

SURVEYS ON PATIENT SAFETY CULTURE[®]



Surveys on
Patient Safety
Culture[®]

2024 MEDICAL OFFICE USER DATABASE REPORT



AHRQ
Agency for Healthcare
Research and Quality

**PATIENT
SAFETY**

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Surveys on Patient Safety Culture[®] (SOPS[®])

2024 Medical Office User Database Report

Part I

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Overview

Surveys on Patient Safety Culture®

Findings from the 2024 Surveys on Patient Safety Culture® (SOPS®) Medical Office Database

The SOPS Medical Office Survey assesses provider and staff perceptions of their organization's patient safety culture. The 2024 SOPS Medical Office Database includes data from:



1,164

Participating
Medical Offices



15,449

Provider and Staff
Respondents



58%

Average Medical Office
Response Rate

Highest Scoring Composite Measures



**Patient Care Tracking/
Followup**

86%

of respondents reported their medical office "always" or "most of the time" reminds patients about appointments, documents how well patients follow treatment plans, and follows up with patients and outside providers.



Teamwork

85%

of respondents "strongly agree" or "agree" their medical office has a culture of teamwork, mutual respect, and close working relationships among staff and providers.

Lowest Scoring Composite Measure



Work Pressure and Pace

41%

of respondents "strongly agree" or "agree" that there are enough staff and providers to handle the patient load, and the office work pace is not hectic.

OTHER FINDINGS

Overall Ratings on Quality

Highest Rated

Equitable 80%

of respondents reported that their medical office is "Excellent" or "Very good" at providing the same quality of care to all individuals.



Lowest Rated

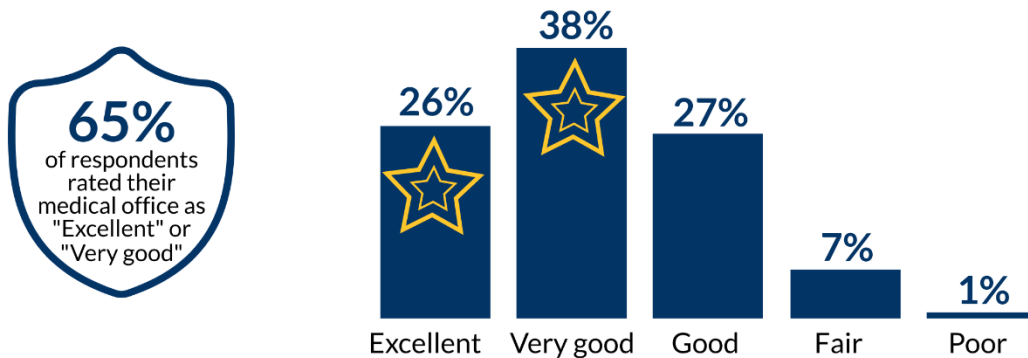
Timely 54%

of respondents reported that their medical office is "Excellent" or "Very good" at minimizing waits and potentially harmful delays.



Overall Patient Safety Rating

Average respondent ratings of their medical office on patient safety



Note: Chart totals may not add to 100% due to rounding. The percent "Excellent" or "Very good" is based on unrounded numbers.

What's Next? Action planning for patient safety improvement

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

Purpose and Use of This Report

In response to requests from medical offices interested in comparing results on the Surveys on Patient Safety Culture® (SOPS®) Medical Office Survey, the Agency for Healthcare Research and Quality (AHRQ) established the SOPS Medical Office Survey Database.

The 2024 SOPS Medical Office User Database Report contains survey data from 1,164 medical offices and includes 15,449 provider and staff respondents. Participating medical offices administered the SOPS Medical Office Survey from November 2021 through September 2023.

Chapter 7 of this report shows scores from the 2024 Database compared with prior Database years.

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

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

Appendix A: Results by Medical Office Characteristics

- Number of providers
- Single specialty vs. multispecialty
- Primary care specialties
- Specific specialties
- Ownership
- Geographic region

Appendix B: Results by Respondent Characteristics

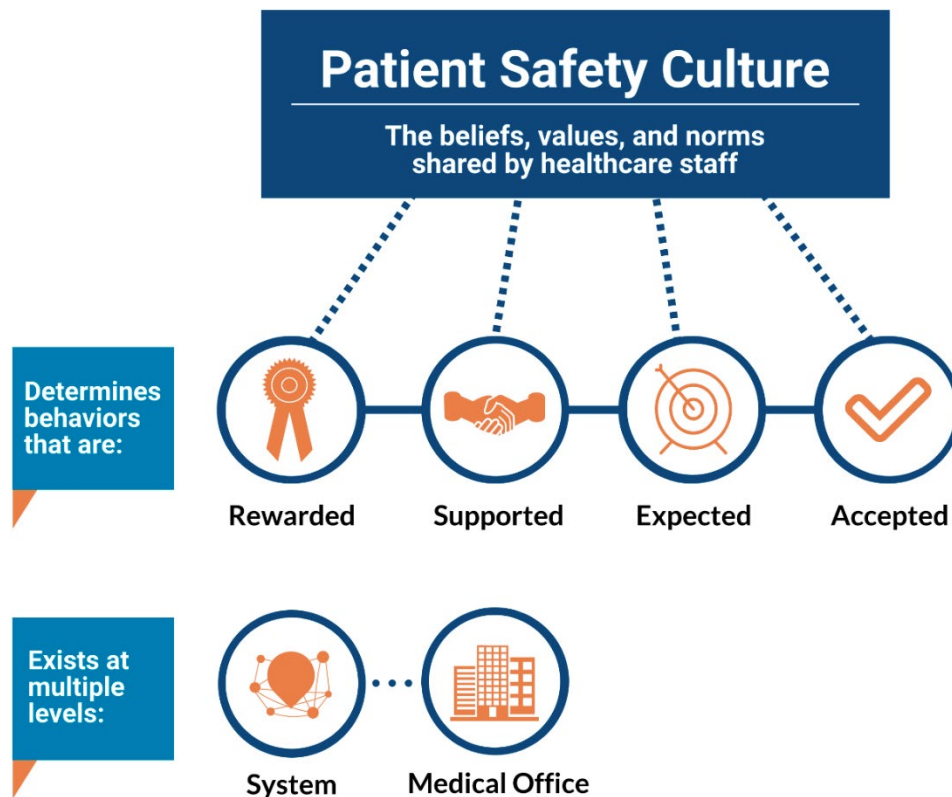
- Staff position
- Tenure in medical office

The appendixes in Part II are available online at ahrq.gov/sops/databases/medical-office.

1 Introduction

Organizational culture refers to the beliefs, values, and norms shared by staff throughout their organization that influence their actions and behaviors. Patient safety culture is the extent to which these beliefs, values, and norms support and promote patient safety. Patient safety culture can be measured by determining what is rewarded, supported, expected, and accepted in an organization as it relates to patient safety (see Figure 1).

Figure 1. Definition of Patient Safety Culture



Survey Content

The AHRQ SOPS Medical Office Survey includes 38 items that make up 10 composite measures. Table 1-1 defines each composite measure.

Table 1-1. SOPS Medical Office Survey Composite Measures and Definitions

SOPS Medical Office Survey Composite Measure	Definition: The extent to which...	Number of Items
Communication About Error	Staff are willing to report mistakes they observe and do not feel like their mistakes are held against them and providers and staff talk openly about office problems and how to prevent errors from happening.	4
Communication Openness	Providers in the office are open to staff ideas about how to improve office processes and staff are encouraged to express alternative viewpoints and do not find it difficult to voice disagreement.	4
Office Processes and Standardization	The office is organized, has an effective workflow, has standardized processes for completing tasks, and has good procedures for checking the accuracy of work performed.	4
Organizational Learning	The office has a learning culture that facilitates making changes in office processes to improve the quality of patient care and evaluates changes for effectiveness.	3
Overall Perceptions of Patient Safety and Quality	The quality of patient care is more important than getting more work done, office processes are good at preventing mistakes, and mistakes do not happen more than they should.	4
Owner/Managing Partner/Leadership Support for Patient Safety	Office leadership actively supports quality and patient safety, places a high priority on improving patient care processes, does not overlook mistakes, and makes decisions based on what is best for patients.	4
Patient Care Tracking/Followup	The office reminds patients about appointments, documents how well patients follow treatment plans, follows up with patients who need monitoring, and follows up when reports from an outside provider are not received.	4
Staff Training	The office provides staff with effective on-the-job training, trains staff on new processes, and does not assign staff tasks they have not been trained to perform.	3
Teamwork	The office has a culture of teamwork, mutual respect, and close working relationships among staff and providers.	4
Work Pressure and Pace	There are enough staff and providers to handle the patient load and the office work pace is not hectic.	4

In addition to items that make up these composite measures, the survey includes single-item measures on information exchange with other settings and how often there are other patient safety and quality issues. It also includes ratings on five areas of healthcare quality (patient centered, effective, timely, efficient, and equitable) and an overall patient safety rating. Respondents are also asked to provide answers to three background questions about tenure in the medical office, hours worked per week in the medical office, and staff position.

2 Survey Administration Statistics

This chapter presents descriptive information on the number of medical offices and survey respondents, overall and average response rates (Table 2-1), and ways medical offices administered the survey (Table 2-2). Participating medical offices administered the SOPS Medical Office Survey from November 2021 through September 2023.

Highlights



Table 2-1. Response Statistics - 2024 SOPS Medical Office Database

Overall Response Information		Statistic
Number of respondents		15,449
Number of surveys distributed		35,323
Overall response rate		44%
Average Response Information		Statistic
Average number of respondents per medical office (range: 3 to 286)		13
Average number of surveys distributed per medical office (range: 5 to 668)		30
Average medical office response rate (range: 6% to 100%)		58%

Table 2-2. Survey Administration Mode Statistics - 2024 SOPS Medical Office Database

Survey Administration Mode	Medical Offices		Respondents		Average Response Rate
	Number	Percent	Number	Percent	Percent
Paper only	11	1%	156	1%	80%
Web only	1,137	98%	15,098	98%	58%
Mixed mode (paper and web)	16	1%	195	1%	73%
Total	1,164	100%	15,449	100%	--

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

3 Medical Office Characteristics

This chapter presents information about the characteristics of the medical offices included in the 2024 SOPS Medical Office Database, including number of providers, ownership, number of specialties (single vs. multispecialty), and geographic region (Table 3-1). This chapter also includes the distribution of single-specialty medical offices by specialty (Table 3-2).

To provide an understanding of the geography of the database participants, the U.S. region of the medical offices submitting to the database is shown with the corresponding distribution of medical offices included in the 2021 U.S. Census Bureau Economic Surveys, Offices of Physicians in Table N5.

Highlights



30%

of participating medical offices have
3-5 providers per week.



91%

of participating medical offices are
owned by a hospital or health system.



86%

of participating medical offices are
single-specialty.

Table 3-1. Distribution of the 2024 SOPS Medical Office Database by Medical Office Characteristics

Medical Office Characteristics	Medical Offices (N=1,164)		Respondents (N=15,449)	
	Number	Percent	Number	Percent
Number of Providers				
1	97	8%	763	5%
2	131	11%	973	6%
3 to 5	344	30%	3,368	22%
6 to 10	324	28%	4,248	27%
11 to 19	166	14%	2,810	18%
20 or more	102	9%	3,287	21%
Ownership	Number	Percent	Number	Percent
Community health center	35	3%	872	6%
Hospital or health system	1,057	91%	13,697	89%
Providers and/or physicians	30	3%	180	1%
University or academic medical center	41	4%	670	4%
Other	1	<1%	30	<1%
Single Specialty vs. Multispecialty	Number	Percent	Number	Percent
Single specialty	1,005	86%	11,965	77%
Multispecialty	159	14%	3,484	23%
Geographic Region	Number	Percent	Number	Percent
New England	65	6%	897	6%
Mid-Atlantic	24	2%	263	2%
South Atlantic/Associated Territories	400	34%	5,528	36%
East North Central	212	18%	2,831	18%
East South Central	204	18%	2,390	15%
West North Central	159	14%	2,016	13%
West South Central	70	6%	757	5%
Mountain/Pacific/Associated Territories	30	3%	767	5%

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

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

Table 3-2. Distribution of the 2024 SOPS Medical Office Database by Specialty for Single-Specialty Medical Offices

Specialty	Number of Medical Offices	Percent
Allergy/Immunology	5	1%
Cardiology	58	6%
Child and Adolescent Psychiatry	1	<1%
Dermatology	5	1%
Diagnostic Radiology	1	<1%
Emergency Medicine	21	2%
Endocrinology/Metabolism	12	1%
Family Practice/Family Medicine	253	25%
Gastroenterology	24	2%
General Practice	43	4%
General Preventive Medicine	1	<1%
General Surgery	11	1%
Geriatrics	3	<1%
Hematology/Oncology	28	3%
Internal Medicine	38	4%
Nephrology	9	1%
Neurology	25	2%
OB/GYN or GYN	69	7%
Ophthalmology	8	1%
Orthopedics	32	3%
Other Specialty	114	11%
Otolaryngology	13	1%
Pathology - Anatomic/Clinical	2	<1%
Pediatrics	50	5%
Physical Medicine and Rehabilitation	33	3%
Psychiatry	22	2%
Pulmonary Medicine	20	2%
Radiology	3	<1%
Rheumatology	11	1%
Surgery (All)	45	4%
Urology	16	2%
Vascular Medicine	29	3%

Note: Specific specialty is presented only for single-specialty medical offices. Percentages may not add to 100 due to rounding.

4 Respondent Characteristics

This chapter describes the characteristics of the 15,449 respondents in the 2024 SOPS Medical Office Database (Table 4-1).

Highlights

Most Prevalent Medical Office Staff Positions



30%

of respondents were **other clinical staff or clinical support staff**.

Most Prevalent Staff Tenure



25%

of respondents have worked in their medical office for **1 year to less than 3 years**.

Note: "Other clinical staff or clinical support staff" includes medical assistants, nursing aides, technicians, and therapists.

Table 4-1. Distribution of the 2024 SOPS Medical Office Database by Respondent Characteristics

Respondent Characteristics	Respondents	
	Number	Percent
Staff Position		
Administrative or clerical staff	3,064	22%
Management	1,214	9%
Physician (M.D. or D.O.)	1,373	10%
Physician assistant, nurse practitioner, clinical nurse specialist, nurse midwife, advanced practice nurse, etc.	1,256	9%
Registered nurse (RN), licensed vocational nurse (LVN), licensed practical nurse (LPN)	2,147	15%
Other clinical staff or clinical support staff	4,245	30%
Other position	769	5%
Total	14,068	100%
Missing	1,381	--
Overall total	15,449	--
Tenure in Medical Office	Number	Percent
Less than 2 months	449	3%
2 months to less than 1 year	2,680	19%
1 year to less than 3 years	3,466	25%
3 years to less than 6 years	2,879	20%
6 years to less than 11 years	2,206	16%
11 years or more	2,372	17%
Total	14,052	100%
Missing	1,397	--
Overall	15,449	--
Hours Worked per Week in Medical Office	Number	Percent
1 to 4 hours	108	1%
5 to 16 hours	440	3%
17 to 24 hours	551	4%
25 to 32 hours	816	6%
33 to 40 hours	8,995	63%
41 hours or more	3,334	23%
Total	14,244	100%
Missing	1,205	
Overall	15,449	

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

5 Overall Results

This chapter presents overall findings from the 2024 SOPS Medical Office Database. We present the average percentage of positive responses for each of the survey’s composite measures and items, summarized for all database medical offices. Reporting the average for all medical offices ensures each medical office’s scores receive an equal weight, regardless of the office’s size. We do not report the percentage of positive responses summarized for all respondents, as this would give greater weight to those medical offices with more staff. Reporting the data at the medical office level, rather than the respondent level, is important because culture is considered a group characteristic, not an individual characteristic.

Highlights

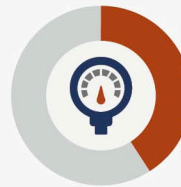
Highest Scoring Composite Measure Patient Care Tracking/Followup



86%

of respondents reported that their office reminds patients about appointments, documents how well patients follow treatment plans, and follows up with patients and outside providers.

Lowest Scoring Composite Measure Work Pressure and Pace



41%

of respondents reported there are enough staff and providers to handle the patient load, and the office work pace is not hectic.

Overall Rating on Patient Safety



65%

of respondents gave their medical office an overall patient safety rating of “Excellent” or “Very good.”

Composite Measure and Item Charts

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

Composite Measure Results

Chart 5-1 shows the average percent positive response for each of the 10 SOPS composite measures, summarized for all medical offices in the database. The SOPS composite measures are shown in order from the highest average percent positive response to the lowest.

Item Results

Chart 5-2 shows the average percent positive response for each of the 38 items. Items are listed in their respective composite measure, grouped by positively and negatively worded items, and then in the order in which they appear in the survey.

Chart 5-3 shows the item average ratings on patient safety and quality issues.

Chart 5-4 shows the item average ratings on information exchange with other settings.

Overall Ratings on Quality

Chart 5-5 shows the results for overall ratings on quality.

Overall Rating on Patient Safety

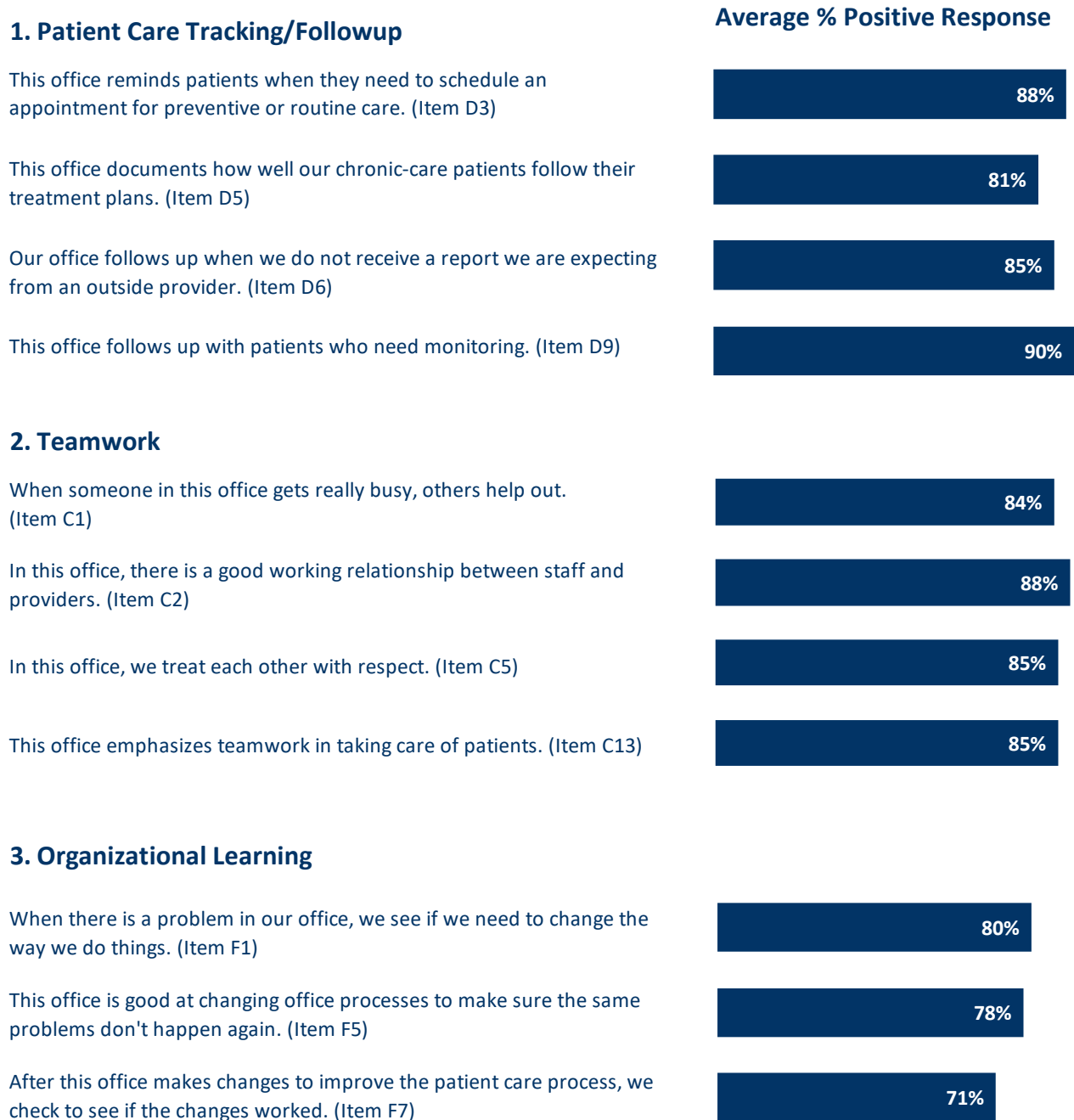
Chart 5-6 shows results from the item that asks respondents to give their medical office an overall rating on patient safety.

Chart 5-1. Composite Measure Results
Average Percent Positive Response - 2024 SOPS Medical Office Database



Chart 5-2. Item Results

Average Percent Positive Response - 2024 SOPS Medical Office Database (Page 1 of 4)



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

Chart 5-2. Item Results

Average Percent Positive Response - 2024 SOPS Medical Office Database (Page 2 of 4)

4. Overall Perceptions of Patient Safety and Quality

Average % Positive Response

Our office processes are good at preventing mistakes that could affect patients. (Item F2)

84%

Mistakes happen more than they should in this office. (Item F3*)

73%

It is just by chance that we don't make more mistakes that affect our patients. (Item F4*)

71%

In this office, getting more work done is more important than quality of care. (Item F6*)

65%

5. Communication About Error

Providers and staff talk openly about office problems. (Item D8)

64%

In this office, we discuss ways to prevent errors from happening again. (Item D11)

82%

Staff are willing to report mistakes they observe in this office. (Item D12)

80%

Staff feel like their mistakes are held against them. (Item D7*)

64%

6. Staff Training

This office trains staff when new processes are put into place. (Item C4)

74%

This office makes sure staff get the on-the-job training they need. (Item C7)

74%

Staff in this office are asked to do tasks they haven't been trained to do. (Item C10*)

64%

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

Chart 5-2. Item Results

Average Percent Positive Response - 2024 SOPS Medical Office Database (Page 3 of 4)

7. Communication Openness

Average % Positive Response

Providers in this office are open to staff ideas about how to improve office processes. (Item D1)

74%

Staff are encouraged to express alternative viewpoints in this office. (Item D2)

73%

Staff are afraid to ask questions when something does not seem right. (Item D4*)

70%

It is difficult to voice disagreement in this office. (Item D10*)

59%

8. Office Processes and Standardization

We have good procedures for checking that work in this office was done correctly. (Item C9)

70%

Staff in this office follow standardized processes to get tasks done. (Item C15)

81%

This office is more disorganized than it should be. (Item C8*)

62%

We have problems with workflow in this office. (Item C12*)

51%

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

Chart 5-2. Item Results

Average Percent Positive Response - 2024 SOPS Medical Office Database (Page 4 of 4)

9. Owner/Managing Partner/Leadership Support for Patient Safety

Average % Positive Response

They place a high priority on improving patient care processes.
(Item E3)

76%

They aren't investing enough resources to improve the quality of care
in this office. (Item E1*)

46%

They overlook patient care mistakes that happen over and over.
(Item E2*)

73%

They make decisions too often based on what is best for the office
rather than what is best for patients. (Item E4*)

53%

10. Work Pressure and Pace

We have enough staff to handle our patient load. (Item C11)

39%

In this office, we often feel rushed when taking care of patients.
(Item C3*)

38%

We have too many patients for the number of providers in this office.
(Item C6*)

39%

This office has too many patients to be able to handle everything
effectively. (Item C14*)

49%

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

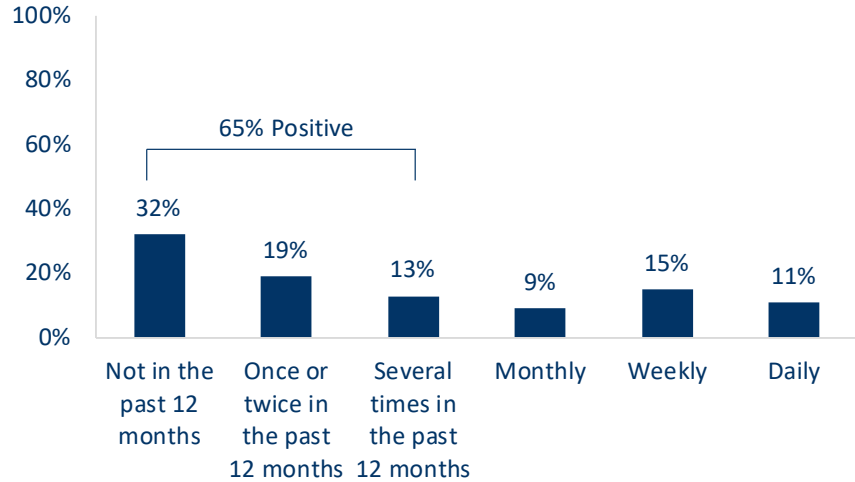
Chart 5-3. Item Results

Average Percentage Response on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database (Page 1 of 5)

The following items describe things that can happen in medical offices that **negatively** affect patient safety and quality of care. **In your best estimate, how often did the following things happen in your medical office OVER THE PAST 12 MONTHS?**

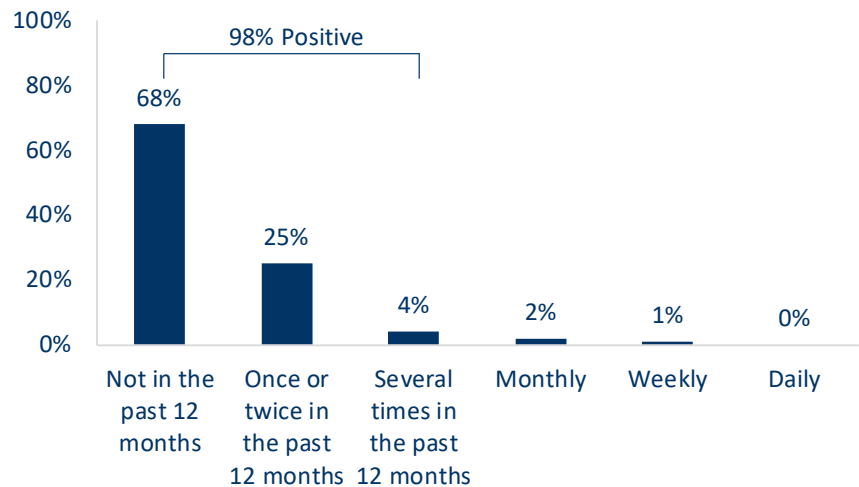
Access to Care

A patient was unable to get an appointment within 48 hours for an acute/serious problem. (Item A1)



Patient Identification

The wrong chart/medical record was used for a patient. (Item A2)



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

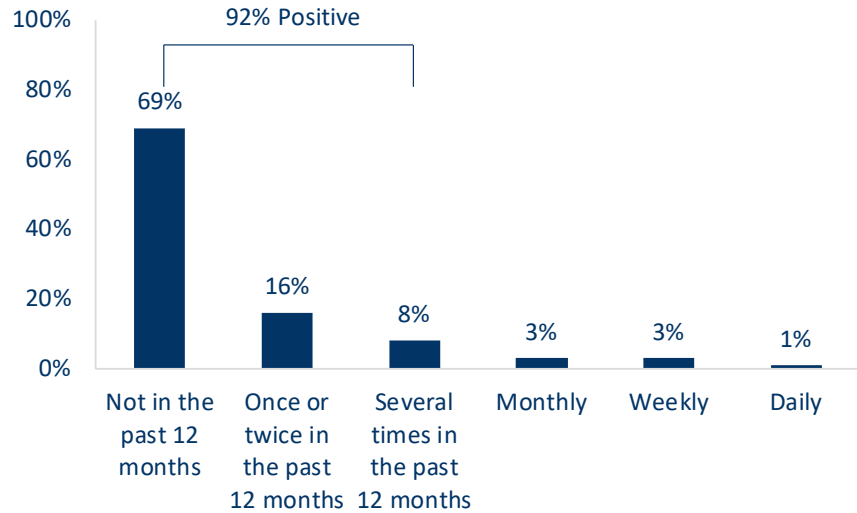
Chart 5-3. Item Results

Average Percentage Response on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database (Page 2 of 5)

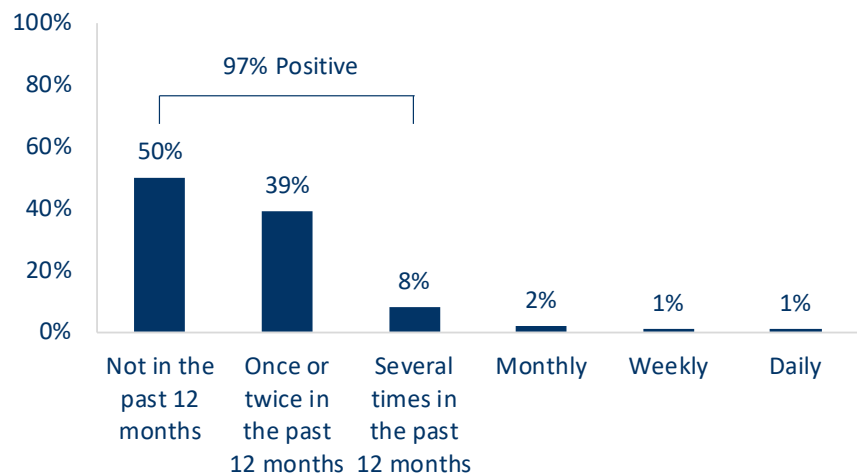
The following items describe things that can happen in medical offices that **negatively** affect patient safety and quality of care. **In your best estimate, how often did the following things happen in your medical office OVER THE PAST 12 MONTHS?**

Charts/Medical Records

A patient's chart/medical record was not available when needed. (Item A3)



Medical information was filed, scanned, or entered into the wrong patient's chart/medical record. (Item A4)



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

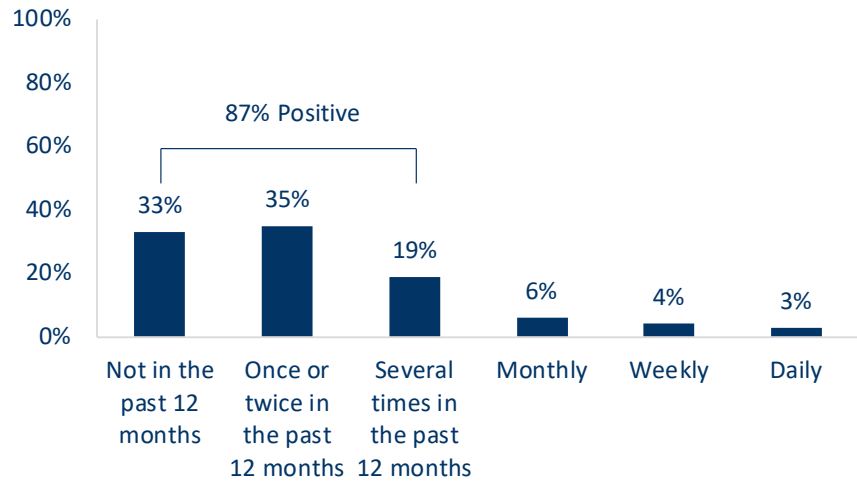
Chart 5-3. Item Results

Average Percentage Response on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database (Page 3 of 5)

The following items describe things that can happen in medical offices that **negatively** affect patient safety and quality of care. **In your best estimate, how often did the following things happen in your medical office OVER THE PAST 12 MONTHS?**

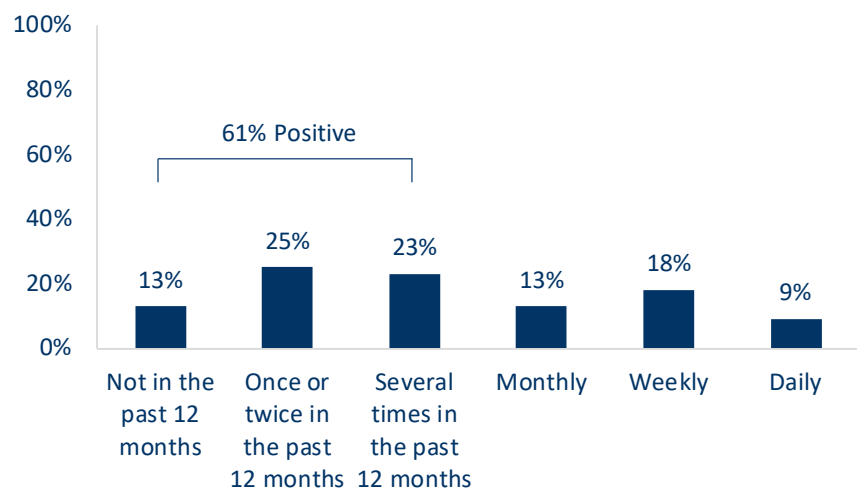
Medical Equipment

Medical equipment was not working properly or was in need of repair or replacement. (Item A5)



Medication

A pharmacy contacted our office to clarify or correct a prescription. (Item A6)



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

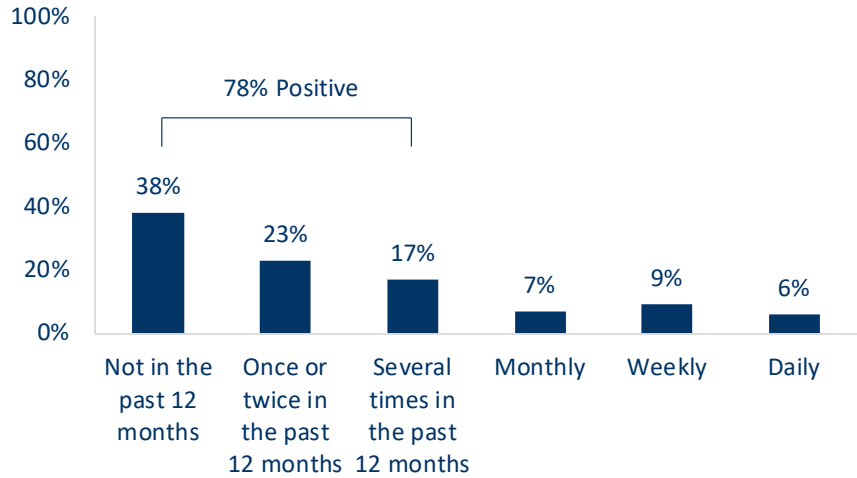
Chart 5-3. Item Results

Average Percentage Response on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database (Page 4 of 5)

The following items describe things that can happen in medical offices that **negatively** affect patient safety and quality of care. **In your best estimate, how often did the following things happen in your medical office OVER THE PAST 12 MONTHS?**

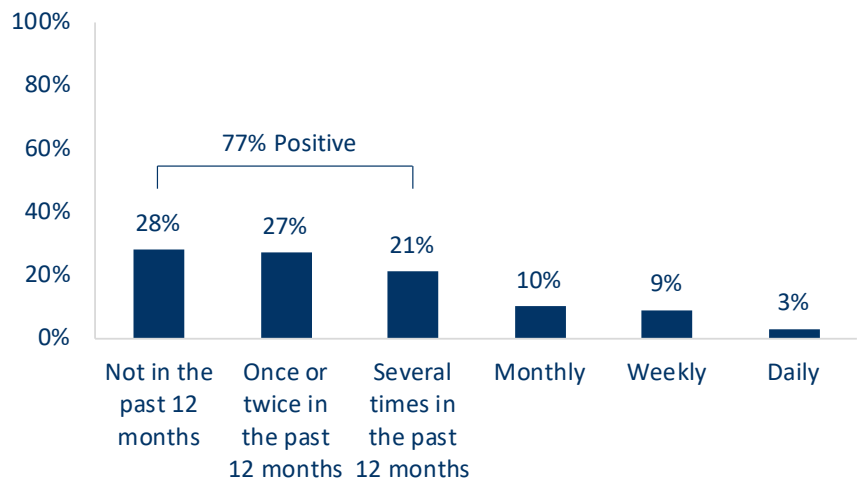
Medication (cont.)

A patient's medication list was not updated during his or her visit. (Item A7)



Diagnostics & Tests

The results from a lab or imaging test were not available when needed. (Item A8)



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

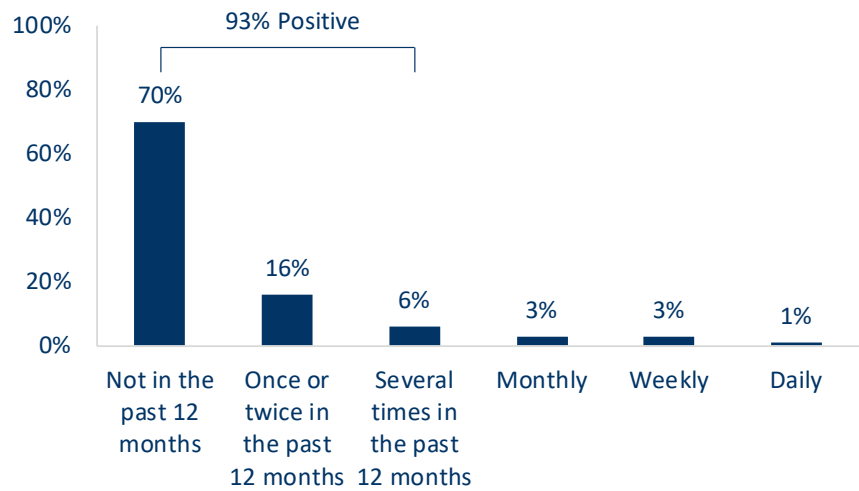
Chart 5-3. Item Results

Average Percentage Response on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database (Page 5 of 5)

The following items describe things that can happen in medical offices that **negatively** affect patient safety and quality of care. **In your best estimate, how often did the following things happen in your medical office OVER THE PAST 12 MONTHS?**

Diagnostics & Tests (cont.)

A critical **abnormal** result from a lab or imaging test was not followed up within 1 business day. (Item A9)



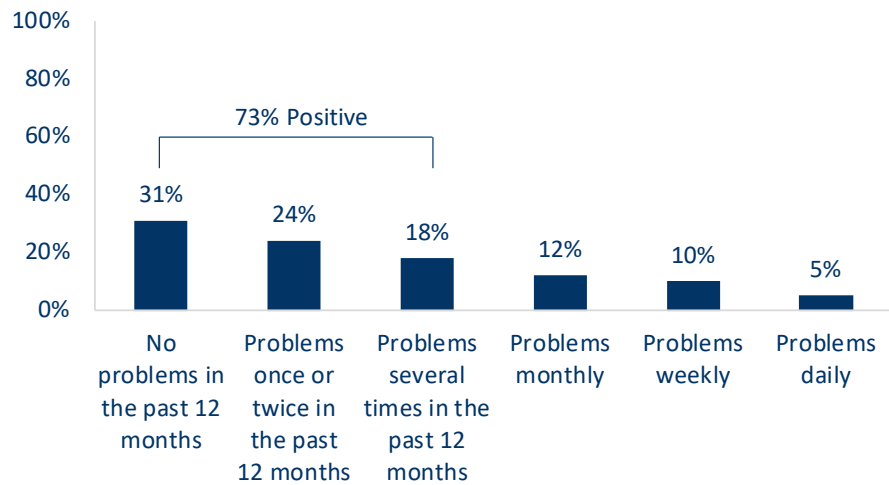
Note: Percentages indicate the database average percent response for each item response option. The percent positive displayed might not equal the sum of the response option percentages due to rounding. Percentages might not add to 100 due to rounding.

Chart 5-4. Item Results

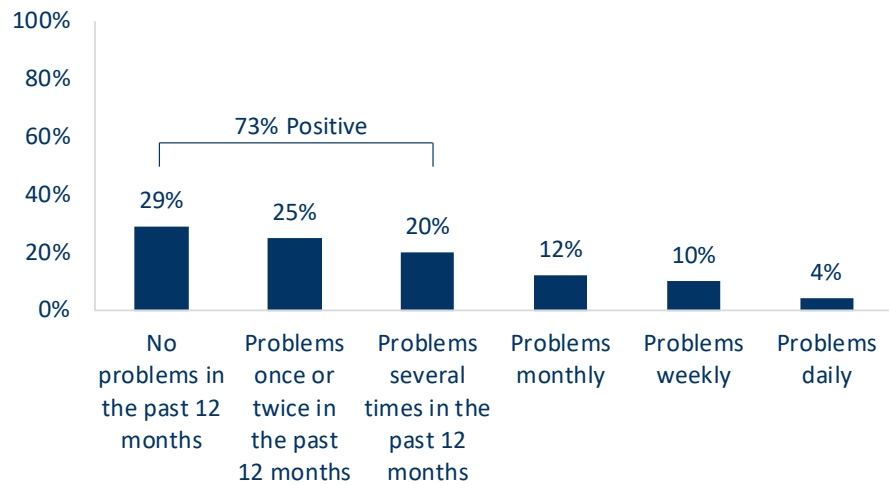
Average Percentage Response on Information Exchange With Other Settings - 2024 SOPS Medical Office Database (Page 1 of 2)

Over the past 12 months, how often has your medical office had *problems exchanging accurate, complete, and timely information with:*

Outside labs/imaging centers?
(Item B1)



Other medical offices/outside physicians? (Item B2)



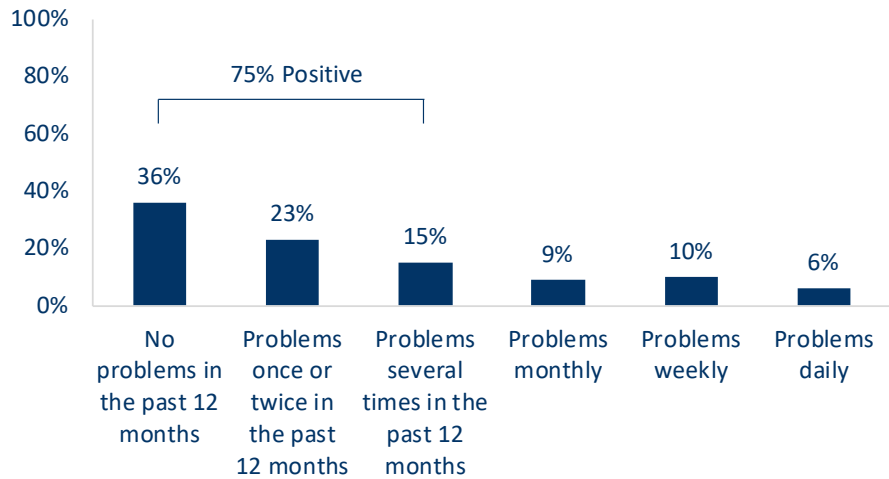
Note: Percentages indicate the database average percent response for each item response option. The percent positive displayed might not equal the sum of the response option percentages due to rounding. Percentages might not add to 100 due to rounding.

Chart 5-4. Item Results

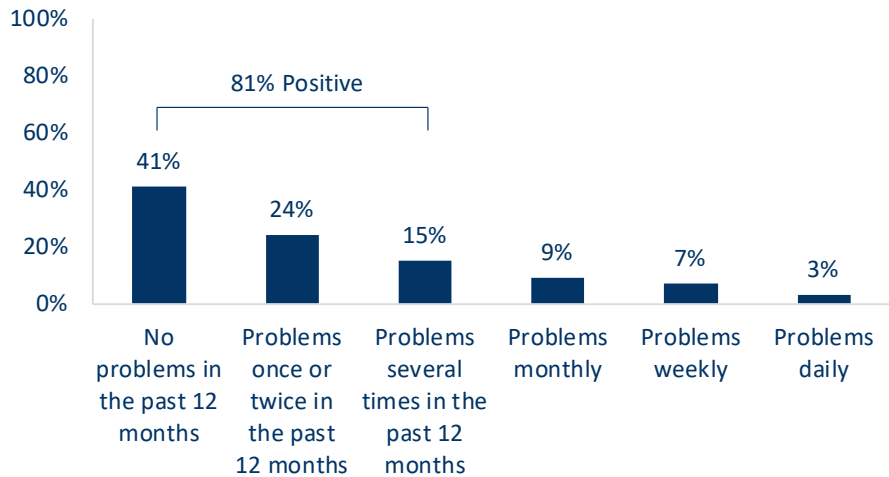
Average Percentage Response on Information Exchange With Other Settings - 2024 SOPS Medical Office Database (Page 2 of 2)

Over the past 12 months, how often has your medical office had *problems exchanging accurate, complete, and timely information with:*

Pharmacies? (Item B3)



Hospitals? (Item B4)



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

Chart 5-5. Item Results

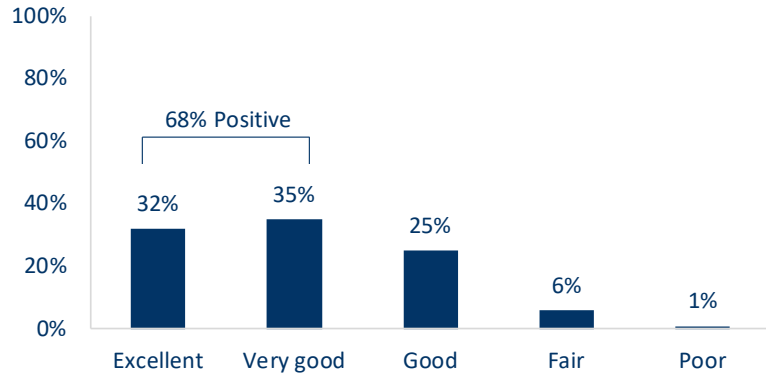
Average Overall Ratings on Quality - 2024 SOPS Medical Office Database

(Page 1 of 2)

Overall, how would you rate your medical office on each of the following areas of healthcare quality?

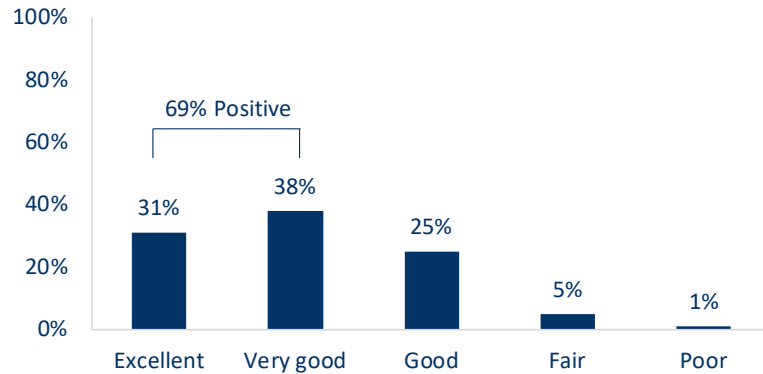
Patient Centered

Is responsive to individual patient preferences, needs, and values. (Item G1A)



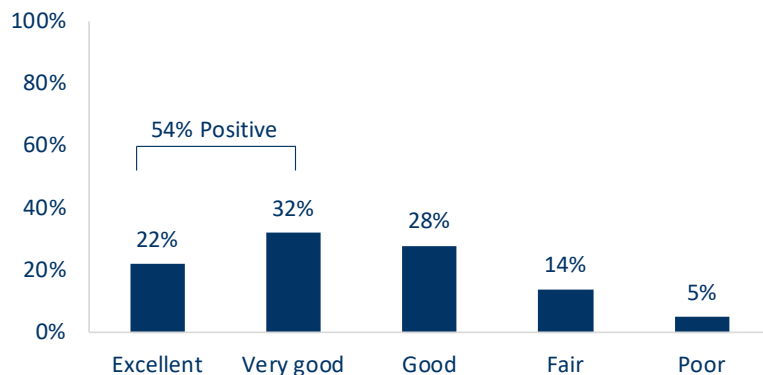
Effective

Is based on scientific knowledge. (Item G1B)



Timely

Minimizes waits and potentially harmful delays. (Item G1C)



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

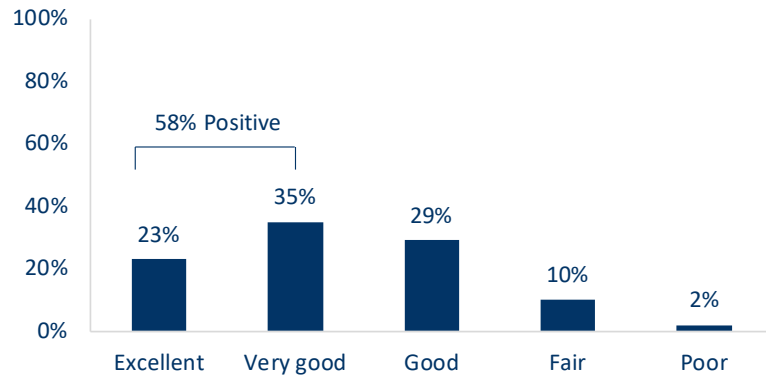
Chart 5-5. Item Results

Average Overall Ratings on Quality - 2024 SOPS Medical Office Database (Page 2 of 2)

Overall, how would you rate your medical office on each of the following areas of healthcare quality?

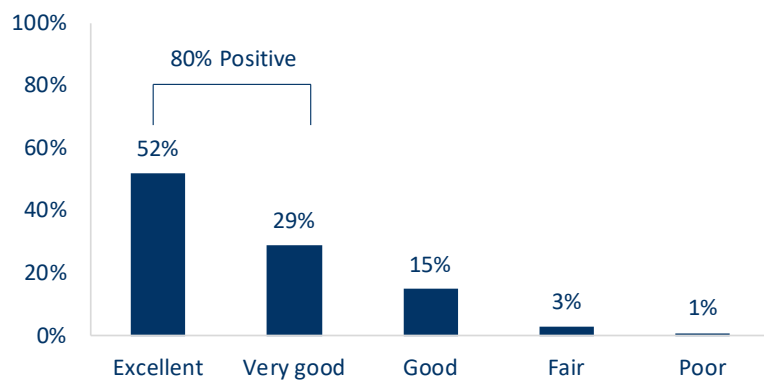
Efficient

Ensures cost-effective care (avoids waste, overuse, and misuse of services).
(Item G1D)



Equitable

Provides the same quality of care to all individuals regardless of gender, race, ethnicity, socioeconomic status, language, etc. (Item G1E)

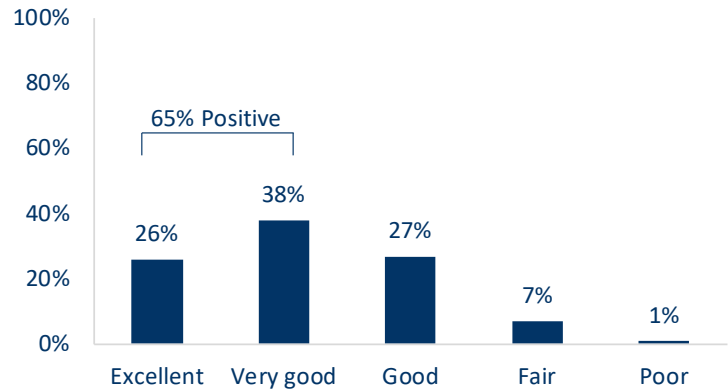


Note: Percentages indicate the database average percent response for each item response option. The percent positive displayed might not equal the sum of the response option percentages due to rounding. Percentages might not add to 100 due to rounding.

Chart 5-6. Item Results

Average Overall Rating on Patient Safety - 2024 SOPS Medical Office Database

Overall, how would you rate the systems and clinical processes your medical office has in place to prevent, catch, and correct problems that have the potential to affect patients? (Item G2)



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

6 Comparing Medical Office Results

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

To compare a medical office’s survey results with the findings from the database, calculate the medical office’s percent positive response on the survey’s 10 composite measures and survey items. These include items about patient safety and quality issues, information exchange with other settings, and ratings on quality and patient safety.

The Notes section at the end of this report describes how to calculate percent positive scores. Individual medical office results can then be compared with the database averages and the percentile scores for all medical offices in the database. When comparing your medical office’s results with the database results, note that the database only provides *relative* comparisons. Although your medical office’s survey results might have higher percent positive results than the database statistics, there may still be room for improvement in a particular area within your medical office in an *absolute* sense.

Composite Measure and Item Tables

Table 6-1 presents statistics (average percent positive, standard deviation [s.d.], minimum and maximum scores, and percentiles) for each of the 10 composite measures.

Table 6-2 presents statistics for each of the 38 survey items in the composite measures. Items are listed in their respective composite measure, with positively worded items listed before negatively worded items.

Table 6-3 presents statistics for items on patient safety and quality issues. Results in the table represent average percent positive scores for respondents who answered “Not in the past 12 months,” “Once or twice in the past 12 months,” and “Several times in the past 12 months.”

Table 6-4 presents statistics for items on information exchange with other settings. Results in the table represent average percent positive scores for respondents who answered “No problems in the past 12 months,” “Problems once or twice in the past 12 months,” or “Problems several times in the past 12 months.”

Table 6-5 presents statistics for overall ratings on quality. Results in the table represent average percent positive scores for respondents who answered “Excellent” or “Very good.”

Table 6-6 presents statistics for overall rating on patient safety. Results in the table represent average percent positive scores for respondents who answered “Excellent” or “Very good.”

Table 6-1. Composite Measure Results - 2024 SOPS Medical Office Database

SOPS Composite Measures	Average % Positive	s.d.	Composite Measure % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Patient Care Tracking/Followup	86%	12.10%	17%	70%	81%	89%	95%	100%	100%
2. Teamwork	85%	13.42%	0%	67%	79%	88%	96%	100%	100%
3. Organizational Learning	76%	16.99%	0%	52%	67%	79%	90%	97%	100%
4. Overall Perceptions of Patient Safety and Quality	73%	19.59%	8%	43%	65%	77%	88%	95%	100%
5. Communication About Error	73%	15.22%	22%	52%	63%	74%	83%	92%	100%
6. Staff Training	71%	18.10%	0%	47%	58%	73%	85%	93%	100%
7. Communication Openness	69%	18.55%	0%	44%	56%	71%	84%	93%	100%
8. Office Processes and Standardization	66%	18.02%	0%	43%	54%	67%	80%	90%	100%
9. Owner/Managing Partner/Leadership Support for Patient Safety	62%	18.04%	0%	38%	50%	63%	75%	83%	100%
10. Work Pressure and Pace	41%	20.25%	0%	16%	26%	40%	55%	67%	100%
Composite Measure Average	70%	12.77%	25%	53%	61%	71%	80%	86%	99%

Note: (1) Each composite measure score is the average of the unrounded composite measure scores for all medical offices in the database; (2) The Composite Measure Average is the average of the 10 unrounded composite measure scores for each medical office in the database.

Table 6-2. Item Results - 2024 SOPS Medical Office Database (Page 1 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
1. Patient Care Tracking/Followup			% Always/Most of the time						
This office reminds patients when they need to schedule an appointment for preventive or routine care. (Item D3)	88%	14.23%	0%	67%	80%	92%	100%	100%	100%
This office documents how well our chronic-care patients follow their treatment plans. (Item D5)	81%	19.08%	0%	56%	71%	83%	100%	100%	100%
Our office follows up when we do not receive a report we are expecting from an outside provider. (Item D6)	85%	16.50%	0%	64%	75%	89%	100%	100%	100%
This office follows up with patients who need monitoring. (Item D9)	90%	12.82%	20%	73%	83%	94%	100%	100%	100%
2. Teamwork			% Strongly Agree/Agree						
When someone in this office gets really busy, others help out. (Item C1)	84%	16.28%	0%	63%	75%	87%	100%	100%	100%
In this office, there is a good working relationship between staff and providers. (Item C2)	88%	15.14%	0%	67%	80%	92%	100%	100%	100%
In this office, we treat each other with respect. (Item C5)	85%	16.68%	0%	60%	76%	89%	100%	100%	100%
This office emphasizes teamwork in taking care of patients. (Item C13)	85%	15.47%	10%	64%	76%	88%	100%	100%	100%

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

Table 6-2. Item Results - 2024 SOPS Medical Office Database (Page 2 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
3. Organizational Learning			% Strongly Agree/Agree						
When there is a problem in our office, we see if we need to change the way we do things. (Item F1)	80%	18.09%	0%	56%	67%	82%	100%	100%	100%
This office is good at changing office processes to make sure the same problems don't happen again. (Item F5)	78%	19.20%	0%	50%	67%	80%	93%	100%	100%
After this office makes changes to improve the patient care process, we check to see if the changes worked. (Item F7)	71%	20.79%	0%	43%	60%	75%	86%	100%	100%
4. Overall Perceptions of Patient Safety and Quality			% Strongly Agree/Agree						
Our office processes are good at preventing mistakes that could affect patients. (Item F2)	84%	16.33%	0%	62%	75%	88%	100%	100%	100%
			% Strongly Disagree/Disagree						
Mistakes happen more than they should in this office. (Item F3*)	73%	26.50%	0%	33%	63%	80%	94%	100%	100%
It is just by chance that we don't make more mistakes that affect our patients. (Item F4*)	71%	25.88%	0%	33%	62%	77%	89%	100%	100%
In this office, getting more work done is more important than quality of care. (Item F6*)	65%	24.52%	0%	29%	50%	67%	82%	100%	100%

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

Table 6-2. Item Results - 2024 SOPS Medical Office Database (Page 3 of 5)

Survey Items by SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
5. Communication About Error			% Always/Most of the time						
Providers and staff talk openly about office problems. (Item D8)	64%	21.72%	0%	33%	50%	65%	80%	93%	100%
In this office, we discuss ways to prevent errors from happening again. (Item D11)	82%	16.44%	0%	60%	73%	84%	100%	100%	100%
Staff are willing to report mistakes they observe in this office. (Item D12)	80%	16.54%	0%	58%	68%	81%	94%	100%	100%
			% Never/Rarely						
Staff feel like their mistakes are held against them. (Item D7*)	64%	26.12%	0%	27%	50%	67%	83%	100%	100%
6. Staff Training			% Strongly Agree/Agree						
This office trains staff when new processes are put into place. (Item C4)	74%	20.05%	0%	46%	63%	75%	88%	100%	100%
This office makes sure staff get the on-the-job training they need. (Item C7)	74%	20.21%	0%	46%	63%	76%	89%	100%	100%
			% Strongly Disagree/Disagree						
Staff in this office are asked to do tasks they haven't been trained to do. (Item C10*)	64%	24.31%	0%	30%	50%	67%	82%	100%	100%

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

Table 6-2. Item Results - 2024 SOPS Medical Office Database (Page 4 of 5)

Survey Items By SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
7. Communication Openness			% Always/Most of the time						
Providers in this office are open to staff ideas about how to improve office processes. (Item D1)	74%	20.91%	0%	44%	60%	75%	90%	100%	100%
Staff are encouraged to express alternative viewpoints in this office. (Item D2)	73%	19.99%	0%	48%	60%	75%	89%	100%	100%
			% Never/Rarely						
Staff are afraid to ask questions when something does not seem right. (Item D4*)	70%	26.14%	0%	33%	60%	75%	88%	100%	100%
It is difficult to voice disagreement in this office. (Item D10*)	59%	25.12%	0%	25%	44%	61%	77%	93%	100%
8. Office Processes and Standardization			% Strongly Agree/Agree						
We have good procedures for checking that work in this office was done correctly. (Item C9)	70%	20.95%	0%	41%	57%	71%	86%	100%	100%
Staff in this office follow standardized processes to get tasks done. (Item C15)	81%	17.27%	0%	57%	71%	83%	100%	100%	100%
			% Strongly Disagree/Disagree						
This office is more disorganized than it should be. (Item C8*)	62%	25.61%	0%	25%	45%	65%	80%	100%	100%
We have problems with workflow in this office. (Item C12*)	51%	25.08%	0%	18%	33%	50%	70%	83%	100%

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

Table 6-2. Item Results - 2024 SOPS Medical Office Database (Page 5 of 5)

Survey Items By SOPS Composite Measure	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
9. Owner/Managing Partner/Leadership Support for Patient Safety			% Strongly Agree/Agree						
They place a high priority on improving patient care processes. (Item E3)	76%	19.92%	0%	50%	67%	78%	90%	100%	100%
			% Strongly Disagree/Disagree						
They aren't investing enough resources to improve the quality of care in this office. (Item E1*)	46%	23.11%	0%	17%	30%	45%	63%	75%	100%
They overlook patient care mistakes that happen over and over. (Item E2*)	73%	25.92%	0%	33%	63%	80%	92%	100%	100%
They make decisions too often based on what is best for the office rather than what is best for patients. (Item E4*)	53%	24.29%	0%	20%	36%	55%	70%	83%	100%
10. Work Pressure and Pace			% Strongly Agree/Agree						
We have enough staff to handle our patient load. (Item C11)	39%	25.97%	0%	0%	20%	35%	57%	75%	100%
			% Strongly Disagree/Disagree						
In this office, we often feel rushed when taking care of patients. (Item C3*)	38%	22.88%	0%	9%	21%	35%	53%	67%	100%
We have too many patients for the number of providers in this office. (Item C6*)	39%	26.36%	0%	0%	18%	33%	57%	75%	100%
This office has too many patients to be able to handle everything effectively. (Item C14*)	49%	25.99%	0%	14%	30%	50%	67%	83%	100%

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

Table 6-3. Item Results on Patient Safety and Quality Issues - 2024 SOPS Medical Office Database

Patient Safety and Quality Issues	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Access to Care									
A patient was unable to get an appointment within 48 hours for an acute/serious problem. (Item A1)	65%	26.22%	0%	26%	50%	67%	86%	100%	100%
Patient Identification									
The wrong chart/medical record was used for a patient. (Item A2)	98%	6.49%	44%	90%	100%	100%	100%	100%	100%
Charts/Medical Records									
A patient’s chart/medical record was not available when needed. (Item A3)	92%	12.34%	0%	75%	88%	100%	100%	100%	100%
Medical information was filed, scanned, or entered into the wrong patient’s chart/medical record. (Item A4)	97%	7.31%	50%	86%	100%	100%	100%	100%	100%
Medical Equipment									
Medical equipment was not working properly or was in need of repair or replacement. (Item A5)	87%	16.07%	0%	67%	78%	92%	100%	100%	100%
Medication									
A pharmacy contacted our office to clarify or correct a prescription. (Item A6)	61%	25.40%	0%	25%	43%	60%	80%	100%	100%
A patient’s medication list was not updated during his or her visit. (Item A7)	78%	21.14%	0%	50%	67%	80%	100%	100%	100%
Diagnostics and Tests									
The results from a lab or imaging test were not available when needed. (Item A8)	77%	20.82%	0%	50%	67%	80%	100%	100%	100%
A critical abnormal result from a lab or imaging test was not followed up within 1 business day. (Item A9)	93%	12.02%	25%	75%	88%	100%	100%	100%	100%

Note: The item’s survey location is shown in parentheses after the item text. For items A1-A9, the percent positive response is based on those who responded “Not in the past 12 months,” “Once or twice in the past 12 months,” or “Several times in the past 12 months.”

Table 6-4. Item Results on Information Exchange With Other Settings - 2024 SOPS Medical Office Database

Information Exchange With Other Settings	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Over the past 12 months, how often has your medical office had <i>problems exchanging accurate, complete, and timely information</i> with:									
Outside labs/imaging centers? (Item B1)	73%	22.57%	0%	40%	60%	75%	92%	100%	100%
Other medical offices/Outside physicians? (Item B2)	73%	20.89%	0%	43%	60%	75%	89%	100%	100%
Pharmacies? (Item B3)	75%	21.90%	0%	44%	60%	77%	100%	100%	100%
Hospitals? (Item B4)	81%	19.94%	0%	50%	69%	83%	100%	100%	100%

Note: The item’s survey location is shown in parentheses after the item text. For items B1-B4, the percent positive response is based on those who responded “No problems in the past 12 months,” “Problems once or twice in the past 12 months,” or “Problems several times in the past 12 months.”

Table 6-5. Results on Average Overall Ratings on Quality - 2024 SOPS Medical Office Database

Average Overall Ratings on Quality	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Overall, how would you rate your medical office on each of the following areas of healthcare quality?									
1. Patient Centered – Is responsive to individual patient preferences, needs, and values. (Item G1A)	68%	22.53%	0%	36%	52%	69%	84%	100%	100%
2. Effective – Is based on scientific knowledge. (Item G1B)	69%	21.81%	0%	40%	56%	70%	84%	100%	100%
3. Timely – Minimizes waits and potentially harmful delays. (Item G1C)	54%	25.03%	0%	20%	33%	53%	71%	88%	100%
4. Efficient – Ensures cost-effective care (avoids waste, overuse, and misuse of services). (Item G1D)	58%	23.66%	0%	27%	43%	60%	75%	90%	100%
5. Equitable – Provides the same quality of care to all individuals regardless of gender, race, ethnicity, socioeconomic status, language, etc. (Item G1E)	80%	17.15%	0%	57%	70%	83%	94%	100%	100%

Table 6-6. Results on Average Overall Rating on Patient Safety - 2024 SOPS Medical Office Database

Average Overall Rating on Patient Safety	Average % Positive	s.d.	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Overall, how would you rate the systems and clinical processes your medical office has in place to prevent, catch, and correct problems that have the potential to affect patients? (Item G2)	65%	22.45%	0%	33%	50%	67%	82%	100%	100%

Note: The item’s survey location is shown in parentheses after the item text; the percent positive response is based on those who responded “Excellent” or “Very good.”

7 Database Results Over Time: 2012 to 2024

This chapter presents trends in average percent positive scores for the composite measures in the SOPS Medical Office Databases from 2012 to 2024. Scores are based on data from the medical offices that submitted to the database for any of these given years. The number of medical offices in the database varies by year, ranging from 934 to 2,437.

Overall, from 2012 to 2020, the composite measure results improved. However, from 2020 to 2022, all composite measure scores decreased during the COVID-19 pandemic. In the 2024 results, several measures continued to decline while others remained steady or increased. The data presented in the charts are arranged from highest to lowest average percent positive based on the rank order of the composite measure scores from the 2024 database.

Highlights



Table 7-1. Participating Medical Offices and Respondents - 2012 to 2024 SOPS Medical Office Database

Database Year	2012	2014	2016	2018	2020	2022	2024
Number of Medical Offices	934	935	1,528	2,437	1,475	1,100	1,164
Number of Respondents	23,679	27,103	25,127	35,523	18,396	13,277	15,449

Chart 7-1. Highest SOPS Medical Office Composite Measure Results Over Time - 2012 to 2024
SOPS Medical Office Database

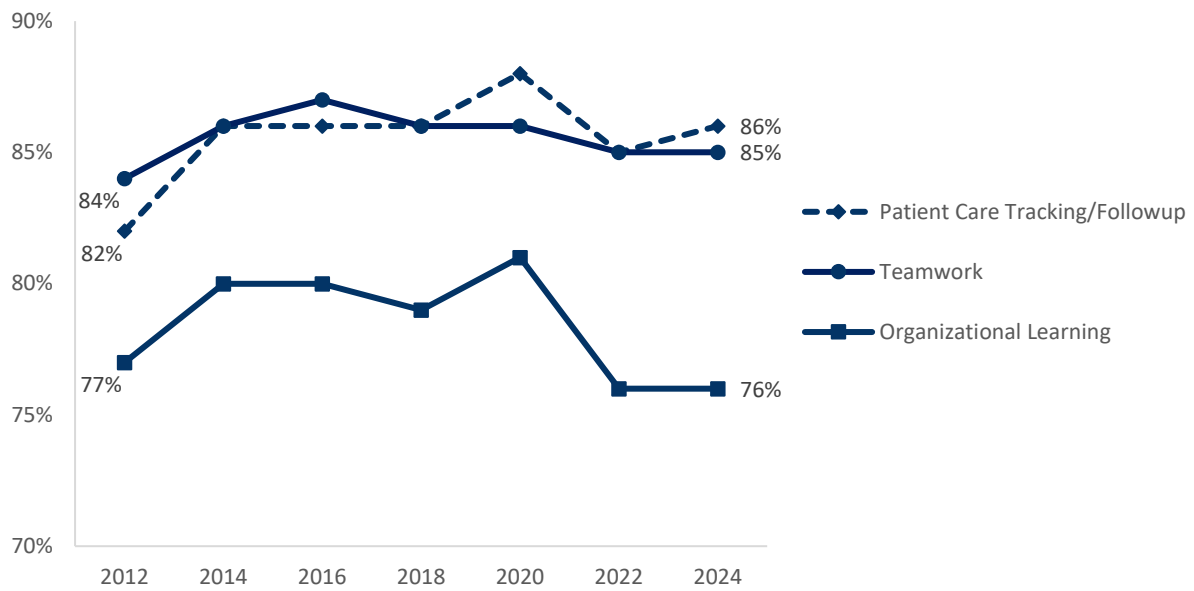


Chart 7-2. Middle SOPS Medical Office Composite Measure Results Over Time - 2012 to 2024
SOPS Medical Office Database

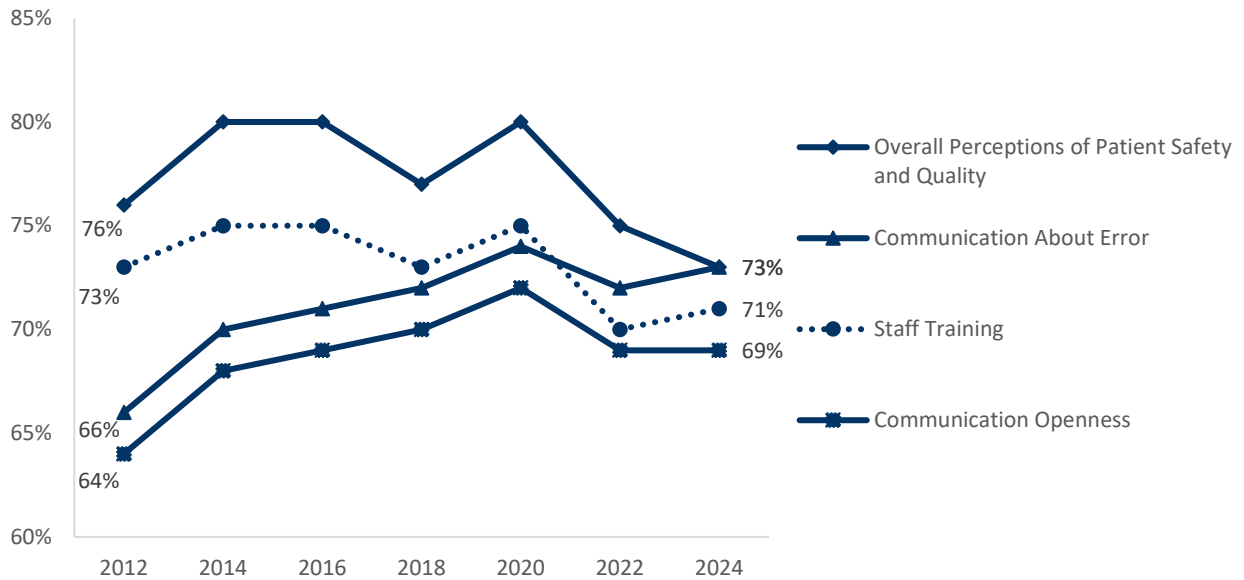


Chart 7-3. Lowest SOPS Medical Office Composite Measure Results Over Time - 2012 to 2024
SOPS Medical Office Database

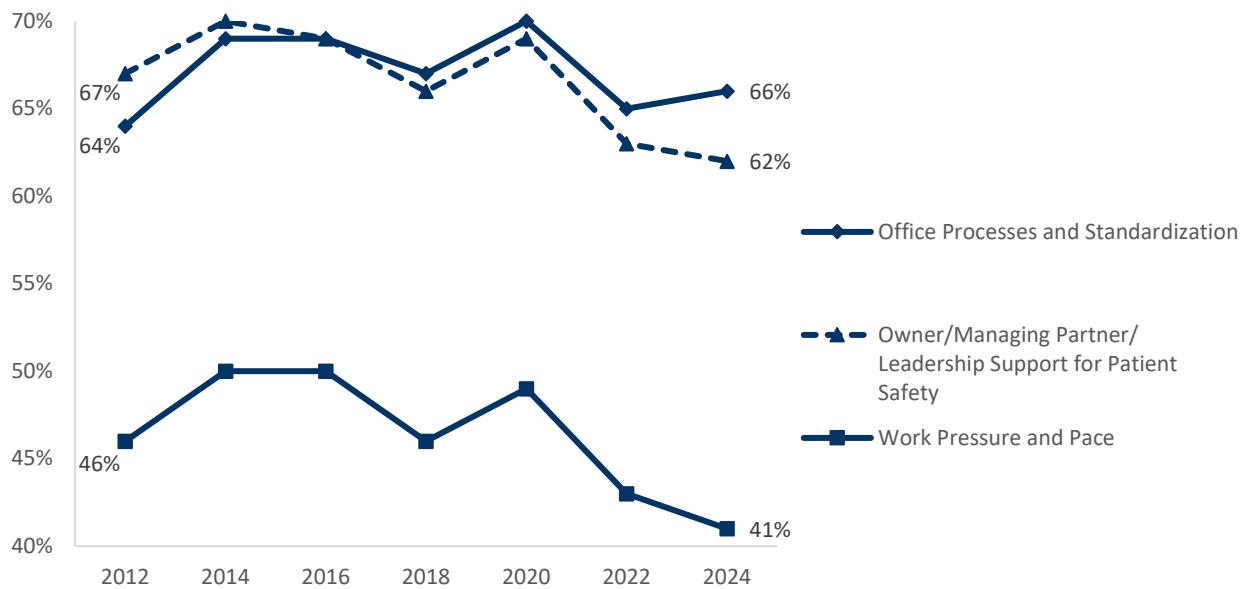
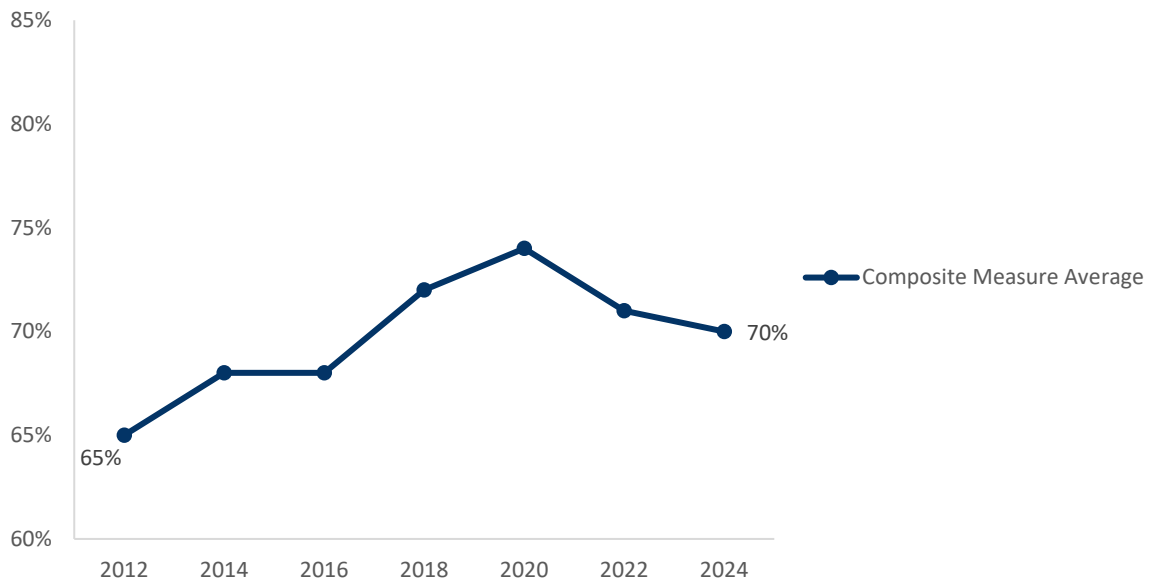


Chart 7-4. SOPS Medical Office Composite Measure Average Over Time - 2012 to 2024
SOPS Medical Office Database



Note: Chart 7-4 depicts the Composite Measure Average from 2012 to 2024. The Composite Measure Average is the average of the 10 unrounded composite measure scores for each medical office in the database.

8

What's Next? Action Planning for Improvement

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

AHRQ Action Planning Tool

The [*Action Planning Tool for the AHRQ Surveys on Patient Safety Culture*](#) is intended for use after your organization administers the survey and analyzes the results. The *Action Planning Tool* offers guidance to help you develop an action plan for your unit, department, or facility. You can use the Action Plan Template at the end of the tool to document your answers to the key questions below.

1. Identifying Areas To Improve:

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

2. Planning Your Improvement Initiative:

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

3. Communicating Your Action Plan:

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

Improvement for Users of the AHRQ Medical Office Survey

Improving Patient Safety in Medical Offices: A Resource List for Users of the AHRQ Medical Office Survey on Patient Safety Culture contains references to websites and other practical resources medical offices can use to improve patient safety culture and patient safety. The resource list is not exhaustive but provides initial guidance to medical offices looking for information about patient safety initiatives.

References

Action Planning Tool for the AHRQ Surveys on Patient Safety Culture™ (SOPS®). Rockville, MD: Agency for Healthcare Research and Quality; November 2022. AHRQ Publication No. 23-0011. <https://www.ahrq.gov/sops/resources/planning-tool/index.html>. Accessed January 18, 2024.

U.S. Census Bureau, 2021 County Business Patterns, Economic Surveys. NAICS code 62111: Offices of physicians. <https://data.census.gov/cedsci/profile?n=62111&g=0100000US>. Accessed January 18, 2024.

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

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

Data Cleaning

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

Data were also reviewed for response biases (e.g., responding with the same answer for all positively and negatively worded items in the same section of the survey). An example of a positively worded item is D2. *Staff are encouraged to express alternative viewpoints in this office* and an example of a negatively worded item is D4. *Staff are afraid to ask questions when something does not seem right.*

Sections C, D, E, and F include both positively and negatively worded items. When respondents supplied the same answer for every item in sections C, D, E, and F, responses for those particular respondents were removed from the final dataset because respondents should not have answered the same way across these differently worded items. In addition, if respondents marked the same answer for all items within section C, D, E, or F, those responses were set to missing in that particular section.

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

Response Rates

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

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

Calculation of Percent Positive Scores

Most of the survey items ask respondents to answer using 5-point response options in terms of agreement (Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree) or frequency (Always, Most of the time, Sometimes, Rarely, Never). Three of the 10 SOPS composite measures consisting of 12 items use the frequency response option (*Communication About Error, Communication Openness, and Patient Care Tracking/Followup*). The other seven composite measures use the agreement response options. Survey items in sections A, B, C, D, E, and F contain a “Does Not Apply or Don’t Know” response option that is not included in the calculation of percent positive scores.

The nine Patient Safety and Quality Issues non-composite measure items use a frequency scale ranging from “Not in the past 12 months” to “Daily”:

- Not in the past 12 months,
- Once or twice in the past 12 months,
- Several times in the past 12 months,
- Monthly,
- Weekly, and
- Daily.

The four Information Exchange With Other Settings non-composite measure items use similar response options ranging from “No problems in the past 12 months” to “Problems daily”:

- No problems in the past 12 months,
- Problems once or twice in the past 12 months,
- Problems several times in the past 12 months,
- Problems monthly,
- Problems weekly, and
- Problems daily.

The Overall Ratings on Quality and Patient Safety use a 5-point scale ranging from “Poor” to “Excellent” (Poor, Fair, Good, Very good, Excellent).

Composite Measure Item Percent Positive Response

The survey includes both positively worded items (e.g., “Staff support one another in this medical office”) and negatively worded items (e.g., “Staff use shortcuts to get their work done faster”). Calculating the percent positive response for positively worded items is different from calculating the percent positive response for negatively worded items:

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

For example, for the item “We have enough staff to handle our patient load,” if 50 percent of respondents within a medical office responded “Strongly Agree” and 25 percent responded “Agree,” the item percent positive response for that medical office would be $50\% + 25\% = 75\%$ positive.

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

For example, for the item “Mistakes happen more than they should in this office,” if 60 percent of respondents within a medical office responded “Strongly Disagree” and 20 percent responded “Disagree,” the item percent positive response would be $60\% + 20\% = 80\%$ positive (i.e., 80 percent of respondents *do not* believe mistakes happen more than they should in this office).

Table N1 shows an example of computing a composite measure score for *Staff Training* in a single medical office. This composite measure has three items. Two are positively worded (items C4 and C7) and one is negatively worded (item C10). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.

Table N1. Example of Computing Item and Composite Measure Percent Positive Scores

Three Items Measuring "Staff Training"	For Positively Worded Items, Number of "Strongly Agree" or "Agree" Responses	For Negatively Worded Items, Number of "Strongly Disagree" or "Disagree" Responses	Total Number of Responses to the Item (Excluding Does Not Apply/Don't Know and Missing Responses)	Item Percent Positive Response
Item C4 - positively worded				
"This office trains staff when new processes are put into place."	110	NA*	240	110/240= 45.8%
Item C7 - positively worded				
"This office makes sure staff get the on-the-job training they need."	142	NA*	250	142/250= 56.8%
Item C10 - negatively worded				
"Staff in this office are asked to do tasks they haven't been trained to do."	NA*	125	260	125/260= 48.1%
Composite Measures % Positive Score = (45.8% + 56.8% + 48.1%) / 3 = 50.2%				

*NA = Not applicable.

This example includes three items, with percent positive response scores of 45.8 percent, 56.8 percent, and 48.1 percent. Averaging the percent positive scores of these three items results in a composite measure percent positive score of 50.2 percent, rounded to 50 percent for the *Staff Training* composite measure.

Single Item Percent Positive Response

Percent positive scores for the Patient Safety and Quality Issues items and the Information Exchange With Other Settings items were calculated differently. The percent positive score for these 13 items is the sum of the three response options that represent the smallest frequency of occurrence.

For Patient Safety and Quality Issues items, the three responses are: "Not in the past 12 months," "Once or twice in the past 12 months," and "Several times in the past 12 months." For Information Exchange With Other Settings items, the three responses are: "No problems in the past 12 months," "Problems once or twice in the past 12 months," and "Problems several times in the past 12 months."

Percent positive scores for the six Overall Ratings on Quality and Patient Safety items were also calculated differently based on the two most positive responses of “Excellent” or “Very good.”

Composite Measure Percent Positive Response

The 10 SOPS Medical Office Survey composite measures are each composed of three or four survey items. We calculated composite measure scores for each medical office by averaging the unrounded percent positive response on the items within a composite measure. For example, for a three-item composite measure, if the item percent positive responses were 45.8 percent, 56.8 percent, and 48.1 percent, the medical office’s composite measure percent positive response would be the average of these three percentages, or 50.2 percent positive, and displayed as a rounded percentage of 50 percent.

If a medical office had item 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 score, the number of item scores needed to calculate the composite measure is two items and for a four-item composite measure score, the number of item scores needed to calculate the composite measure is two items.

Database Item and Composite Measure Percent Positive Scores

We calculated the database average percent positive scores for each of the 10 SOPS composite measures and survey items by averaging the unrounded medical office-level percent positive scores and composite measure scores of all medical offices in the database. Because the percent positive is displayed as an overall average, scores from each medical office are weighted equally in their contribution to the calculation of the average.

Standard Deviation

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

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

When the distribution of medical office scores follows a normal bell-shaped curve (where most of the scores fall in the middle of the distribution, with fewer scores at the lower and higher ends of the distribution), the average, plus or minus the standard deviation, will include about 68 percent of all medical office scores. For example, if an average percent positive score across the

database medical office were 70 percent with a standard deviation of 10 percent (and scores were normally distributed), then about 68 percent of all the database medical offices would have scores between 60 percent and 80 percent positive.

Minimum and Maximum Scores

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

When comparing your data with the minimum and maximum scores, keep in mind that these scores may represent medical offices that are extreme outliers (indicated by large differences between the minimum score and the 10th percentile score, or between the 90th percentile score and the maximum score).

Percentiles

Percentiles provide information about the distribution of medical office scores. A specific percentile score shows the percentage of medical offices that scored at or below a particular score.

Percentiles were computed using the SAS® software default method. The first step in this procedure is to rank the percent positive scores from all the participating medical offices from lowest to highest. The next step is to multiply the number of medical offices (n) by the percentile of interest (p), which in our case would be the 10th, 25th, 50th, 75th, or 90th percentile.

The following examples show how the 10th and 50th percentiles would be computed using a sample of percent positive scores from 12 medical offices (using fake data shown in Table N2). First, the percent positive scores for Composite Measure “A” are sorted from low to high.

Table N2. Data Table for Example of How To Compute Percentiles

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

10th percentile

1. For the 10th percentile, we would first multiply the number of medical offices (n) by .10 (p) for the 10th percentile:
($n \times p = 12 \times .10 = 1.2$).
2. The product of $n \times p = 1.2$, where “j” = 1 (the integer) and “g” = 2 (the decimal). Because “g” is *not* equal to 0, the 10th percentile score is equal to the percent positive value of the medical office in the jth +1 position:
 1. “j” equals 1.
 2. The 10th percentile equals the value for the medical office in the 2nd position = 48%.

50th percentile

1. For the 50th percentile, we would first multiply the number of medical offices by .50:
($n \times p = 12 \times .50 = 6.0$).
2. The product of $n \times p = 6.0$, where “j” = 6 and “g” = 0. Because “g” = 0, the 50th percentile score is equal to the percent positive value of the medical office in the jth position plus the percent positive value of the medical office in the jth +1 position, divided by 2:
 1. “j” equals 6.
 2. The 50th percentile equals the average of the medical offices in the 6th and 7th positions ($(64\%+66\%)/2 = 65\%$).

When the distribution of medical office scores follows a normal bell-shaped curve (where most of the scores fall in the middle of the distribution with fewer scores at the lower and higher ends of the distribution), the 50th percentile, or median, will be very similar to the average score. Interpret the percentile scores as shown in Table N3.

Table N3. Interpretation of Percentile Scores

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

To compare with the database percentiles, compare your medical office’s percent positive scores with the percentile scores for each composite measure and item. See examples below in Table N4.

Table N4. Sample Percentile Statistics

Survey Item	Average % Positive	s.d	Survey Item % Positive Response						
			Min	10th %ile	25th %ile	Median/ 50th %ile	75th %ile	90th %ile	Max
Item 1	36%	12.26	8%	10%	25%	35%	49%	62%	96%

If your medical office’s score is 55%, your score falls here:

If your medical office’s score is 65%, your score falls here:

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

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

Statistically “Significant” Differences Between Scores

You might be interested in determining the statistical significance of differences between your scores and the database scores, or between database scores in various categories (e.g., numbers of providers and staff, staff position). 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. We provide the average, standard deviation, range, and percentile information so that you can compare your data with the database in different ways.

Data Limitations

The survey results presented in this report represent the largest known compilation of publicly available patient safety culture data for medical offices and therefore provide a useful reference. However, these data have several limitations.

First, medical offices voluntarily submitted their data to the database; therefore, the database only includes those medical offices that have administered the SOPS Medical Office Survey and were willing to 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 medical offices in the United States (less than 1 percent) are represented in the database (see Table N5). In addition, the geographic distribution of the medical offices that participated in the database differs from the geographic distribution of the 213,098 medical offices in the U.S. Census Bureau dataset.

Table N5. Distribution of Medical Offices in the 2024 SOPS Medical Office Database Compared With U.S. Census Economic Surveys, Offices of Physicians (2021) Data by Region

Geographic Region	AHRQ SOPS Medical Office Survey Database Medical Offices (2024)		U.S. Census Economic Surveys, Offices of Physicians (2021) ⁱ	
	Number	Percent	Number	Percent
New England	65	6%	8,058	4%
Mid-Atlantic	24	2%	29,375	14%
South Atlantic/Associated Territories	400	34%	49,244	23%
East North Central	212	18%	25,934	12%
East South Central	204	18%	11,001	5%
West North Central	159	14%	8,533	4%
West South Central	70	6%	28,679	13%
Mountain/Pacific/Associated Territories	30	3%	52,274	25%
Total	1,164	100%	213,098	100%

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

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

Third, medical offices that administered the survey were not required to undergo any training and administered the survey in different ways. Most medical offices administered web-based

ⁱ U.S. Census Bureau, 2021 County Business Patterns, Economic Surveys. NAICS code 62111: Offices of physicians. <https://data.census.gov/cedsci/profile?n=62111&g=0100000US>. Accessed January 18, 2024.

surveys, some used paper-only surveys, and others used a combination of paper and web-based surveys. These different survey administration modes could have led to differences in survey responses; further research is needed to determine whether, and how, different administration modes affect the results. Survey administration statistics for database medical offices, such as survey administration modes and response rates, are provided in Chapter 2.

Finally, the data medical offices submitted have been cleaned for out-of-range values (e.g., invalid response values due to data entry errors), straight-lining (where responses to all survey items in sections C, D, E, and F were the same), and blank records (where responses to all survey items were missing or “Does Not Apply or Don’t Know,” except for background items). Otherwise, data are presented as submitted. No additional attempts were made to verify or audit the accuracy of the data submitted.



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