

SURVEYS ON PATIENT SAFETY CULTURE™ (SOPS®) HOSPITAL SURVEY 2.0



2022 User Database Report



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Surveys on Patient Safety Culture™ (SOPS®) Hospital Survey 2.0: 2022 User Database Report

Part I

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Overview



Surveys on Patient Safety Culture™

Findings from the 2022 Hospital Survey 2.0 Database

This overview summarizes survey findings from the 2022 Hospital Survey on Patient Safety Culture 2.0 Database.

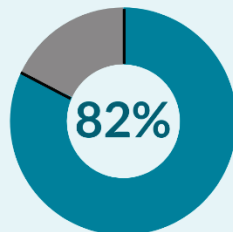


206,410 providers and staff respondents



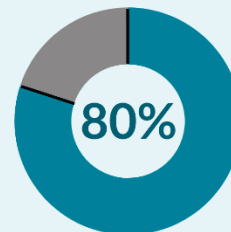
Areas of strength for most hospitals

Teamwork



of respondents “strongly agreed” or “agreed” that staff work together as an effective team, help each other during busy times, and are respectful.

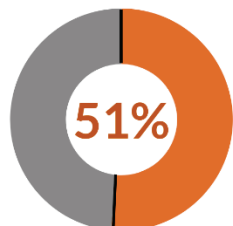
Supervisor, Manager, or Clinical Leader Support for Patient Safety



of respondents “strongly agreed” or “agreed” that supervisors, managers, or clinical leaders consider staff suggestions for improving patient safety, do not encourage shortcuts, and address patient safety concerns.

Area of potential improvement for most hospitals

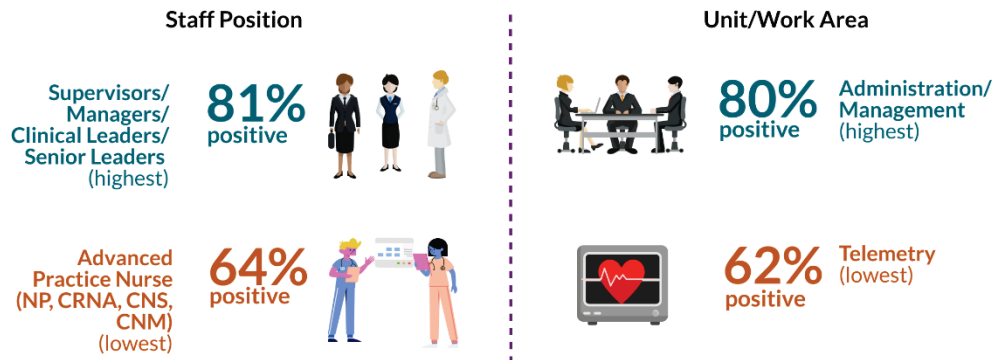
Staffing and Work Pace



of respondents indicated there are enough staff to handle the workload, staff work appropriate hours and do not feel rushed, and there is appropriate reliance on temporary, float, or PRN staff.

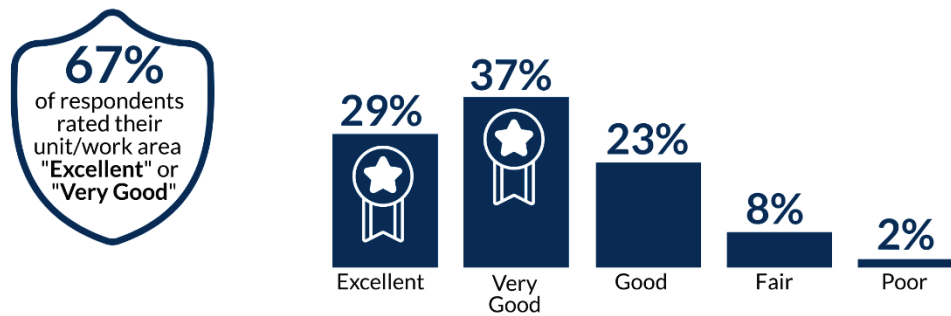
Other findings

» Highest and lowest composite measure average score by staff position and unit/work area



Overall patient safety rating

» Average patient safety rating of unit/work area



Notes: 1) Percentages indicate the database average percent response for each response option; 2) The percent positive displayed might not equal the sum of the separate response option percentages due to rounding; 3) All five percentages might not add to 100 percent due to rounding.

Trending results

» Trending results for 56 hospitals that submitted to both the 2021 and 2022 databases



The **Staffing and Work Pace** composite measure had the largest change in scores from the previous to the most recent database (-6% change).



The **Hospital Management Support for Patient Safety** composite measure had the second largest change in scores from the previous to the most recent database (-5% change).

What's next? Action planning for 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 hospitals interested in comparing results with those of other hospitals on the Surveys on Patient Safety Culture™ (SOPS®) Hospital Survey 2.0, the Agency for Healthcare Research and Quality (AHRQ) established the SOPS Hospital Survey 2.0 Database. The SOPS Hospital Survey 2.0, released by AHRQ in 2019, is a different version than the original SOPS Hospital Survey 1.0. The SOPS Hospital Survey 2.0 has fewer items and item wording, as well as the names of some composite measures, is different than the 1.0 survey. More information about the 2.0 survey can be found on the AHRQ website at ahrq.gov/sops/surveys/hospital.

The 2022 SOPS Hospital 2.0 User Database Report contains data from 400 hospitals and includes 206,410 provider and staff respondents. Participating hospitals, including some hospitals that participated in the pilot study of the Workplace Safety Supplemental Item Set, administered the SOPS Hospital Survey 2.0 between November 2020 and July 2022. Because the survey was administered during the COVID-19 pandemic, scores may have been affected.

Only a small number of hospitals submitted survey data for the SOPS Supplemental Item Sets. Due to the small number of hospitals, not enough data were available to report on the Health IT Patient Safety or Hospital Value and Efficiency Supplemental Item Sets in the 2022 Hospital Database. Updated results for the Workplace Safety Supplemental Item Set for Hospitals 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 Version 2.0 of the SOPS Hospital Survey. This report also includes a trending chapter that describes patient safety culture change over time. The trending chapter describes changes in scores from hospitals that submitted to both the 2021 and the 2022 SOPS Hospital Survey 2.0 database.

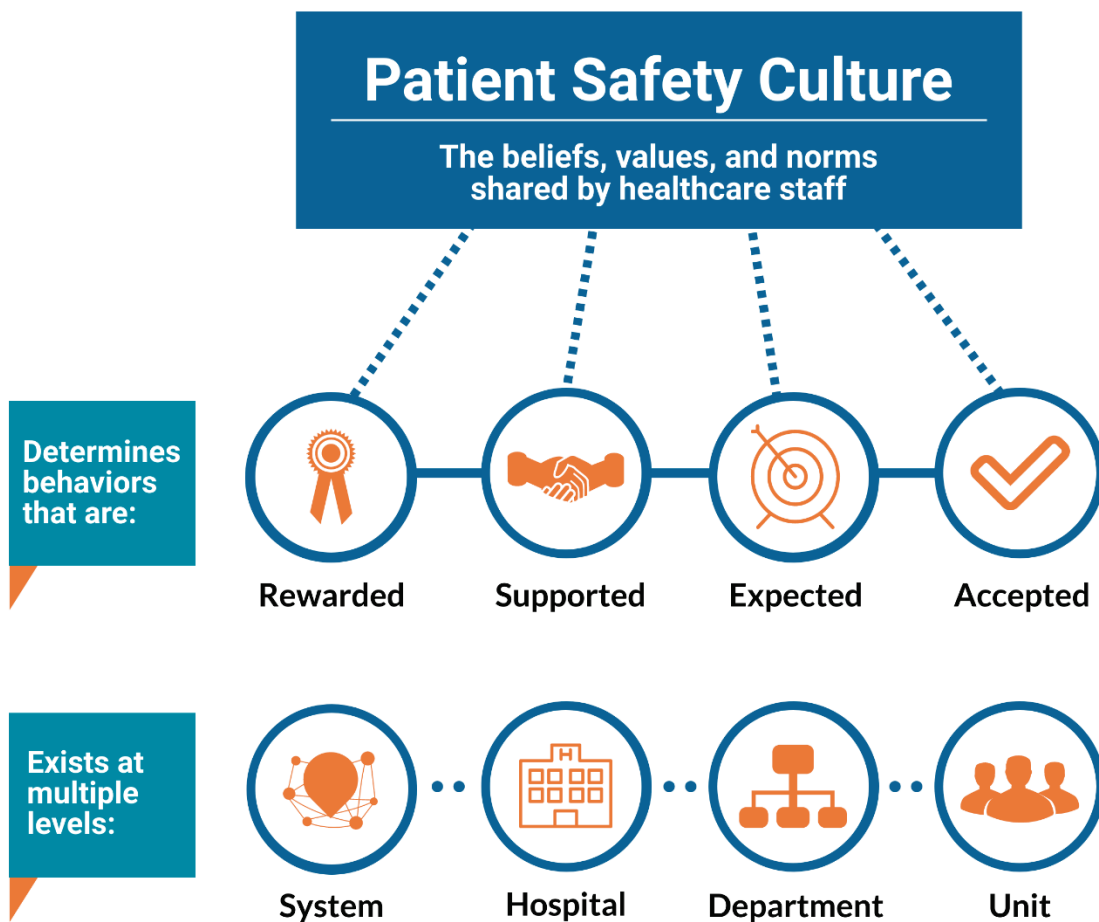
This report also includes two appendixes:

- Appendix A presents results by hospital characteristics (bed size, teaching status, ownership, and geographic region).
- Appendix B presents results by respondent characteristics (staff position, unit/work area, tenure in current unit/work area, and interaction with patients).

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 (see Figure 1).

Figure 1. Definition of Patient Safety Culture



Survey Content

AHRQ funded the development of the SOPS Hospital Survey 2.0, which includes 32 items that make up 10 composite measures of patient safety culture. Table 1-1 defines each of the 10 SOPS Hospital Survey 2.0 composite measures.

Table 1-1. SOPS Hospital Survey 2.0 Composite Measures and Definitions

SOPS Hospital Survey 2.0 Composite Measures	Definition: The extent to which...
Communication About Error	Staff are informed when errors occur, discuss ways to prevent errors, and are informed when changes are made.
Communication Openness	Staff speak up if they see something unsafe and feel comfortable asking questions.
Handoffs and Information Exchange	Important patient care information is transferred across hospital units and during shift changes.
Hospital Management Support for Patient Safety	Hospital management shows that patient safety is a top priority and provides adequate resources for patient safety.
Organizational Learning—Continuous Improvement	Work processes are regularly reviewed, changes are made to keep mistakes from happening again, and changes are evaluated.
Reporting Patient Safety Events	Mistakes of the following types are reported: (1) mistakes caught and corrected before reaching the patient and (2) mistakes that could have harmed the patient but did not.
Response to Error	Staff are treated fairly when they make mistakes and there is a focus on learning from mistakes and supporting staff involved in errors.
Staffing and Work Pace	There are enough staff to handle the workload, staff work appropriate hours and do not feel rushed, and there is appropriate reliance on temporary, float, or PRN staff.
Supervisor, Manager, or Clinical Leader Support for Patient Safety	Supervisors, managers, or clinical leaders consider staff suggestions for improving patient safety, do not encourage taking shortcuts, and take action to address patient safety concerns.
Teamwork	Staff work together as an effective team, help each other during busy times, and are respectful.

In addition to items that make up these composite measures, the survey includes two single-item measures asking respondents how many patient safety events they have reported and to provide an overall rating on patient safety for their unit/work area. Respondents are also asked to provide answers to six background demographic questions.

2 Survey Administration Statistics

This chapter presents descriptive information on the number of hospitals and survey respondents included in the 2022 SOPS Hospital 2.0 Database (Table 2-1), as well as information about response rates (Table 2-2) and how hospitals administered the survey (Table 2-3).

Highlights



Table 2-1. Nontrending and Trending Overall Response Statistics—2022 SOPS Hospital 2.0 Database

Overall Statistic	Nontrending Hospitals	Trending Hospitals	Database Total
	2022 First-Time Submitters	Submitted 2021 and 2022	
Number of hospitals	344	56	400
Number of survey respondents	185,468	20,942	206,410

Table 2-2. Average Survey Administration Statistics—2022 SOPS Hospital 2.0 Database

Average Response Information	Statistic
Average number of respondents per hospital (range: 17 to 5,793)	516
Average number of surveys administered per hospital (range: 36 to 10,373)	1,163
Average hospital response rate (range: 9% to 100%)	48%

Table 2-3. Survey Administration Mode Statistics—2022 SOPS Hospital 2.0 Database

Survey Administration Mode	Hospitals		Respondents		Average Response Rate
	Number	Percent	Number	Percent	Percent
Paper only	13	3%	1,882	1%	40%
Web only	375	94%	201,385	98%	48%
Both paper and web	12	3%	3,143	2%	47%
Total	400	100%	206,410	100%	--

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

3 Hospital Characteristics

This chapter presents information about the characteristics of hospitals included in the 2022 SOPS Hospital 2.0 Database, including bed size, teaching status, ownership, and geographic region (Table 3-1).

To provide some context, the characteristics of database hospitals by bed size, teaching status, ownership, and geographic region are also compared with the distribution of AHA-registered hospitals included in the 2020 American Hospital Association Annual Survey of Hospitals.ⁱ

Highlights



21%

of participating hospitals have between 25 and 49 beds.



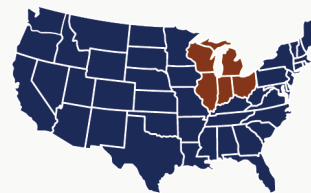
55%

of participating hospitals are nonteaching.



65%

of participating hospitals are nongovernment (not for profit).



25%

of participating hospitals are in the East North Central region.

ⁱ Data for U.S. and U.S. territory AHA-registered hospitals were obtained from the 2020 AHA Annual Survey of Hospitals Database, © 2020 Health Forum, LLC, an affiliate of the American Hospital Association. Hospitals not registered with AHA were asked to provide information on their hospital's characteristics, such as bed size, teaching status, and ownership.

Table 3-1. Distribution of 2022 SOPS Hospital 2.0 Database by Hospital Characteristics Compared With AHA-Registered Hospitals

Hospital Characteristics	AHA-Registered Hospitals (n = 6,165)		Database Hospitals (n = 400)		Database Respondents (n = 206,410)	
	Number	Percent	Number	Percent	Number	Percent
Bed Size						
6-24 beds	866	14%	40	10%	5,232	3%
25-49 beds	1,398	23%	84	21%	12,714	6%
50-99 beds	1,181	19%	60	15%	12,720	6%
100-199 beds	1,219	20%	68	17%	25,618	12%
200-299 beds	614	10%	62	16%	40,546	20%
300-399 beds	357	6%	38	10%	29,178	14%
400-499 beds	192	3%	17	4%	18,998	9%
500 or more beds	338	5%	31	8%	61,404	30%
Teaching Status						
Teaching	2,615	42%	180	45%	145,692	71%
Nonteaching	3,550	58%	220	55%	60,718	29%
Ownership						
Government (Federal and non-Federal)	1,427	23%	76	19%	36,515	18%
Nongovernment (not for profit)	3,137	51%	261	65%	150,023	73%
Investor owned (for profit)	1,601	26%	63	16%	19,872	10%
Geographic Region						
New England	246	4%	14	4%	5,754	3%
Mid-Atlantic	536	9%	21	5%	15,222	7%
South Atlantic/Associated Territories	989	16%	85	21%	69,939	34%
East North Central	902	15%	98	25%	42,331	21%
East South Central	481	8%	21	5%	6,048	3%
West North Central	768	12%	40	10%	19,776	10%
West South Central	1,057	17%	87	22%	31,947	15%
Mountain	541	9%	18	5%	6,090	3%
Pacific/Associated Territories	645	10%	16	4%	9,303	5%

Note: Percentages may not add to 100 due to rounding. States are categorized into regions as follows:

- New England: CT, MA, ME, NH, RI, VT
- Mid-Atlantic: NJ, NY, PA
- South Atlantic/Associated Territories: DC, DE, FL, GA, MD, NC, SC, VA, WV, Puerto Rico, Virgin Islands
- East North Central: IL, IN, MI, OH, WI
- East South Central: AL, KY, MS, TN
- West North Central: IA, KS, MN, MO, ND, NE, SD
- West South Central: AR, LA, OK, TX
- Mountain: AZ, CO, ID, MT, NM, NV, UT, WY
- Pacific/Associated Territories: AK, CA, HI, OR, WA, American Samoa, Guam, Marshall Islands, Northern Mariana Islands

4 Respondent Characteristics

This chapter describes the characteristics of the 206,410 respondents in the 2022 SOPS Hospital 2.0 Database.

Highlights



Largest Two Staff Positions

33% Registered nurse (RN)
10% Technologist, Technician
(EKG, Lab, Radiology)



Largest Two Unit/Work Areas

8% Combined Medical/Surgical Unit
7% Emergency Department, Observation,
Short Stay



36% of respondents have worked in their hospital **1 to 5 years**.
41% of respondents have worked in their unit/work area **1 to 5 years**.



60% of respondents work **30 to 40 hours per week** in their hospital.



76% of respondents have direct interaction with patients.

Table 4-1. Distribution of 2022 SOPS Hospital 2.0 Database by Staff Position

Respondent Characteristics	Respondents	
	Number	Percent
Hospital Staff Position		
Nursing		
Advanced Practice Nurse (NP, CRNA, CNS, CNM)	3,764	2%
Licensed Vocational Nurse (LVN), Licensed Practical Nurse (LPN)	2,493	1%
Patient Care Aide, Hospital Aide, Nursing Assistant	13,736	7%
Registered Nurse (RN)	62,659	33%
Nursing Subtotal	82,652	43%
Medical		
Physician Assistant	1,082	1%
Resident, Intern	2,457	1%
Physician, Attending, Hospitalist	5,337	3%
Medical Subtotal	8,876	5%
Other Clinical Position		
Dietitian	818	<1%
Pharmacist, Pharmacy Technician	6,500	3%
Physical, Occupational, or Speech Therapist	6,057	3%
Psychologist	151	<1%
Respiratory Therapist	4,265	2%
Social Worker	2,014	1%
Technologist, Technician (e.g., EKG, Lab, Radiology)	18,375	10%
Other Clinical Position Subtotal	38,180	20%
Supervisor, Manager, Clinical Leader, Senior Leader		
Supervisor, Manager, Department Manager, Clinical Leader, Administrator, Director	14,171	7%
Senior Leader, Executive, C-Suite	1,151	1%
Supervisor, Manager, Clinical Leader, Senior Leader Subtotal	15,322	8%
Support		
Facilities	2,170	1%
Food Services	3,313	2%
Housekeeping, Environmental Services	5,134	3%
Information Technology, Health Information Services, Clinical Informatics	3,393	2%
Security	1,682	1%
Transporter	1,168	1%
Unit Clerk, Secretary, Receptionist, Office Staff	12,638	7%
Support Subtotal	29,498	15%
Other Staff Position	17,525	9%
Total	192,053	100%
Missing	14,357	
Overall total	206,410	

Note: Percentages may not add to 100 due to rounding. Item percentages may not add to subtotal percentage due to rounding.

Table 4-2. Distribution of 2022 SOPS Hospital 2.0 Database by Unit/Work Area

Respondent Characteristics	Respondents	
	Number	Percent
Unit/Work Area		
Multiple Units, No Specific Unit	13,731	7%
Medical/Surgical Units		
Combined Medical/Surgical Unit	14,609	8%
Medical Unit (Nonsurgical)	5,963	3%
Surgical Unit	7,139	4%
Medical/Surgical Units Subtotal	27,711	15%
Patient Care Units		
Cardiology	5,093	3%
Emergency Department, Observation, Short Stay	12,063	7%
Gastroenterology	670	<1%
ICU (All Adult Types)	9,952	5%
Labor and Delivery, Obstetrics and Gynecology	7,724	4%
Oncology, Hematology	3,266	2%
Pediatrics (including NICU, PICU)	5,276	3%
Psychiatry, Behavioral Health	4,483	2%
Pulmonology	521	<1%
Rehabilitation, Physical Medicine	6,546	4%
Telemetry	3,981	2%
Patient Care Units Subtotal	59,575	32%
Surgical Services		
Anesthesiology	843	<1%
Endoscopy, Colonoscopy	1,043	1%
Pre Op, Operating Room/Suite, PACU/Post Op, Peri Op	9,486	5%
Surgical Services Subtotal	11,372	6%
Clinical Services		
Pathology, Lab	6,886	4%
Pharmacy	6,291	3%
Radiology, Imaging	9,552	5%
Respiratory Therapy	2,290	1%
Social Services, Case Management, Discharge Planning	2,358	1%
Clinical Services Subtotal	27,377	15%
Administration/Management		
Administration, Management	5,819	3%
Financial Services, Billing	2,040	1%
Human Resources, Training	1,058	1%
Information Technology, Health Information Management, Clinical Informatics	3,441	2%
Quality, Risk Management, Patient Safety	1,937	1%
Administration/Management Subtotal	14,295	8%

Note: Percentages may not add to 100 due to rounding. Item percentages may not add to subtotal percentage due to rounding.

Table 4-2. Distribution of 2022 SOPS Hospital 2.0 Database by Unit/Work Area, (continued)

Respondent Characteristics Unit/Work Area (Continued)	Respondents	
	Number	Percent
Support Services		
Admitting/Registration	3,590	2%
Food Services, Dietary	3,889	2%
Housekeeping, Environmental Services, Facilities	5,651	3%
Security Services	1,370	1%
Transport	901	<1%
Support Services Subtotal	15,401	8%
Other Unit/Work Area	15,183	8%
Total	184,645	100%
Missing	21,765	
Overall total	206,410	

Note: Percentages may not add to 100 due to rounding. Item percentages may not add to subtotal percentage due to rounding.

Table 4-3. Distribution of 2022 SOPS Hospital 2.0 Database by Other Respondent Characteristics

Respondent Characteristics	Respondents	
	Number	Percent
Tenure in Hospital		
Less than 1 year	28,539	15%
1 to 5 years	66,971	36%
6 to 10 years	32,496	17%
11 or more years	58,839	31%
Total	186,845	100%
Missing	19,565	
Overall total	206,410	
Tenure in Unit/Work Area	Number	Percent
Less than 1 year	36,862	20%
1 to 5 years	76,924	41%
6 to 10 years	31,151	17%
11 or more years	41,678	22%
Total	186,615	100%
Missing	19,795	
Overall total	206,410	
Hours Worked per Week in Hospital	Number	Percent
Less than 30 hours per week	22,860	12%
30 to 40 hours per week	113,503	60%
More than 40 hours	52,019	28%
Total	188,382	100%
Missing	18,028	
Overall total	206,410	
Interaction With Patients	Number	Percent
Yes, I typically have direct interaction or contact with patients	141,710	76%
No, I typically do NOT have direct interaction or contact with patients	45,973	24%
Total	187,683	100%
Missing	18,727	
Overall total	206,410	

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

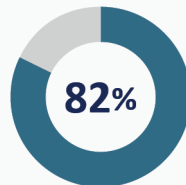
5 Overall Results

This chapter presents overall findings for the 2022 SOPS Hospital 2.0 Database. We present the average percentage of positive responses for each of the survey's composite measures and items, summarized for all hospitals. Reporting the average for all hospitals ensures that each hospital's scores receive equal weight, regardless of the hospital'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 larger hospitals. Reporting the data at the hospital, rather than the respondent level, is important because culture is considered to be a group characteristic, not an individual characteristic.

Highlights

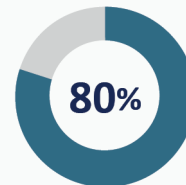
HIGHEST Scoring Composite Measures

Teamwork



of respondents "strongly agreed" or "agreed" that staff work together as an effective team, help each other during busy times, and are respectful.

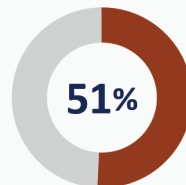
Supervisor, Manager, or Clinical Leader Support for Patient Safety



of respondents "strongly agreed" or "agreed" that supervisors, managers, or clinical leaders consider staff suggestions for improving patient safety, do not encourage shortcuts, and address patient safety concerns.

LOWEST Scoring Composite Measures

Staffing and Work Pace



of respondents "strongly agreed" or "agreed" that there are enough staff to handle the workload, staff work appropriate hours and do not feel rushed, and there is appropriate reliance on temporary, float, or PRN staff.

Composite Measure and Item Charts

This section provides the overall item and composite measure 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 10 SOPS Hospital 2.0 composite measures, summarized for all hospitals in the database. The SOPS Hospital 2.0 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 32 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.

Number of Events Reported

Chart 5-3 shows results from the item that asks respondents how many patient safety events they reported in the past 12 months.

Overall Rating on Patient Safety

Chart 5-4 shows results from the item that asks respondents to give their unit/work area an overall rating on patient safety.

Chart 5-1. Composite Measure Results
Average Percent Positive Response—2022 SOPS Hospital 2.0 Database

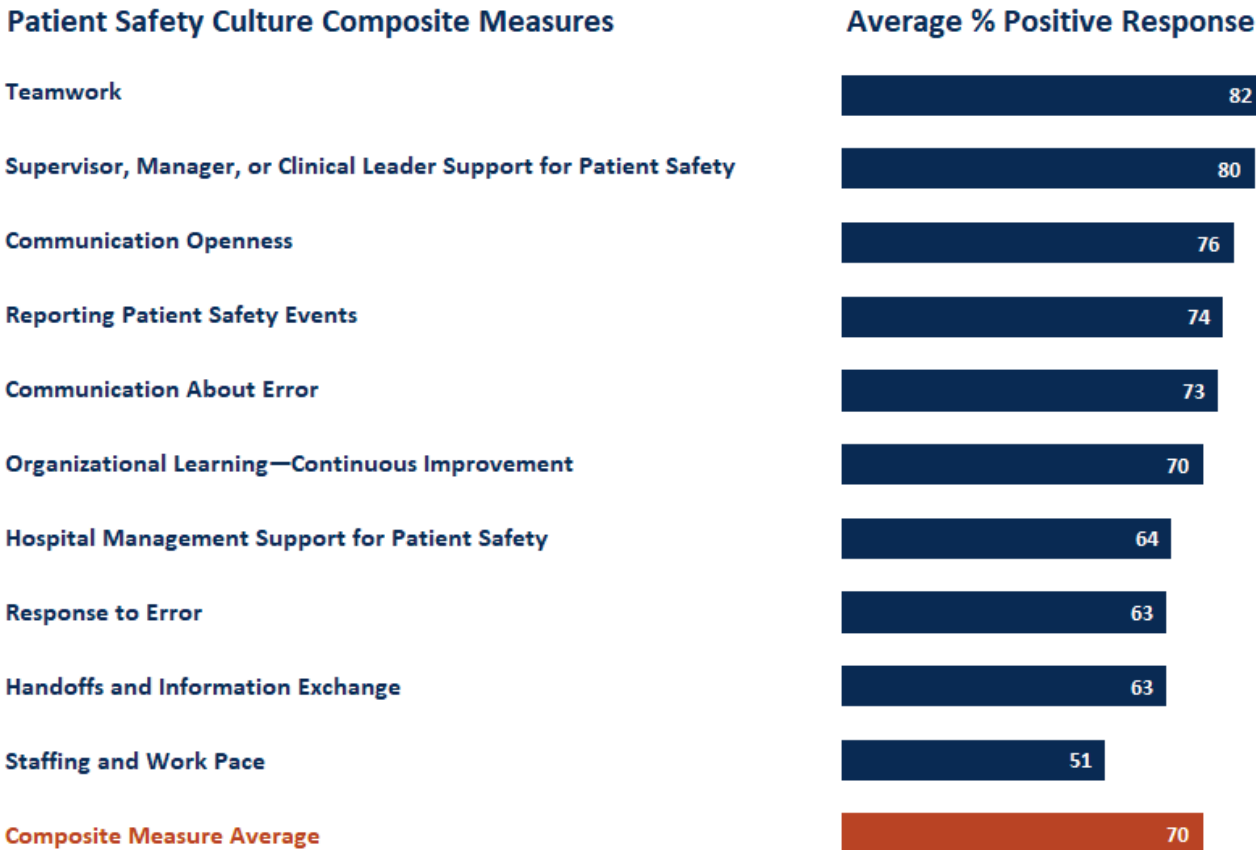


Chart 5-2. Item Results

Average Percent Positive Response—2022 SOPS Hospital 2.0 Database (Page 1 of 4)

1. Teamwork

In this unit, we work together as an effective team. (Item A1)

87

During busy times, staff in this unit help each other. (Item A8)

87

There is a problem with disrespectful behavior by those working in this unit. (Item A9*)

71

2. Supervisor, Manager, or Clinical Leader Support for Patient Safety

My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety. (Item B1)

80

My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (Item B3)

84

My supervisor, manager, or clinical leader wants us to work faster during busy times, even if it means taking shortcuts. (Item B2*)

78

3. Communication Openness

In this unit, staff speak up if they see something that may negatively affect patient care. (Item C4)

83

When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (Item C5)

73

When staff in this unit speak up, those with more authority are open to their patient safety concerns. (Item C6)

75

In this unit, staff are afraid to ask questions when something does not seem right. (Item C7*)

72

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—2022 SOPS Hospital 2.0 Database (Page 2 of 4)

4. Reporting Patient Safety Events

When a mistake is caught and corrected before reaching the patient, how often is this reported? (Item D1)

65

When a mistake reaches the patient and could have harmed the patient, but did not, how often is this reported? (Item D2)

83

5. Communication About Error

We are informed about errors that happen in this unit. (Item C1)

72

When errors happen in this unit, we discuss ways to prevent them from happening again. (Item C2)

76

In this unit, we are informed about changes that are made based on event reports. (Item C3)

71

6. Organizational Learning— Continuous Improvement

This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (Item A4)

71

In this unit, changes to improve patient safety are evaluated to see how well they worked. (Item A12)

66

This unit lets the same patient safety problems keep happening. (Item A14*)

72

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—2022 SOPS Hospital 2.0 Database (Page 3 of 4)

7. Hospital Management Support for Patient Safety

Average % Positive Response

The actions of hospital management show that patient safety is a top priority. (Item F1)

75

Hospital management provides adequate resources to improve patient safety. (Item F2)

69

Hospital management seems interested in patient safety only after an adverse event happens. (Item F3*)

48

8. Response to Error

When staff make errors, this unit focuses on learning rather than blaming individuals. (Item A10)

70

In this unit, staff feel like their mistakes are held against them. (Item A6*)

61

When an event is reported in this unit, it feels like the person is being written up, not the problem. (Item A7*)

59

In this unit, there is a lack of support for staff involved in patient safety errors. (Item A13*)

64

9. Handoffs and Information Exchange

During shift changes, there is adequate time to exchange all key patient care information. (Item F6)

71

When transferring patients from one unit to another, important information is often left out. (Item F4*)

56

During shift changes, important patient care information is often left out. (Item F5*)

63

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—2022 SOPS Hospital 2.0 Database (Page 4 of 4)

10. Staffing and Work Pace

Average % Positive Response

In this unit, we have enough staff to handle the workload.
(Item A2)

45

Staff in this unit work longer hours than is best for patient care.
(Item A3*)

47

This unit relies too much on temporary, float, or PRN staff.
(Item A5*)

54

The work pace in this unit is so rushed that it negatively affects
patient safety. (Item A11*)

59

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 Response on the Number of Patient Safety Events Reported in the Past 12 Months—2022 SOPS Hospital 2.0 Database

Number of Events Reported

In the past 12 months, how many patient safety events have you reported? (Item D3)

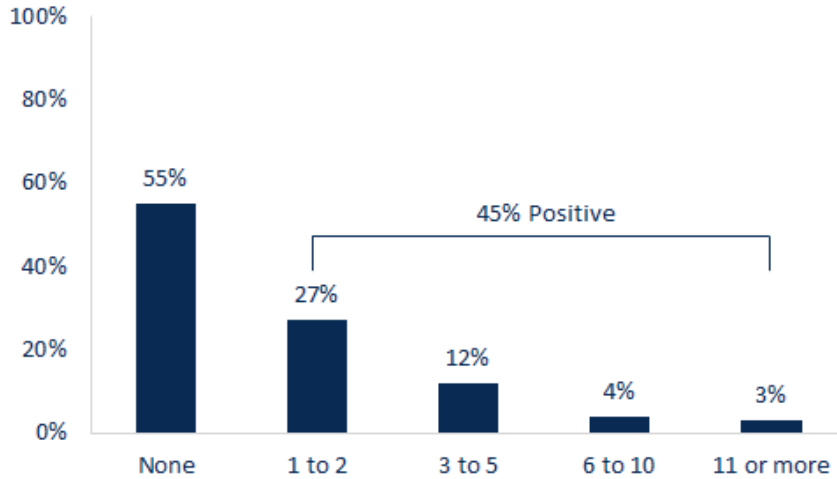
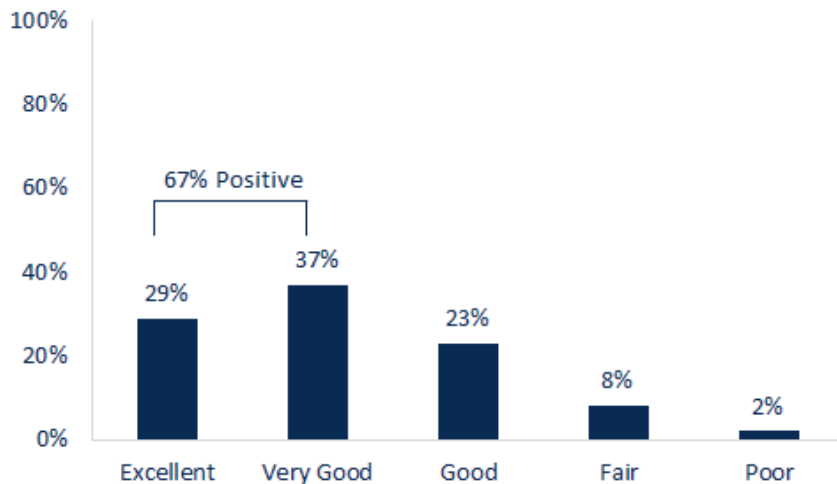


Chart 5-4. Item Results

Average Unit/Work Area Patient Safety Rating—2022 SOPS Hospital 2.0 Database

Patient Safety Rating

How would you rate your unit/work area on patient safety? (Item E1)



Note: 1) Percentages indicate the database average percent response for each response option; 2) The percent positive displayed might not equal the sum of the separate response option percentages due to rounding; 3) All five percentages might not add to 100 due to rounding.

6 Comparing Hospital Results

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

To compare a hospital's survey results with the aggregated findings from the database, calculate the hospital's percent positive response on the survey's 10 composite measures and other survey items. These include the number of events reported and overall rating on patient safety items.

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

When comparing your hospital's results with results from the database, note that the database only provides *relative* comparisons. Although your hospital'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 hospital 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 10 SOPS Hospital 2.0 composite measures.

Table 6-2 presents statistics for each of the 32 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 the number of patient safety events reported. Statistics include average percent positive scores for hospital respondents who answered "1 to 2," "3 to 5," "6 to 10," and "11 or more."

Table 6-4 presents statistics for respondents' patient safety rating of their unit/work area within their hospital. Results presented in the table represent average percent positive scores for hospital respondents who answered "Excellent" or "Very Good."

Table 6-1. Composite Measure Results—2022 SOPS Hospital 2.0 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. Teamwork	82%	5.57%	49%	76%	79%	82%	85%	88%	95%
2. Supervisor, Manager, or Clinical Leader Support for Patient Safety	80%	6.78%	40%	72%	76%	81%	84%	89%	94%
3. Communication Openness	76%	6.86%	40%	67%	71%	76%	81%	84%	91%
4. Reporting Patient Safety Events	74%	7.85%	37%	65%	69%	74%	79%	84%	94%
5. Communication About Error	73%	8.70%	31%	62%	68%	74%	79%	84%	93%
6. Organizational Learning-Continuous Improvement	70%	8.33%	31%	60%	65%	70%	75%	80%	88%
7. Hospital Management Support for Patient Safety	64%	10.80%	18%	50%	57%	64%	72%	77%	88%
8. Response to Error	63%	7.90%	36%	53%	58%	64%	69%	73%	84%
9. Handoffs and Information Exchange	63%	9.27%	37%	52%	57%	63%	69%	76%	89%
10. Staffing and Work Pace	51%	9.95%	20%	39%	44%	51%	58%	65%	77%
Composite Measure Average	70%	7.00%	39%	61%	65%	70%	75%	79%	85%

Note: 1) Each composite measure is the average of the unrounded composite measure scores for all hospitals in the database; 2) The Composite Measure Average is the average of the 10 unrounded composite measure scores of each hospital in the database.

Table 6-2. Item Results – 2022 SOPS Hospital 2.0 Database (Page 1 of 5)

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. Teamwork	% Strongly Agree/Agree								
In this unit, we work together as an effective team. (Item A1)	87%	6.69%	29%	81%	85%	88%	91%	94%	100%
During busy times, staff in this unit help each other. (Item A8)	87%	5.65%	38%	81%	84%	87%	90%	92%	99%
	% Strongly Disagree/Disagree								
There is a problem with disrespectful behavior by those working in this unit. (Item A9*)	71%	7.53%	36%	62%	67%	71%	77%	81%	94%
2. Supervisor, Manager, or Clinical Leader Support for Patient Safety	% Strongly Agree/Agree								
My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety. (Item B1)	80%	7.77%	29%	71%	75%	80%	84%	88%	96%
My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (Item B3)	84%	6.86%	31%	76%	80%	84%	88%	91%	97%
	% Strongly Disagree/Disagree								
My supervisor, manager, or clinical leader wants us to work faster during busy times, even if it means taking shortcuts. (Item B2*)	78%	7.51%	41%	68%	73%	78%	83%	87%	97%

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 – 2022 SOPS Hospital 2.0 Database (Page 2 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10 th %ile	25 th %ile	Median/ 50 th %ile	75 th %ile	90 th %ile	Max
3. Communication Openness			% Always/Most of the time						
In this unit, staff speak up if they see something that may negatively affect patient care. (Item C4)	83%	6.38%	50%	75%	79%	84%	88%	91%	98%
When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (Item C5)	73%	8.78%	29%	62%	68%	74%	80%	84%	97%
When staff in this unit speak up, those with more authority are open to their patient safety concerns. (Item C6)	75%	7.96%	38%	66%	71%	76%	81%	85%	93%
			% Never/Rarely						
In this unit, staff are afraid to ask questions when something does not seem right. (Item C7*)	72%	6.93%	42%	63%	68%	72%	77%	80%	94%
4. Reporting Patient Safety Events			% Always/Most of the time						
When a mistake is caught and corrected before reaching the patient, how often is this reported? (Item D1)	65%	9.93%	21%	54%	60%	66%	72%	77%	90%
When a mistake reaches the patient and could have harmed the patient, but did not, how often is this reported? (Item D2)	83%	7.05%	44%	74%	79%	83%	87%	91%	100%

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 – 2022 SOPS Hospital 2.0 Database (Page 3 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10 th %ile	25 th %ile	Median/ 50 th %ile	75 th %ile	90 th %ile	Max
5. Communication About Error	% Always/Most of the time								
We are informed about errors that happen in this unit. (Item C1)	72%	9.27%	25%	61%	66%	73%	78%	83%	93%
When errors happen in this unit, we discuss ways to prevent them from happening again. (Item C2)	76%	8.71%	33%	65%	71%	77%	82%	86%	96%
In this unit, we are informed about changes that are made based on event reports. (Item C3)	71%	9.34%	33%	59%	65%	71%	77%	82%	96%
6. Organizational Learning – Continuous Improvement	% Strongly Agree/Agree								
This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (Item A4)	71%	8.76%	20%	62%	67%	71%	77%	82%	95%
In this unit, changes to improve patient safety are evaluated to see how well they worked. (Item A12)	66%	8.99%	16%	55%	60%	67%	72%	78%	89%
	% Strongly Disagree/Disagree								
This unit lets the same patient safety problems keep happening. (Item A14*)	72%	9.33%	26%	60%	66%	72%	78%	84%	93%

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 – 2022 SOPS Hospital 2.0 Database (Page 4 of 5)

Survey Items by SOPS Composite Measure	Average % Positive s.d.		Survey Item % Positive Response						
			Min	10 th %ile	25 th %ile	Median/ 50 th %ile	75 th %ile	90 th %ile	Max
7. Hospital Management Support for Patient Safety	% Strongly Agree/Agree								
The actions of hospital management show that patient safety is a top priority. (Item F1)	75%	11.52%	19%	60%	68%	76%	84%	89%	97%
Hospital management provides adequate resources to improve patient safety. (Item F2)	69%	12.53%	18%	53%	61%	70%	78%	85%	95%
% Strongly Disagree/Disagree									
Hospital management seems interested in patient safety only after an adverse event happens. (Item F3*)	48%	10.30%	13%	36%	41%	47%	54%	63%	82%
8. Response to Error	% Strongly Agree/Agree								
When staff make errors, this unit focuses on learning rather than blaming individuals. (Item A10)	70%	7.55%	22%	61%	66%	71%	74%	79%	89%
% Strongly Disagree/Disagree									
In this unit, staff feel like their mistakes are held against them. (Item A6*)	61%	8.75%	29%	51%	55%	61%	67%	72%	84%
When an event is reported in this unit, it feels like the person is being written up, not the problem. (Item A7*)	59%	8.97%	26%	48%	53%	59%	64%	69%	85%
In this unit, there is a lack of support for staff involved in patient safety errors. (Item A13*)	64%	9.61%	25%	51%	57%	64%	70%	76%	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 – 2022 SOPS Hospital 2.0 Database (Page 5 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10 th %ile	25 th %ile	Median/ 50 th %ile	75 th %ile	90 th %ile	Max
9. Handoffs and Information Exchange			% Strongly Agree/Agree						
During shift changes, there is adequate time to exchange all key patient care information. (Item F6)	71%	9.78%	17%	58%	65%	71%	77%	84%	100%
			% Strongly Disagree/Disagree						
When transferring patients from one unit to another, important information is often left out. (Item F4*)	56%	11.32%	22%	41%	48%	55%	64%	71%	85%
During shift changes, important patient care information is often left out. (Item F5*)	63%	10.20%	20%	50%	56%	62%	69%	76%	92%
10. Staffing and Work Pace			% Strongly Agree/Agree						
In this unit, we have enough staff to handle the workload. (Item A2)	45%	12.49%	7%	29%	36%	44%	54%	62%	77%
			% Strongly Disagree/Disagree						
Staff in this unit work longer hours than is best for patient care. (Item A3*)	47%	10.36%	5%	35%	41%	47%	53%	60%	83%
This unit relies too much on temporary, float, or PRN staff. (Item A5*)	54%	11.45%	17%	41%	47%	53%	61%	69%	86%
The work pace in this unit is so rushed that it negatively affects patient safety. (Item A11*)	59%	12.07%	27%	45%	51%	60%	67%	76%	94%

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. Item Results for Reporting One or More Events in the Past 12 Months—2022 SOPS Hospital 2.0 Database

Events Reported in the Past 12 Months (Item D3)	Average % Positive	s.d.	Survey Item % Response						
			Min	10th %ile	25th %ile	Median/50th %ile	75th %ile	90th %ile	Max
1 or more events	45%	10.85%	19%	31%	39%	45%	51%	58%	80%

Note: For results for all response options, see Chart 5-3.

Table 6-4. Item Results on Overall Rating on Patient Safety for Excellent or Very Good—2022 SOPS Hospital 2.0 Database

Unit/Work Area Patient Safety Rating (Item E1)	Average % Positive	s.d.	Survey Item % Response						
			Min	10th %ile	25th %ile	Median/50th %ile	75th %ile	90th %ile	Max
Excellent or Very Good	67%	11.58%	9%	53%	59%	67%	75%	80%	98%

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

7 Results for Trending Hospitals: 2021 and 2022

In this section, we provide results from the 56 hospitals that submitted their data to both the 2021 and 2022 databases. Hospitals that submitted to both databases are considered “trending hospitals.” With trending hospitals, we can examine differences in scores within hospitals by comparing their most recent scores with their previous scores. In doing so, we can summarize the extent of change within these hospitals over time.

When reviewing the results in this chapter, note that survey scores might change, or not change, over time for a number of reasons. Important factors to consider are whether a hospital implemented patient safety initiatives or took other actions between survey administrations and the length of time between survey administrations.

Survey methodology may also affect changes in scores over time. Low survey response rates for the previous or most recent administration, changes in the number of staff asked to complete the survey, or changes in the types of staff asked to complete the survey make it difficult to understand the reasons for changes in scores over time.

Highlights



56

Trending Hospitals



The **Staffing and Work Pace** composite measure had the largest change in scores from the previous to the most recent database (-6% change).



The **Hospital Management Support for Patient Safety** composite measure had the second largest change in scores from the previous to the most recent database (-5% change).

Table 7-1. Trending Hospitals: Response Rate Statistics—2022 SOPS Hospital 2.0 Database

Summary Statistic	Most Recent Submission (2022)	Previous Submission (2021)
Total number of respondents	20,942	18,792
Number of completed surveys per hospital	Average: 374 Range: 17 – 4,169	Average: 336 Range: 26 – 1,884
Hospital response rate	Average: 40% Range: 9% – 80%	Average: 46% Range: 13% – 98%

Note: Trending hospitals include hospitals that submitted to both the 2021 and 2022 SOPS Hospital Databases.

Table 7-2. Distribution of 2022 SOPS Hospital 2.0 Database Trending Hospitals

Bed Size	AHA-Registered U.S. Hospitals (n = 6,165)		Trending Hospitals 2021 and 2022 (n=56)	
	Number	Percent	Number	Percent
6-24 beds	866	14%	8	14%
25-49 beds	1,398	23%	10	18%
50-99 beds	1,181	19%	10	18%
100-199 beds	1,219	20%	8	14%
200-299 beds	614	10%	8	14%
300-399 beds	357	6%	4	7%
400-499 beds	192	3%	2	4%
500 or more beds	338	5%	6	11%
Teaching Status	Number	Percent	Number	Percent
Teaching	2,615	42%	28	50%
Nonteaching	3,550	58%	28	50%

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

Table 7-2. Distribution of 2022 SOPS Hospital 2.0 Database Trending Hospitals (continued)

	AHA-Registered U.S. Hospitals (n = 6,165)		Trending Hospitals 2021 and 2022 (n=56)	
	Number	Percent	Number	Percent
Ownership				
Government (Federal and non-Federal)	1,427	23%	20	36%
Nongovernment (not for profit)	3,137	51%	34	61%
Investor owned (for profit)	1,601	26%	2	4%
Geographic Region	Number	Percent	Number	Percent
New England	246	4%	3	5%
Mid-Atlantic	536	9%	5	9%
South Atlantic/Associated Territories	989	16%	4	7%
East North Central	902	15%	12	21%
East South Central	481	8%	4	7%
West North Central	768	12%	2	4%
West South Central	1057	17%	21	38%
Mountain	541	9%	4	7%
Pacific/Associated Territories	645	10%	1	2%

Note: 1) Percentages may not add to 100 due to rounding; 2) States and territories are categorized into AHA-defined regions as follows:

- New England: CT, MA, ME, NH, RI, VT
- Mid-Atlantic: NJ, NY, PA
- South Atlantic/Associated Territories: DC, DE, FL, GA, MD, NC, SC, VA, WV, Puerto Rico, Virgin Islands
- East North Central: IL, IN, MI, OH, WI
- East South Central: AL, KY, MS, TN
- West North Central: IA, KS, MN, MO, ND, NE, SD
- West South Central: AR, LA, OK, TX
- Mountain: AZ, CO, ID, MT, NM, NV, UT, WY
- Pacific/Associated Territories: AK, CA, HI, OR, WA, American Samoa, Guam, Marshall Islands, Northern Mariana Islands

Trending Hospital Composite Measure and Item Results

Table 7-3. Trending Hospitals: Composite Measure Results—2022 SOPS Hospital 2.0 Database

SOPS Composite Measures	Composite Measure % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
1. Teamwork	81%	82%	-1%	8%	-17%	3%	-4%
2. Supervisor, Manager, or Clinical Leader Support for Patient Safety	80%	81%	-1%	11%	-14%	5%	-4%
3. Communication Openness	75%	76%	-1%	16%	-22%	4%	-6%
4. Reporting Patient Safety Events	75%	76%	-1%	29%	-27%	6%	-5%
5. Communication About Error	73%	73%	0%	16%	-26%	6%	-6%
6. Organizational Learning-Continuous Improvement	68%	72%	-4%	15%	-21%	4%	-7%
7. Hospital Management Support for Patient Safety	63%	68%	-5%	10%	-29%	5%	-9%
8. Response to Error	62%	63%	-1%	12%	-24%	5%	-6%
9. Handoffs and Information Exchange	61%	64%	-3%	24%	-30%	6%	-8%
10. Staffing and Work Pace	52%	58%	-6%	12%	-34%	5%	-10%
Composite Measure Average	69%	71%	-2%	10%	-20%	3%	-6%

Note: 1) Each composite measure is the average of the unrounded composite measure scores for the 56 trending hospitals in the database; 2) The Composite Measure Average is the average of the 10 unrounded composite measure scores for the trending hospitals; 3) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results.

Table 7-4. Trending Hospitals: Item Results—2022 SOPS Hospital 2.0 Database (Page 1 of 5)

Survey Items by SOPS Composite Measure	Survey Item % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
1. Teamwork	% Strongly Agree/Agree						
In this unit, we work together as an effective team. (Item A1)	86%	89%	-3%	12%	-52%	4%	-6%
During busy times, staff in this unit help each other. (Item A8)	87%	88%	-1%	9%	-17%	4%	-4%
	% Strongly Disagree/Disagree						
There is a problem with disrespectful behavior by those working in this unit. (Item A9*)	70%	70%	0%	13%	-22%	6%	-6%
2. Supervisor, Manager, or Clinical Leader Support for Patient Safety	% Strongly Agree/Agree						
My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety. (Item B1)	79%	79%	0%	20%	-18%	6%	-5%
My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (Item B3)	84%	85%	-1%	15%	-13%	5%	-4%
	% Strongly Disagree/Disagree						
My supervisor, manager, or clinical leader wants us to work faster during busy times, even if it means taking shortcuts. (Item B2*)	78%	79%	-1%	10%	-20%	4%	-6%

Note: 1) Based on data from 56 trending hospitals; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results, but the exact number of respondents will vary from item to item; 3) 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 7-4. Trending Hospitals: Item Results—2022 SOPS Hospital 2.0 Database (Page 2 of 5)

Survey Items by SOPS Composite Measure	Survey Item % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
3. Communication Openness	% Always/Most of the time						
In this unit, staff speak up if they see something that may negatively affect patient care. (Item C4)	82%	83%	-1%	14%	-19%	5%	-6%
When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (Item C5)	72%	73%	-1%	23%	-33%	5%	-6%
When staff in this unit speak up, those with more authority are open to their patient safety concerns. (Item C6)	74%	75%	-1%	23%	-28%	5%	-7%
	% Never/Rarely						
In this unit, staff are afraid to ask questions when something does not seem right. (Item C7*)	71%	72%	-1%	15%	-20%	5%	-5%
4. Reporting Patient Safety Events	% Always/Most of the time						
When a mistake is caught and corrected before reaching the patient, how often is this reported? (Item D1)	66%	66%	0%	40%	-35%	8%	-7%
When a mistake reaches the patient and could have harmed the patient, but did not, how often is this reported? (Item D2)	84%	85%	-1%	17%	-18%	5%	-5%

Note: 1) Based on data from 56 trending hospitals; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results, but the exact number of respondents will vary from item to item; 3) 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 7-4. Trending Hospitals: Item Results—2022 SOPS Hospital 2.0 Database (Page 3 of 5)

Survey Items by SOPS Composite Measure	Survey Item % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
5. Communication About Error	% Always/Most of the time						
We are informed about errors that happen in this unit. (Item C1)	73%	72%	1%	19%	-30%	6%	-5%
When errors happen in this unit, we discuss ways to prevent them from happening again. (Item C2)	76%	76%	0%	15%	-29%	7%	-7%
In this unit, we are informed about changes that are made based on event reports. (Item C3)	70%	71%	-1%	29%	-30%	6%	-8%
6. Organizational Learning – Continuous Improvement	% Strongly Agree/Agree						
This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (Item A4)	70%	74%	-4%	14%	-23%	5%	-8%
In this unit, changes to improve patient safety are evaluated to see how well they worked. (Item A12)	64%	67%	-3%	32%	-21%	6%	-8%
	% Strongly Disagree/Disagree						
This unit lets the same patient safety problems keep happening. (Item A14*)	71%	76%	-5%	9%	-28%	4%	-9%

Note: 1) Based on data from 56 trending hospitals; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results, but the exact number of respondents will vary from item to item; 3) 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 7-4. Trending Hospitals: Item Results—2022 SOPS Hospital 2.0 Database (Page 4 of 5)

Survey Items by SOPS Composite Measure	Survey Item % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
7. Hospital Management Support for Patient Safety	% Strongly Agree/Agree						
The actions of hospital management show that patient safety is a top priority. (Item F1)	75%	79%	-4%	17%	-32%	5%	-10%
Hospital management provides adequate resources to improve patient safety. (Item F2)	69%	74%	-5%	23%	-36%	6%	-11%
	% Strongly Disagree/Disagree						
Hospital management seems interested in patient safety only after an adverse event happens. (Item F3*)	47%	52%	-5%	9%	-34%	4%	-9%
8. Response to Error	% Strongly Agree/Agree						
When staff make errors, this unit focuses on learning rather than blaming individuals. (Item A10)	68%	69%	-1%	16%	-27%	5%	-6%
	% Strongly Disagree/Disagree						
In this unit, staff feel like their mistakes are held against them. (Item A6*)	59%	60%	-1%	20%	-30%	5%	-6%
When an event is reported in this unit, it feels like the person is being written up, not the problem. (Item A7*)	57%	56%	1%	24%	-20%	6%	-5%
In this unit, there is a lack of support for staff involved in patient safety errors. (Item A13*)	63%	66%	-3%	15%	-24%	6%	-9%

Note: 1) Based on data from 56 trending hospitals; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results, but the exact number of respondents will vary from item to item; 3) 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 7-4. Trending Hospitals: Item Results—2022 SOPS Hospital 2.0 Database (Page 5 of 5)

Survey Items by SOPS Composite Measure	Survey Item % Positive Response						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
9. Handoffs and Information Exchange	% Strongly Agree/Agree						
During shift changes, there is adequate time to exchange all key patient care information. (Item F6)	69%	73%	-4%	28%	-27%	5%	-9%
	% Strongly Disagree/Disagree						
When transferring patients from one unit to another, important information is often left out. (Item F4*)	54%	57%	-3%	22%	-52%	8%	-10%
During shift changes, important patient care information is often left out. (Item F5*)	61%	64%	-3%	27%	-23%	7%	-8%
10. Staffing and Work Pace	% Strongly Agree/Agree						
In this unit, we have enough staff to handle the workload. (Item A2)	45%	53%	-8%	17%	-32%	7%	-13%
	% Strongly Disagree/Disagree						
Staff in this unit work longer hours than is best for patient care. (Item A3*)	49%	55%	-6%	17%	-29%	6%	-11%
This unit relies too much on temporary, float, or PRN staff. (Item A5*)	51%	62%	-11%	11%	-62%	6%	-14%
The work pace in this unit is so rushed that it negatively affects patient safety. (Item A11*)	60%	63%	-3%	24%	-30%	8%	-11%

Note: 1) Based on data from 56 trending hospitals; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results, but the exact number of respondents will vary from item to item; 3) 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 7-5. Trending Hospitals: Average Percentage of Respondents Reporting One or More Events in the Past 12 Months—2022 SOPS Hospital 2.0 Database

Events Reported in the Past 12 Months (Item D3)	Percentage of Respondents Within Hospitals						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
1 or more events	40%	41%	-1%	22%	-22%	7%	-7%

Note: 1) Based on data from 56 trending hospitals with data for this item; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results; 3) Most recent, previous, and change columns display average percent positive scores for the trending hospitals.

Table 7-6. Trending Hospitals: Average Percentage of Respondents Giving Their Unit/Work Area a Patient Safety Rating of Excellent or Very Good —2022 SOPS Hospital 2.0 Database

Unit/Work Area Patient Safety Rating (Item E1)	Percentage of Respondents Within Hospitals						
	Most Recent	Previous	Change	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
Excellent or Very Good	66%	73%	-7%	15%	-35%	6%	-11%

Note: 1) Based on data from 56 trending hospitals with data for this item; 2) The number of respondents was 20,942 for the most recent results and 18,792 for the previous results; 3) Most recent, previous, and change columns display average percent positive scores for the trending hospitals.

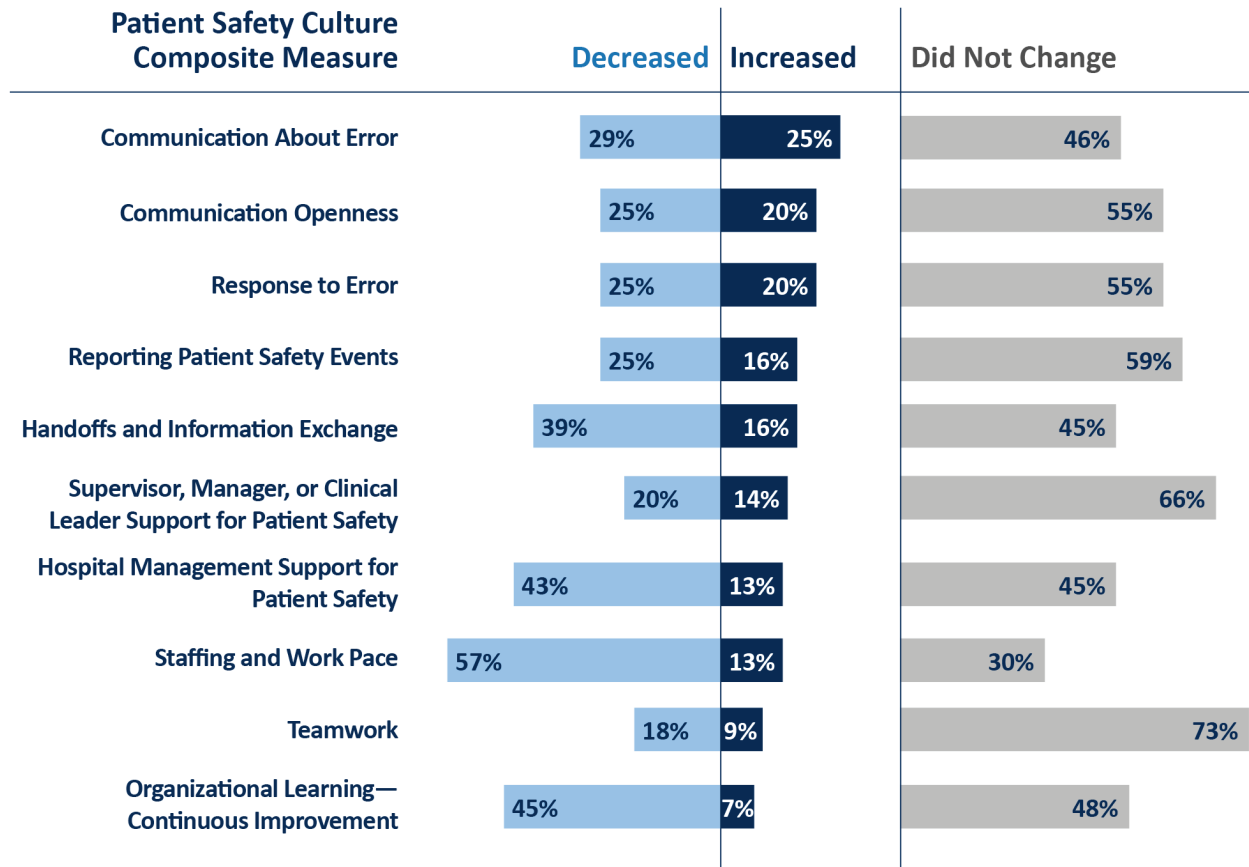
Bar Charts of Trending Hospital 2.0 Database Results

Chart 7-1 shows the percentages of trending hospitals that increased, decreased, or did not change for each of the 10 patient safety culture composite measures. Composite measures are ordered from highest to lowest percentage of hospitals that had an increase in score of 5 percent or more.

Chart 7-2 displays results for the percentages of trending hospitals that increased, decreased, or did not change in the percentage of respondents reporting one or more events in the past year and on unit/work area patient safety rating (percentage of respondents providing a rating of “Excellent” or “Very Good”).

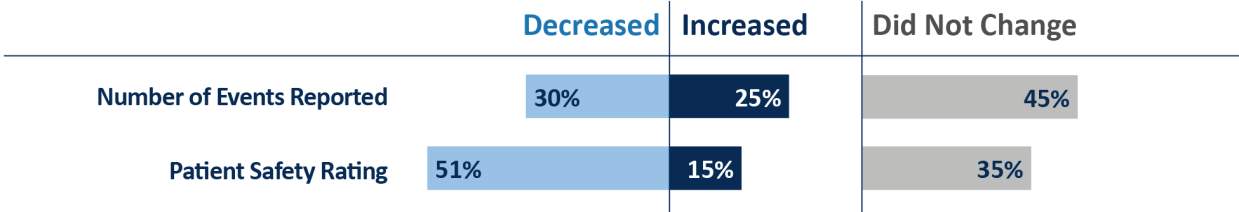
Chart 7-3 displays the overall number of composite measures for which trending hospitals increased or decreased by 5 percentage points or more.

Chart 7-1. Trending Hospitals: Percentage of 2022 Hospital 2.0 Database Hospitals That Increased or Decreased by 5 Percentage Points or More or Did Not Change on Each Composite Measure



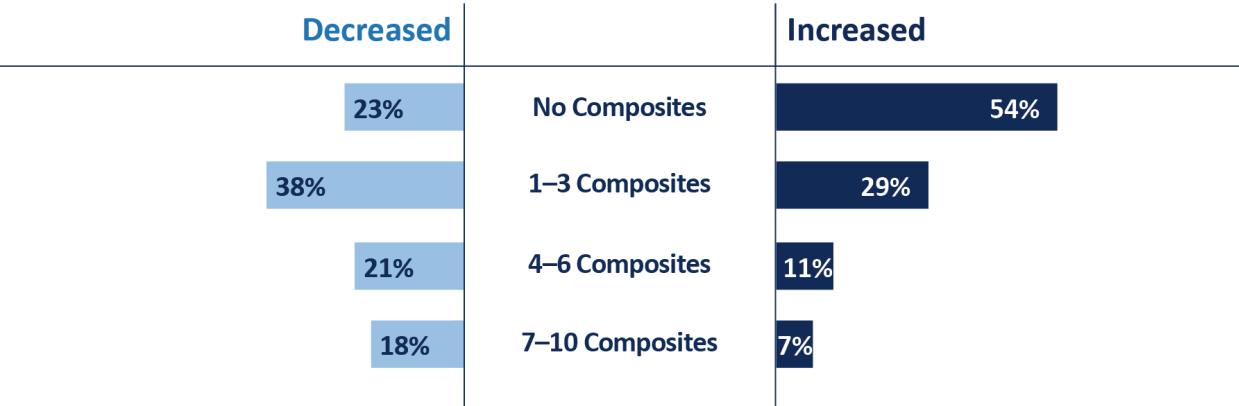
Note: Based on data from 56 trending hospitals. Percentages may not add to 100 due to rounding.

Chart 7-2. Trending Hospitals: Percentage of 2022 Hospital 2.0 Database Hospitals That Increased or Decreased by 5 Percentage Points or More or Did Not Change on Number of Events Reported (Item D3) and Unit/Work Area Patient Safety Rating (Item E1)



Note: 1) Based on data from 56 trending hospitals with data for these items. Percentages may not add to 100 due to rounding; 2) Average Percent Positive for Number of Events Reported is based on those who answered “1 or more events” and for Patient Safety Rating is based on those respondents that answered “Excellent” or “Very Good.”

Chart 7-3. Trending Hospitals: Distribution of 2022 Hospital 2.0 Database Hospitals by Number of Composite Measures That Increased or Decreased by 5 Percentage Points or More



Note: 1) Composite measures that increased or decreased and had a change in score of 5 percentage points or more; 2) Percentages may not add to 100 due to rounding.

8 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, which 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 Hospital Survey

The AHRQ [*Improving Patient Safety in Hospitals: A Resource List for Users of the AHRQ Hospital Survey on Patient Safety Culture Version 2.0*](#) contains references to websites and other practical resources hospitals can use to improve patient safety culture and patient safety.

It includes information on resources such as the Guide to Safety Huddles and the IHI Patient Safety Essentials Toolkit. These resources are not exhaustive but are provided to give initial guidance to hospitals seeking information about patient safety initiatives.

References

Agency for Healthcare Research and Quality. Hospital Survey on Patient Safety Culture.
<https://www.ahrq.gov/sops/surveys/hospital/index.html>. Accessed September 25, 2022.

American Hospital Association. 2019 AHA Annual Survey Database.
<https://www.ahadata.com/aha-annual-survey-database>.

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

The data were also reviewed 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 A8. *During busy times, staff in this unit help each other*, and an example of a negatively worded item is A9. *There is a problem with disrespectful behavior by those working in this unit.*

Sections A, B, C, and F include both positively and negatively worded items. When respondents supplied the same answer for every item in section A, B, C, and F, responses for those particular respondents were removed 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 (A and F) 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, D, E, and F were removed from the final dataset. Hospitals were included 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 hospitals to provide the number of completed, returned surveys and the total number of surveys distributed. Incomplete surveys are those surveys removed from data cleaning as outlined above. We then 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 10 SOPS composite measures use the frequency response option (*Communication About Error*, *Communication Openness*, and *Reporting Patient Safety Events*) while the other 7 composite measures use the agreement response option. The composite measure items also contain a “Does Not Apply or Don’t Know” response option that is not included in the calculation of percent positive scores.

The single item, Number of Events Reported, uses a 5-point scale ranging from “None” to “11 or more” (*None, 1 to 2, 3 to 5, 6 to 10, 11 or more*).

The Overall Rating on Patient Safety uses a 5-point scale ranging from “Poor” to “Excellent” (*Poor, Fair, Good, Very Good, Excellent*).

Composite Measure Item Percent Positive Response

The survey includes both positively worded items (e.g., “During busy times, staff in this unit help each other”) and negatively worded items (e.g., “There is a problem with disrespectful behavior by those working in this unit”). 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**, percent positive response is the combined percentage of respondents within a hospital who answered “Strongly Agree” or “Agree,” or “Always” or “Most of the time,” depending on the response options used for the item.

For example, for the item “During busy times, staff in this unit help each other,” if 50 percent of respondents within a hospital responded “Strongly Agree” and 25 percent responded “Agree,” the item percent positive response for that hospital would be $50\% + 25\% = 75\%$ positive.

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

For example, for the item “There is a problem with disrespectful behavior by those working in this unit,” if 40 percent of respondents within a hospital 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 disrespectful behavior).

Single Item Percent Positive Response

In this example, the Number of Events Reported (Item D3) percent positive response is calculated by adding together the percentage of respondents who answered that they reported one or more events in the past 12 months and then dividing that sum by the total number of responses to item D3.

The Patient Safety Rating (Item E1) 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 item E1.

Table N1 shows examples of computing the percent positive response for the Number of Events Reported (Item D3) and the Patient Safety Rating (Item E1).

Table N1. Example of Computing Number of Events Reported and Patient Safety Rating

Survey Items	Number of Responses Reporting 1 or More Events	Number of “Excellent” or “Very Good” Responses	Total Number of Responses to the Item	Item Percent Positive Response
Item D3: “In the past 12 months, how many patient safety events have you reported?”	193	NA*	250	193/250 = 77.2%
Item E1: “How would you rate your unit/work area on patient safety?”	NA*	106	240	106/240 = 44.2%

* NA = Not applicable.

Composite Measure Percent Positive Response

The 10 SOPS Hospital Survey 2.0 patient safety culture composite measures are each composed of two, three, or four survey items. We calculated composite measure scores for each hospital 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 hospital’s composite measure percent positive response is the average of these three percentages, or 50.2 percent positive, and displayed as a rounded percentage of 50%.

If a hospital 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. 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, there must be at least three respondents for the item.

Table N2 shows an example of computing a composite measure score for *Teamwork* for a single hospital. This composite measure has three items. Two are positively worded (Items A1 and A8) and one is negatively worded (Item A9). 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

Three Items Measuring "Teamwork"	Calculation of Percent Positive			
	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 A1 - positively worded "In this unit, we work together as an effective team."	110	NA*	240	110/240= 45.8%
Item A8 - positively worded "During busy times, staff in this unit help each other."	142	NA*	250	142/250= 56.8%
Item A9 - negatively worded "There is a problem with disrespectful behavior by those working in this unit."	NA*	125	260	125/260= 48.1%
Composite Measure % Positive Score = (45.8% + 56.8% + 48.1%) / 3 = 50.2%				

*NA = Not applicable.

This example includes three items, with percent positive response scores of 45.8 percent, 56.8 percent, and 48.1 percent. Averaging these three items' percent positive scores results in a composite measure percent positive score of 50.2 percent for the *Teamwork* composite measure.

Database Item and Composite Measure Percent Positive Scores Example

We calculated the database average percent positive scores for each of the 10 patient safety culture composite measures and survey items by averaging the unrounded hospital-level percent positive item scores and composite measure scores of all hospitals in the database. Because the percent positive is displayed as an overall average, scores from each hospital 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 hospital scores around the average. The standard deviations presented in Chapter 6 show the extent to which hospital scores differ from the average:

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

When the distribution of hospital 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 hospital scores.

For example, if an average percent positive score across the database hospitals was 70 percent with a standard deviation of 10 percent (and scores were normally distributed), then about 68 percent of all the database hospitals 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 hospitals and are actual scores from the lowest and highest scoring hospitals.

When comparing your data with the minimum and maximum scores, keep in mind that these scores may represent hospitals 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 hospital scores. A specific percentile score shows the percentage of hospitals 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 the percent positive scores from all the participating hospitals, from lowest to highest. The next step is to multiply the number of hospitals (n) by the percentile of interest (p), which in our case would be the 10th, 25th, 50th, 75th, or 90th percentiles.

The following examples show how the 10th and 50th percentiles would be computed using a sample of percent positive scores from 12 hospitals (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

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

10th percentile

1. For the 10th percentile, we would first multiply the number of hospitals (n) by .10 (p):
($n \times p = 12 \times .10 = 1.2$).
2. The product of $n \times p = 1.2$, 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 hospital in the $j^{\text{th}} + 1$ position:
 1. “j” equals 1.
 2. The 10th percentile equals the value for the hospital in the 2nd position = 48%.

50th percentile

1. For the 50th percentile, we would first multiply the number of hospitals by .50:
($n \times p = 12 \times .50 = 6.0$).

2. 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 hospital in the jth position plus the percent positive value of the hospital in the jth + 1 position, divided by 2:
 1. “j” equals 6.
 2. The 50th percentile equals the average of the hospitals in the 6th and 7th positions $(64\%+66\%)/2 = 65\%$.

When the distribution of hospital 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 hospitals.	10% of the hospitals scored the same or lower. 90% of the hospitals scored higher.
25th percentile Represents lower scoring hospitals.	25% of the hospitals scored the same or lower. 75% of the hospitals scored higher.
50th percentile (or median) Represents the middle of the distribution of hospitals.	50% of the hospitals scored the same or lower. 50% of the hospitals scored higher.
75th percentile Represents higher scoring hospitals.	75% of the hospitals scored the same or lower. 25% of the hospitals scored higher.
90th percentile Represents the highest scoring hospitals.	90% of the hospitals scored the same or lower. 10% of the hospitals scored higher.

To compare with the database percentiles, compare your hospital’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 hospital’s score is 55%, your score falls here: ↑

If your hospital’s score is 65%, your score falls here: ↑

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

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

Description of Trending Statistics

Trending Hospitals: 2021 and 2022

Table N6 shows examples of the statistics provided in Chapter 7 of this report. The tables show the average percentage of respondents who answered positively in the most recent survey administration (left column) and the previous administration (middle column) for trending hospitals only. The change over time (Most Recent score minus Previous score) is shown in the right column. The change is a negative number if the score from the most recent administration shows a decline and a positive number if the score from the most recent administration shows an increase.

Table N6. Example of Trending Statistics

Survey Item	Most Recent	Previous	Change
Item 1	80%	84%	-4%
Item 2	80%	78%	2%

Table N7 shows examples of additional trending statistics that are provided in Chapter 7. The maximum increase shows the score from the hospital or hospitals with the largest percent positive score increase on a particular composite measure or item. Similarly, the maximum decrease shows the score from the hospital or hospitals with the largest percent positive score decrease.

We calculated the average increase by including only hospitals that had any increase in their most recent score; hospitals that had no change or decreased were not included when calculating the average increase. Similarly, the average decrease was calculated by including only hospitals that had a decrease in their most recent score; hospitals that had no change or increased were not included when calculating the average decrease.

Table N7. Example of Other Trending Statistics

Survey Item	Maximum Increase	Maximum Decrease	Average Increase	Average Decrease
Item 1	18%	-45%	3%	-5%
Item 2	21%	-19%	5%	-6%

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., hospital bed size, teaching status). 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 represent the largest known compilation of publicly available patient safety culture data for hospitals (SOPS Hospital 2.0 Survey data) and therefore provide a useful reference. However, several limitations to these data should be kept in mind.

First, hospitals voluntarily submitted their data to the database; therefore, the database only includes those hospitals that have administered the SOPS Hospital 2.0 Survey and were willing to submit their data to the database. As such, only a small percentage of all hospitals in the United States (less than 7 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 hospitals are fairly consistent with the distribution of hospitals registered with the American Hospital Association (AHA) and are described further in Chapter 3.

Second, hospitals that administered the survey were not required to undergo any training and administered the survey in different ways. Some hospitals administered only paper surveys, others used only web-based surveys, and others used a combination of these two methods. 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 hospitals, such as survey administration modes and response rates, are provided in Chapter 2.

In addition, some hospitals conducted a census, surveying all of their staff and providers, while others administered the survey to a sample of only some staff and providers. Survey administration statistics for database hospitals, such as survey administration modes and response rates, are provided in Chapter 2.

Finally, the data hospitals 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, C, and F 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.

Appendixes A and B: Overall Results by Hospital Characteristics and Respondent Characteristics

In addition to the overall results on the database hospitals presented, Part II of the report presents data tables showing average percent positive scores on the survey composite measures and items across database hospitals, broken down by the following hospital and respondent characteristics:

Appendix A: Results by Hospital Characteristics

- Bed size
- Teaching status
- Ownership
- Geographic region

Appendix B: Results by Respondent Characteristics

- Staff position
- Unit/work area
- Tenure in current unit/work area
- Interaction with patients

The breakout tables are included as appendixes due to the large number of them. The appendixes are available online at ahrq.gov/sops/databases/hospital.

Highlights From Appendix A: Overall Results by Hospital Characteristics

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

- Hospitals with the smallest bed size (*6-24 beds*) had the highest Composite Measure Average (74 percent); larger hospitals (*400-499 beds* and *500 or more beds*) had the lowest (66 percent).
- Hospitals with the largest bed size (*500 or more beds*) had the highest average percentage of respondents who reported one or more events in the past year (48 percent); hospitals with the smallest bed size (*6-24 beds*) had the lowest (42 percent).
- Hospitals with the smallest bed size (*6-24 beds*) had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (73 percent); larger hospitals (*400-499 beds*) had the lowest (60 percent).

Teaching Status and Ownership (Tables A-5, A-7, A-8)

- *Nonteaching* hospitals had a higher average percent positive score (67 percent) than *Teaching* hospitals (61 percent) on the *Hospital Management Support for Patient Safety* composite measure.
- *Nonteaching* hospitals had a higher average percent positive score (54 percent) than *Teaching* hospitals (48 percent) on the *Staffing and Work Pace* composite measure.
- *Nonteaching* hospitals had a higher average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (69 percent); *Teaching* hospitals had a lower percentage (64 percent).
- *Government* owned hospitals had the highest average percent positive score on the *Staffing and Work Pace* composite measure (55 percent); *Investor owned* hospitals had the lowest (49 percent).
- *Investor owned* hospitals had the highest average percentage of respondents who reported one or more events in the past year (50 percent); *Government* hospitals had the lowest (39 percent).
- *Government* hospitals had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (69 percent); *Investor owned* hospitals had the lowest (58 percent).

Geographic Region (Tables A-9, A-11, A-12)

- *East South Central* hospitals had the highest Composite Measure Average (74 percent); *Mid Atlantic*, *New England*, and *Pacific* hospitals had the lowest (66 percent).

- *West North Central* hospitals had the highest average percentage of respondents who reported one or more events in the past year (50 percent); *East South Central* hospitals had the lowest (37 percent).
- *East South Central* hospitals had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (73 percent); *Pacific* hospitals had the lowest (59 percent).

Highlights From Appendix B: Overall Results by Respondent Characteristics

Staff Position (Tables B-1, B-3, B-4)

- *Supervisors/Managers/Clinical Leaders/Senior Leaders* had the highest Composite Measure Average (81 percent); *Advanced Practice Nurses* had the lowest (64 percent).
- *Supervisors/Managers/Clinical Leaders/Senior Leaders* had the highest average percentage of respondents who reported one or more events in the past year (64 percent); *Support Staff* had the lowest (21 percent).
- *Supervisors/Managers/Clinical Leaders/Senior Leaders* had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (80 percent); *RN/LVN/LPNs* had the lowest (59 percent).

Unit/Work Area (Tables B-5, B-7, B-8)

- *Administration/Management* had the highest Composite Measure Average (80 percent); *Telemetry* had the lowest (62 percent).
- *Telemetry* had the highest average percentage of respondents who reported one or more events in the past year (62 percent); *Support Services* had the lowest (29 percent).
- *Administration/Management* had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (81 percent); *Telemetry* had the lowest (49 percent).

Tenure in Current Unit/Work Area (Tables B-9, B-11, B-12)

- Respondents who have worked *Less than 1 year* in their current unit/work area had the highest Composite Measure Average (74 percent); respondents who have worked *1-5 years* and *6-10 years* had the lowest (68 percent).
- Respondents who have worked *6-10 years* in their current unit/work area had the highest average percentage of respondents who reported one or more events in the past year (50 percent); respondents who have worked *Less than 1 year* had the lowest (33 percent).

- Respondents who have worked *Less than 1 year* in their current unit/work area had the highest average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (71 percent); respondents who have worked *1-5 years* had the lowest (64 percent).

Interaction With Patients (Tables B-13, B-15, B-16)

- Respondents *without direct patient interaction* had a higher Composite Measure Average (75 percent) than respondents *with direct patient interaction* (68 percent).
- Respondents *with direct patient interaction* had a higher average percentage of respondents who reported one or more events in the past year (49 percent) than respondents *without direct patient interaction* (33 percent).
- Respondents *without direct patient interaction* had a higher average percentage of respondents who gave their unit/work area a patient safety rating of “Excellent” or “Very Good” (75 percent) than respondents *with direct patient interaction* (64 percent).



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