



Surveys on
Patient Safety
Culture®



2025 Surveys on Patient Safety Culture®

Ambulatory Surgery Center Survey Database Report

Part I



PATIENT
SAFETY

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Contents

Chapter	Page
Highlights	1
1 Overview	3
2 Overall Results	7
3 Database Results Over Time: 2020 to 2025	14
4 Comparing Facility Results	17
5 What's Next? Action Planning for Improvement	24
Explanation of Calculations and Data Limitations	25

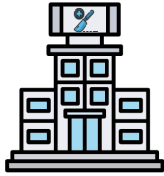


Highlights



Surveys on Patient Safety Culture®

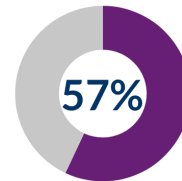
Findings From the 2025 Ambulatory Surgery Center (ASC) Database



292
Participating
ambulatory surgery centers

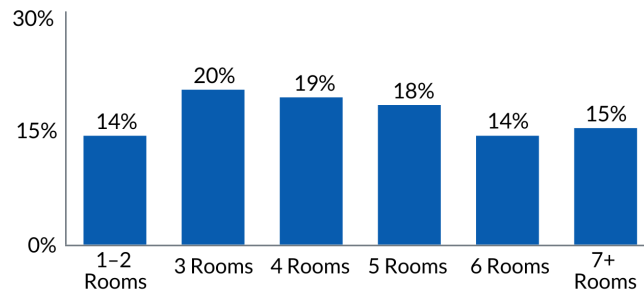
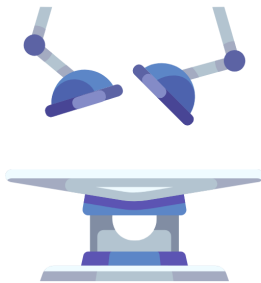


7,845
Respondents



Average response
rate

» Distribution of Operating/Procedure Rooms for Database ASCs



» Composite Measure Average



Note: Average of the eight composite measure percent positive scores.



Highest Scoring Composite Measure



Organizational Learning - Continuous Improvement

91%

of respondents reported that the facility actively looks for ways to improve patient safety and makes changes to ensure that problems do not recur.

Lowest Scoring Composite Measure



Staffing, Work Pressure, and Pace

72%

of respondents indicated they have enough time to prepare for procedures, have enough staff to handle the workload, and do not feel rushed.

Highest Scoring Survey Items



94%

of respondents indicated important patient care information is communicated across areas, and key patient information is shared. (Items A1 and A7, Communication About Patient Information)

Lowest Scoring Survey Item

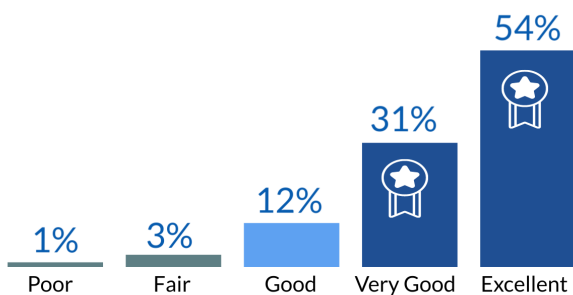


52%

of respondents indicated they do not feel rushed taking care of patients. (Item A10, Staffing, Work Pressure, and Pace)

Note: Results are based on items in a composite measure.

Overall Rating on Patient Safety



Note: Chart totals may not add to 100% due to rounding.

What's Next? Action Planning for Patient Safety Improvement

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



1 Overview

Patient safety culture is the extent to which the beliefs, values, and norms shared by providers and staff 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. It can exist at multiple levels including at the ambulatory surgery center level and at the system level.

In response to requests from ambulatory surgery centers (ASCs) interested in comparing results on the Surveys on Patient Safety Culture® (SOPS®) Ambulatory Surgery Center Survey, the Agency for Healthcare Research and Quality (AHRQ) established the SOPS Ambulatory Surgery Center Survey Database. The SOPS Database aggregates voluntarily submitted data to facilitate comparisons of SOPS ASC Survey results.

This report presents unweighted statistics (averages, standard deviations, minimum and maximum scores, and percentiles) on the patient safety culture composite measures and items from the SOPS ASC Survey. The SOPS ASC Survey includes 27 items that make up eight composite measures. Table 1-1 defines each composite measure.

Table 1-1. SOPS ASC Survey Composite Measures and Definitions

SOPS ASC Survey Composite Measures	Definition: The Extent to Which...	Number of Items
Communication About Patient Information	Key information about patients is available and well communicated within the ASC.	4
Communication Openness	Staff speak up when they see something unsafe, they feel comfortable asking questions, and their suggestions are valued.	3
Management Support for Patient Safety	Managers examine near-miss events, provide adequate resources, and encourage everyone to suggest ways to improve patient safety.	3
Organizational Learning—Continuous Improvement	The facility actively looks for ways to improve patient safety and makes changes to ensure that problems do not recur.	3
Response to Mistakes	Staff are told about patient safety problems, learning rather than blame is emphasized, and staff are treated fairly when they make mistakes.	3
Staff Training	Staff receive adequate orientation, get the refresher and on-the-job training they need, and do not feel pressured to do tasks they are not trained to do.	4
Staffing, Work Pressure, and Pace	Staff have enough time to properly prepare between procedures, there are enough staff to handle the workload, and they do not feel rushed.	3
Teamwork	Staff are respectful and help each other, work together as an effective team, and understand each other's roles and responsibilities.	4

In addition to the items that make up these composite measures, the survey includes an item about near-miss documentation, an item for respondents' overall rating on patient safety, and three items about communication in the surgery/procedure room. Respondents are also asked to provide answers to two background questions about staff position and hours worked per week in the ASC, and to answer a screening question regarding respondents' presence in the surgery room.

Response Statistics for 2025 Database ASCs

Table 1-2 shows response rate information for the 292 participating ASCs. Table 1-3 shows response rates by survey administration modes. Participating ASCs administered the survey from October 2023 to June 2025.

Table 1-2. Response Statistics

Overall Response Information	Statistic
Number of ASCs	292
Number of respondents	7,845
Number of surveys distributed	15,199
Overall response rate	52%
Average Response Information	Average (SD)
Average number of respondents per ASC (range: 4 to 196)	27 (19)
Average number of surveys distributed per ASC (range: 5 to 267)	52 (38)
Average ASC response rate (range: 10% to 100%)	57% (21%)

Table 1-3. Survey Administration Mode Statistics

Survey Administration Mode	ASCs		Respondents		Average Response Rate
	Number	Percent	Number	Percent	Percent (SD)
Paper only	9	3%	263	3%	90% (12%)
Web only	282	97%	7,566	96%	56% (20%)
Mixed mode (paper and web)	1	<1%	16	<1%	30%
Total	292	100.00	7,845	100.00	--

Note: Percentages may not add to 100 due to rounding. The standard deviation is displayed in parentheses and measures the spread or variability of ASC scores around the average.

Characteristics of 2025 Database ASCs and Respondents

Database ASCs



57%

of participating ASCs have **3 to 5 operating/procedure rooms**



84%

of participating ASCs are **multispecialty**



93%

of participating ASCs are **for profit**

Database Respondents



40%

of respondents are **nurses**, the most prevalent ASC staff position



59%

of respondents work **32–40 hours per week** in their ASC



48%

of respondents **typically work** in the surgery/procedure room during surgeries, procedures and treatments

Part II of this report (Appendixes A and B) presents more detailed information and results by ASC and respondent characteristics.

Appendix A: Results by ASC Characteristics

- Number of operating/procedure rooms
- Specialty
- Geographic region

Appendix B: Results by Respondent Characteristics

- Staff position
- Hours worked per week
- Presence in surgery/procedure room

The appendixes in Part II are available online at <https://www.ahrq.gov/sops/databases/asc>.



2 Overall Results

This chapter presents average percent positive responses for each survey composite and item from the 2025 SOPS ASC Survey Database. The methods for calculating the percent positive scores are described in the Explanation of Calculations and Data Limitations chapter.

When comparing your ASC's results with the database results, note that the database provides only *relative* comparisons. Although your ASC's survey results may have higher percent positive scores, there may still be room for improvement within your ASC in an *absolute* sense.

The most positive-scoring measures were Organizational Learning – Continuous Improvement (91%) and Near-Miss Documentation (92%), which were about 20 percentage points higher than Staffing, Work Pressure, and Pace (72%), the lowest scoring measure.

Highlights

Highest Scoring Composite Measure:
**Organizational Learning –
Continuous Improvement**



91%

of respondents reported that their facility actively looks for ways to improve patient safety and makes changes to ensure that patient safety problems do not recur.

Lowest Scoring Composite Measure:
Staffing, Work Pressure, and Pace



72%

of respondents indicated they have enough time to prepare for procedures, have enough staff to handle the workload, and do **not** feel rushed.

Near-Miss Documentation



92%

of respondents reported that near-miss events are "Always" or "Most of the time" reported.

Overall Rating on Patient Safety



85%

of respondents gave their ASC an overall patient safety rating of "Excellent" or "Very Good."

Chart 2-1. Composite Measure Results—Average Percent Positive Response

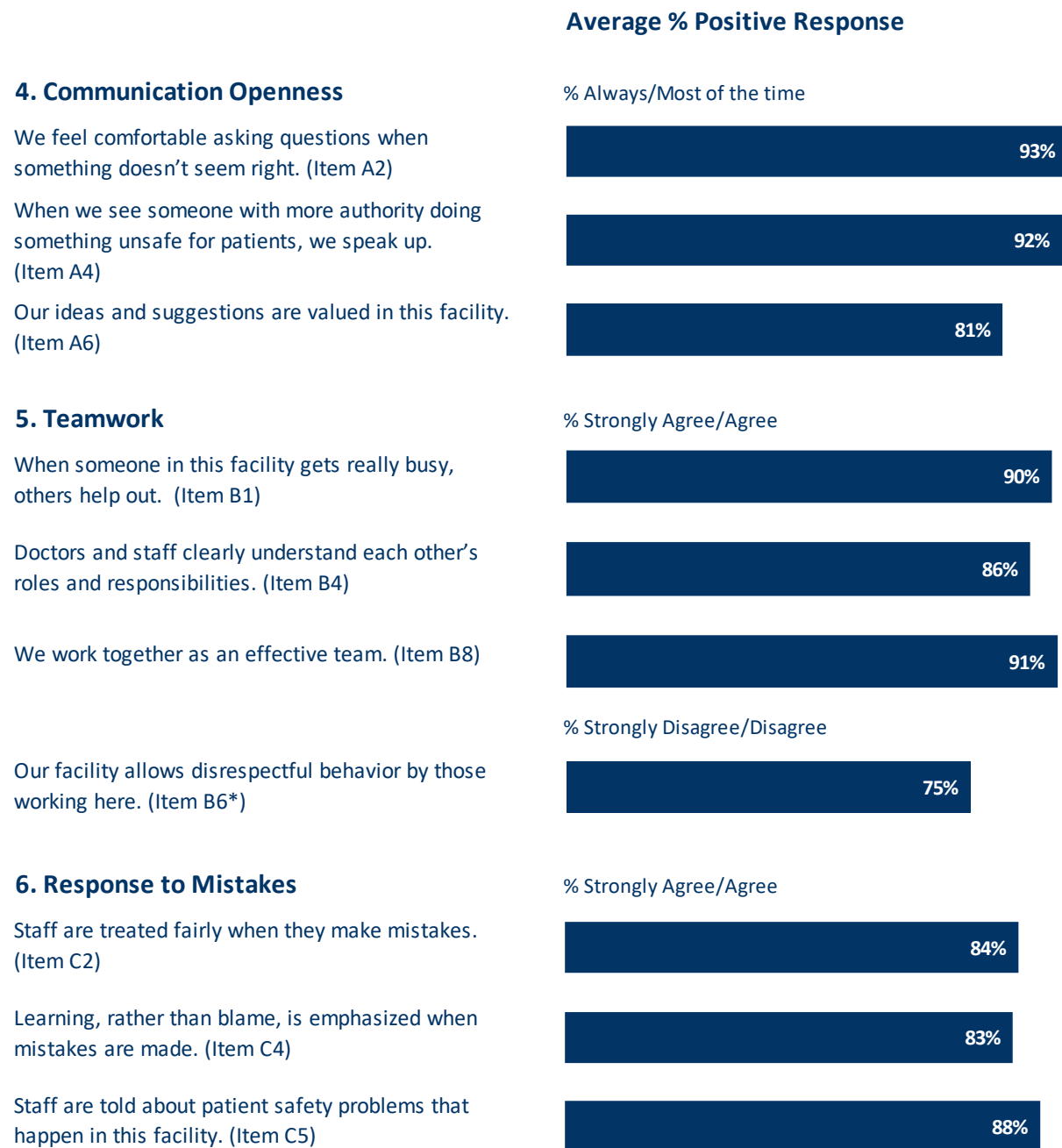


Chart 2-2. Item Results—Average Percent Positive Response (Page 1 of 3)



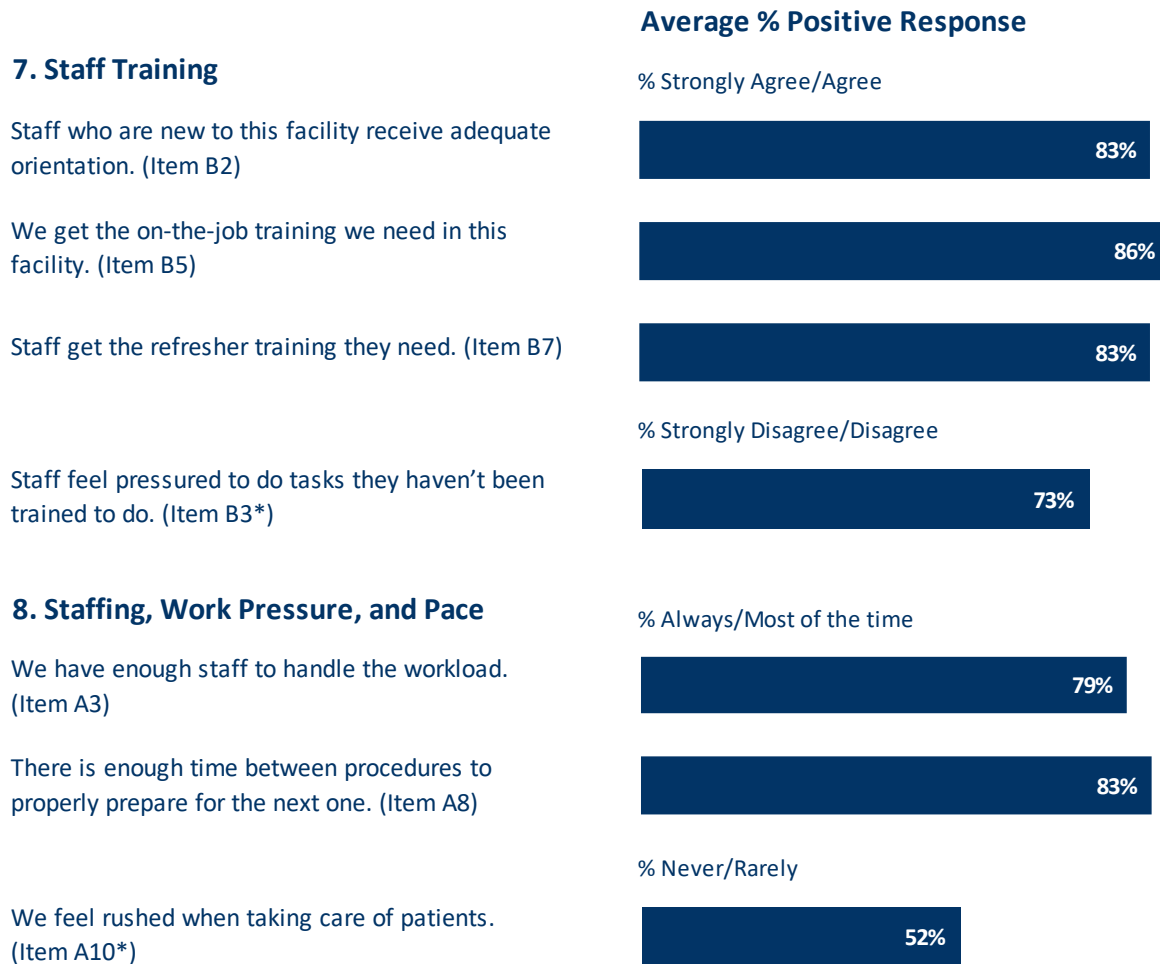
Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely.

Chart 2-2. Item Results—Average Percent Positive Response (Page 2 of 3)



Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely.

Chart 2-2. Item Results—Average Percent Positive Response (Page 3 of 3)



Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely.

Chart 2-3. Item Results—Average Percent Positive Response on Communication in the Surgery/Procedure Room

Communication in the Surgery/Procedure Room

In the past 6 months, how often were the following actions done in your facility?

Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done. (Item G1)

Average % Positive Response

% Always/Most of the time



Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns. (Item G2)



Immediately after procedures, team members discussed any concerns for patient recovery. (Item G3)

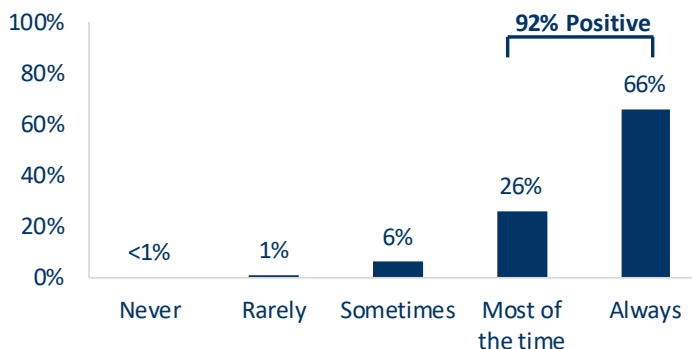


Note: The item’s survey location is shown in parentheses after the item text. Results only include those respondents who answered “Yes” to typically being in the surgery/procedure room during surgeries, procedures, or treatments.

Chart 2-4. Item Results—Average Percent Response on Near-Miss Documentation

Near-Miss Documentation

When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report? (Item D1)

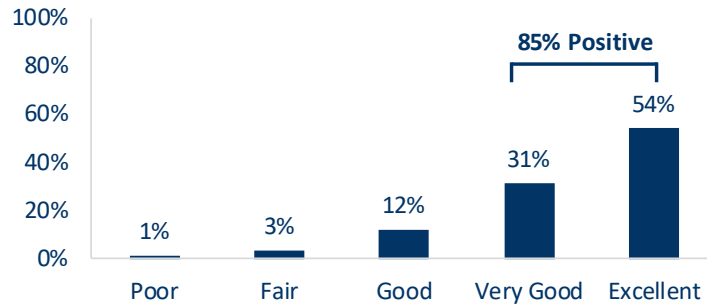


Note: Percentages indicate the database average percent response for each response option. The percent positive displayed might not equal the sum of the separate response option percentages due to rounding. Percentages might not add to 100 due to rounding.

Chart 2-5. Item Results—Average Percent Response on Overall Rating on Patient Safety

Overall Rating on Patient Safety

Please give your facility an overall rating on patient safety. (Item F1)



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



3 Database Results Over Time: 2020 to 2025

The chapter presents trends in average percent positive scores for the composite measures in the SOPS ASC Survey Databases from 2020, 2021, 2023 and 2025. Scores are based on data from ASCs that submitted to the database for any of these given years. The number of ASCs in the database varied by year (Table 3-1).

Overall, there were very small changes in composite measure scores over time. The largest differences were 2 percentage points higher or lower. *Communication Openness* and *Response to Mistakes* improved by 2 percentage points from 2020 to 2025, and *Staffing, Work Pressure and Pace* worsened by 2 percentage points over the same time period.


Highlights

Largest Improvement ↑



Communication Openness
and **Response to Mistakes**
improved by 2 percentage
points from 2020 to 2025

Largest Decline ↓



Staffing, Work Pressure,
and **Pace** worsened by
2 percentage points from
2020 to 2025

Table 3-1. Participating ASCs and Respondents

Database Year	2020	2021	2023	2025
Survey Administration Dates	May 2014 to July 2019	Aug. 2020 to June 2021	Jan. 2022 to June 2023	Oct. 2023 to June 2025
Number of ASCs	282	235	243	292
Number of Respondents	10,527	8,918	7,458	7,845

Chart 3-1. Highest SOPS ASC Survey Composite Measure Results Over Time

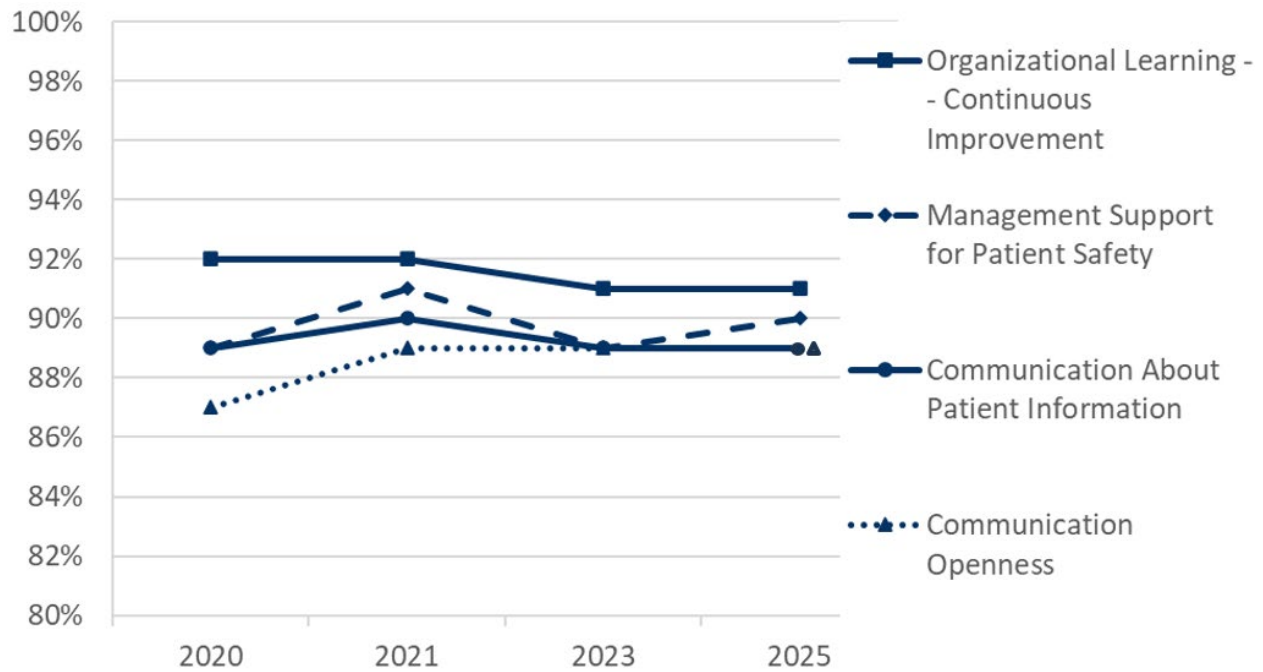


Chart 3-2. Lowest SOPS ASC Survey Composite Measure Results Over Time

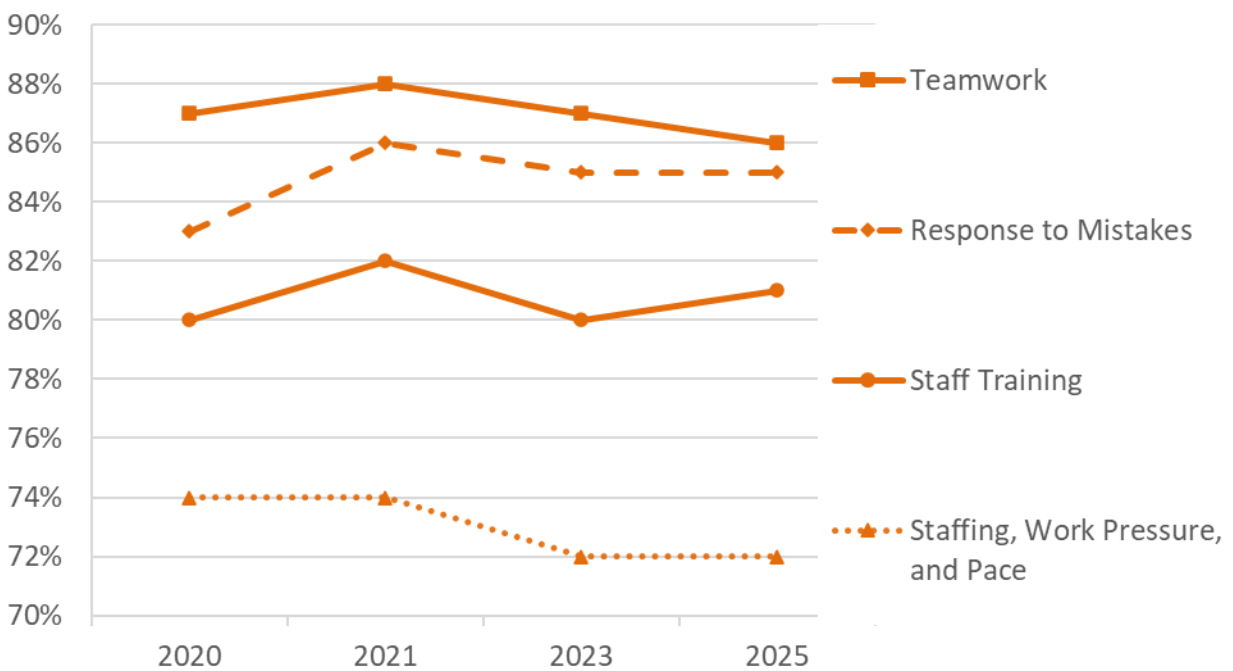


Table 3-2. Database ASC Percent Positive Results 2020—2025

Composite Measure	2020	2021	2023	2025	Change 2020 — 2025
Organizational Learning—Continuous Improvement	92%	92%	91%	91%	-1%
Management Support for Patient Safety	89%	91%	89%	90%	1%
Communication About Patient Information	89%	90%	89%	89%	0%
Communication Openness	87%	89%	89%	89%	2%
Teamwork	87%	88%	87%	86%	-1%
Response to Mistakes	83%	86%	85%	85%	2%
Staff Training	80%	82%	80%	81%	1%
Staffing, Work Pressure, and Pace	74%	74%	72%	72%	-2%



4 Comparing Facility Results

This chapter presents descriptive statistics (average percent positive, standard deviation [SD], minimum and maximum scores, and percentiles) for the composite measures and items. You can compare your facility’s results with the averages and percentile scores for all ASCs in the database. A description of how these statistics were calculated can be found at the end of this report in the Explanation of Calculations and Data Limitations chapter.

Percentiles provide information about the distribution of ASC scores for the database. A specific percentile score shows the percentage of ASCs that scored at or below a particular score. For example, the 75th percentile represents the percent positive score where 75 percent of the ASCs scored the same or lower. The 90th percentile represents the percent positive score where 90 percent of the ASCs scored the same or lower. If your facility scores fall in a high percentile, it means your facility is scoring better than most database ASCs. Table 4-1 shows examples of two facilities scoring above the 75th and 90th percentiles.

Table 4-1. Sample Percentile Statistics

Survey Item	Average % Positive	SD	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 ASC’s score is 55% positive, your score falls here: ↑

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

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

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

Table 4-2. Composite Measure Percentiles

SOPS Composite Measures	Average % Positive SD		Composite Measure % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Organizational Learning—Continuous Improvement	91%	9.48%	39%	78%	88%	93%	97%	100%	100%
2. Management Support for Patient Safety	90%	10.12%	42%	77%	86%	92%	96%	100%	100%
3. Communication About Patient Information	89%	7.94%	48%	79%	86%	90%	94%	97%	100%
4. Communication Openness	89%	8.61%	53%	78%	84%	91%	95%	99%	100%
5. Teamwork	86%	9.55%	48%	72%	81%	87%	92%	96%	100%
6. Response to Mistakes	85%	11.02%	42%	69%	79%	87%	93%	97%	100%
7. Staff Training	81%	13.01%	29%	63%	75%	84%	90%	96%	100%
8. Staffing, Work Pressure, and Pace	72%	15.40%	15%	52%	64%	73%	82%	89%	100%
Composite Measure Average	85%	9.14%	42%	72%	82%	87%	92%	94%	100%

Note: (1) Each composite measure score is the average of the unrounded composite measure scores for all ASCs in the database; (2) the Composite Measure Average is the average of the eight unrounded composite measure scores of each ASC in the database; (3) the standard deviation is displayed in parentheses and measures the spread or variability of ASC scores around the average.

Table 4-3. Item Percentiles (Page 1 of 4)

Survey Items by SOPS Composite Measure	Average % Positive		Survey Item % Positive Response						
	SD	Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max	
1. Organizational Learning—Continuous Improvement			% Strongly Agree/Agree						
This facility actively looks for ways to improve patient safety. (Item C1)	92%	10.39%	30%	80%	88%	95%	100%	100%	100%
We make improvements when someone points out patient safety problems. (Item C3)	91%	9.37%	43%	80%	88%	94%	100%	100%	100%
We are good at changing processes to make sure the same patient safety problems don't happen again. (Item C6)	90%	10.86%	33%	76%	86%	93%	97%	100%	100%
2. Management Support for Patient Safety			% Strongly Agree/Agree						
Managers encourage everyone to suggest ways to improve patient safety. (Item E1)	89%	10.56%	45%	76%	84%	92%	97%	100%	100%
Management examines near-miss events that could have harmed patients but did not. (Item E2)	91%	11.09%	20%	79%	87%	93%	100%	100%	100%
Management provides adequate resources to improve patient safety. (Item E3)	89%	12.00%	28%	74%	85%	92%	98%	100%	100%

Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely. The standard deviation measures the spread or variability of ASC scores around the average.

Table 4-3. Item Percentiles (Page 2 of 4)

Survey Items by SOPS Composite Measure	Average % Positive SD		Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
3. Communication About Patient Information			% Always/Most of the time						
Important patient care information is clearly communicated across areas in this facility. (Item A1)	94%	8.25%	42%	83%	92%	96%	100%	100%	100%
We share key information about patients as soon as it becomes available. (Item A7)	94%	7.12%	60%	86%	91%	96%	100%	100%	100%
Within this facility, we do a good job communicating information that affects patient care. (Item A9)	93%	8.49%	36%	83%	90%	95%	100%	100%	100%
			% Never/Rarely						
Key information about patients is missing when it is needed. (Item A5*)	74%	14.84%	13%	56%	65%	75%	85%	91%	100%
4. Communication Openness			% Always/Most of the time						
We feel comfortable asking questions when something doesn't seem right. (Item A2)	93%	7.78%	50%	83%	89%	95%	100%	100%	100%
When we see someone with more authority doing something unsafe for patients, we speak up. (Item A4)	92%	7.93%	56%	83%	89%	93%	100%	100%	100%
Our ideas and suggestions are valued in this facility. (Item A6)	81%	15.10%	33%	60%	73%	84%	92%	100%	100%

Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely. The standard deviation measures the spread or variability of ASC scores around the average.

Table 4-3. Item Percentiles (Page 3 of 4)

Survey Items by SOPS Composite Measure	Average % Positive SD		Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
5. Teamwork			% Strongly Agree/Agree						
When someone in this facility gets really busy, others help out. (Item B1)	90%	9.29%	55%	78%	85%	91%	97%	100%	100%
Doctors and staff clearly understand each other’s roles and responsibilities. (Item B4)	86%	11.56%	36%	71%	81%	89%	94%	100%	100%
We work together as an effective team. (Item B8)	91%	9.60%	50%	79%	88%	94%	100%	100%	100%
			% Strongly Disagree/Disagree						
Our facility allows disrespectful behavior by those working here. (Item B6*)	75%	16.28%	18%	52%	67%	77%	88%	95%	100%
6. Response to Mistakes			%Strongly Agree/Agree						
Staff are treated fairly when they make mistakes. (Item C2)	84%	12.97%	33%	64%	75%	87%	93%	100%	100%
Learning, rather than blame, is emphasized when mistakes are made. (Item C4)	83%	13.15%	43%	64%	75%	85%	93%	100%	100%
Staff are told about patient safety problems that happen in this facility. (Item C5)	88%	11.51%	25%	73%	84%	90%	96%	100%	100%

Note: The item’s survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely. The standard deviation measures the spread or variability of ASC scores around the average.

Table 4-3. Item Percentiles (Page 4 of 4)

Survey Items by SOPS Composite Measure	Average % Positive	SD	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
7. Staff Training			% Strongly Agree/Agree						
Staff who are new to this facility receive adequate orientation. (Item B2)	83%	14.61%	14%	64%	76%	86%	93%	100%	100%
We get the on-the-job training we need in this facility. (Item B5)	86%	12.32%	29%	71%	80%	88%	95%	100%	100%
Staff get the refresher training they need. (Item B7)	83%	14.15%	17%	65%	76%	86%	92%	100%	100%
			% Strongly Disagree/Disagree						
Staff feel pressured to do tasks they haven't been trained to do. (Item B3*)	73%	17.04%	18%	50%	64%	75%	86%	93%	100%
8. Staffing, Work Pressure, and Pace			% Always/Most of the time						
We have enough staff to handle the workload. (Item A3)	79%	17.85%	6%	55%	71%	83%	92%	100%	100%
There is enough time between procedures to properly prepare for the next one. (Item A8)	83%	15.88%	14%	63%	75%	87%	95%	100%	100%
			% Never/Rarely						
We feel rushed when taking care of patients. (Item A10*)	52%	20.12%	0%	30%	40%	50%	67%	79%	100%

Note: The item's survey location is shown in parentheses after the item text. An asterisk (*) denotes a negatively worded item. For negatively worded items, the percent positive response is the percentage of respondents who answered Strongly Disagree/Disagree or Never/Rarely. The standard deviation measures the spread or variability of ASC scores around the average.

Table 4-4. Single Item Measure Percentiles

Single Item Measures	Average % Positive	SD	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Communication in the Surgery/Procedure Room			% Always/Most of the time						
Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done. (Item G1)	94%	9.54%	33%	83%	90%	100%	100%	100%	100%
Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns. (Item G2)	73%	19.11%	20%	47%	60%	75%	87%	100%	100%
Immediately after procedures, team members discussed any concerns for patient recovery. (Item G3)	78%	16.34%	27%	59%	67%	80%	92%	100%	100%
Near-Miss Documentation			% Always/Most of the time						
When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report? (Item D1)	92%	9.28%	40%	78%	88%	94%	100%	100%	100%
Overall Rating on Patient Safety			% Excellent/Very Good						
Please give your facility an overall rating on patient safety (Item F1)	85%	13.98%	25%	67%	79%	88%	94%	100%	100%

Note: The item's survey location is shown in parentheses after the item text. Results for Communication in the Surgery/Procedure Room only include those respondents who answered “Yes” to typically being in the surgery/procedure room during surgeries, procedures, or treatments. The standard deviation measures the spread or variability of ASC scores around the average.



5 What's Next? Action Planning for Improvement

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

SOPS Action Planning Tool

The [Action Planning Tool for the AHRQ Surveys on Patient Safety Culture](#) is intended for use after administering the survey and analyzing the results. The Action Planning Tool offers guidance to help you develop an action plan for your 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” (Specific, Measurable, Achievable, Relevant, Time-Bound) goals?

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 the AHRQ SOPS ASC Survey

[Improving Patient Safety in Ambulatory Surgery Centers: A Resource List for Users of the AHRQ Ambulatory Surgery Center Survey on Patient Safety Culture](#) contains references to websites and other practical resources ASCs can use to improve patient safety culture and patient safety. The resource list is not exhaustive but provides initial guidance to ASCs seeking information about patient safety initiatives they can implement for improvement purposes.



Explanation of Calculations and Data Limitations

This chapter provides additional detail regarding how various statistics presented in this report were calculated, as well as data limitations. Note that all statistics presented are unweighted.

Data Cleaning

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

Sections A and B of the survey include both positively and negatively worded items. An example of a positively worded item is B8. *We work together as an effective team*, and an example of a negatively worded item is B6. *Our facility allows disrespectful behavior by those working here*. If respondents marked the same answer for all items within either section A or B, which have at least two negatively worded items, those responses were set to missing in that particular section.

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. Additionally, respondents who marked the same answer for all items across sections A, B, C, D, and E were removed from the final dataset. ASCs were included in the database only if they had at least three respondents after all data cleaning steps.

Section G includes a filter question (GA), which asked respondents if they are typically in the surgery/procedure room during surgeries, procedures, or treatments. Respondents who answered “No,” but provided responses to items in section G, had their responses in section G set to “appropriately skipped.” Appropriately skipped responses were not included in the percentage of missing or Does Not Apply/Don’t Know for the items.

Response Rates

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

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

Calculation of Percent Positive Scores

The composite measure items contain a “Does Not Apply or Don’t Know” response option that is not included in the calculation of percent positive scores.

The survey includes both positively worded items and negatively worded items. Calculating the percent positive response for positively worded items is different from calculating the percent positive response for negatively worded items:

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

Composite Measure Percent Positive Response

The eight SOPS ASC Survey composite measures are each composed of three or four survey items. Composite measure scores were calculated for each ASC by averaging the unrounded percent positive response on the items within a composite measure.

If an ASC had data for at least 50 percent of the items within a composite measure, the site would still 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.

Table 5 shows an example of computing a composite measure score for *Staffing, Work Pressure, and Pace* for a single ASC. This composite measure has three items. Two are positively worded (Items A3 and A8) and one is negatively worded (Item A10). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.

Table 5. Example of Computing Item and Composite Measure Percent Positive Scores

Staffing, Work Pressure, and Pace Composite Measure	Calculation of Percent Positive			
	Number of “Strongly Agree” or “Agree” Responses for Positively Worded Items	Number of “Strongly Disagree” or “Disagree” Responses for Negatively Worded Items	Total Number of Responses to the Item (Excluding “Does Not Apply or Don’t Know” and Missing)	Item Percent Positive Response
Item A3—positively worded “We have enough staff to handle the workload.”	110	NA*	240	110/240= 45.8%
Item A8—positively worded “There is enough time between procedures to properly prepare for the next one.”	142	NA*	250	142/250= 56.8%
Item A10—negatively worded “We feel rushed when taking care of patients.”	NA*	125	260	125/260= 48.1%
Composite Measure % Positive Score = (45.8% + 56.8% + 48.1%) / 3 = 50.2%				

*NA = Not applicable for calculating the percent positive response.

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 *Staffing, Work Pressure, and Pace* composite measure.

Single Item Percent Positive Response

The percent positive score for the Near-Miss Documentation item (D1) and for each item in Communication in the Surgery/Procedure Room (G1-G3) is the percentage of respondents who answered “Always” or “Most of the time.”

The Overall Rating on Patient Safety (Item F1) percent positive response is the percentage of respondents who answered “Excellent” or “Very Good.”

Database Item and Composite Measure Percent Positive Scores

The database average percent positive scores were calculated by averaging the unrounded ASC-level percent positive scores of all ASCs with at least three (3) respondents. For the appendixes, average percent positive scores were calculated by averaging the unrounded ASC-level percent positive scores of all ASCs for each facility characteristic (Appendix A) and for each respondent characteristic (Appendix B).

Reporting the average percent positive scores at the ASC level ensures that each ASC's scores receive equal weight, regardless of the ASC's size. We do not report the percentage of positive responses at the individual level, as this approach would give greater weight to ASCs with greater numbers of staff. Reporting the data at the ASC level, rather than the individual level, is important because culture is considered a group characteristic, not an individual characteristic.

Thresholds for Reporting Percent Positive Scores

For the main report and Appendix A, item percent positive scores were calculated only for ASCs with at least three (3) respondents to a given item. If fewer than three respondents answered the item, the ASC's score was set to missing and excluded from the benchmark. In Appendix A, item scores were not shown if fewer than 10 ASCs met the three (3) respondent threshold for that item.

For Appendix B, the requirements for item percent positive scores differed to retain more data. Item percent positive scores were calculated for ASCs with at least one (1) respondent per respondent characteristic (e.g., anesthesiologist), recognizing that many ASCs may only have a single respondent in that category. However, item scores were not shown in the tables if fewer than 10 ASCs had at least one (1) respondent to the item. As a result, an ASC's item average percent positive score may reflect the response of one individual.

Standard Deviation

The standard deviation is a measure of the spread or variability of ASC scores around the average. A low standard deviation indicates that most of the scores are close to the average, while a high standard deviation indicates greater variability around the average.

Margin of Error

The margin of error provided in the appendixes is an estimate of uncertainty around the percent positive score estimates based on the sample data. For example, if the sample percent positive score is 80 percent, and the margin of error is ± 2 percent, we can be 95 percent confident that the true population percent positive score lies within the interval of 78 to 82 percent ($80\% \pm 2\%$). A smaller margin of error means greater precision in the estimate, while a larger margin of error indicates more uncertainty in the estimate. When comparing two percent positive score estimates in the appendixes, consider their respective margins of error. If the ranges defined by their confidence

intervals (score \pm margin of error) overlap, the two percent positive scores are less likely to be significantly different.

Minimum and Maximum Scores

The minimum (lowest) and maximum (highest) percent positive scores are presented for each composite measure and item. When comparing your data with the minimum and maximum scores, keep in mind that these scores may represent ASCs 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

Percentile scores represent the percentage of ASCs that scored at or below the percent positive score for a particular item or composite measure. For example, the 50th percentile, also known as the median, is the middle value that divides the lower half from the upper half, so that 50 percent of the ASCs fall below that percent positive score, and 50 percent fall above it. Percentiles range from 0 to 100. Interpret the percentile scores as shown in Table 6.

Table 6. Interpretation of Percentile Scores

Percentile Score	Interpretation
10th percentile Represents the lowest scoring ASCs.	10% of the ASCs scored the same or lower. 90% of the ASCs scored higher.
25th percentile Represents lower scoring ASCs.	25% of the ASCs scored the same or lower. 75% of the ASCs scored higher.
50th percentile (or median) Represents the middle of the distribution of ASCs.	50% of the ASCs scored the same or lower. 50% of the ASCs scored higher.
75th percentile Represents higher scoring ASCs.	75% of the ASCs scored the same or lower. 25% of the ASCs scored higher.
90th percentile Represents the highest scoring ASCs.	90% of the ASCs scored the same or lower. 10% of the ASCs scored higher.

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., number of operating/procedure rooms or geographic region). 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), such a small difference of 1 percentage point 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. The average, standard deviation, range, and percentile information are provided 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 ASCs and therefore provide a useful reference. However, these data have several limitations.

First, the database only includes ASCs that were willing to voluntarily submit their data to the database. Estimates based on this self-selected sample may produce biased estimates of the population. Therefore, it is not possible to compute estimates of precision that apply to the population.

Second, only a small percentage of all ASCs in the United States (less than 5%) are represented in the database (see Table 1 in the Appendixes). Additionally, the SOPS Database ASCs have characteristics that differ from the 2025 Centers for Medicare & Medicaid Services' (CMS) ASCs.

Third, ASCs were not required to undergo any training and administered the survey in different ways. Most ASCs administered only web-based surveys, others administered only paper surveys, and one ASC used a combination of these two methods. These different survey administration modes could have led to differences in survey responses.

Finally, the data ASCs submitted have been cleaned for out-of-range values, straight-lining, and blank records as noted in the Data Cleaning section. Otherwise, data are presented as submitted. No additional attempts were made to verify or audit the accuracy of the data submitted.



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