPS Nursing Home Database (Page 4 of 4)

10. Communication Openness

Staff ideas and suggestions are valued in this nursing home.
(Item B7)

57%

It is easy for staff to speak up about problems in this nursing home.
(Item B11)

56%

Staff opinions are ignored in this nursing home. (Item B9*)

49%

11. Nonpunitive Response to Mistakes

Staff are treated fairly when they make mistakes. (Item A15)

60%

Staff feel safe reporting their mistakes. (Item A18)

55%

Staff are blamed when a resident is harmed. (Item A10*)

49%

Staff are afraid to report their mistakes. (Item A12*)

49%

12. Staffing

We have enough staff to handle the workload. (Item A3)

24%

Residents' needs are met during shift changes. (Item A16)

57%

Staff have to hurry because they have too much work to do.
(Item A8*)

27%

It is hard to keep residents safe here because so many staff quit
their jobs. (Item A17*)

49%

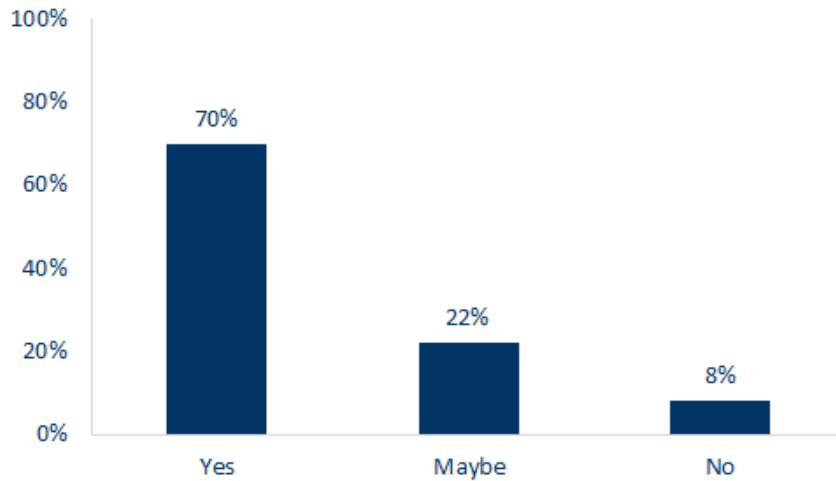
Note: The item's survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Chart 5-3. Item Results

Average Percentage of Respondents Willing To Recommend—2023 SOPS Nursing Home Database

Willingness To Recommend

I would tell friends that this is a safe nursing home for their family. (Item E1)



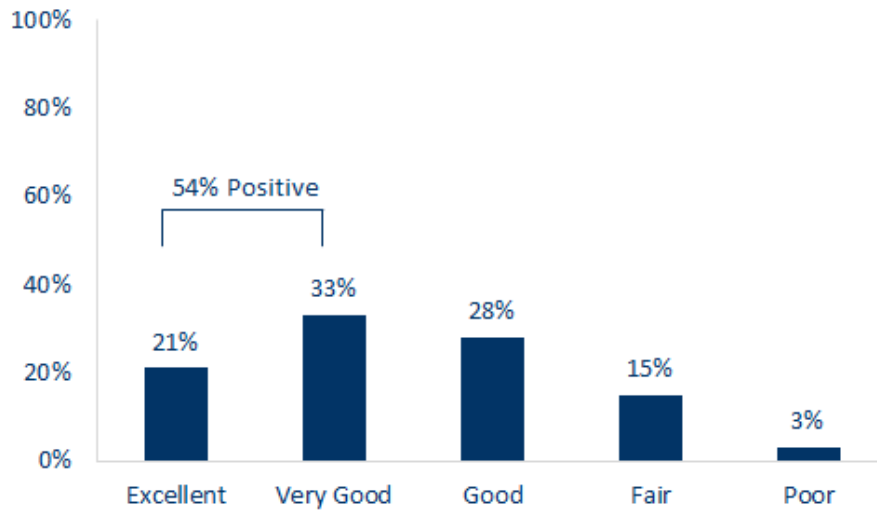
Note: Percentages indicate the database average percent response for each item response option.

Chart 5-4. Item Results

Average Percentage of Respondents Giving Overall Rating on Resident Safety— 2023 SOPS Nursing Home Database

Overall Rating on Resident Safety

Please give this nursing home an overall rating on resident safety. (Item E2)



Note: Percentages indicate the database average percent response for each item response option.

6 Comparing Nursing Home Results

The data in this report should be used to supplement your nursing home’s efforts to identify areas of strength and areas on which to focus efforts to improve patient safety culture.

To compare a nursing home’s survey results with the findings from the database, calculate the nursing home’s percent positive response on the survey’s 12 composite measures and survey items. These include the willingness to recommend and overall rating on resident safety items.

The Notes section at the end of this report describes how to calculate percent positive scores. Individual nursing home results can then be compared with the database averages and the percentile scores for all nursing homes in the database.

When comparing your nursing home’s results with the database results, note that the database only provides *relative* comparisons. Although your nursing home’s survey results may have higher percent positive scores than the database statistics, there might still be room for improvement in a particular area within your nursing home in an *absolute* sense.

Composite Measure and Item Tables

Table 6-1 presents statistics (average percent positive, standard deviation [s.d.], minimum and maximum scores, and percentiles) for each of the 12 SOPS Nursing Home composite measures.

Table 6-2 presents statistics for each of the 42 survey items that make up the composite measures. Items are listed in their respective composite measure, with positively worded items listed before negatively worded items.

Table 6-3 presents statistics for respondents’ 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 respondents’ overall rating on resident safety in their nursing home. Results presented in the table represent average percent positive scores for nursing home respondents who answered “Excellent” or “Very Good.”

Table 6-1. Composite Measure Results – 2023 SOPS Nursing Home Database

SOPS Composite Measures	Average % Positive	s.d.	Composite Measure % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Feedback and Communication About Incidents	83%	11.40%	43%	68%	77%	85%	90%	95%	100%
2. Overall Perceptions of Resident Safety	81%	13.29%	38%	63%	75%	84%	90%	95%	100%
3. Supervisor Expectations and Actions Promoting Resident Safety	79%	9.25%	55%	68%	73%	81%	87%	90%	94%
4. Organizational Learning	64%	14.40%	19%	49%	54%	67%	76%	83%	87%
5. Training and Skills	64%	14.09%	18%	44%	55%	65%	75%	80%	89%
6. Management Support for Resident Safety	63%	15.38%	19%	43%	55%	65%	72%	81%	98%
7. Handoffs	62%	13.41%	23%	45%	54%	63%	72%	79%	87%
8. Teamwork	61%	15.24%	18%	41%	51%	61%	74%	79%	92%
9. Compliance With Procedures	58%	12.04%	21%	44%	53%	59%	66%	74%	77%
10. Communication Openness	54%	14.40%	19%	34%	44%	53%	67%	72%	93%
11. Nonpunitive Response to Mistakes	53%	12.91%	9%	38%	45%	55%	62%	67%	78%
12. Staffing	39%	12.94%	9%	23%	33%	38%	49%	57%	69%
Composite Measure Average	64%	11.87%	26%	50%	54%	64%	73%	77%	86%

Note: (1) Each composite measure is the average of the unrounded composite measure scores for all nursing homes in the database; (2) the Composite Measure Average is the average of the 12 unrounded composite measure scores of each nursing home in the database.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 1 of 6)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Feedback and Communication About Incidents			% Always/Most of the Time						
When staff report something that could harm a resident, someone takes care of it. (Item B4)	81%	13.21%	40%	64%	74%	84%	90%	95%	100%
In this nursing home, we talk about ways to keep incidents from happening again. (Item B5)	82%	12.21%	42%	66%	76%	84%	90%	95%	100%
Staff tell someone if they see something that might harm a resident. (Item B6)	86%	10.57%	47%	76%	82%	88%	93%	97%	100%
In this nursing home, we discuss ways to keep residents safe from harm. (Item B8)	82%	12.44%	42%	66%	75%	83%	90%	95%	100%
2. Overall Perceptions of Resident Safety			% Strongly Agree/Agree						
Residents are well cared for in this nursing home. (Item D1)	80%	14.33%	30%	61%	71%	82%	89%	96%	100%
This nursing home does a good job keeping residents safe. (Item D6)	81%	13.52%	40%	62%	76%	85%	92%	95%	100%
This nursing home is a safe place for residents. (Item D8)	83%	13.15%	45%	65%	78%	85%	93%	95%	100%

Note: The item’s survey location is shown in parentheses after the item text.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 2 of 6)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
3. Supervisor Expectations and Actions Promoting Resident Safety			% Strongly Agree/Agree						
My supervisor listens to staff ideas and suggestions about resident safety. (Item C1)	79%	10.03%	50%	65%	72%	81%	86%	89%	96%
My supervisor says a good word to staff who follow the right procedures. (Item C2)	75%	11.31%	42%	63%	68%	76%	85%	88%	95%
My supervisor pays attention to resident safety problems in this nursing home. (Item C3)	83%	9.02%	60%	70%	79%	85%	90%	94%	97%
4. Organizational Learning			% Strongly Agree/Agree						
It is easy to make changes to improve resident safety in this nursing home. (Item D4)	60%	15.12%	16%	41%	48%	63%	72%	76%	86%
This nursing home is always doing things to improve resident safety. (Item D5)	71%	15.46%	26%	50%	58%	74%	82%	88%	100%
When this nursing home makes changes to improve resident safety, it checks to see if the changes worked. (Item D10)	67%	15.77%	17%	49%	56%	69%	79%	85%	94%
			% Strongly Disagree/Disagree						
This nursing home lets the same mistakes happen again and again. (Item D3*)	60%	15.68%	17%	41%	50%	59%	74%	79%	88%

Note: The item’s survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 3 of 6)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
5. Training and Skills			% Strongly Agree/Agree						
Staff get the training they need in this nursing home. (Item A7)	68%	15.69%	21%	50%	56%	73%	78%	85%	95%
Staff have enough training on how to handle difficult residents. (Item A11)	51%	16.08%	6%	34%	41%	52%	62%	72%	81%
Staff understand the training they get in this nursing home. (Item A13)	72%	13.86%	26%	57%	65%	74%	83%	89%	100%
6. Management Support for Resident Safety			% Strongly Agree/Agree						
Management asks staff how the nursing home can improve resident safety. (Item D2)	62%	17.09%	11%	40%	50%	64%	72%	85%	100%
Management listens to staff ideas and suggestions to improve resident safety. (Item D7)	64%	15.36%	24%	40%	58%	65%	75%	82%	100%
Management often walks around the nursing home to check on resident care. (Item D9)	61%	17.87%	10%	38%	49%	64%	74%	82%	94%

Note: The item’s survey location is shown in parentheses after the item text.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 4 of 6)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
7. Handoffs			% Always/Most of the Time						
Staff are told what they need to know before taking care of a resident for the first time. (Item B1)	68%	15.05%	29%	47%	57%	70%	79%	86%	100%
Staff are told right away when there is a change in a resident’s care plan. (Item B2)	56%	15.80%	12%	35%	44%	58%	67%	74%	89%
We have all the information we need when residents are transferred from the hospital. (Item B3)	55%	14.39%	21%	35%	45%	54%	65%	74%	81%
Staff are given all the information they need to care for residents. (Item B10)	71%	14.35%	28%	52%	62%	71%	82%	88%	95%
8. Teamwork			% Strongly Agree/Agree						
Staff in this nursing home treat each other with respect. (Item A1)	64%	17.13%	20%	42%	51%	65%	78%	85%	100%
Staff support one another in this nursing home. (Item A2)	64%	16.21%	20%	45%	56%	65%	76%	81%	96%
Staff feel like they are part of a team. (Item A5)	58%	16.66%	20%	36%	47%	58%	72%	79%	90%
When someone gets really busy in this nursing home, other staff help out. (Item A9)	59%	15.05%	5%	42%	53%	60%	72%	76%	89%

Note: The item’s survey location is shown in parentheses after the item text.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 5 of 6)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
9. Compliance With Procedures			% Strongly Agree/Agree						
Staff follow standard procedures to care for residents. (Item A4)	77%	12.53%	41%	60%	71%	79%	86%	89%	96%
			% Strongly Disagree/Disagree						
Staff use shortcuts to get their work done faster. (Item A6*)	38%	12.84%	5%	22%	30%	38%	46%	53%	67%
To make work easier, staff often ignore procedures. (Item A14*)	60%	14.78%	16%	38%	53%	61%	71%	75%	88%
10. Communication Openness			% Always/Most of the Time						
Staff ideas and suggestions are valued in this nursing home. (Item B7)	57%	15.30%	25%	35%	46%	59%	69%	76%	95%
It is easy for staff to speak up about problems in this nursing home. (Item B11)	56%	15.20%	17%	36%	45%	58%	66%	75%	95%
			% Never/Rarely						
Staff opinions are ignored in this nursing home. (Item B9*)	49%	15.05%	17%	29%	40%	47%	60%	67%	90%

Note: The item’s survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Table 6-2. Item Results – 2023 SOPS Nursing Home Database (Page 6 of 6)

Survey Items by SOPS Composite Measure	Average % Positive s.d.		Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
11. Nonpunitive Response to Mistakes			% Strongly Agree/Agree						
Staff are treated fairly when they make mistakes. (Item A15)	60%	15.71%	17%	40%	50%	61%	72%	81%	89%
Staff feel safe reporting their mistakes. (Item A18)	55%	14.74%	10%	38%	47%	56%	63%	75%	87%
			% Strongly Disagree/Disagree						
Staff are blamed when a resident is harmed. (Item A10*)	49%	13.35%	11%	32%	38%	50%	58%	65%	80%
Staff are afraid to report their mistakes. (Item A12*)	49%	14.97%	0%	33%	41%	51%	59%	65%	75%
12. Staffing			% Strongly Agree/Agree						
We have enough staff to handle the workload. (Item A3)	24%	14.24%	0%	7%	15%	23%	34%	42%	67%
Residents’ needs are met during shift changes. (Item A16)	57%	17.84%	11%	33%	47%	59%	71%	78%	86%
			% Strongly Disagree/Disagree						
Staff have to hurry because they have too much work to do. (Item A8*)	27%	12.70%	7%	13%	19%	26%	36%	42%	61%
It is hard to keep residents safe here because so many staff quit their jobs. (Item A17*)	49%	16.21%	8%	29%	39%	48%	61%	68%	87%

Note: The item’s survey location is shown in parentheses after the item text. An * denotes a negatively worded item, where the % Strongly Disagree/Disagree or % Never/Rarely indicates a positive response.

Table 6-3. Percentage of Respondents Willing To Recommend Their Nursing Home – 2023 SOPS Nursing Home Database

Willingness To Recommend (Item E1)	Average % Positive	s.d.	Survey Item % Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Yes	70%	17.44%	25%	44%	61%	72%	84%	90%	97%

Note: For results for all response options, 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 – 2023 SOPS Nursing Home Database

Overall Rating on Resident Safety (Item E2)	Average % Positive	s.d.	Survey Item % Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Excellent or Very Good	54%	19.46%	4%	26%	44%	56%	67%	81%	91%

Note: For the results for all response options, see Chart 5-4.

7

What's Next? Action Planning for Improvement

The AHRQ Surveys on Patient Safety Culture are important sources of information for healthcare organizations striving to improve patient safety. However, administering a SOPS survey is not the end of the improvement process. It is important to develop and implement action plans that use survey data for improvement.

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 *Action Planning Tool* offers guidance to help you develop an action plan for your unit, department, or facility. You can use the Action Plan Template at the end of the tool to document your answers to the key questions below.

1. Identifying Areas To Improve:

- a. What areas do you want to focus on for improvement?
- b. What are your “SMART” goals? (Specific, Measurable, Achievable, Relevant, Time bound)

2. Planning Your Improvement Initiative:

- a. What initiative will you implement?
- b. What resources will you need?
- c. What are possible barriers and how can you overcome them?
- d. How will you measure progress and success?
- e. Will you pilot test the initiative?
- f. What is the timeline?

3. Communicating Your Action Plan:

- a. How will you share your action plan?
- b. How will you provide progress updates on your action plan?

Improvement Resources for Users of the AHRQ Nursing Home Survey

Improving Patient Safety in Nursing Homes: A Resource List for Users of the AHRQ Nursing Home Survey on Patient Safety Culture contains references to websites and other practical resources nursing homes can use to improve patient/resident safety culture and patient/resident safety. The resource list is not exhaustive but provides initial guidance to nursing homes looking for information about patient/resident safety initiatives.

References

Action Planning Tool for the AHRQ Surveys on Patient Safety Culture™ (SOPS®). Rockville, MD: Agency for Healthcare Research and Quality; November 2022. AHRQ Publication No. 23-0011. <https://www.ahrq.gov/sops/resources/planning-tool/index.html>. Accessed December 22, 2022.

CMS Nursing Home Compare datasets. Baltimore, MD: Centers for Medicare & Medicaid Services. Last updated June 2022. <https://data.medicare.gov/data/nursing-home-compare>. Accessed December 22, 2022.

Improving Patient Safety in Nursing Homes: A Resource List for Users of the AHRQ Nursing Home Survey on Patient Safety Culture. Rockville, MD: Agency for Healthcare Research and Quality; January 2019. <https://www.ahrq.gov/sites/default/files/wysiwyg/sops/quality-patient-safety/patientsafetyculture/nursinghomeresourcelist-020118.pdf>. Accessed December 22, 2022.

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

This section provides additional detail regarding how various statistics presented in this report were calculated, as well as data limitations.

Data Cleaning

Each participating nursing home submitted respondent-level survey data. Once the data were submitted, we tabulated response frequencies for each nursing home to find out-of-range values, missing values, and other data anomalies. When we found data outliers or other inconsistencies, we contacted the nursing home and asked them to correct and resubmit their data. In addition, upon uploading their survey data, each participating nursing home received a copy of its data frequencies to verify the dataset the online submission system received was correct.

We also reviewed the data for response biases (e.g., responding with the same answer for all positively and negatively worded items in the same section of the survey). An example of a positively worded item is A5. *Staff feel like they are part of a team*, and an example of a negatively worded item is A8. *Staff have to hurry because they have too much work to do*.

Sections A, B, and D include both positively and negatively worded items. When respondents supplied the same answer for every item in section A, B, and D, we removed responses for those particular respondents from the final dataset because respondents should not have answered the same way across these differently worded items. In addition, respondents who marked the same answer for all items within sections that had more than one negatively worded item (Section A) had those items considered missing in that particular section.

As a final step, respondents who had missing answers or supplied a “Does Not Apply or Don’t Know” response to all items across sections A, B, C, and D were removed from the final dataset. We included nursing homes in the database only if they had at least 10 respondents after all data cleaning steps.

Response Rates

As part of the data submission process, we asked nursing homes to provide the number of completed, returned surveys and the total number of surveys distributed. Incomplete surveys are those surveys that were removed from data cleaning as outlined above. We calculated response rates using the formula below:

$$\text{Response Rate} = \frac{\text{Number of complete, returned surveys} - \text{Incompletes}}{\text{Number of eligible providers and staff who received a survey}}$$

Calculation of Percent Positive Scores

Most of the survey items ask respondents to answer using 5-point response options in terms of agreement (Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree) or frequency (Always, Most of the time, Sometimes, Rarely, Never). Three of the 12 composite measures use the frequency response options (*Handoffs*, *Feedback and Communication About Incidents*, and *Communication Openness*) while the other 9 composite measures use the agreement response options. The composite measure items also have a “Does Not Apply or Don’t Know” response option that is not included in the calculation of percent positive scores.

The single item, Willingness To Recommend, uses a 3-point scale: “Yes,” “Maybe,” and “No.”

The Overall Rating on Resident Safety uses a 5-point scale: “Poor,” “Fair,” “Good,” “Very Good,” and “Excellent.”

Composite Measure Item Percent Positive Response

The survey includes both positively worded items (e.g., “Staff feel like they are part of a team”) and negatively worded items (e.g., “Staff have to hurry because they have too much work to do”). Calculating the percent positive response for positively worded items is different from calculating the percent positive response for negatively worded items:

- **For positively worded items**, the 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 options for the item.

For example, for the item “Staff feel like they are part of a team,” if 50 percent of respondents within a nursing home responded “Strongly Agree” and 25 percent responded “Agree,” the item percent positive response for that nursing home would be $50\% + 25\% = 75\%$ positive.

- **For negatively worded items**, the percent positive response is the combined percentage of respondents within a nursing home who answered “Strongly Disagree” or “Disagree,” or “Never” or “Rarely,” depending on the response options for the item. Keep in mind that a negative answer to a negatively worded item indicates a positive response.

For example, for the item “Staff have to hurry because they have too much work to do,” if 40 percent of respondents within a nursing home responded “Strongly Disagree” and 20 percent responded “Disagree,” the item percent positive response would be 60% positive (i.e., 60 percent of respondents *do not* believe there is a problem with staff having to hurry because they have too much work to do).

Single Item Percent Positive Response

The Willingness To Recommend (item E1) percent positive response is calculated by counting the number respondents who answered “Yes” to that item and then dividing that sum by the total number of responses to that item.

The Overall Rating on Resident Safety (item E2) percent positive response is calculated by adding together the percentage of respondents who answered “Excellent” or “Very Good” and then dividing that sum by the total number of responses to that item.

Table N1 shows examples of computing the percent positive response for Willingness To Recommend (item E1) and Overall Rating on Resident Safety (item E2).

Table N1. Example of Computing Willingness To Recommend and Overall Rating on Resident Safety

Survey Items	Number of “Yes” Responses	Number of “Excellent” or “Very Good” Responses	Total Number of Responses to the Item	Item Percent Positive Response
Item E1: “I would tell friends that this is a safe nursing home for their family.”	193	NA*	250	193/250 = 77%
Item E2: “Please give this nursing home an overall rating on resident safety.”	NA*	125	240	125/240 = 52%

* NA = Not applicable.

Composite Measure Percent Positive Response

The 12 SOPS Nursing Home patient safety culture composite measures are each composed of three or four survey items. We calculated composite measure scores for each nursing home by averaging the unrounded percent positive response on the items within a composite measure. For example, for a three-item composite measure, if the item percent positive responses were 45.8 percent, 56.8 percent, and 48.1 percent, the nursing home’s composite measure percent positive response is the average of these three percentages, or 50.2 percent positive, displayed as a rounded percentage of 50%.

If a nursing home had item data for at least 50 percent of the items within a composite measure, the site would receive a composite measure score. For example, for a three-item composite measure, the number of item scores needed to calculate the composite measure score is two items. Similarly, for a four-item composite measure, the number of item scores needed to calculate the composite measure score is two items. For an item score to be calculated, at least three respondents had to respond to the item.

Table N2 shows an example of computing a composite measure score for *Staffing* for a single nursing home. This composite measure has four items. Two are positively worded (items A3 and A16) and two are negatively worded (items A8 and A17). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.

Table N2. Example of Computing Item and Composite Measure Percent Positive Scores

Four Items Measuring "Staffing"	For Positively Worded Items, Number of "Strongly Agree" or "Agree" Responses	For Negatively Worded Items, Number of "Strongly Disagree" or "Disagree" Responses	Total Number of Responses to the Item (Excluding "Does Not Apply" or "Don't Know" and Missing Responses)	Item Percent Positive Response
Item A3 - positively worded				
"We have enough staff to handle the workload."	110	NA*	240	110/240= 45.8%
Item A16 - positively worded				
"Residents' needs are met during shift changes."	142	NA*	250	142/250= 56.8%
Item A8 - negatively worded				
"Staff have to hurry because they have too much work to do."	NA*	125	260	125/260= 48.1%
Item A17 - negatively worded				
"It is hard to keep residents safe here because so many staff quit their jobs."	NA*	132	255	132/255= 51.8%
Composite Measure % Positive Score = (45.8% + 56.8% + 48.1% + 51.8%) / 4 = 50.6%				

*NA = Not applicable.

This example includes four items, with percent positive response scores of 45.8 percent, 56.8 percent, 48.1 percent, and 51.8 percent. Averaging these four items' percent positive scores results in a composite measure percent positive score of 50.6 percent for the *Staffing* composite measure.

Database Item and Composite Measure Percent Positive Scores

We calculated the database average percent positive scores for each of the 12 patient safety culture composite measures and survey items by averaging the unrounded nursing home-level percent positive item scores and composite measure scores of all nursing homes in the database.

The percent positive is displayed as an overall average and scores from each nursing home are weighted equally in their contribution to the calculation of the average.

Standard Deviation

The standard deviation (s.d.) is a measure of the spread, or variability, of nursing home scores around the average. The standard deviations presented in Chapter 6 show the extent to which nursing home scores differ from the average:

- If scores from all nursing homes were exactly the same, then 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, then the standard deviation would be small and close to zero.
- If scores from many nursing homes were very different from the average, then 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 was 70 percent with a standard deviation of 10 percent (and scores were normally distributed), then about 68 percent of all the database nursing homes would have scores between 60 percent and 80 percent positive.

Minimum and Maximum Scores

The minimum (lowest) and maximum (highest) percent positive scores are presented for each composite measure and item. These scores provide information about the range of percent positive scores obtained by database nursing homes and are actual scores from the lowest and highest scoring nursing homes.

When comparing your data 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 SAS® software. The first step in this procedure is to rank 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 this case would be the 10th, 25th, 50th, 75th, or 90th percentile.

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 N3). First, the percent positive scores for composite measure “A” are sorted from low to high.

Table N3. Data Table for Example of How To Compute Percentiles

Nursing Home	Composite Measure “A” % Positive Score
1	33%
2	48%
3	52%
4	60%
5	63%
6	64%
7	66%
8	70%
9	72%
10	75%
11	75%
12	78%

← 10th percentile score = 48%

← 50th percentile score = 65%

10th percentile

1. For the 10th percentile, we would first multiply the number of nursing homes (n) by .10 (p):
(n x p = 12 x .10 = 1.2).
2. The product of n x p = 1.2, where “j” = 1 (the integer) and “g” = 2 (the decimal). 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:
 1. “j” equals 1.
 2. The 10th percentile equals the value for the nursing home in the 2nd position = 48%.

50th percentile

3. For the 50th percentile, we would first multiply the number of nursing homes by .50:
($n \times p = 12 \times .50 = 6.0$).
4. The product of $n \times p = 6.0$, 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:
 3. “j” equals 6.
 4. 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. Interpret the percentile scores as shown in Table N4.

Table N4. Interpretation of Percentile Scores

Percentile Score	Interpretation
10th percentile 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 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) 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 Represents higher scoring nursing homes.	75% of the nursing homes scored the same or lower. 25% of the nursing homes scored higher.
90th percentile 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 measure and item. See examples below in Table N5.

Table N5. Sample Percentile Statistics

Survey Item	Average % Positive	s.d	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Item 1	36%	12.26	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.

Statistically “Significant” Differences Between Scores

You might be interested in determining the statistical significance of differences between your scores and the database scores, or between database scores in various categories (e.g., nursing home bed size or ownership). 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.

Data Limitations

The survey results presented in this report include the largest known compilation of publicly available patient safety culture data for nursing homes (SOPS Nursing Home Survey data) and therefore provide a useful reference. However, these data have several limitations.

First, nursing homes voluntarily submitted their data to the database; therefore, the database only includes those nursing homes that have administered the SOPS Nursing Home Survey and were willing to submit their data to the database. As such, only a small percentage of all nursing homes in the United States (less than 1 percent) are represented (see Table 3-1).

Estimates based on this self-selected group may produce biased estimates of the population and it is not possible to compute estimates of precision from such a self-selected group. However, the characteristics of the database nursing homes are somewhat consistent with the distribution of nursing homes registered with the Centers for Medicare & Medicaid Services Nursing Home Compare database, as described 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 administered paper surveys only, while others used only web-based surveys. These different survey administration modes could have led to differences in survey responses; further research is needed to determine whether, and how, different survey administration modes affect the results. Survey

administration statistics for 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-lining (where responses to all survey items in sections A, B, and D were the same), and blank records (where responses to all survey items were missing or “Does not Apply or Don’t Know” except for background items).

Otherwise, data are presented as submitted. No additional attempts were made to verify or audit the accuracy of the data submitted.



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