



## SOPS: Assessing Patient Safety Culture From a Provider and Staff Perspective

### SOPS Program

Since 2001, the Agency for Healthcare Research and Quality (AHRQ) Surveys on Patient Safety Culture™ (SOPS®) program has supported AHRQ’s mission by advancing the scientific understanding of patient safety culture in healthcare settings.

Organizational culture refers to the beliefs, values, and norms shared by staff throughout an organization that influence their actions and behaviors (Figure 1). 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 a healthcare organization as it relates to patient safety.

Culture exists at multiple levels in organizations, including the unit level, department, organization, and system level. Providers and staff can use the SOPS surveys to assess the extent to which their organizational culture supports patient safety.

**Figure 1. Description of Organizational Culture**



Under the SOPS program, AHRQ funds research on patient safety culture. With a contractor, AHRQ develops and maintains the SOPS surveys, toolkit materials, and databases; provides technical assistance and education; and promotes the use of the surveys for patient safety culture improvement.

Learn more about the SOPS program at: [ahrq.gov/sops/about](http://ahrq.gov/sops/about).

### SOPS Surveys

Five SOPS surveys are available: Hospitals, Nursing Homes, Medical Offices, Community Pharmacies, and Ambulatory Surgery Centers. Healthcare organizations can use these survey assessment tools to:

- Raise staff awareness about patient safety.
- Assess the current status of patient safety culture.
- Identify strengths and areas for patient safety culture improvement.
- Examine trends in patient safety culture over time.
- Evaluate the cultural impact of patient safety initiatives and interventions.

**Figure 2. SOPS Surveys and Years Released**



## Areas of Patient Safety Culture Assessed by the SOPS Surveys

The SOPS surveys can be used to assess many areas of patient safety culture, including:

- Communication About Error.
- Communication Openness.
- Organizational Learning – Continuous Improvement.
- Overall Rating on Patient Safety.
- Response to Error.
- Staffing.
- Supervisor and Management Support for Patient Safety.
- Teamwork.
- Work Pressure and Pace.

Multiple survey items are used to assess each area and the wording of survey items is tailored to each healthcare setting. The SOPS surveys also assess areas of patient safety culture unique to each setting.

## Optional Supplemental Items

All of the SOPS surveys include a standard set of **core items** that support the comparability of survey content across users. Optional **supplemental item sets** are available for specific surveys to assess content in additional areas not included in the core surveys. Supplemental items can be added toward the end of the core SOPS surveys, just before the background questions.

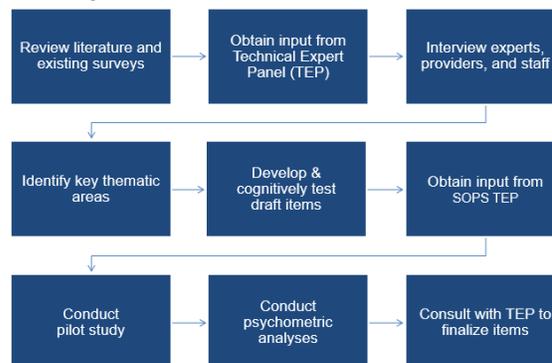
- **Value and Efficiency (Hospital; Medical Office).** Focus on empowerment to improve efficiency, waste reduction, patient centeredness, management support, and activities to improve efficiency.
- **Health Information Technology (Health IT) Patient Safety (Hospital).** Focus on how the use of health IT affects patient safety culture, including electronic health record (EHR) system training, EHR support and communication, and workflow/work processes.

- **Workplace Safety (Hospital).** Focus on workplace safety for providers and staff, including workplace hazards, workplace aggression, management support, and burnout.
- **Diagnostic Safety (Medical Office).** Focus on effective diagnostic processes, including time availability, testing and referrals, and provider and staff communication around diagnosis

## Survey Development Process

SOPS surveys and supplemental item sets undergo a rigorous development and testing process.

**Figure 3. Steps in the SOPS Survey Development Process**



- **Review literature and existing surveys.** Conduct a review of the literature on patient safety, safety culture, medical error, event reporting, and already existing surveys.
- **Obtain input from a Technical Expert Panel (TEP), experts, providers, and staff.** Identify and convene a TEP, consisting of stakeholders representing various care settings and relevant expertise.
- **Interview experts, providers, and staff.** Interview patient safety experts and healthcare providers and staff about patient safety culture.

- **Identify key thematic areas.** Identify key areas of patient safety culture the surveys should assess based on the literature review, TEP input, and background interviews.
- **Develop and cognitively test draft items.** Draft survey items and cognitively test the items with healthcare providers and staff to determine how well they are understood.
- **Obtain input from the SOPS TEP.** With additional input from the TEP, revise the items and conduct cognitive testing again.
- **Conduct pilot study.** Administer the draft survey to providers and staff in numerous healthcare organizations to collect pilot data.
- **Conduct psychometric analyses.** To examine the reliability, factor structure, and construct validity of the survey measures, conduct psychometric analyses on the pilot data.
- **Consult with TEP to finalize items.** With additional input from the TEP, finalize the survey items.

## SOPS Databases

AHRQ established the SOPS databases as central repositories for survey data from each of the SOPS surveys and supplemental item sets to enable healthcare organizations to compare their survey results.

Healthcare organizations that administer one of the SOPS surveys can voluntarily submit their data to the appropriate database. In addition, organizations that administer any of the supplemental item sets with the companion SOPS survey can submit data to the appropriate database.

AHRQ produces database reports and infographics that display aggregated, de-identified results from all participating sites. Participating facilities receive a customized

feedback report that displays their site results compared with database results and identifies strengths and areas for patient safety culture improvement.

AHRQ accepts voluntary data submission for two SOPS databases per year. Therefore, each SOPS database accepts data once every 2 years. Organizations that administer the SOPS surveys can choose to submit their data to these currently active databases:

- **Ambulatory Surgery Center**
- **Hospital**
- **Medical Office**
- **Nursing Home**



## SOPS Resources

To support the SOPS surveys, AHRQ provides a variety of materials and resources available for download at [ahrq.gov/sops](http://ahrq.gov/sops). The SOPS website has surveys available in English and Spanish, as well as these other resources:

- **Survey User's Guide**
  - Getting started.
  - Selecting your survey population.
  - Conducting web and paper-based surveys.
  - Optimizing response rates.
  - Analyzing the data.

## ■ Data Entry and Analysis Tools

- Enter your survey data.
- View survey results.
- Create tables and graphs of survey results.
- Export data file for submission to the SOPS Databases.

## ■ Action Planning Tool

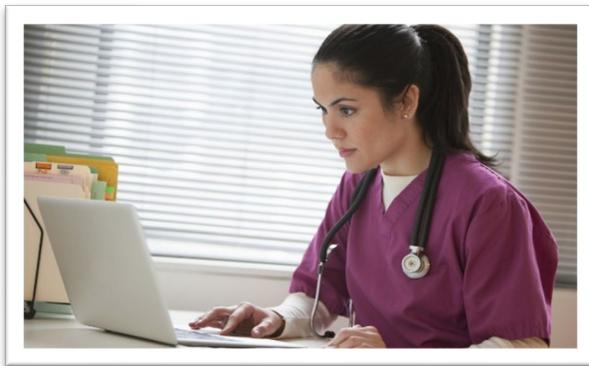
- Identify patient safety culture areas for improvement.
- Define goals and select your initiative.
- Plan your initiative.
- Develop your timeline.
- Communicate your action plan.

## ■ Improvement Resources

- Find links to practical, free, and publicly available resources to improve patient safety culture.

## ■ SOPS Bibliography

- Browse or search more than 300 references about the SOPS surveys and supplemental items, organized by the following topics: patient safety culture improvement, linking culture to outcomes, analyzing measures within the survey, psychometrics, and international studies:  
[ahrq.gov/sops/bibliography](http://ahrq.gov/sops/bibliography).



## ■ SOPS Webcasts

- View webcast recordings and slides at [ahrq.gov/sops/events](http://ahrq.gov/sops/events).

## ■ Free Technical Assistance (TA)

- **General TA:** 1-888-324-9749  
[SafetyCultureSurveys@westat.com](mailto:SafetyCultureSurveys@westat.com)
  - Survey administration.
  - Survey materials and resources.
  - International requests for permission to use or translate the survey.
- **Database TA:** 1-888-324-9790  
[DatabasesOnSafetyCulture@westat.com](mailto:DatabasesOnSafetyCulture@westat.com)
  - Data entry and analysis tool.
  - Data submission.
  - Database reports.
  - Analytic request.



AHRQ Pub. No. 22-M002  
January 2022