

# AHRQ Surveys on Patient Safety Culture™ Hospital Survey Version 2.0

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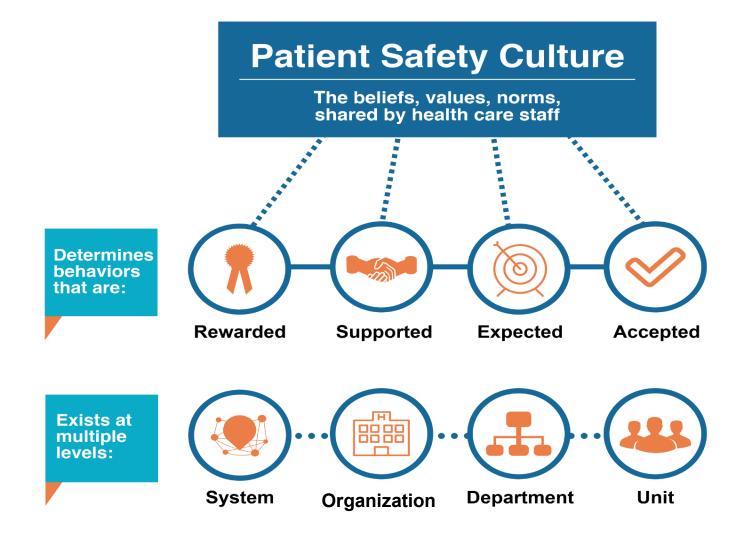
- SOP Technical Expert Panel Members
- AHRQ Sponsors



# Background on Patient Safety Culture and the SOPS Surveys

### What is Patient Safety Culture?

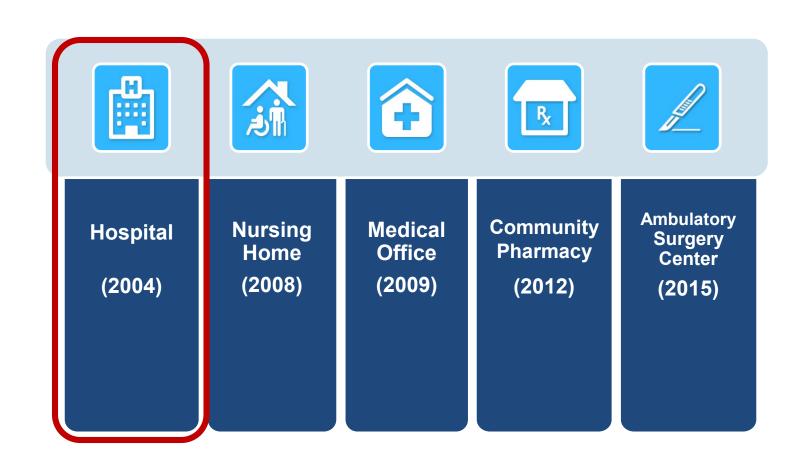




## What are the SOPS Surveys?



Surveys of providers and staff about the extent to which their organizational culture supports patient safety



## How are SOPS surveys used?



- Raise staff awareness about patient safety
- Assess patient safety culture to identify strengths and areas for improvement
- Examine trends over time
- Evaluate the impact of patient safety initiatives





# The SOPS Hospital Survey 2.0 (HSOPS 2.0)

### Why did AHRQ develop HSOPS 2.0?



- Over the years, users and stakeholders have suggested changes to the survey, including:
  - 1. Rewording complex survey items and survey items difficult to translate;
  - 2. Adding a "Does not apply or Don't know" (NA/DK) response option;
  - 3. Shifting to a "Just Culture" framework to assess Response to Error;
  - 4. Revising the staff positions and units/work areas; and
  - 5. Determining if the number of negatively worded items could be reduced.

# What are the most important things to know about HSOPS 2.0?



- 1. HSOPS 2.0 assesses many of the same areas of patient safety culture as HSOPS 1.0, but substantial changes were made to the survey.
- 2. Hospitals that administer HSOPS 2.0 can expect their scores on HSOPS 2.0 to be higher than comparable scores on HSOPS 1.0.

#### What changes were made in HSOPS 2.0?



HSOPS 1.0

51 survey items HSOPS 2.0

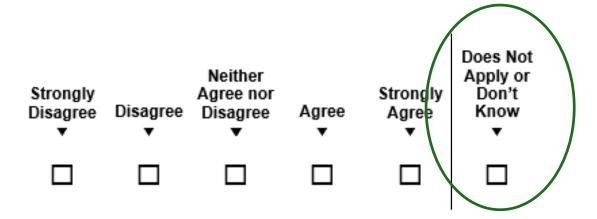
40 survey items

- Only 5 HSOPS 1.0 survey items were kept unchanged in HSOPS 2.0
  - ▶ 21 HSOPS 1.0 items were dropped
  - ▶ 25 HSOPS 1.0 items were reworded or response options were changed
  - ▶ 10 new survey items were added to HSOPS 2.0

#### What other changes were made in HSOPS 2.0?



HSOPS 2.0 now includes a "Does not apply/Don't know" (NA/DK) response option.



 Similar to HSOPS 1.0, HSOPS 2.0 still includes a mix of positively and negatively worded survey items.

# What areas of patient safety culture does HSOPS 2.0 assess?



#### **HSOPS 2.0 Composite Measures:**

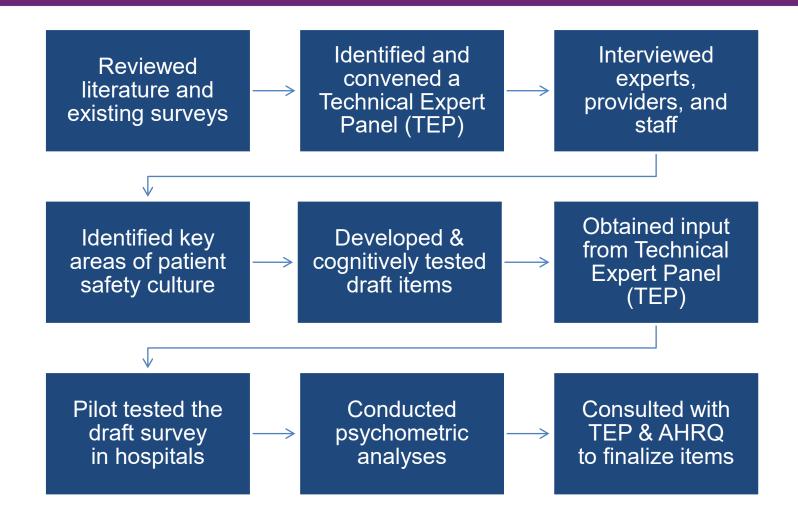
- 1. Communication about error
- 2. Communication openness
- 3. Handoffs and information exchange
- 4. Hospital management support for patient safety
- 5. Organizational learning—Continuous improvement
- 6. Reporting patient safety events
- 7. Response to error
- 8. Staffing and work pace
- 9. Supervisor, manager, or clinical leader support for patient safety
- 10. Teamwork

#### **Composite Measures Dropped from HSOPS 1.0:**

- 1. Overall perceptions of patient safety
- 2. Teamwork across units

### What was the process for developing HSOPS 2.0?







# HSOPS 2.0 Pilot Testing: 2017 and 2019

## What were the goals of HSOPS 2.0 pilot testing?



- Test the new HSOPS 2.0 by administering it in hospitals to see how well the survey items worked
- Conduct psychometric analysis of the pilot results to examine the reliability and construct validity of HSOPS 2.0
- Examine differences in results between HSOPS 1.0 and 2.0
  - ► How do scores differ between HSOPS 1.0 and 2.0?
  - ▶ What's the impact of adding a "Does not apply/Don't know" response option?
  - What guidance can we provide to users who want to compare their scores on the two surveys?

#### What was done in the 2017 pilot test?



- Web survey of all providers and staff in 44 hospitals
- Simultaneous administration of HSOPS 1.0 and HSOPS 2.0
  - Randomly assigned staff within each hospital into 2 groups

HSOPS 1.0

HSOPS 2.0
Does not apply/
Don't know

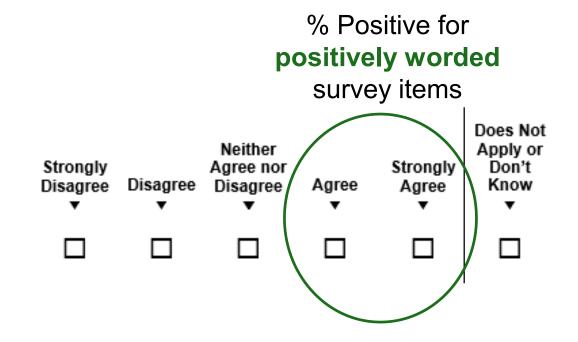
► About 15,000 respondents in each group; about a 42% response rate

## What's a "percent positive score"?



#### Positively worded survey item:

We are informed about errors that happen in this unit.

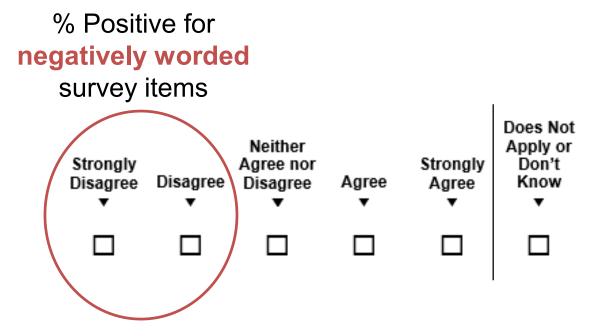


### What's a "percent positive score"?



#### Negatively worded item:

In this unit, staff feel like their mistakes are held against them.



### What were the results from the 2017 pilot test?



- Overall, we were surprised to find that HSOPS 2.0 percent positive scores were much higher compared to HSOPS 1.0
- Why were scores so much higher on HSOPS 2.0?
  - ► Having fewer negatively worded items resulted in much more positive HSOPS 2.0 scores
- A lot of concern about the positivity of scores on 2.0 and "acquiescence bias"

# What was done to revise HSOPS 2.0 after the 2017 pilot test?



- Reviewed additional literature
- Examined open-ended comments from the 2017 pilot test
- Brought back negatively worded items
- Brought back some HSOPS 1.0 items
- Further edited item wording and developed new survey items
- Conducted more cognitive testing of the revised survey
- Conducted a second pilot test of the revised HSOPS 2.0 in 2019

### What was done in the 2019 pilot test?



- Web survey of all providers and staff in 25 hospitals
- Simultaneous administration
  - ► Randomly assigned staff within each hospital into 3 groups

HSOPS 1.0

Does not apply/
Don't know

HSOPS 2.0
Does not apply/
Don't know

- ► About 4,400 respondents in each group; about a 39% response rate
- Final HSOPS 2.0 survey was based on the results from the 2019 pilot test

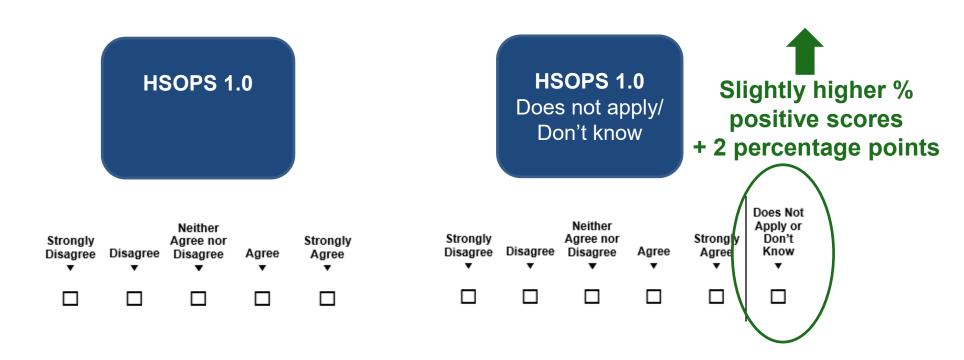




What were the results from the 2019 pilot test?

#### The Impact of NA/DK on Scores





 Since HSOPS 2.0 includes NA/DK, hospitals can expect scores to be slightly higher on 2.0 simply due to the addition of NA/DK

#### **Smaller Differences in Scores in 2019**



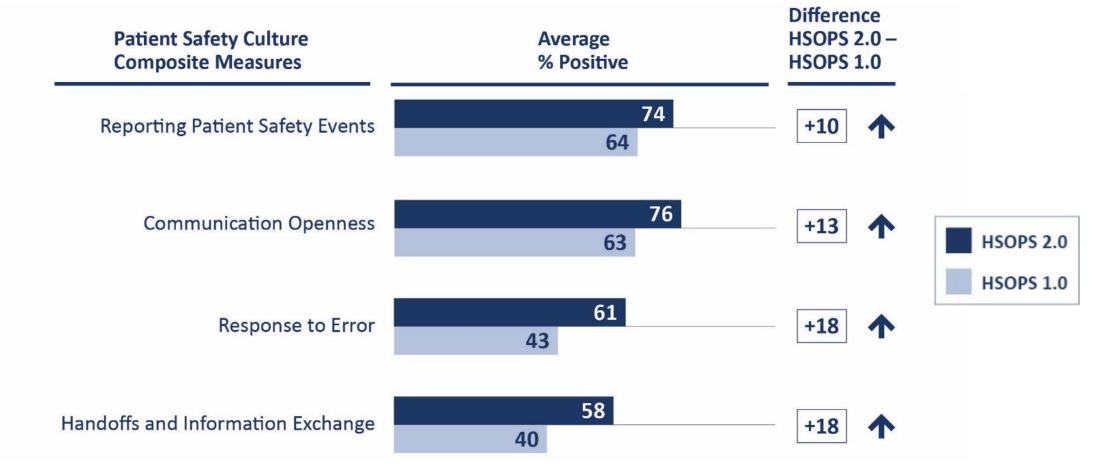
 Overall, we found that HSOPS 2.0 percent positive scores were higher (more positive) compared to HSOPS 1.0

#### **BUT**

There were smaller differences in scores in the 2019 pilot test

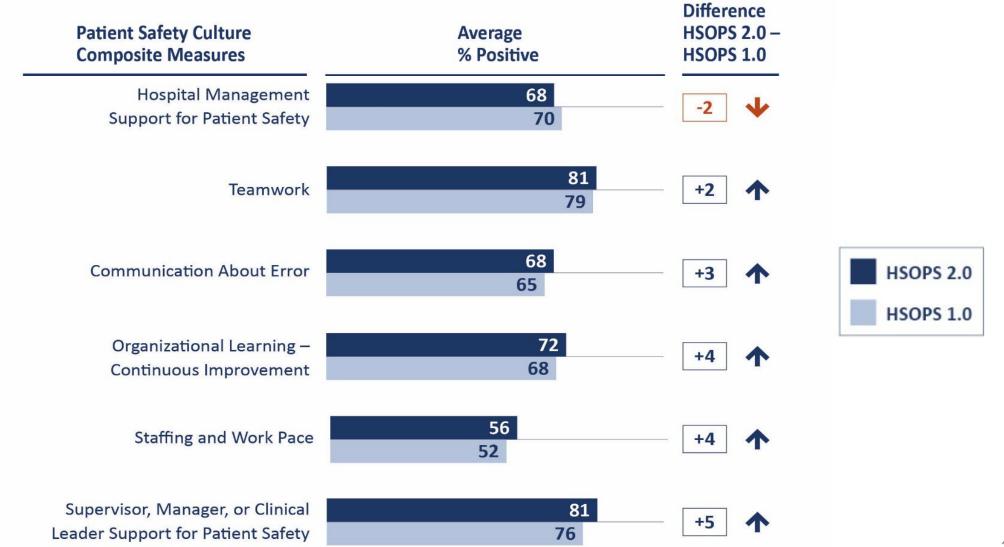
#### **Largest Score Differences**





#### **Smallest Score Differences**









How did survey item changes impact patient safety culture scores?

# **Minor Wording Change**



Survey Version	Item		% Positive
HSOPS 2.0	My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safe	ety. (B1)	80%
HSOPS 1.0	My supervisor/manager seriously considers staff suggestions for improving patient safety. (B2)		75%
	D	ifference	5%

# **Major Wording Change**



Survey Version	Item	% Positive
HSOPS 2.0	During busy times, staff in this unit help each other. (A8)	86%
HSOPS 1.0	When one area in this unit gets really busy, others help out.	70%
	Difference	16%

#### Is HSOPS 2.0 reliable and valid?



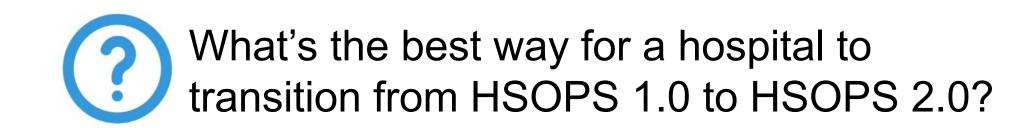
- We conducted psychometric analysis on the 2019 pilot test data to examine the reliability and construct validity of HSOPS 2.0
- All composite measures had acceptable internal consistency reliability (Cronbach's alpha ≥ 0.70), except Staffing and Work Pace (0.67)
- All composite measures and items had acceptable site-level reliability (≥ 0.70)
- Confirmatory factor analysis showed:
  - ► All items had acceptable factor loadings on their respective composite measures (≥ 0.40)
  - ► All items and composite measures demonstrated acceptable overall model fit for several goodness-of-fit indices (CFI, RMSEA, SRMR)

#### **HSOPS 2.0 Conclusions**



- HSOPS 2.0 assesses many of the same areas of patient safety culture as HSOPS 1.0, but substantial changes were made to the survey.
- Hospitals that administer HSOPS 2.0 can expect their scores on HSOPS 2.0 to be higher than comparable scores on HSOPS 1.0.
- We did <u>not</u> reduce the proportion of negatively worded items.
- Psychometric properties of the survey are good.





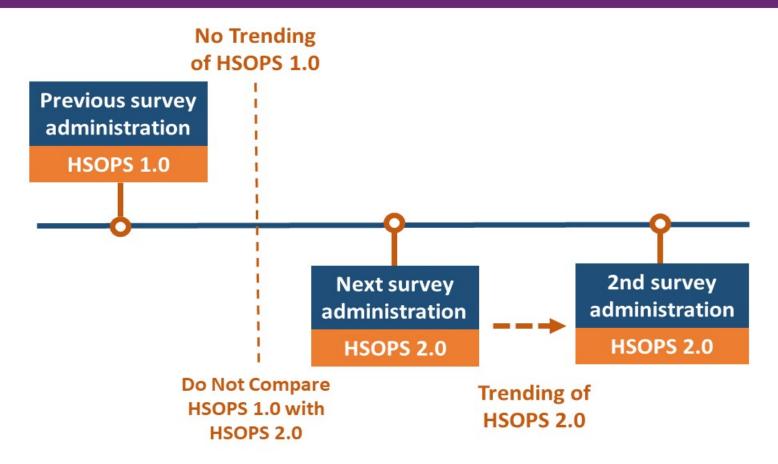
## Three Options for Transitioning to HSOPS 2.0



- Option 1 Administer HSOPS 2.0
- Option 2 Administer HSOPS 1.0 One More Time
- Option 3 Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0

#### **Option 1: Administer HSOPS 2.0**

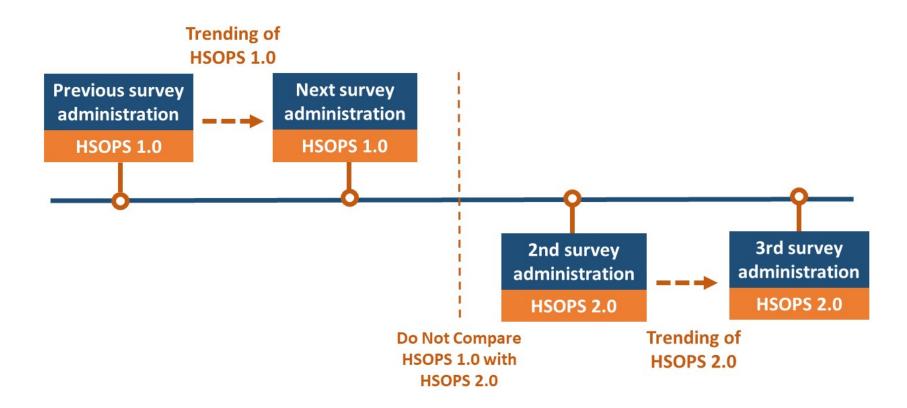




 For hospitals that want to use HSOPS 2.0 for their next survey administration without trending previous HSOPS 1.0 scores

#### Option 2: Administer HSOPS 1.0 One More Time

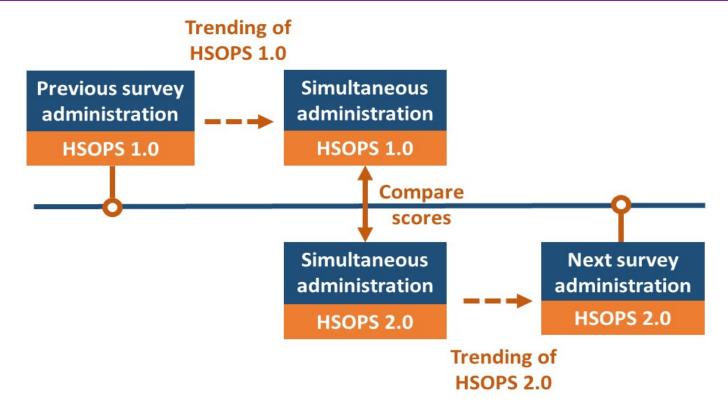




 For hospitals that want to trend their HSOPS 1.0 scores one more time and later establish a new baseline on HSOPS 2.0

# Option 3: Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0





• Only for larger hospitals with 1,000 or more staff that want to trend their HSOPS 1.0 scores, establish a new baseline for HSOPS 2.0, and compare their 1.0 and 2.0 scores

Refer to Appendix B of the document "Transitioning to the SOPS<sup>TM</sup> Hospital Survey Version 2.0: What's Different and What To Expect" on the AHRQ web site

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What supplemental items are available to use with HSOPS 1.0 and HSOPS 2.0?

## Supplemental Items



- Can be added toward the end of HSOPS 1.0 or 2.0 surveys
  - ► Value and Efficiency (Hospital & Medical Office) 13 items
    - Improving efficiency, waste reduction, patient centeredness, and highquality care.
  - ► Health Information Technology Patient Safety (Hospital) 15 items
    - EHR issues, training, system support, communication, and workflow



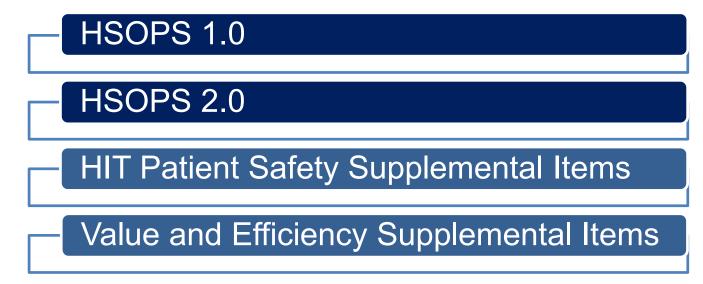


Are there results available for HSOPS 2.0? Will there be a database and research datasets for HSOPS 2.0?

### **SOPS Hospital Database**



- Results from the 2019 HSOPS 2.0 pilot test in 25 hospitals are available on the AHRQ web site
  - SOPS Hospital Database web page
- Data submission for the SOPS Hospital Database opens
   June 1 July 20, 2020 and will accept:



### **SOPS Research Datasets**



- For research purposes only
- De-identified Data Requests
  - Hospital, medical office, nursing home, community pharmacy, and ambulatory surgery database data are available
- Hospital-Identifiable Data Requests—SOPS Hospital Database only
  - Allows linking SOPS data to other datasets
  - Requests are reviewed and approved by AHRQ
  - Requestors complete a research abstract and sign a data release agreement
  - Database hospitals must agree release their data





# What resources are available for HSOPS 2.0?

# **Survey Documents**



### **HSOPS 2.0 Survey**

#### Hospital Survey on Patient Safety (Version 2.0) Instructions This survey asks for your opinions about patient safety issues, medical error, and event reporting in your hospital and will take about 10-15 minutes to complete. If a question does not apply to you or your hospital or you don't know the answer, please select "Does Not Apply or Don't Know." "Patient safety" is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of healthcare delivery. A "patient safety event" is defined as any type of healthcare-related error, mistake, or incident, regardless of whether or not it results in patient harm. Your Staff Position 1. What is your position in this hospital? Select ONF answer Supervisor, Manager, Clinical Leader, Senior 1 Advanced Practice Nurse (NP. CRNA, CNS. □ 15 Supervisor, Manager, Department Manager, Clinical Leader, Administrator, Director 2 Licensed Vocational Nurse (LVN). Licensed ☐ 16 Senior Leader, Executive, C-Suite Practical Nurse (LPN) Patient Care Aide, Hospital Aide, Nursing Assistant Support □4 Registered Nurse (RN) ☐ 17 Facilities ☐ 18 Food Services Medical ☐ 19 Housekeeping, Environmental Services ☐s Physician Assistant ☐20 Information Technology, Health Information □ 6 Resident, Intern Services, Clinical Informatics □7 Physician, Attending, Hospitalist ☐21 Security □22 Transporter Other Clinical Position □23 Unit Clerk, Secretary, Receptionist, Office □s Dietitian Pharmacist, Pharmacy Technician □ 10 Physical, Occupational, or Speech Therapist □24 Other, please specify: ☐11 Psychologist □ 12 Respiratory Therapist □ 13 Social Worker □ 14 Technologist, Technician (e.g., EKG, Lab. Radiology)

# Items and Composite Measures

#### SOPS Hospital Survey 2.0: Items and Composite Measures

In this document, the items in the SOPS Hospital Survey 2.0 are grouped according to the safety culture composite measures they are intended to assess. The item's survey location is shown to the left of each item. Negatively worded items are indicated. Reliability statistics based on the pilot test data from 25 hospitals and 4,345 hospital staff are provided for the composite measures.

#### Teamwork

(Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Does Not Apply or Don't Know)

- In this unit, we work together as an effective team.
- A8. During busy times, staff in this unit help each other.
- A9. There is a problem with disrespectful behavior by those working in this unit. (negatively worded)

Reliability of this composite measure—Cronbach's alpha (3 items) = .76

#### 2. Staffing and Work Pace

(Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Does Not Apply or Don't Know)

- A2. In this unit, we have enough staff to handle the workload.
- Staff in this unit work longer hours than is best for patient care. (negatively worded)
- This unit relies too much on temporary, float, or PRN staff. (negatively worded)
- A11. The work pace in this unit is so rushed that it negatively affects patient safety. (negatively worded)

Reliability of this composite measure—Cronbach's alpha (4 items) = .67

#### 3. Organizational Learning—Continuous Improvement

(Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree, Does Not Apply or Don't Know)

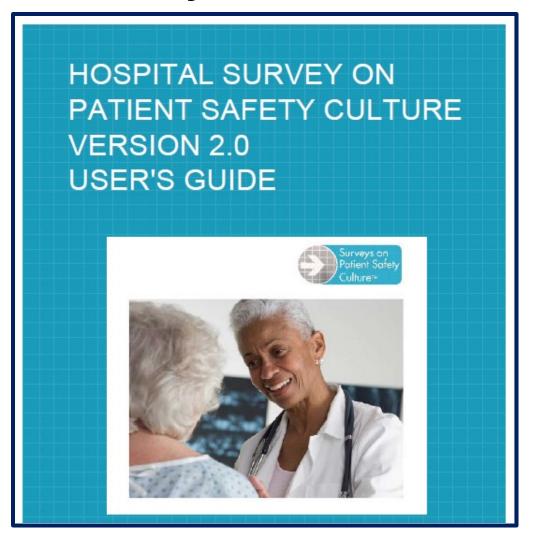
- A4. This unit regularly reviews work processes to determine if changes are needed to improve patient safety
- A12. In this unit, changes to improve patient safety are evaluated to see how well they worked.
- A14. This unit lets the same patient safety problems keep happening. (negatively worded)

Reliability of this composite measure—Cronbach's alpha (3 items) = .76

### **HSOPS 2.0 Guides**



### **Surveys User's Guide**



### **Transitioning Guide**



Transitioning to the SOPS™ Hospital Survey Version 2.0: What's Different and What To Expect

Part I: Main Report

#### Prepared for:

Agency for Healthcare Research and Quality U.S. Department of Health and Human Services 5600 Fishers Lane Rockville, MD 20857 www.ahro.gov

Contract No. HHSP233201500026I/HHSP23337004T

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# **HSOPS 2.0 Data Entry and Analysis Tool**



Agency for Healthcare Research and Quality  Surveys on Patient Safety Culture <sup>TM</sup> Hospital Survey 2.0  Data Entry and Analysis Tool						
Version: October 2019 1. Entering Data	2. Your Hospital Results	3. Comparative Results				
Instructions	Respondent Demographics					
Edit Report Cover Sheet	Composite Measure Results	Composite Measure Results				
Data Entry	Item Results	Item Results				
Explanation of Calculations	Patient Safety Rating	Patient Safety Rating				
Interpreting Your Results	Number of Events Reported	Number of Events Reported				
Print All*	Survey Comments					
Export Data **						
5. Comparative Results by Staff Position	6. Comparative Results by Unit/Work Area	7. Comparative Results by Interaction with Patients	8. Comparative Results by Tenure in Unit/Work Area			
Composite Measure Results	Composite Measure Results	Composite Measure Results	Composite Measure Results			
Item Results	Item Results	Item Results	Item Results			
Patient Safety Rating & Number of Events Reported	Patient Safety Rating & Number of Events Reported	Patient Safety Rating & Number of Events Reported	Patient Safety Rating & Number of Events Reported			

# Simultaneous Administration Comparison Tool



### For Simultaneous Administration ONLY

HSOPS 2.0	HSOPS 1.0 Composite Measures and Item Text	Your Hospital % Positive			2019 Pilot Hospital Average % Positive		
Composite Measures and Item Text		HSOPS 2.0	HSOPS 1.0	Difference: HSOPS 2.0 – HSOPS 1.0	HSOPS 2.0	HSOPS 1.0	Difference: HSOPS 2.0 – HSOPS 1.0
Supervisor, Manager, or Clinical Leader Support for Patient Safety	Supervisor/Manager Expectations & Actions Promoting Patient Safety	85%	77%	8%	81%	76%	5%
My supervisor, manager, or clinical leader seriously considers staff suggestions for improving patient safety. (B1)	My supervisor/manager seriously considers staff suggestions for improving patient safety. (B2)	85%	77%	8%	80%	75%	5%

### **Other SOPS Resources**





### Research Reference List

	Action Plan for the AHRQ Surveys on Patient Safety Culture					
	Facility Name: Date last updated: Page					
Def	Defining Your Goals and Selecting Your Initiative					
1	What areas do you want to focus on for improvement?					
2	What are your goals?					
3	What initiative will you implement?					
Not	tes or Comments					

**Action Planning Tool** 

#### IV. Resources by Composite

The following resources are organized according to the relevant AHRQ Hospital Survey on Patient Safety Culture composite measures they are designed to help improve. Some resources are duplicated (and cross-referenced) since they apply to more than one composite.

Composites 1 and 2. Supervisor, Manager, or Clinical Leader Support for Patient Safety and Hospital Management Support for Patient Safety

1. Conduct Patient Safety Leadership WalkRounds™
http://www.ihi.org/resources/Pages/ConductPatientSafetyLeadershipWalkRounds.aspx
http://www.ihi.org/resources/Pages/Tools/PatientSafetyLeadershipWalkRounds.aspx
(both items require free account setup and login)

Senior leaders can demonstrate their commitment to safety and learn about the safety issues in their organization by making regular rounds for the sole purpose of discussing safety with staff. These institute for Healthcare Improvement (IHI) web pages discuss the benefits of management making regular rounds and give tips for doing the rounds, as well as links to resources. These rounds are especially effective in conjunction with safety briefings.

 Framework for Effective Board Governance of Health System Quality http://www.ihi.org/resources/Pages/IHIWhitePagers/Framework-Effective-Board-Governance-Health-System-Quality.aspx (requires free account setup and login)

The Institute for Healthcare Improvement (IHI) Lucian Leape Institute conducted a research scan on board governance of health system quality, an evaluation of governance education in quality, and expert interviews. This work made it clear that board members, and those who support them, want a clear and consistent framework to guide governance of all dimensions of quality beyond safety, including identifying the core processes and necessary activities for effective governance of quality. The framework, assessment tool, and support guides strive to reduce variation in and clarify trustee responsibilities for quality oversight. They also provide practical tools for trustees and the health system leaders who support them to govern quality in

### Resource List

# **HSOPS 2.0 Frequently Asked Questions (FAQs)**



- 20. Why did AHRQ develop Version 2.0 of the SOPS Hospital Survey (HSOPS 2.0)?
- 21. What is different about the new *SOPS Hospital Survey 2.0* (HSOPS 2.0) compared with the original *SOPS Hospital Survey 1.0* (HSOPS 1.0)?
- 22. How long is the SOPS Hospital Survey 2.0 (HSOPS 2.0)?
- 23. How many completed surveys are needed to submit to the SOPS Hospital Database?
- 24. What areas of patient safety culture are assessed on the *SOPS Hospital Survey 2.0* (HSOPS 2.0)?
- 25. How was the SOPS Hospital Survey 2.0 (HSOPS 2.0) developed and tested?
- 26. How can hospitals transition from the SOPS Hospital Survey 1.0 (HSOPS 1.0) to the new SOPS Hospital Survey 2.0 (HSOPS 2.0)? Can hospitals compare scores on HSOPS 2.0 against scores from a previous administration of HSOPS 1.0?
- 27. How can hospitals conduct a simultaneous administration of *SOPS Hospital Survey* 1.0 (HSOPS 1.0) and *SOPS Hospital Survey* 2.0 (HSOPS 2.0) to compare scores?
- 28. When is the next data submission for the SOPS Hospital Database and which versions of the SOPS Hospital Survey will be accepted?
- 29. Are the current *SOPS Hospital Survey* resource materials—including the Survey User's Guide, Data Entry and Analysis Tool, and Action Planning Tool—still relevant or are there new versions of these resources for the *SOPS Hospital Survey 2.0 (HSOPS 2.0)*?
- 30. Will AHRQ continue to support the SOPS Hospital Survey 1.0 (HSOPS 1.0)? If so, for how long?

# Other SOPS Updates



- New SOPS Animated Videos
  - Why Choose AHRQ Surveys on Patient Safety Culture?
  - ► Why Submit Data to the AHRQ SOPS Databases?



- SOPS Ambulatory Surgery Center Database Report
  - ► Late 2019/ early 2020
- Diagnostic Safety Supplemental Items for medical offices
  - Under development

# **SOPS Technical Assistance (TA)**







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