Results From the 2014 AHRQ Ambulatory Surgery Center Survey on Patient Safety Culture Pilot Study

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1. Purpose and Use of This Document

This report provides results from 59 United States ambulatory surgery centers (ASCs) that participated in a pilot study of the Agency for Healthcare Research and Quality (AHRQ) *Ambulatory Surgery Center Survey on Patient Safety Culture* in early 2014.

When comparing your ASC's results with the comparative results provided in this document, keep in mind that these results are from limited numbers of staff and ASCs and will provide only a general indication of how your ASC compares with other centers in the United States. The data summarized here were not derived from a statistically selected sample of U.S. ASCs. *At this time, there is no central repository for ASCs to submit data for comparative purposes.*

According to the Medicare Payment Advisory Commission's (MedPAC) 2014 Report to Congress,[1] there are more than 5,300 Medicare-certified ASCs in the United States. The pilot study results presented here represent approximately 1 percent of the total number of ASCs. In addition, the mean number of surgery/procedure rooms per ASC is 2.8. In the survey pilot study across the 59 ASCs, the mean number of surgery/procedure rooms was 4.3. MedPAC reports that the most frequently provided ASC services are cataract surgeries (16.9%), upper gastrointestinal endoscopies (8.1%), and colonoscopies (5.8%); ASCs that provided these services were included in the pilot study.

2. Survey Development

Patient safety culture can be defined as the set of values, beliefs, and norms about what is important, how to behave, and what attitudes are appropriate when it comes to patient safety in a workgroup or organization. The *Ambulatory Surgery Center Survey on Patient Safety Culture* is intended to help ASCs assess the extent to which their culture emphasizes the importance of patient safety.

The survey design team conducted a review of the literature on patient and surgical safety in ASCs, interviewed more than a dozen ASC experts and researchers, identified appropriate survey topics, and drafted survey questions for review by a Technical Expert Panel. The draft survey was cognitively tested with ASC staff and doctors to ensure that the questions were easy to understand and answer and were relevant to the ASC setting. In 2014, a pilot administration was conducted with 59 ASCs throughout the United States. The pilot data were analyzed to examine the survey's psychometric properties (reliability and factor structure), with the end goal of shortening the pilot survey by including only the best questions or items.

The final survey includes 27 survey items that measure eight areas of organizational culture pertaining to patient safety (Table 1). The survey uses either 5-point agreement scales ("Strongly disagree" to "Strongly agree") or frequency scales ("Never" to "Always"). Items include a "Does not apply or Don't know" option.

[1] Ambulatory surgical center services. Report to the Congress: Medicare payment policy. Washington, DC: Medicare Payment Advisory Commission; 2014. pp. 121-38.

In addition to the survey items in composite measures (composites), the survey includes one item measuring how often ASCs document near misses. It also includes a screener item and three followup items measuring how often doctors and staff communicate before and after surgeries, procedures, or treatments. Finally, the survey includes one item that asks respondents to provide an overall grade on patient safety for their ASC, two items about respondent background characteristics, and a section for open-ended comments.

Table 1. Patient Safety Culture Composites and Definitions

Patient Safety Culture Composite	Definition: *The extent to which…*
1. Communication About Patient Information	Key information about patients is available and communicated well within the ASC.
2. Communication Openness	Staff speak up when they see something unsafe, they feel comfortable asking questions, and their suggestions are valued.
3. Staffing, Work Pressure, and Pace	Staff do not feel rushed, they have enough time to properly prepare for procedures, and there are enough staff to handle the workload.
4. Teamwork	Staff are respectful and help each other, work together as an effective team, and understand each other's roles and responsibilities.
5. 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.
6. Organizational Learning—Continuous Improvement	The facility actively looks for ways to improve patient safety and makes changes to ensure that problems do not recur.
7. 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.
8. Management Support for Patient Safety	Managers examine near-miss events, provide adequate resources, and encourage everyone to suggest ways to improve patient safety.

3. Pilot Study Survey Administration Statistics

To ensure that the pilot study included a diverse sample of ASCs, we recruited ASCs representing different ownership arrangements, size, and regions in the United States. In addition, we targeted both specialty and nonspecialty ASCs performing a wide range of surgeries and nonsurgical procedures. ASCs that participated in the patient safety culture survey pilot test also participated in a larger AHRQ-funded study examining the implementation of surgical checklists in ASCs.

The pilot survey was administered to doctors and staff in participating ASCs between May 2014 and August 2014. A total of 1,821 completed surveys were received from the 59 ASCs participating in the pilot study.

Overall response rate statistics for ASCs included in the 2014 pilot study are shown in Table 2. An average of 31 completed surveys were submitted per ASC (range: 5 to 90), with an average

ASC response rate of 77 percent (range: 50% to 100%). Some ASCs did not provide complete survey administration information and are not included in response rate calculations.

Table 2. Average Response Rate per ASC

Average Response Rate	Statistic
Average number of completed surveys per ASC (range: 5 to 90)	31
Average number of surveys administered per ASC (range: 9 to 106)	41
Average ASC response rate (range: 50% to 100%)	77%

Note: *n* = 50 sites representing 1,591 respondents. A denominator was not provided by 9 ASCs; therefore, a response rate was not calculated for those sites.

Sixty-seven percent of anesthesiologists, 66 percent of other doctors/physicians or surgeons, and 82 percent of all other staff surveyed in the pilot study successfully completed and returned a survey (Table 3).

Table 3. Average Response Rate per Staff Position

Average Response Rate per Staff Position	Statistic
Doctor/Physician (excluding Anesthesiologists) or Surgeon	66%
Anesthesiologists	67%
All Other Staff	82%

Note: *n* = 50 sites representing 1,591 respondents. A denominator was not provided by 9 ASCs; therefore, a response rate was not calculated for those sites.

4. Characteristics of Pilot Study ASCs

Tables 4 through 7 present information about the distribution of the 59 pilot study ASCs by ownership, specialty type, size, and region. The ASC characteristics were obtained from a designated point of contact in each ASC.

Table 4 shows the distribution of ASCs by ownership type. Three-fourths of the pilot study ASCs were not affiliated with a hospital.

Table 4. ASCs by Ownership

ASC Type	Pilot Study ASCs	
	Number	Percent
Hospital Affiliated	15	25%
Not Hospital Affiliated	44	75%
Total	59	100%

Sixty-nine percent of the pilot study facilities were multispecialty ASCs including a range of medical specialties. Thirty-one percent were considered single specialty and included specialties such as ophthalmology, dermatology, pain, and gastroenterology (Table 5).

Table 5. ASCs by Type

ASC Type	Pilot Study ASCs	
	Number	Percent
Multispecialty	41	69%
Single Specialty (e.g., ophthalmology, dermatology, pain, gastroenterology)	18	31%
Total	59	100%

Nearly one-quarter (24%) of ASCs had 1 or 2 surgery/procedure rooms (Table 6).

Table 6. ASCs by Size

Number of Surgical/Procedure Rooms	Pilot Study ASCs	
	Number	Percent
1 or 2	14	24%
3	11	19%
4	13	22%
5	5	8%
6	7	12%
7+	9	15%
Total	59	100%

The 59 ASCs came from 20 States across the United States. The largest percentage of ASCs was from the Pacific region (29%), with the fewest ASCs participating from New England and the East Central region (Table 7).

Table 7. ASCs by Region

Region	Pilot Study ASCs	
	Number	Percent
Mid-Atlantic	6	10%
New England	5	8%
South Atlantic	8	14%
East Central	6	10%
West Central	9	15%
Mountain	8	14%
Pacific	17	29%
Total	59	100%

Note: States and territories are categorized into regions as follows:

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

5. Characteristics of Pilot Study Respondents

Tables 8 to 10 describe the 1,821 ASC respondents within participating ASCs by—

- Staff position
- Areas typically worked
- Hours worked per week

All staff within ASCs were asked to respond to the survey, including full- and part-time employees, per diem employees, and contract staff members or doctors. This included doctors, nurses, certified registered nurse anesthetists, physician assistants, nurse practitioners, technicians, management staff (center directors, medical directors, nurse managers, office managers, etc.), and administrative, clerical, or business staff (schedulers, billing staff, receptionists, medical records, etc.). Respondents who did not respond to an item are shown as missing in the tables and are excluded from total percentages.

- The three most common staff positions reported by respondents were nurses (33%), doctors (21%), and technicians (12 percent) (Table 8).
- Nearly two-thirds (66%) of respondents worked in surgery or procedure rooms (Table 9).
- More than half (51%) of respondents worked in their ASC at least 32 hours per week (Table 10).

Table 8. Staff Position

Staff Position (H1)	Pilot Study Respondents	
	Number	Percent
Doctor/Physician (excluding Anesthesiologists) or Surgeon	389	21%
Anesthesiologist	138	8%
Certified Registered Nurse Anesthetist	62	3%
Physician Assistant or Nurse Practitioner	42	2%
Management	134	7%
Nurse	592	33%
Technician	215	12%
Other Clinical Staff or Clinical Support Staff	49	3%
Administrative, Clerical, or Business Staff	173	10%
Other Position	21	1%
Total	1,815	100%
Missing	6	
Overall total	1,821	

Note: Missing staff positions were imputed using sites' tracking sheets, when available.

Table 9. Areas Worked

Areas Worked	Pilot Study Respondents	
	Number	Percent
Admissions/Check-in	232	14%
Office/Business/Administrative Area	268	16%
Holding/Pre-op	651	39%
Surgery or Procedure Rooms	1,119	66%
PACU/Post-op/Recovery	732	43%
Sterile Processing	196	12%
Other Area	78	5%
Missing	133	7%

Note: (1) Areas worked is a mark-all-that-apply item; therefore, areas worked are not mutually exclusive groups and percentages do not add to 100 percent. (2) This item was collected for descriptive purposes only. It was not included in the final survey.

Table 10. Hours Typically Worked per Week

Hours Typically Worked per Week (H2)	Pilot Study Respondents	
	Number	Percent
1 to 16	543	32%
17 to 31	287	17%
32 to 40	705	42%
More than 40	159	9%
Total	1,694	100%
Missing	127	7%
Overall total	1,821	

6. Composite-Level and Item-Level Results

This section provides overall results for the survey's questions (items) and composite measures (composites). The methods for calculating the percent positive scores at the item and composite levels are described in the Appendix.

Chart 1 shows the average percent positive response for each of the eight patient safety culture composites across ASCs in the pilot study. The patient safety culture composites are shown in order from the highest average percent positive response to the lowest.

Chart 2 provides the average percent positive response on the composite items.

Charts 3 and 4 show the average distribution of responses for Near-Miss Documentation and Overall Rating on Patient Safety, respectively.

Chart 5 shows the responses to the three Communication in the Surgery/Procedure Room items.

Chart 1. Composite-Level Results From 59 Pilot Study ASCs

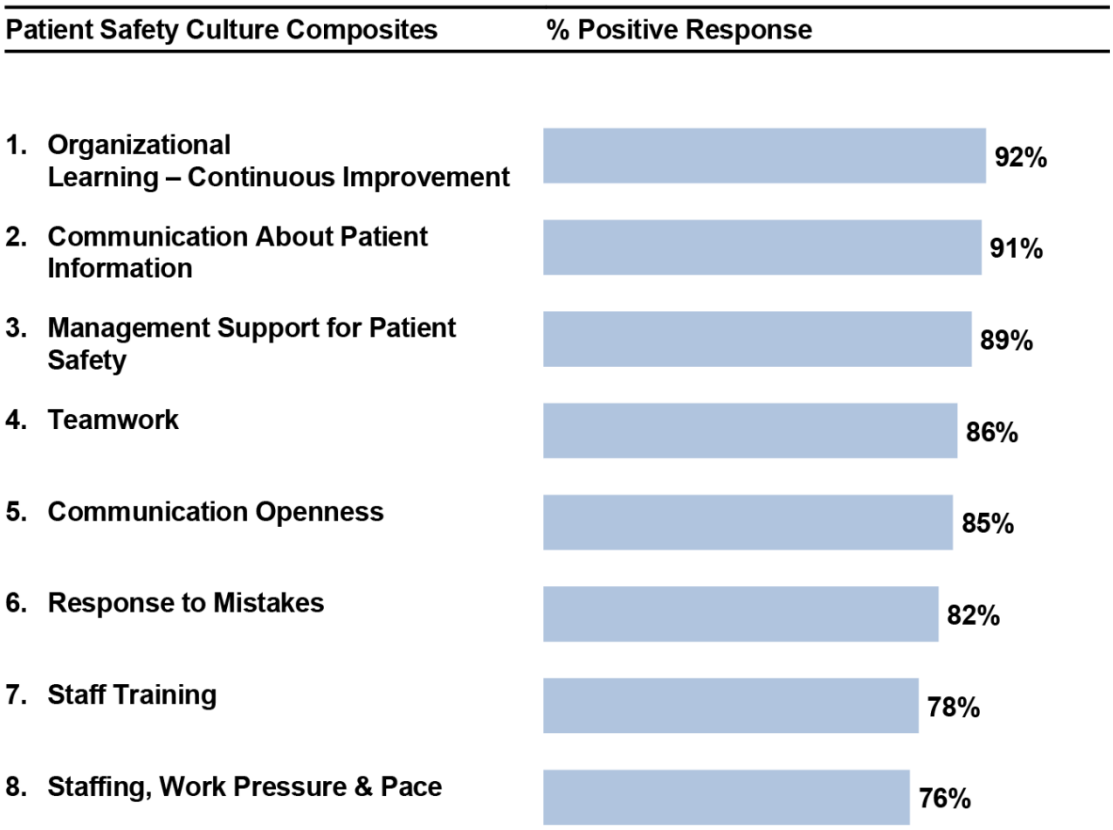
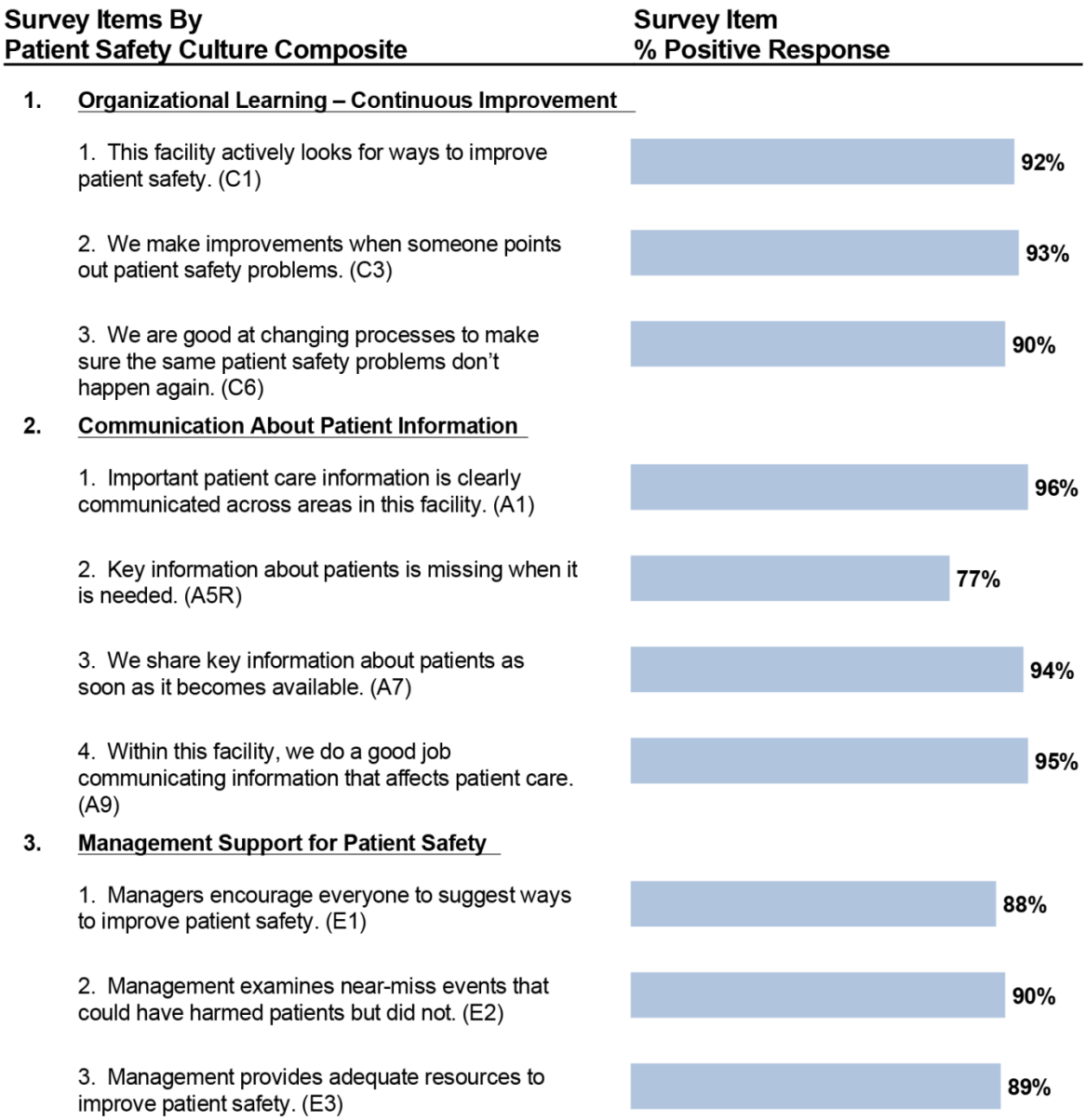
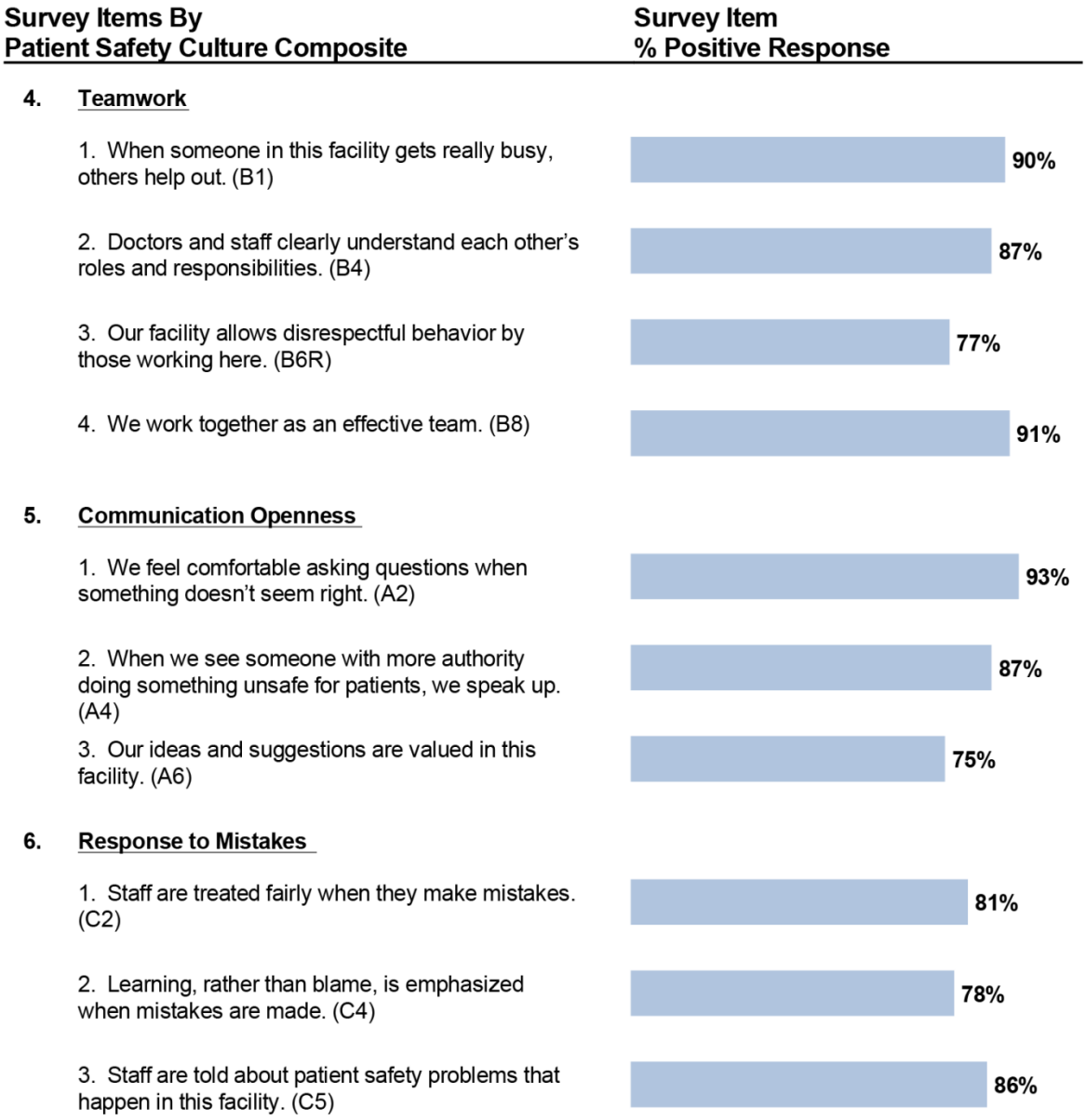


Chart 2. Item-Level Results From 59 Pilot Study ASCs



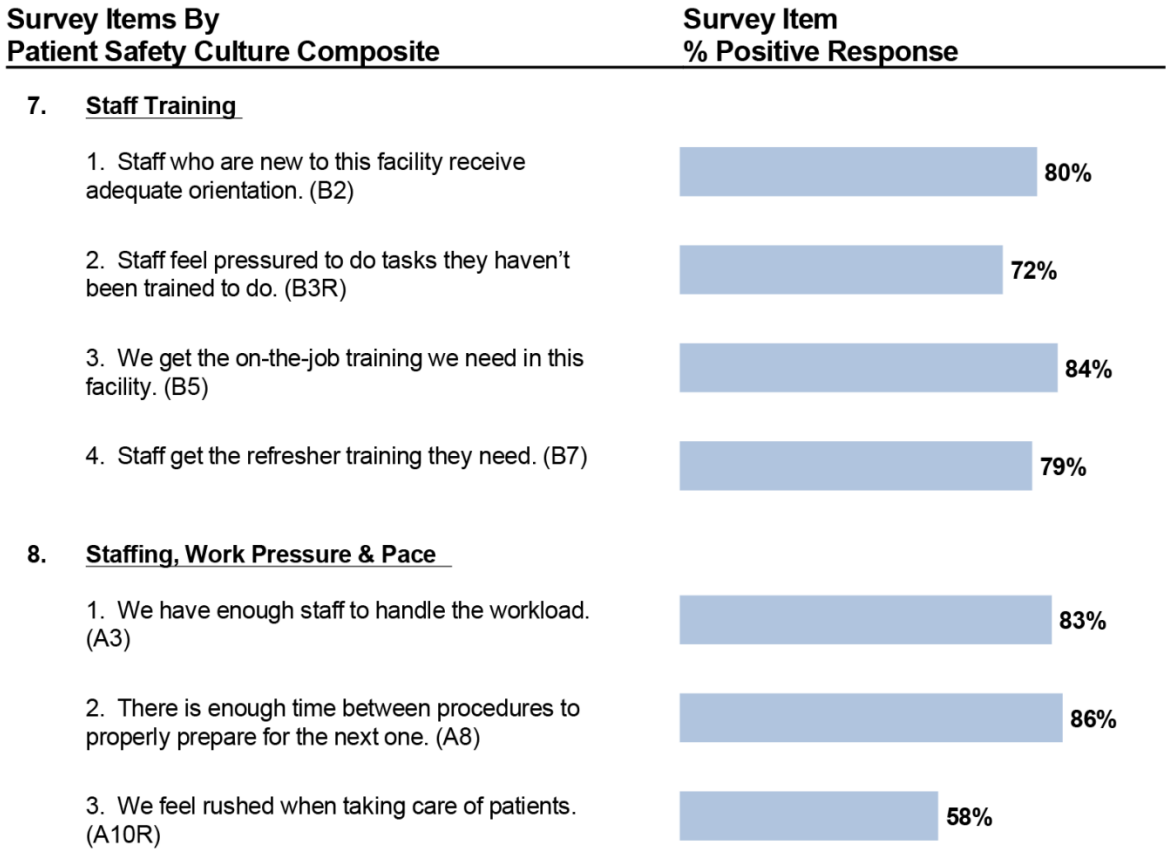
Note: The item's survey location is shown after the item text. An "R" indicates a negatively worded item, where the percent positive response is based on those who responded "Strongly disagree" or "Disagree," or "Never" or "Rarely" (depending on the response scale used for the item).

Chart 2. Item-Level Results From 59 Pilot Study ASCs, continued



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 scale used for the item).

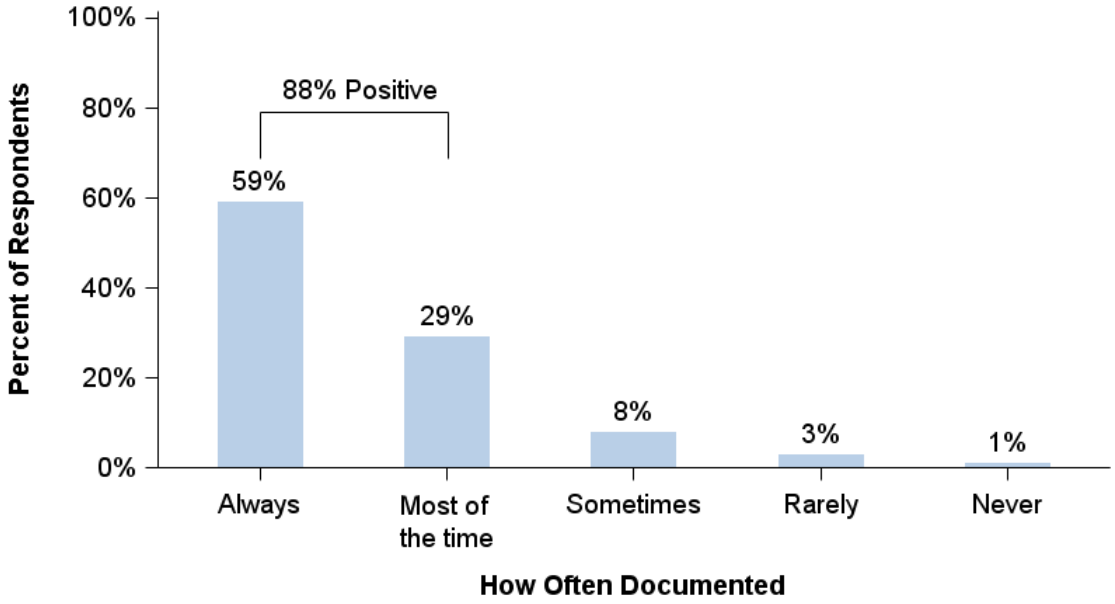
Chart 2. Item-Level Results From 59 Pilot Study ASCs, continued



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 scale used for the item).

Chart 3. Results for Near-Miss Documentation From 59 Pilot Study ASCs

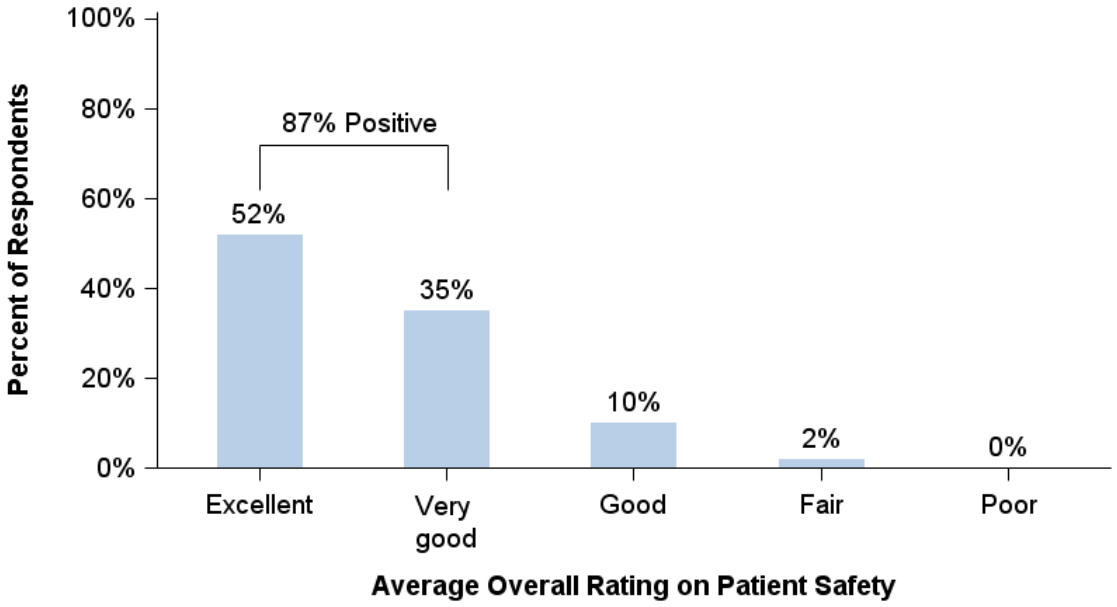
D1. When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?



Note: (1) Percentages indicate average percent response for each item response category across the pilot ASCs; (2) all five percentages may not add to 100 percent because of rounding.

Chart 4. Results for Overall Rating on Patient Safety From 59 Pilot Study ASCs

F0. Please give your facility an overall rating on patient safety.

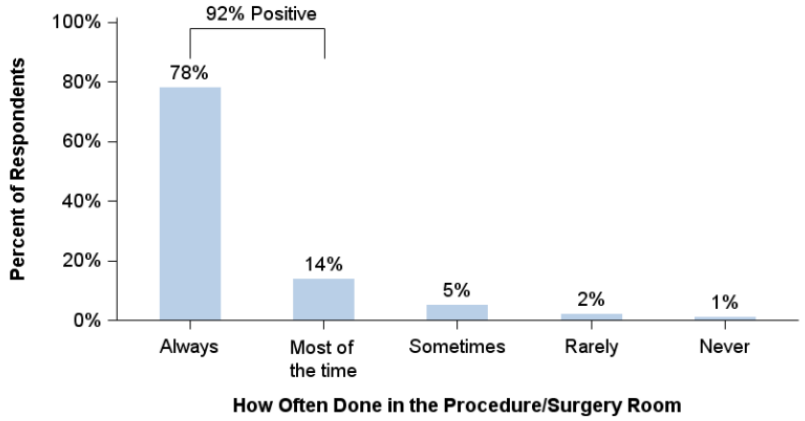


Note: (1) Percentages indicate average percent response for each item response category across the pilot ASCs. (2) all five percentages may not add to 100 percent because of rounding.

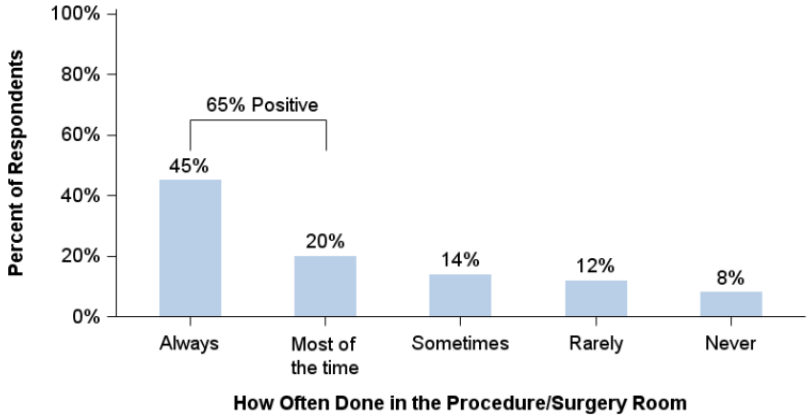
Chart 5. Results for Communication in the Surgery/Procedure Room From 59 Pilot Study ASCs

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

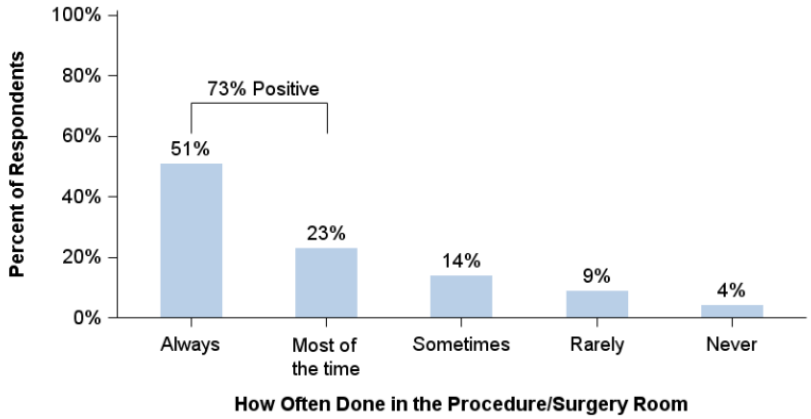
G1. Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.



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



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



Note: In the pilot study survey, items G1 and G2 began with "Before the start of the procedures. . . ." The items were revised to "Just before the start of procedures. . . ." to further clarify that the action should occur right before each surgery/procedure. Percentages may not add to 100 or to combined percentages because of rounding.

7. Composite-Level and Item-Level Results by ASC Type

Tables 11 through 15 show the average percent positive scores on the survey composite measures and survey items across ASCs, broken out by ASC type—Multispecialty vs. Single Specialty. *Multispecialty* refers to ASCs with multiple specialties. *Single specialty* refers to ASCs with only one specialty, such as dermatology, gastroenterology, pain, or ophthalmology. There was little variation between ASC types across composites and items. Note: The numbers of facilities and respondents by ASC type are collapsed, respectively, into two categories in each table. However, the precise numbers of ASCs and respondents corresponding to each data cell in a table vary because of individual nonresponse/missing data.

Table 11. Composite-Level Average Percent Positive Response by ASC Type

Patient Safety Culture Composites		ASC Type	
		Multispecialty	Single Specialty
	# ASCs	41	18
	# Respondents	1,357	464
1.	**Communication About Patient Information**	91%	91%
2.	**Communication Openness**	85%	85%
3.	**Staffing, Work Pressure, and Pace**	76%	75%
4.	**Teamwork**	87%	86%
5.	**Staff Training**	78%	79%
6.	**Organizational Learning—Continuous Improvement**	92%	91%
7.	**Response to Mistakes**	82%	83%
8.	**Management Support for Patient Safety**	89%	89%
	Average Across Composites	85%	85%

Table 12. Item-Level Average Percent Positive Response by ASC Type

		ASC Type	
	Patient Safety Culture Composites	**Multispecialty**	**Single Specialty**
	# ASCs	41	18
	# Respondents	1,357	464
	Communication About Patient Information		
A1.	Important patient care information is clearly communicated across areas in this facility.	96%	97%
A5R.	Key information about patients is missing when it is needed.	78%	76%
A7.	We share key information about patients as soon as it becomes available.	94%	94%
A9.	Within this facility, we do a good job communicating information that affects patient care.	95%	96%
	Communication Openness		
A2.	We feel comfortable asking questions when something doesn't seem right.	93%	94%
A4.	When we see someone with more authority doing something unsafe for patients, we speak up.	87%	86%
A6.	Our ideas and suggestions are valued in this facility.	76%	75%
	Staffing, Work Pressure, and Pace		
A3.	We have enough staff to handle the workload.	83%	85%
A8.	There is enough time between procedures to properly prepare for the next one.	86%	87%
A10R.	We feel rushed when taking care of patients.	60%	52%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 12. Item-Level Average Percent Positive Response by ASC Type, continued

	Patient Safety Culture Composites	ASC Type	
		Multispecialty	**Single Specialty**
	# ASCs	41	18
	# Respondents	1,357	464
	Teamwork		
B1.	When someone in this facility gets really busy, others help out.	90%	89%
B4.	Doctors and staff clearly understand each other's roles and responsibilities.	87%	88%
B6R	Our facility allows disrespectful behavior by those working here.	78%	75%
B8.	We work together as an effective team.	91%	89%
	Staff Training		
B2.	Staff who are new to this facility receive adequate orientation.	80%	79%
B3R	Staff feel pressured to do tasks they haven't been trained to do.	71%	72%
B5.	We get the on-the-job training we need in this facility.	83%	86%
B7.	Staff get the refresher training they need.	79%	79%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 12. Item-Level Average Percent Positive Response by ASC Type, continued

		ASC Type	
	Patient Safety Culture Composites	**Multispecialty**	**Single Specialty**
	# ASCs	41	18
	# Respondents	1,357	464
	Organizational Learning—Continuous Improvement		
C1.	This facility actively looks for ways to improve patient safety.	94%	89%
C3.	We make improvements when someone points out patient safety problems.	93%	94%
C6.	We are good at changing processes to make sure the same patient safety problems don't happen again.	90%	91%
	Response to Mistakes		
C2.	Staff are treated fairly when they make mistakes.	81%	82%
C4.	Learning, rather than blame, is emphasized when mistakes are made.	78%	79%
C5.	Staff are told about patient safety problems that happen in this facility.	86%	87%
	Management Support for Patient Safety		
E1.	Managers encourage everyone to suggest ways to improve patient safety.	88%	89%
E2.	Management examines near-miss events that could have harmed patients but did not.	90%	92%
E3.	Management provides adequate resources to improve patient safety.	89%	88%

Note: The item's survey location is shown to the left.

Table 13. Near-Miss Documentation by ASC Type

Near-Miss Documentation	ASC Type	
	Multispecialty	**Single Specialty**
# ASCs	41	18
# Respondents	1,357	464
D1. When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?		
Always or Most of the Time	**88%**	**88%**
Always	57%	63%
Most of the Time	31%	25%
Sometimes	8%	7%
Rarely	3%	4%
Never	1%	1%

Note: (1) The item's survey location is shown to the left. (2) Percentages may not sum to 100 or to combined percentages because of rounding.

Table 14. Overall Rating on Patient Safety Results by ASC Type

	ASC Type	
Overall Rating on Patient Safety	**Multispecialty**	**Single Specialty**
# ASCs	41	18
# Respondents	1,357	464
Excellent or Very Good	**86%**	**90%**
Excellent	50%	59%
Very Good	37%	31%
Good	11%	9%
Fair	3%	1%
Poor	0%	0%

Note: Percentages may not sum to 100 or to combined percentages because of rounding.

Table 15. Communication in the Surgery/Procedure Room by ASC Type

Communication in the Surgery/Procedure Room		ASC Type	
		Multispecialty	Single Specialty
	# ASCs	41	18
	# Respondents	1,357	464
In the past 6 months, how often were the following actions done in your facility?			
G1.	Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.	92%	92%
G2.	Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns.	64%	70%
G3.	Immediately after procedures, team members discussed any concerns for patient recovery.	69%	83%

Note: (1) The item's survey location is shown to the left. (2) In the pilot study survey, items G1 and G2 began with “Before the start of the procedures. . . .” The items were revised to “Just before the start of procedures. . . .” to further clarify that the action should occur right before each surgery/procedure.

8. Composite-Level and Item-Level Results by ASC Ownership

Tables 16 through 20 show the average percent positive scores for the survey composite measures and survey items across ASCs, broken out by ASC ownership type (Hospital Affiliated vs. Not Hospital Affiliated).

The average percent positive scores were higher for Hospital-Affiliated ASCs across all composites. Hospital-Affiliated ASCs were also more positive than Not-Hospital-Affiliated ASCs on the majority of survey items.

Note: The numbers of ASCs and respondents by ownership type are shown in each table. However, the precise numbers of ASCs and respondents corresponding to each data cell in a table vary because of individual nonresponse/missing data.

Table 16. Composite-Level Average Percent Positive Response by ASC Ownership

Patient Safety Culture Composites		ASC Ownership	
		Not Hospital Affiliated	Hospital Affiliated
	# ASCs	44	15
	# Respondents	1,251	570
1.	**Communication About Patient Information**	90%	92%
2.	**Communication Openness**	84%	87%
3.	**Staffing, Work Pressure, and Pace**	75%	77%
4.	**Teamwork**	85%	89%
5.	**Staff Training**	77%	81%
6.	**Organizational Learning—Continuous Improvement**	91%	93%
7.	**Response to Mistakes**	80%	86%
8.	**Management Support for Patient Safety**	88%	92%
	Average Across Composites	84%	87%

Table 17. Item-Level Average Percent Positive Response by ASC Ownership

		ASC Ownership	
	Patient Safety Culture Composites	**Not Hospital Affiliated**	**Hospital Affiliated**
	# ASCs	44	15
	# Respondents	1,251	570
	Communication About Patient Information		
A1.	Important patient care information is clearly communicated across areas in this facility.	96%	97%
A5R.	Key information about patients is missing when it is needed.	76%	81%
A7.	We share key information about patients as soon as it becomes available.	93%	95%
A9.	Within this facility, we do a good job communicating information that affects patient care.	95%	95%
	Communication Openness		
A2.	We feel comfortable asking questions when something doesn't seem right.	93%	94%
A4.	When we see someone with more authority doing something unsafe for patients, we speak up.	86%	87%
A6.	Our ideas and suggestions are valued in this facility.	74%	80%
	Staffing, Work Pressure, and Pace		
A3.	We have enough staff to handle the workload.	83%	85%
A8.	There is enough time between procedures to properly prepare for the next one.	86%	87%
A10R.	We feel rushed when taking care of patients.	57%	60%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 17. Item-Level Average Percent Positive Response by ASC Ownership, continued

		ASC Ownership	
	Patient Safety Culture Composites	**Not Hospital Affiliated**	**Hospital Affiliated**
	# ASCs	44	15
	# Respondents	1,251	570
	Teamwork		
B1.	When someone in this facility gets really busy, others help out.	89%	92%
B4.	Doctors and staff clearly understand each other's roles and responsibilities.	86%	91%
B6R.	Our facility allows disrespectful behavior by those working here.	76%	81%
B8.	We work together as an effective team.	90%	94%
	Staff Training		
B2.	Staff who are new to this facility receive adequate orientation.	80%	81%
B3R.	Staff feel pressured to do tasks they haven't been trained to do.	70%	77%
B5.	We get the on-the-job training we need in this facility.	83%	87%
B7.	Staff get the refresher training they need.	78%	82%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 17. Item-Level Average Percent Positive Response by ASC Ownership, continued

	Patient Safety Culture Composites	ASC Ownership	
		Not Hospital Affiliated	Hospital Affiliated
	# ASCs	44	15
	# Respondents	1,251	570
	Organizational Learning—Continuous Improvement		
C1.	This facility actively looks for ways to improve patient safety.	92%	94%
C3.	We make improvements when someone points out patient safety problems.	93%	93%
C6.	We are good at changing processes to make sure the same patient safety problems don't happen again.	90%	91%
	Response to Mistakes		
C2.	Staff are treated fairly when they make mistakes.	80%	85%
C4.	Learning, rather than blame, is emphasized when mistakes are made.	76%	84%
C5.	Staff are told about patient safety problems that happen in this facility.	85%	89%
	Management Support for Patient Safety		
E1.	Managers encourage everyone to suggest ways to improve patient safety.	87%	92%
E2.	Management examines near-miss events that could have harmed patients but did not.	90%	92%
E3.	Management provides adequate resources to improve patient safety.	88%	91%

Note: The item's survey location is shown to the left.

Table 18. Near-Miss Documentation by ASC Ownership

Near-Miss Documentation	ASC Ownership	
	Not Hospital Affiliated	Hospital Affiliated
# ASCs	44	15
# Respondents	1,251	570
D1. When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?		
Always or Most of the Time	**88%**	**89%**
Always	59%	61%
Most of the Time	29%	29%
Sometimes	8%	8%
Rarely	4%	3%
Never	1%	0%

Note: (1) The item's survey location is shown to the left. (2) Percentages may not sum to 100 or to combined percentages because of rounding.

Table 19. Overall Rating on Patient Safety Results by ASC Ownership

Overall Rating on Patient Safety	ASC Ownership	
	Not Hospital Affiliated	Hospital Affiliated
# ASCs	44	15
# Respondents	1,251	570
Excellent or Very Good	**86%**	**90%**
Excellent	51%	58%
Very Good	36%	32%
Good	11%	9%
Fair	3%	2%
Poor	0%	0%

Note: Percentages may not sum to 100 or to combined percentages because of rounding.

Table 20. Communication in the Surgery/Procedure Room by ASC Ownership

Communication in the Surgery/Procedure Room	ASC Ownership	
	Not Hospital Affiliated	Hospital Affiliated
# ASCs	44	15
# Respondents	1,251	570
In the past 6 months, how often were the following actions done in your facility?		
G1. Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.	92%	91%
G2. Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns.	67%	61%
G3. Immediately after procedures, team members discussed any concerns for patient recovery.	76%	67%

Note: (1) The item's survey location is shown to the left. (2) In the pilot study survey, items G1 and G2 began with "Before the start of procedures. . . ." The items were revised to "Just before the start of procedures. . . ." to further clarify that the action should occur right before each surgery/procedure.

9. Composite-Level and Item-Level Results by ASC Size

Tables 21 through 25 show the average percent positive scores on the survey composite measures and survey items across ASCs, broken out by size (i.e., number of surgery/procedure rooms).

The average percent positive scores were higher for smaller ASCs (3 surgery/procedure rooms or fewer) across all composites except Communication About Patient Information. In addition, smaller ASCs scored slightly higher than larger ASCs (4 or more surgery/procedure rooms) on the majority of composite items.

Note: The numbers of ASCs and respondents are shown in each table. However, the precise numbers of ASCs and respondents corresponding to each data cell in a table vary because of individual nonresponse/missing data.

Table 21. Composite-Level Average Percent Positive Response by ASC Size

	Number of Surgery/Procedure Rooms			
Patient Safety Culture Composites	**1 or 2 Rooms**	**3 Rooms**	**4 or 5 Rooms**	**6 Rooms or More**
# ASCs	14	11	18	16
# Respondents	239	217	654	711
1. Communication About Patient Information	91%	91%	91%	90%
2. Communication Openness	87%	88%	84%	83%
3. Staffing, Work Pressure and Pace	83%	75%	74%	71%
4. Teamwork	86%	88%	87%	85%
5. Staff Training	77%	82%	79%	77%
6. Organizational Learning—Continuous Improvement	93%	93%	91%	91%
7. Response to Mistakes	85%	84%	81%	79%
8. Management Support for Patient Safety	91%	92%	86%	88%
Average Across Composites	87%	87%	84%	83%

Table 22. Item-Level Average Percent Positive Response by ASC Size

		Number of Surgery/Procedure Rooms			
	Patient Safety Culture Composites	**1 or 2 Rooms**	**3 Rooms**	**4 or 5 Rooms**	**6 Rooms or More**
	# ASCs	14	11	18	16
	# Respondents	239	217	654	711
	Communication About Patient Information				
A1.	Important patient care information is clearly communicated across areas in this facility.	96%	97%	96%	97%
A5R.	Key information about patients is missing when it is needed.	76%	77%	79%	78%
A7.	We share key information about patients as soon as it becomes available.	96%	93%	93%	93%
A9.	Within this facility, we do a good job communicating information that affects patient care.	96%	96%	96%	94%
	Communication Openness				
A2.	We feel comfortable asking questions when something doesn't seem right.	95%	93%	93%	93%
A4.	When we see someone with more authority doing something unsafe for patients, we speak up.	86%	89%	88%	83%
A6.	Our ideas and suggestions are valued in this facility.	80%	82%	70%	73%
	Staffing, Work Pressure, and Pace				
A3.	We have enough staff to handle the workload.	89%	85%	85%	75%
A8.	There is enough time between procedures to properly prepare for the next one.	90%	85%	86%	84%
A10R.	We feel rushed when taking care of patients.	70%	56%	52%	55%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 22. Item-Level Average Percent Positive Response by ASC Size, continued

		Number of Surgery/Procedure Rooms			
	Patient Safety Culture Composites	**1 or 2 Rooms**	**3 Rooms**	**4 or 5 Rooms**	**6 Rooms or More**
	# ASCs	14	11	18	16
	# Respondents	239	217	654	711
	Teamwork				
B1.	When someone in this facility gets really busy, others help out.	90%	92%	91%	88%
B4.	Doctors and staff clearly understand each other's roles and responsibilities.	84%	91%	89%	86%
B6R.	Our facility allows disrespectful behavior by those working here.	78%	78%	79%	75%
B8.	We work together as an effective team.	92%	91%	89%	91%
	Staff Training				
B2.	Staff who are new to this facility receive adequate orientation.	82%	80%	81%	77%
B3R.	Staff feel pressured to do tasks they haven't been trained to do.	67%	77%	73%	70%
B5.	We get the on-the-job training we need in this facility.	83%	88%	84%	82%
B7.	Staff get the refresher training they need.	80%	81%	78%	77%

Note: (1) The item's survey location is shown to the left. (2) 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 scale used for the item).

Table 22. Item-Level Average Percent Positive Response by ASC Size, continued

		Number of Surgery/Procedure Rooms			
	Patient Safety Culture Composites	**1 or 2 Rooms**	**3 Rooms**	**4 or 5 Rooms**	**6 Rooms or More**
	# ASCs	14	11	18	16
	# Respondents	239	217	654	711
	Organizational Learning—Continuous Improvement				
C1.	This facility actively looks for ways to improve patient safety.	92%	93%	92%	93%
C3.	We make improvements when someone points out patient safety problems.	95%	96%	91%	91%
C6.	We are good at changing processes to make sure the same patient safety problems don't happen again.	93%	90%	89%	88%
	Response to Mistakes				
C2.	Staff are treated fairly when they make mistakes.	83%	83%	81%	79%
C4.	Learning, rather than blame, is emphasized when mistakes are made.	79%	82%	77%	76%
C5.	Staff are told about patient safety problems that happen in this facility.	92%	87%	85%	82%
	Management Support for Patient Safety				
E1.	Managers encourage everyone to suggest ways to improve patient safety.	88%	92%	85%	88%
E2.	Management examines near-miss events that could have harmed patients but did not.	94%	93%	87%	89%
E3.	Management provides adequate resources to improve patient safety.	91%	91%	87%	86%

Note: The item's survey location is shown to the left.

Table 23. Near-Miss Documentation by ASC Size

Near-Miss Documentation	Number of Surgery/Procedure Rooms			
	1 or 2 Rooms	3 Rooms	4 or 5 Rooms	6 Rooms or More
# ASCs	14	11	18	16
# Respondents	239	217	654	711
D1. When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?				
Always or Most of the Time	**90%**	**88%**	**89%**	**87%**
Always	69%	56%	60%	53%
Most of the Time	21%	32%	29%	34%
Sometimes	8%	8%	6%	9%
Rarely	2%	4%	4%	4%
Never	0%	1%	1%	0%

Note: (1) The item's survey location is shown to the left. (2) Percentages may not sum to 100 or to combined percentages because of rounding.

Table 24. Overall Rating on Patient Safety by ASC Size

	Number of Surgery/Procedure Rooms			
Overall Rating on Patient Safety	**1 or 2 Rooms**	**3 Rooms**	**4 or 5 Rooms**	**6 Rooms or More**
# ASCs	14	11	18	16
# Respondents	239	217	654	711
Excellent or Very Good	**86%**	**91%**	**87%**	**86%**
Excellent	51%	63%	51%	49%
Very Good	35%	28%	36%	37%
Good	12%	8%	11%	10%
Fair	3%	1%	2%	4%
Poor	0%	0%	0%	0%

Note: Percentages may not sum to 100 or to combined percentages because of rounding.

Table 25. Communication in the Surgery/Procedure Room by ASC Size

Communication in the Surgery/Procedure Room	Number of Surgery/Procedure Rooms			
	1 or 2 Rooms	3 Rooms	4 or 5 Rooms	6 Rooms or More
# ASCs	14	11	18	16
# Respondents	239	217	654	711
In the past 6 months, how often were the following actions done in your facility?				
G1. Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.	93%	92%	93%	90%
G2. Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns.	75%	63%	65%	60%
G3. Immediately after procedures, team members discussed any concerns for patient recovery.	78%	79%	74%	65%

Note: (1) The item's survey location is shown to the left. (2) In the pilot study survey, items G1 and G2 began with “Before the start of procedures. . . .” The items were revised to “Just before the start of procedures. . . .” to further clarify that the action should occur right before each surgery/procedure.

10. Composite-Level and Item-Level Results by Staff Position

Tables 26 through 30 show the average percent positive scores on the survey composite measures and survey items across ASCs, broken out by staff position. Only the staff positions where at least 20 ASCs had at least five respondents in that staff position are included: Doctor/Physician (excluding Anesthesiologists) or Surgeon, Anesthesiologist, Management Staff, Nurse, Technician, and Administrative Staff.

Doctors/Physicians (excluding Anesthesiologists) or Surgeons were more positive than other staff positions on all composites, most composite items, and Overall Patient Safety Rating. Doctors/Physicians (excluding Anesthesiologists) or Surgeons were more positive than most other staff positions on the Near-Miss Documentation item, but Administrative Staff had the highest percentage who indicated that near-miss events were documented "Always or Most of the Time" (94%).

Note: The numbers of ASCs and respondents in each staff position are shown in each table. However, the precise numbers of ASCs and respondents corresponding to each data cell in a table vary because of individual nonresponse/missing data.

Table 26. Composite-Level Average Percent Positive Response by Staff Position

	Staff Position					
Patient Safety Culture Composites	**Doctor/Physician (excluding Anesthesiologists) or Surgeon**	**Anesthesiologist**	**Management**	**Nurse**	**Technician**	**Administrative Staff**
# ASCs	51	36	55	59	56	49
# Respondents	389	138	134	592	215	173
1. Communication About Patient Information	97%	95%	90%	88%	88%	89%
2. Communication Openness	97%	94%	87%	78%	80%	80%
3. Staffing, Work Pressure, and Pace	94%	89%	81%	64%	67%	73%
4. Teamwork	95%	94%	89%	83%	81%	78%
5. Staff Training	93%	90%	83%	73%	70%	72%
6. Organizational Learning—Continuous Improvement	97%	96%	95%	88%	92%	90%
7. Response to Mistakes	96%	92%	91%	77%	74%	72%
8. Management Support for Patient Safety	98%	95%	95%	84%	86%	87%
Average Across Composites	96%	93%	89%	79%	80%	80%

Table 27. Item-Level Average Percent Positive Response by Staff Position

		Staff Position					
	Patient Safety Culture Composites	**Doctor/Physician (excluding Anesthesiologists) or Surgeon**	**Anesthesiologist**	**Management**	**Nurse**	**Technician**	**Administrative Staff**
	# ASCs	51	36	55	59	56	49
	# Respondents	389	138	134	592	215	173
	Communication About Patient Information						
A1.	Important patient care information is clearly communicated across areas in this facility.	99%	98%	95%	95%	95%	95%
A5R.	Key information about patients is missing when it is needed.	90%	89%	77%	69%	81%	76%
A7.	We share key information about patients as soon as it becomes available.	99%	97%	95%	93%	86%	91%
A9.	Within this facility, we do a good job communicating information that affects patient care.	98%	97%	95%	94%	92%	93%
	Communication Openness						
A2.	We feel comfortable asking questions when something doesn't seem right.	99%	99%	95%	89%	91%	91%
A4.	When we see someone with more authority doing something unsafe for patients, we speak up.	97%	94%	80%	83%	81%	82%
A6.	Our ideas and suggestions are valued in this facility.	94%	91%	87%	63%	67%	69%
	Staffing, Work Pressure, and Pace						
A3.	We have enough staff to handle the workload.	95%	95%	95%	77%	71%	79%
A8.	There is enough time between procedures to properly prepare for the next one.	99%	96%	95%	78%	79%	87%
A10R.	We feel rushed when taking care of patients.	87%	76%	54%	37%	52%	55%

Note: (1) Missing responses and respondents who selected "Certified Registered Nurse Anesthetist (CRNA)," "Physician Assistant or Nurse Practitioner," or "Other" are not shown. (2) The item's survey location is shown to the left. (3) 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 scale used for the item).

Table 27. Item-Level Average Percent Positive Response by Staff Position, continued

		Staff Position					
	Patient Safety Culture Composites	**Doctor/Physician (excluding Anesthesiologists) or Surgeon**	**Anesthesiologist**	**Management**	**Nurse**	**Technician**	**Administrative Staff**
	# ASCs	51	36	55	59	56	49
	# Respondents	389	138	134	592	215	173
	Teamwork						
B1.	When someone in this facility gets really busy, others help out.	96%	95%	94%	90%	81%	84%
B4.	Doctors and staff clearly understand each other's roles and responsibilities.	98%	96%	89%	84%	84%	76%
B6R.	Our facility allows disrespectful behavior by those working here.	89%	89%	83%	69%	74%	72%
B8.	We work together as an effective team.	98%	97%	91%	89%	83%	78%
	Staff Training						
B2.	Staff who are new to this facility receive adequate orientation.	94%	96%	83%	73%	71%	79%
B3R.	Staff feel pressured to do tasks they haven't been trained to do.	91%	89%	80%	64%	57%	55%
B5.	We get the on-the-job training we need in this facility.	98%	88%	86%	79%	81%	81%
B7.	Staff get the refresher training they need.	90%	89%	83%	75%	71%	75%

Note: (1) Missing responses and respondents who selected "Certified Registered Nurse Anesthetist (CRNA)," "Physician Assistant or Nurse Practitioner," or "Other" are not shown. (2) The item's survey location is shown to the left. (3) 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 scale used for the item).

Table 27. Item-Level Average Percent Positive Response by Staff Position, continued

	Patient Safety Culture Composites	Staff Position					
		Doctor/Physician (excluding Anesthesiologists) or Surgeon	Anesthesiologist	Management	Nurse	Technician	Administrative Staff
	# ASCs	51	36	55	59	56	49
	# Respondents	389	138	134	592	215	173
	Organizational Learning—Continuous Improvement						
C1.	This facility actively looks for ways to improve patient safety.	97%	98%	95%	89%	91%	91%
C3.	We make improvements when someone points out patient safety problems.	98%	96%	98%	91%	91%	90%
C6.	We are good at changing processes to make sure the same patient safety problems don't happen again.	97%	94%	93%	85%	93%	89%
	Response to Mistakes						
C2.	Staff are treated fairly when they make mistakes.	98%	93%	91%	75%	72%	72%
C4.	Learning, rather than blame, is emphasized when mistakes are made.	95%	91%	88%	73%	66%	67%
C5.	Staff are told about patient safety problems that happen in this facility.	95%	94%	94%	84%	86%	77%
	Management Support for Patient Safety						
E1.	Managers encourage everyone to suggest ways to improve patient safety.	98%	91%	98%	82%	86%	85%
E2.	Management examines near-miss events that could have harmed patients but did not.	98%	98%	96%	87%	87%	90%
E3.	Management provides adequate resources to improve patient safety.	99%	97%	92%	81%	87%	89%

Note: (1) Missing responses and respondents who selected "Certified Registered Nurse Anesthetist (CRNA)," "Physician Assistant or Nurse Practitioner," or "Other" are not shown. (2) The item's survey location is shown to the left.

Table 28. Near-Miss Documentation by Staff Position

	Staff Position					
Near-Miss Documentation	**Doctor/Physician (excluding Anesthesiologists) or Surgeon**	**Anesthesiologist**	**Management**	**Nurse**	**Technician**	**Administrative Staff**
# ASCs	51	36	55	59	56	49
# Respondents	389	138	134	592	215	173
D1. When something happens that could harm the patient, but does not, how often is it documented in an incident or occurrence report?						
Always or Most of the Time	**91%**	**88%**	**90%**	**84%**	**90%**	**94%**
Always	64%	48%	51%	55%	61%	81%
Most of the Time	27%	40%	39%	29%	29%	13%
Sometimes	7%	9%	7%	11%	5%	4%
Rarely	1%	3%	3%	4%	3%	1%
Never	0%	0%	0%	1%	1%	1%

Note: (1) Missing responses and respondents who selected “Certified Registered Nurse Anesthetist (CRNA),” “Physician Assistant or Nurse Practitioner,” or "Other" are not shown. (2) The item's survey location is shown to the left. (3) Percentages may not sum to 100 or to combined percentages because of rounding.

Table 29. Overall Rating on Patient Safety by Staff Position

	Staff Position					
Overall Rating on Patient Safety	**Doctor/Physician (excluding Anesthesiologists) or Surgeon**	**Anesthesiologist**	**Management**	**Nurse**	**Technician**	**Administrative Staff**
# ASCs	51	36	55	59	56	49
# Respondents	389	138	134	592	215	173
Excellent or Very Good	**99%**	**93%**	**91%**	**81%**	**85%**	**88%**
Excellent	84%	64%	48%	40%	48%	45%
Very Good	15%	29%	43%	41%	37%	43%
Good	1%	6%	6%	16%	12%	12%
Fair	0%	1%	2%	4%	3%	0%
Poor	0%	0%	0%	0%	0%	0%

Note: (1) Missing responses and respondents who selected “Certified Registered Nurse Anesthetist (CRNA),” “Physician Assistant or Nurse Practitioner,” or "Other" are not shown. (2) Percentages may not sum to 100 or to combined percentages because of rounding.

Table 30. Communication in the Surgery/Procedure Room by Staff Position

Patient Safety Culture Composites	Staff Position				
	Doctor/Physician (excluding Anesthesiologists) or Surgeon	Anesthesiologist	Management	Nurse	Technician
# ASCs	51	36	55	59	56
# Respondents	389	138	134	592	215
In the past 6 months, how often were the following actions done in your facility?					
G1. Just before the start of procedures, all team members stopped to discuss the overall plan of what was to be done.	98%	99%	90%	89%	90%
G2. Just before the start of procedures, the doctor encouraged all team members to speak up at any time if they had any concerns.	80%	80%	49%	50%	59%
G3. Immediately after procedures, team members discussed any concerns for patient recovery.	88%	76%	66%	65%	65%

Note: (1) Missing responses and respondents who selected “Certified Registered Nurse Anesthetist (CRNA),” “Physician Assistant or Nurse Practitioner,” or "Other" are not shown. (2) The item's survey location is shown to the left. (3) The items were applicable to staff who were typically in the surgery/procedure room; therefore, Administrative Staff are not included. (4) In the pilot study survey, items G1 and G2 began with “Before the start of procedures. . . .” The items were revised to “Just before the start of procedures. . . .” to further clarify that the action should occur right before each surgery/procedure.

Appendix: Explanation of Calculations

Calculating Item Percent Positive Scores

ASC ***percent positive scores*** are calculated as follows:

- **For *positively* worded questions or items**, it is simply calculating the total percentage of respondents who answered positively—combined percentage of "Strongly agree" and "Agree" responses, or "Always" and "Most of the time" responses, depending on the response scale used for the items.
- **For *negatively* worded questions or items**, it is calculating the total percentage of respondents who answered negatively—combined percentage of "Strongly disagree" and "Disagree" responses, or "Never" and "Rarely" responses, because a *negative* answer on these items indicates a *positive* response.

Calculating Composite Percent Positive Scores

A composite score summarizes how respondents answered *groups of survey items* that all measure the same thing. Composite scores on the eight patient safety culture survey composites tell you the average percentage of respondents who answered positively when looking at the survey items that measure each safety culture composite.

To calculate each ASC's composite score on a particular safety culture area, simply average the percent positive response on each item that is included in the composite. An example of computing a composite score for the Communication About Patient Information composite follows.

1. There are four items in this composite—three are positively worded (items A1, A9, and A10), and one is negatively worded (item A7). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.
2. Calculate the percent positive response at the item level (see example in Table 31).

Table 31. Example of How To Calculate Item and Composite Percent Positive Scores

Four items measuring Communication About Patient Information	For positively worded items, the # of "Strongly agree" or "Agree" responses	For negatively worded items, the # of "Strongly disagree" or "Disagree" responses	Total # of responses to the item (excluding Does not apply/Don't know and missing responses)	Percent positive response on item
Item A1-positively worded: "Important patient care information is clearly communicated across areas in this facility."	210	NA	260	210/260 = 81%
Item A5-negatively worded: "Key information about patients is missing when it is needed."	NA	150	250	150/250= 60%
Item A7-positively worded: "We share key information about patients as soon as it becomes available."	180	NA	240	180/240= 75%
Item A9-positively worded: "Within this facility, we do a good job communicating information that affects patient care."	160	NA	250	160/250= 64%
NA = Not applicable			**Average percent positive response across the 4 items = 70%**	

In this example, there were four items, with percent positive response scores of 81 percent, 60 percent, 75 percent, and 64 percent. Averaging these item-level percent positive scores (81% + 60% + 75% + 64% / 4) results in a composite score of .70, or 70 percent, on Communication About Patient Information. That is, an average of about 70 percent of the respondents responded positively on the survey items in this composite.