



## Surveys on Patient Safety Culture™

# Pilot Test Results From the 2019 AHRQ Surveys on Patient Safety Culture™ (SOPS™) Hospital Survey Version 2.0

## Part I: Overall Results

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**Contract No. HHSP233201500026I/HHSP23337004T**

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**AHRQ Publication No. 19-0068**

**September 2019**



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**Suggested Citation:**

Sorra, J, Famolaro T, Yount N, et al. Pilot Test Results from the 2019 AHRQ Surveys on Patient Safety Culture™ (SOPS™) Hospital Survey Version 2.0--Part I: Overall Results. (Prepared by Westat, Rockville, MD, under Contract No. HHSP233201500026I/HHSP23337004T). Rockville, MD: Agency for Healthcare Research and Quality; September 2019. AHRQ Publication No. 19-0068.

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**No investigators have any affiliations or financial involvement (e.g., employment, consultancies, honoraria, stock options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in this report.**

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# Purpose and Use of This Report

This report provides results from 25 U.S. hospitals that participated in a 2019 pilot test of Hospital Survey Version 2.0, an updated version of the Hospital Survey on Patient Safety Culture. The Agency for Healthcare Research and Quality (AHRQ) developed the Surveys on Patient Safety Culture™ (SOPS™) for various healthcare settings. The hospital survey was first released in 2004.

When comparing your hospital's results against the pilot results in this document, keep in mind that these results are from a very limited number of hospitals and will provide only a general indication of how your hospital compares with other hospitals in the United States. The data summarized here were not derived from a statistically selected sample of U.S. hospitals.

According to the American Hospital Association (AHA) 2017 Database, 6,282 hospitals are registered with AHA in the United States and its territories combined.<sup>1</sup> The pilot test results presented here represent less than 1 percent of the total number of hospitals.

To encourage adoption of the SOPS Hospital Survey 2.0, AHRQ intends to accept voluntary data submission on Version 2.0 for the SOPS Hospital Database. For more information on the SOPS Hospital Survey 2.0, visit the AHRQ website at [www.ahrq.gov/sops/surveys/hospital](http://www.ahrq.gov/sops/surveys/hospital); for information on data submission, visit [www.ahrq.gov/sops/databases](http://www.ahrq.gov/sops/databases).

In addition to the overall results presented in Part I, Part II of the report presents data tables showing average percent positive scores on the SOPS Hospital Survey 2.0 survey composite measures and items broken down by the following respondent characteristics:

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

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<sup>1</sup> American Hospital Association (AHA). Annual Survey of Hospitals Database. Chicago: Health Forum; data used from 2017.

# Survey Development and Pilot Test

## SOPS Hospital Survey 2.0 Development

Patient safety culture is the extent to which an organization’s culture supports and promotes patient safety. Patient safety culture refers to the beliefs, values, and norms shared by healthcare practitioners and other staff throughout the organization that influence their actions and behaviors. Patient safety culture can be measured by determining what is rewarded, supported, expected, and accepted in an organization as it relates to patient safety. The SOPS Hospital Survey 2.0 is intended to help hospitals assess patient safety culture.

The survey team reviewed the literature on patient safety in hospitals, interviewed hospital experts and researchers, identified appropriate survey topics, and drafted survey items for review by the SOPS Technical Expert Panel. We cognitively tested the draft survey with hospital providers and staff to ensure that the questions were easy to understand and answer and that the items were relevant.

We conducted an initial pilot test with 44 hospitals in 2017, but after further analysis and input from AHRQ and the SOPS Technical Expert Panel, decided to further revise the SOPS Hospital Survey 2.0 and conduct another pilot test in 2018. A second pilot administration was conducted with 25 U.S. hospitals from November 2018 to January 2019. We analyzed the pilot data to examine the survey’s psychometric properties (reliability, factor structure, etc.), with the goal of shortening the survey by including only the best items.

The SOPS Hospital Survey 2.0 has a total of 40 survey items. There are 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. In addition, 32 survey items are grouped into 10 composite measures (a composite measure consists of 2 to 4 survey items that assess the same area of patient safety culture), described in Table 1. Most of the survey items use 5-point agreement scales (“Strongly disagree” to “Strongly agree”) or frequency scales (“Never” to “Always”) and include a “Does not apply or Don’t know” response option. The survey also includes six items about respondent background characteristics (staff position, unit/work area, hospital tenure, unit/work area tenure, work hours, and whether they have direct interaction with patients). The end of the survey includes a section for open-ended comments.

**Table 1. SOPS Hospital Survey 2.0 Patient Safety Culture Composite Measures**

Patient Safety Culture Composite Measures	Definition: The extent to which...	Number of Items
<b>Communication About Error</b>	Staff are informed when errors occur, discuss ways to prevent errors, and are informed when changes are made.	3
<b>Communication Openness</b>	Staff speak up if they see something unsafe and feel comfortable asking questions.	4
<b>Handoffs and Information Exchange</b>	Important patient care information is transferred across hospital units and during shift changes.	3
<b>Hospital Management Support for Patient Safety</b>	Hospital management shows that patient safety is a top priority and provides adequate resources for patient safety.	3
<b>Organizational Learning—Continuous Improvement</b>	Work processes are regularly reviewed, changes are made to keep mistakes from happening again, and changes are evaluated.	3
<b>Reporting Patient Safety Events</b>	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.	2
<b>Response to Error</b>	Staff are treated fairly when they make mistakes and there is a focus on learning from mistakes and supporting staff involved in errors.	4
<b>Staffing and Work Pace</b>	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.	4
<b>Supervisor, Manager, or Clinical Leader Support for Patient Safety</b>	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.	3
<b>Teamwork</b>	Staff work together as an effective team, help each other during busy times, and are respectful.	3

## Pilot Test Response Rate Statistics

The number of respondents, number of surveys administered, and response rates for the overall pilot test of SOPS Hospital Survey 2.0 are shown in Table 2.

**Table 2. Response Rate Statistics – 2019 SOPS Hospital Survey 2.0 Pilot Test**

Overall Response Rate Information		Statistic
Total number of respondents		4,345
Total number of surveys administered		11,292
Overall response rate		38%
Average Response Rate Information		Statistic
Average number of respondents per hospital (range: 29 to 527)		174
Average number of surveys administered per hospital (range: 79 to 1,203)		452
Average hospital response rate (range: 21% to 67%)		42%

# Pilot Hospital Characteristics

This section presents information about the distribution of pilot hospitals by hospital size, teaching status, ownership, and geographic region.

**Table 3. Distribution of 2019 SOPS Hospital Survey 2.0 Pilot Test Hospitals by Hospital Characteristics Compared With AHA Registered Hospitals**

Bed Size	Pilot Test Hospitals (n=25)		AHA Registered Hospitals (n = 6,282)	
	Number	Percent	Number	Percent
6-49 beds	1	4%	2,256	36%
50-99 beds	7	28%	1,215	19%
100-199 beds	6	24%	1,279	20%
200-299 beds	4	16%	641	10%
300-399 beds	6	24%	370	6%
400 or more beds	1	4%	521	8%
Teaching Status	Number	Percent	Number	Percent
Teaching	11	44%	2,413	38%
Nonteaching	14	56%	3,869	62%
Ownership	Number	Percent	Number	Percent
Government (Federal and non-Federal)	5	20%	1,445	23%
Nongovernment, not for profit	18	72%	3,155	50%
Investor owned (for profit)	2	8%	1,682	27%
Geographic Region	Number	Percent	Number	Percent
New England	1	4%	248	4%
Mid-Atlantic	2	8%	562	9%
South Atlantic/Associated Territories	4	16%	1,009	16%
East North Central	6	24%	920	15%
East South Central	1	4%	496	8%
West North Central	2	8%	786	13%
West South Central	3	12%	1,065	17%
Mountain	2	8%	540	9%
Pacific/Associated Territories	4	16%	656	10%

**Note:** Percentages may not add to 100 percent 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



# Pilot Respondent Characteristics

This section describes respondent characteristics within the pilot test hospitals.

**Table 4. Distribution of 2019 SOPS Hospital Survey 2.0 Pilot Test Respondents by Staff Position**

Respondent Characteristics Hospital Staff Position	Pilot Test Respondents	
	Number	Percent
<b>Nursing</b>		
Licensed Vocational Nurse (LVN), Licensed Practical Nurse (LPN)	27	1%
Advanced Practice Nurse (NP, CRNA, CNS, CNM)	53	1%
Patient Care Aide, Nursing Assistant	270	6%
Registered Nurse (RN)	1,390	32%
<b>Medical</b>		
Resident, Intern	10	<1%
Physician Assistant	13	<1%
Physician, Attending, Hospitalist	98	2%
<b>Supervisor, Manager, Clinical Leader, Senior Leader</b>		
Senior Leader, Executive, C-Suite	29	1%
Supervisor, Manager, Department Manager, Clinical Leader, Administrator, Director	336	8%
<b>Other Clinical Position</b>		
Psychologist	2	<1%
Dietitian	21	<1%
Social Worker	44	1%
Respiratory Therapist	97	2%
Physical, Occupational, or Speech Therapist	107	2%
Pharmacist, Pharmacy Technician	113	3%
Technologist, Technician (EKG, Lab, Radiology)	392	9%
<b>Support</b>		
Transporter	16	<1%
Security	39	1%
Food Services	65	2%
Facilities	67	2%
Housekeeping, Environmental Services	76	2%
Information Technology, Health Information Services, Clinical Informatics	169	4%
Unit Clerk, Secretary, Receptionist, Office Staff	355	8%
<b>Other Staff Position</b>	549	13%
<b>Total</b>	4,338	100%
Missing	7	
<b>Overall total</b>	4,345	

**Table 5. Distribution of 2019 SOPS Hospital Survey 2.0 Pilot Test Respondents by Unit/Work Area**

Respondent Characteristics Unit/Work Area	Pilot Test Respondents	
	Number	Percent
<b>Multiple Units, No Specific Unit</b>	408	9%
<b>Medical/Surgical Units</b>		
Medical Unit (Nonsurgical)	62	1%
Surgical Unit	70	2%
Combined Medical/Surgical Unit	297	7%
<b>Patient Care Units</b>		
Pulmonology	8	<1%
Gastroenterology	18	<1%
Psychiatry, Behavioral Health	66	2%
Oncology, Hematology	67	2%
Cardiology	96	2%
Rehabilitation, Physical Medicine	118	3%
Telemetry	124	3%
ICU (All Adult Types)	125	3%
Emergency Department, Observation, Short Stay	228	5%
Labor & Delivery, Obstetrics & Gynecology	212	5%
Pediatrics (including NICU, PICU)	241	6%
<b>Surgical Services</b>		
Anesthesiology	18	<1%
Endoscopy, Colonoscopy	18	<1%
Pre Op, Operating Room/Suite, PACU/Post Op, Peri Op	239	6%
<b>Clinical Services</b>		
Respiratory Therapy	37	1%
Social Services, Case Management, Discharge Planning	39	1%
Pharmacy	104	2%
Pathology, Lab	175	4%
Radiology, Imaging	191	4%
<b>Administration/Management</b>		
Human Resources, Training	35	1%
Financial Services, Billing	113	3%
Administration, Management	126	3%
Information Technology, Health Information Management, Clinical Informatics	176	4%
Quality, Risk Management, Patient Safety	66	2%
<b>Support Services</b>		
Transport	20	<1%
Security Services	33	1%
Food Services, Dietary	76	2%
Housekeeping, Environmental Services, Facilities	104	2%
Admitting/Registration	119	3%
<b>Other Unit/Work Area</b>	492	11%
<b>Total</b>	4,321	100%
Missing	24	
<b>Overall total</b>	4,345	

**Table 6. Distribution of 2019 SOPS Hospital Survey 2.0 Pilot Test Respondents by Other Respondent Characteristics**

Respondent Characteristics	Pilot Test Respondents	
	Number	Percent
<b>Tenure in Hospital</b>		
Less than 1 year	437	10%
1 to 5 years	1,543	36%
6 to 10 years	757	18%
11 or more years	1,578	37%
<b>Total</b>	4,315	100%
Missing	30	
Overall total	4,345	
<b>Tenure in Unit/Work Area</b>		
Less than 1 year	585	14%
1 to 5 years	1,826	42%
6 to 10 years	744	17%
11 or more years	1,156	27%
<b>Total</b>	4,311	100%
Missing	34	
Overall total	4,345	
<b>Hours Worked per Week in Hospital</b>		
Less than 30 hours per week	631	15%
30 to 40 hours per week	2,591	60%
More than 40 hours	1,089	25%
<b>Total</b>	4,311	100%
Missing	34	
Overall total	4,345	
<b>Interaction With Patients</b>		
Yes, I typically have direct interaction or contact with patients	3,025	70%
No, I typically do NOT have direct interaction or contact with patients	1,291	30%
<b>Total</b>	4,316	100%
Missing	29	
Overall total	4,345	

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

# Composite Measure and Item Results

## Composite Measure and Item Charts

This section provides results for the SOPS Hospital Survey 2.0 composite measures and items. The methods for calculating the percent positive scores for the composite measures and items are described in the Notes at the end of this document.

### Composite Measure Results

**Chart 1** shows the average percent positive response for each of the 10 patient safety culture composite measures. The patient safety culture composite measures are shown in order from the highest average percent positive response to the lowest.

### Item Results

**Chart 2** shows the average percent positive response for each of the 32 survey composite measure items. The items are grouped by the patient safety culture composite measure they are intended to measure. Within each composite measure, the items are presented in the order in which they appear in the survey.

### Number of Events Reported

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

### Overall Ratings on Patient Safety

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

**Chart 1. Composite Measure Results for the SOPS Hospital Survey 2.0  
Average Percent Positive Response – 2019 Pilot Test Hospitals**



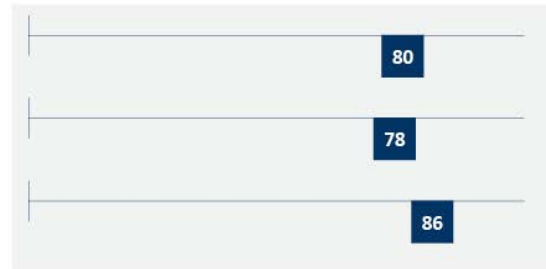
**Chart 2. Item Results for the SOPS Hospital Survey 2.0**  
**Average Percent Positive Response - 2019 Pilot Test Hospitals**

**1. Supervisor, Manager, or Clinical Leader**

**Support for Patient Safety**

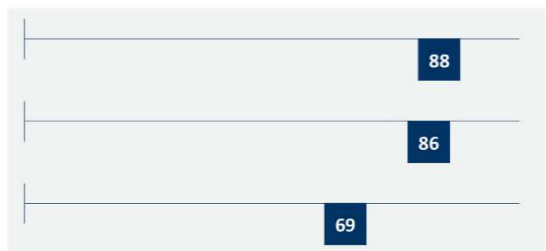
- 1. My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety. (B1)
- 2. My supervisor, manager, or clinical leader wants us to work faster during busy times, even if it means taking shortcuts. (B2R)
- 3. My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (B3)

**Average % Positive Response**



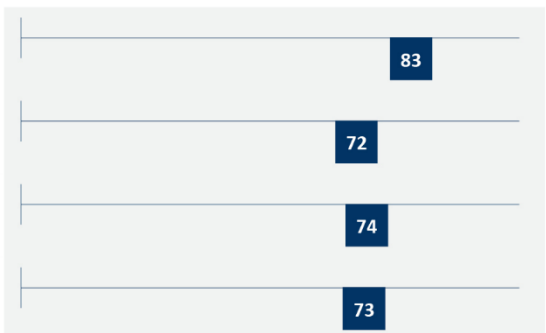
**2. Teamwork**

- 1. In this unit, we work together as an effective team. (A1)
- 2. During busy times, staff in this unit help each other. (A8)
- 3. There is a problem with disrespectful behavior by those working in this unit. (A9R)



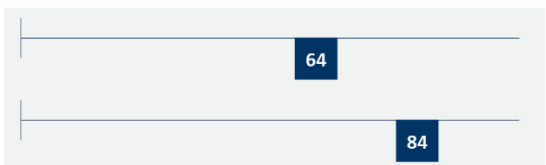
**3. Communication Openness**

- 1. In this unit, staff speak up if they see something that may negatively affect patient care. (C4)
- 2. When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (C5)
- 3. When staff in this unit speak up, those with more authority are open to their patient safety concerns. (C6)
- 4. In this unit, staff are afraid to ask questions when something does not seem right. (C7R)



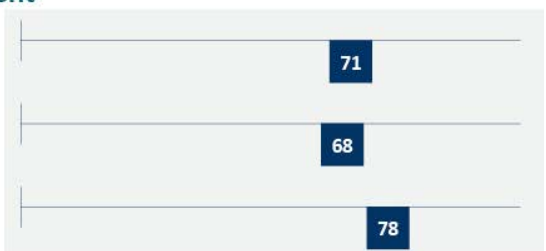
**4. Reporting Patient Safety Events**

- 1. When a mistake is caught and corrected before reaching the patient, how often is this reported? (D1)
- 2. When a mistake reaches the patient and could have harmed the patient but did not, how often is this reported? (D2)



**5. Organizational Learning – Continuous Improvement**

- 1. This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (A4)
- 2. In this unit, changes to improve patient safety are evaluated to see how well they worked. (A12)
- 3. This unit lets the same patient safety problems keep happening. (A14R)

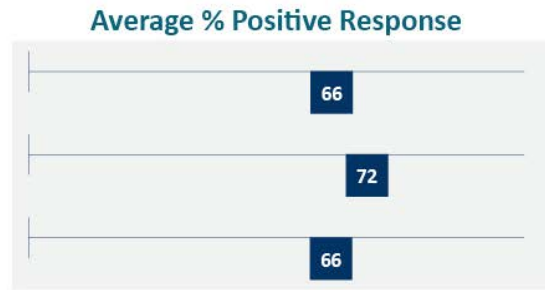


**Note:** The item’s survey location is shown after the item text. An “R” indicates a negatively worded item, where the percent positive response is based on those who responded “Strongly disagree” or “Disagree,” or “Never” or “Rarely” (depending on the response category used for the item).

**Chart 2. Item Results for the SOPS Hospital Survey 2.0**  
**Average Percent Positive Response - 2019 Pilot Test Hospitals, continued**

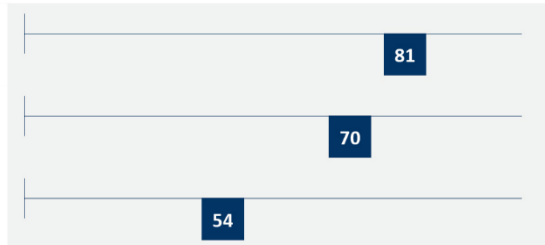
**6. Communication About Error**

- 1. We are informed about errors that happen in this unit. (C1)
- 2. When errors happen in this unit, we discuss ways to prevent them from happening again. (C2)
- 3. In this unit, we are informed about changes that are made based on event reports. (C3)



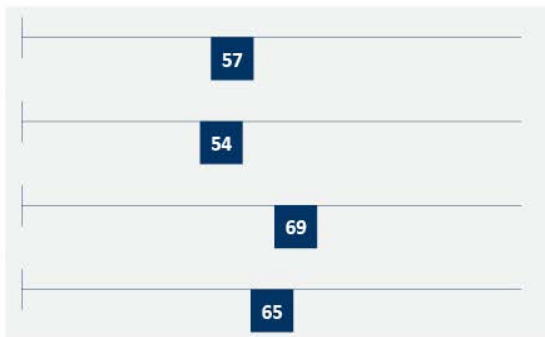
**7. Hospital Management Support for Patient Safety**

- 1. The actions of hospital management show that patient safety is a top priority. (F1)
- 2. Hospital management provides adequate resources to improve patient safety. (F2)
- 3. Hospital management seems interested in patient safety only after an adverse event happens. (F3R)



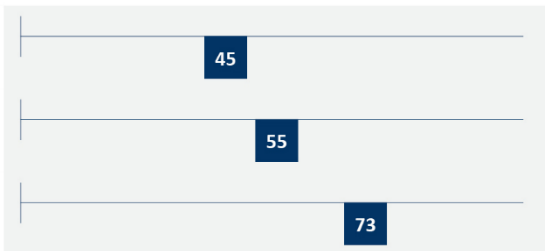
**8. Response to Error**

- 1. In this unit, staff feel like their mistakes are held against them. (A6R)
- 2. When an event is reported in this unit, it feels like the person is being written up, not the problem. (A7R)
- 3. When staff make errors, this unit focuses on learning rather than blaming individuals. (A10)
- 4. In this unit, there is a lack of support for staff involved in patient safety errors. (A13R)



**9. Handoffs and Information Exchange**

- 1. When transferring patients from one unit to another, important information is often left out. (F4R)
- 2. During shift changes, important patient care information is often left out. (F5R)
- 3. During shift changes, there is adequate time to exchange all key patient care information. (F6)

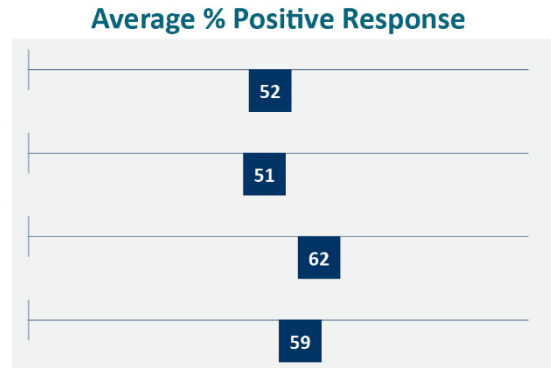


**Note:** The item’s survey location is shown after the item text. An “R” indicates a negatively worded item, where the percent positive response is based on those who responded “Strongly disagree” or “Disagree,” or “Never” or “Rarely” (depending on the response category used for the item).

**Chart 2. Item Results for the SOPS Hospital Survey 2.0  
Average Percent Positive Response - 2019 Pilot Test Hospitals, continued**

**10. Staffing and Work Pace**

- 1. In this unit, we have enough staff to handle the workload. (A2)
- 2. Staff in this unit work longer hours than is best for patient care. (A3R)
- 3. This unit relies too much on temporary, float, or PRN staff. (A5R)
- 4. The work pace in this unit is so rushed that it negatively affects patient safety. (A11R)

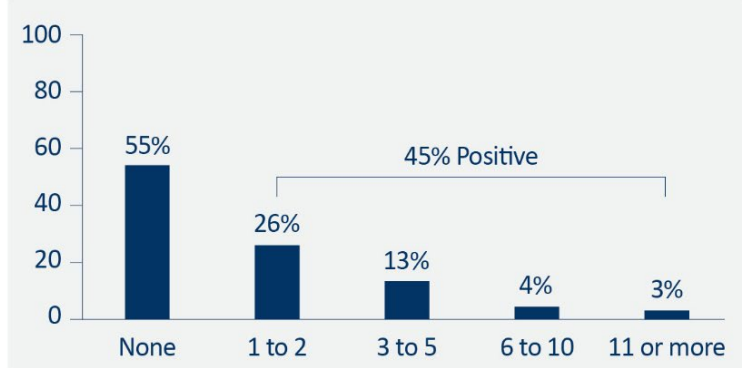


**Note:** The item’s survey location is shown after the item text. An “R” indicates a negatively worded item, where the percent positive response is based on those who responded “Strongly disagree” or “Disagree,” or “Never” or “Rarely” (depending on the response category used for the item).

**Chart 3. SOPS Hospital Survey 2.0  
Average Percentage of Respondents Reporting Events in the Past 12 months –  
2019 Pilot Test Hospitals**

**Number of Events Reported**

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



**Note:** (1) Percentages indicate average percent response for each item response category across the 2019 pilot hospitals, (2) the percent positive displayed may not equal the sum of the response option percentages due to rounding, and (3) all five percentages may not add to 100 percent due to rounding.



**Chart 4. SOPS Hospital Survey 2.0**  
**Average Overall Rating on Patient Safety - 2019 Pilot Test Hospitals**

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**Patient Safety Rating**

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



**Note:** (1) Percentages indicate average percent response for each item response category across the 2019 pilot hospitals, and (2) the percent positive displayed may not equal the sum of the response option percentages due to rounding.

# Notes: Explanation of Calculations

This section provides additional detail regarding how various statistics presented in this report were calculated.

## Calculation of Percent Positive Scores

Most of the SOPS Hospital Survey 2.0 items ask respondents to answer using 5-point response categories in terms of agreement (Strongly agree, Agree, Neither, Disagree, Strongly disagree, Does not apply or Don't know) or frequency (Always, Most of the time, Sometimes, Rarely, Never, Does not apply or Don't know). **Table N1** shows the response options and the composite measures that use those response options.

**Table N1. SOPS Hospital Survey 2.0 Response Options and Corresponding Composite Measures**

Composite Measure	Response Options	
	Agreement Scale (Strongly agree, Agree, Neither, Disagree, Strongly disagree, Does not apply or Don't know)	Frequency Scale (Always, Most of the time, Sometimes, Rarely, Never, Does not apply or Don't know)
Communication About Error		√
Communication Openness		√
Handoffs and Information Exchange	√	
Hospital Management Support for Patient Safety	√	
Organizational Learning – Continuous Improvement	√	
Reporting Patient Safety Events		√
Response to Error	√	
Staffing and Work Pace	√	
Supervisor, Manager, or Clinical Leader Support for Patient Safety	√	
Teamwork	√	

The single item, Number of Events Reported, uses a 5-point frequency 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*).

Most of the survey's items include a “Does not apply/Don't know” response option. In addition, each survey item will probably have some missing data from respondents who simply did not answer the question. “Does not apply/Don't know” and missing responses are excluded when calculating percentages of response to the survey items.

## Item Percent Positive Response

The survey includes both positively worded items (e.g., “When staff in this unit speak up, those with more authority are open to their patient safety concerns”) and negatively worded items (e.g., “In this unit, staff are afraid to ask questions when something does not seem right”). Calculating the percent positive response on an item is different for positively and negatively worded items:

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

For example, for the item “When staff make errors, this unit focuses on learning rather than blaming individuals,” 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,” because a *negative* answer on a negatively worded item indicates a *positive* response.

For example, for the item “In this unit, staff are afraid to ask questions when something does not seem right,” if 40% percent of respondents within a hospital responded “Never” and 20 percent responded “Rarely,” the item percent positive response would be 60 percent (i.e., 60 percent of respondents *are not* afraid to ask questions when something does not seem right).

## Composite Measure Percent Positive Response

The 10 patient safety culture composite measures are composed of two, three, or four survey items. We calculated composite measure scores for each hospital by averaging the 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 50 percent, 55 percent, and 60 percent, the hospital’s composite measure percent positive response would be the average of these three percentages, or 55 percent positive.

## Item and Composite Measure Percent Positive Scores Example

We calculated average percent positive scores for each of the 10 patient safety culture composite measures and survey items by averaging the hospital-level percent positive scores of all hospitals in the pilot test. Since 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.

**Table N2** shows an example of computing a composite measure score for *Teamwork*. This composite measure has three items. Two are positively worded (items A1 and A8) and one is negatively worded (item A9R). 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 for the SOPS Hospital Survey 2.0**

Three Items Measuring "Teamwork"	For Positively Worded Items, # of "Strongly Agree" or "Agree" Responses	For Negatively Worded Items, # of "Strongly Disagree" or "Disagree" Responses	Total # of Responses to the Item (Excluding "Does Not Apply" or "Don't Know" and Missing Responses)	Percent Positive Response on Item
<b>Item A1 - positively worded</b> "In this unit, we work together as an effective team."	110	NA*	240	110/240=46%
<b>Item A8 - positively worded</b> "During busy times, staff in this unit help each other."	140	NA*	250	140/250= 56%
<b>Item A9R - negatively worded</b> "There is a problem with disrespectful behavior by those working in this unit."	NA*	125	260	125/260=48%
<b>Composite Measure % Positive Score = (46% + 56% + 48%) / 3 = 50%</b>				

\*NA = Not applicable.

This example includes three items, with percent positive response scores of 46 percent, 56 percent, and 48 percent. Averaging these item percent positive scores results in a composite measure score of 50 percent on *Teamwork*. This means that an average of 50 percent of the respondents responded positively to the survey items in this composite measure.

Once you calculate your hospital's percent positive response for each of the 10 patient safety culture composite measures, you can compare your results with the composite measure results from the 25 pilot test hospitals.

The *Average Across Composite Measures* is calculated by averaging the average percent positive response for all 10 composite measures.