# Surveys on Patient Safety Culture™

### Transitioning to the SOPS<sup>™</sup> Hospital Survey Version 2.0: What's Different and What To Expect

### Part II: Appendixes

Appendix A – Differences in Scores Between HSOPS 2.0 and HSOPS 1.0

# Appendix B – How To Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0 and Compare Scores

#### **Prepared for:**

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

#### Contract No. HHSP233201500026I/HHSP23337004T

#### **Prepared by:**

Westat, Rockville, MD

Joann Sorra, Ph.D. Theresa Famolaro, M.P.S., M.S., M.B.A. Naomi Dyer Yount, Ph.D.

AHRQ Publication No. 19-0076-1-EF September 2019



This document is in the public domain and may be used and reprinted without permission in the United States for noncommercial purposes, unless materials are clearly noted as copyrighted in the document. Users outside the United States must get permission from AHRQ to reprint or translate this product. Anyone wanting to reproduce this product for sale must contact AHRQ for permission.

Surveys on Patient Safety Culture<sup>™</sup> and SOPS<sup>™</sup> are trademarks of AHRQ.

#### **Suggested Citation:**

Sorra, J., Famolaro T., Yount N. Transitioning to the SOPS<sup>™</sup> Hospital Survey Version 2.0: What's Different and What to Expect, Part II: Appendixes. (Prepared by Westat, Rockville, MD, under Contract No. HHSP233201500026I/HHSP23337004T ). Rockville, MD: Agency for Healthcare Research and Quality; September 2019. AHRQ Publication No. 19-0076-1-EF

The authors of this report are responsible for its content. Statements in the report should not be construed as endorsement by the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

No investigators have any affiliations or financial involvement (e.g., employment, consultancies, honoraria, stock options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in this report.

### **Table of Contents**

ection Pa	age
ppendix A: Differences in Scores Between HSOPS 2.0 and HSOPS 1.0	1
ppendix B: How to Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0 and Compare Scores	17
How To Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0	17
How To Compare Scores From a Simultaneous Administration	. 20

### List of Tables

#### Tables

Page

Table A-1. Composite Measure and Item Differences Between HSOPS 2.0 and HSOPS 1.0 – 2019 Pilot Test	. 2
Table A-2. Background Question Differences Between HSOPS 2.0 and HSOPS 1.0	13
Table A-3. HSOPS 1.0 Composite Measures and Associated Items Dropped From         HSOPS 2.0	16
Table B-1. Minimum Sample Sizes for Simultaneous Administration of HSOPS 1.0 and         HSOPS 2.0	18
Table B-2. Example of Provider and Staff List Assignment to HSOPS 1.0 or HSOPS 2.0	19
Table B-3. Example of Composite Measure Expected Range of Difference Scores Between         HSOPS 2.0 and HSOPS 1.0	20
Table B-4. Composite Measure and Item Expected Range of Difference Scores Between         HSOPS 2.0 and HSOPS 1.0	22



### List of Figures

Figures
---------

#### Page



## Appendix A: Differences in Scores Between HSOPS 2.0 and HSOPS 1.0

Appendix A provides detailed information on differences in scores between HSOPS 2.0 and HSOPS 1.0 based on results from the 2019 pilot test.

Table A-1 displays composite measure and item differences in HSOPS 2.0 and HSOPS 1.0 scores from the 2019 pilot test and contains the following information:

- 1. HSOPS 2.0 composite measure and item text (with wording changes in HSOPS 2.0 shown in red underlining);
- 2. HSOPS 1.0 composite measure and item text;
- 3. Average percent positive scores for composite measures and items on HSOPS 2.0 and HSOPS 1.0 from the 2019 pilot test;
- 4. The difference between HSOPS 2.0 and HSOPS 1.0 average percent positive scores for the 24 survey items that can be compared; and
- 5. The type of change—major and minor wording changes, no changes, dropped HSOPS 1.0 items, or new HSOPS 2.0 items.

Table A-2 displays the background questions for HSOPS 2.0 and HSOPS 1.0, with wording changes in HSOPS 2.0 shown in red underlining.

Table A-3 displays the two HSOPS 1.0 composite measures and associated survey items that were dropped from HSOPS 2.0.



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019   Hospital / % Pos	Average	Difference: HSOPS 2.0 –	Type of Change
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	
Hospital Management Support for Patient Safety	Management Support for Patient Safety	68%	70%	-2%	Minor wording change
The actions of hospital management show that patient safety is a top priority. (F1)	The actions of hospital management show that patient safety is a top priority. (F8)	81%	75%	6%	No change
Hospital management provides adequate resources to improve patient safety. (F2)		70%			New 2.0 item
Hospital management seems interested in patient safety only after an adverse event happens. (F3R)	Hospital management seems interested in patient safety only after an adverse event happens. (F9R)	54%	57%	-3%	No change
	Hospital management provides a work climate that promotes patient safety. (F1)		77%		Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of Change
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	
Teamwork	Teamwork Within Units	81%	79%	2%	Major wording change
In this unit, we work together as <u>an</u> <u>effective</u> team. (A1)	When a lot of work needs to be done quickly, we work together as a team to get the work done. (A3)	88%	83%	5%	Major wording change
During busy times, staff in this unit help each other. (A8)	When one area in this unit gets really busy, others help out. (A11)	86%	70%	16%	Major wording change
There is a problem with disrespectful behavior by those working in this unit. (A9R)		69%			New 2.0 item
	In this unit, people treat each other with respect. (A4)		77%		Dropped 1.0 item
	People support one another in this unit. (A1)		85%		Dropped 1.0 item



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 -	Type of Change
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Communication About Error	Feedback and Communication About Error	68%	65%	3%	Major wording change
We are informed about errors that happen in this unit. (C1)	We are informed about errors that happen in this unit. (C3)	66%	66%	0%	No change
When errors happen in this unit, we discuss ways to prevent them from happening again. (C2)	In this unit, we discuss ways to prevent errors from happening again. (C5)	72%	73%	-1%	Minor wording change
In this unit, we are informed about changes <u>that are made</u> based on event reports. (C3)	We are given feedback about changes put into place based on event reports. (C1)	66%	56%	10%	Major wording change



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Organizational Learning – Continuous Improvement	Organizational Learning – Continuous Improvement	72%	68%	4%	No wording change
This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (A4)		71%			New 2.0 item
In this unit, changes to improve patient safety <u>are evaluated to see how well they</u> worked. (A12)	After we make changes to improve patient safety, we evaluate their effectiveness. (A13)	68%	66%	2%	Major wording change
This unit lets the same patient safety problems keep happening. (A14R)		78%			New 2.0 item
	We are actively doing things to improve patient safety. (A6)		78%		Dropped 1.0 item
	Mistakes have led to positive changes here. (A9)		60%		Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure		9 Pilot Il Average ositive	Difference: HSOPS 2.0 –	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Staffing and Work Pace	Staffing	56%	52%	4%	Major wording change
In this unit, we have enough staff to handle the workload. (A2)	We have enough staff to handle the workload. (A2)	52%	49%	3%	Added "In this unit"
Staff in this unit work longer hours than is best for patient care. (A3R)	Staff in this unit work longer hours than is best for patient care. (A5R)	51%	47%	4%	No change
This unit relies too much on temporary, float, or PRN staff. (A5R)	We use more agency/temporary staff than is best for patient care. (A7R)	62%	64%	-2%	Major wording change
The work pace in this unit is so rushed that it negatively affects patient safety. (A11R)	We work in "crisis mode" trying to do too much, too quickly. (A14R)	59%	46%	13%	Major wording change



HSOPS 2.0 Composite Measure and Item Text Supervisor, Manager, <u>or Clinical Leader</u> Support for Patient Safety	HSOPS 1.0 Composite Measure and Item Text	2019 Pilot Hospital Average % Positive HSOPS HSOPS 2.0 1.0		Hospital AverageDifference:% PositiveHSOPS 2.0 -HSOPSHSOPSHSOPSHSOPS 1.0	
	Supervisor/Manager Expectations & Actions Promoting Patient Safety	81%	76%	5%	Minor wording change
My supervisor, manager, <u>or clinical leader</u> seriously considers staff suggestions for improving patient safety. (B1)	My supervisor/manager seriously considers staff suggestions for improving patient safety. (B2)	80%	75%	5%	Minor wording change
My supervisor, manager, <u>or clinical leader</u> wants us to work faster <u>during busy times</u> , even if it means taking shortcuts (B2R)	Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts. (B3R)	78%	76%	2%	Minor wording change
My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (B3)		86%			New 2.0 item
	My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures. (B1)		77%		Dropped 1.0 item
	My supervisor/manager overlooks patient safety problems that happen over and over. (B4R)		77%		Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	Hospital	Pilot Average sitive	Difference: HSOPS 2.0 –	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Reporting Patient Safety Events	Frequency of Events Reported	74%	64%	10%	Major wording change
When a mistake is <i>caught and corrected before <u>reaching</u> the patient,</i> how often is this reported? (D1)	When a mistake is made, but is <i>caught and corrected before affecting the patient</i> , how often is this reported? (D1)	64%	58%	6%	Minor wording change
When a mistake <u>reaches the patient and</u> could <u>have harmed</u> the patient but <u>did</u> not, how often is this reported? (D2)	When a mistake is made that <i>could harm the patient</i> , but does not, how often is this reported? (D3)	84%	74%	10%	Major wording change
	When a mistake is made but has <i>no potential to harm the patient</i> , how often is this reported? (D2)		60%		Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of Change
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	
Communication Openness	Communication Openness	76%	63%	13%	No wording change
In this unit, staff speak up if they see something that may negatively affect patient care. (C4)	Staff will freely speak up if they see something that may negatively affect patient care. (C2)	83%	75%	8%	Added "In this unit"
When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (C5)		72%			New 2.0 item
When staff in this unit speak up, those with more authority are open to their patient safety concerns. (C6)		74%			New 2.0 item
In this unit, staff are afraid to ask questions when something does not seem right. (C7R)	Staff are afraid to ask questions when something does not seem right. (C6R)	73%	66%	7%	Added "In this unit"
	Staff feel free to question the decisions or actions of those with more authority. (C4)		47%		Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Response to Error	Nonpunitive Response to Error	61%	43%	18%	Minor wording change
In this unit, staff feel like their mistakes are held against them. (A6R)	Staff feel like their mistakes are held against them. (A8R)	57%	50%	7%	Added "In this unit"
When an event is reported <u>in this unit,</u> it feels like the person is being written up, not the problem. (A7R)	When an event is reported, it feels like the person is being written up, not the problem. (A12R)	54%	45%	9%	Added "In this unit"
When staff make errors, this unit focuses on learning rather than blaming individuals. (A10)		69%			New 2.0 item
In this unit, there is a lack of support for staff involved in patient safety errors. (A13R)		65%			New 2.0 item
	Staff worry that mistakes they make are kept in their personnel file. (A16R)		34%		Dropped 1.0 item



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Change
Handoffs and Information Exchange	Handoffs and Transitions	58%	40%	18%	Major wording change
When transferring patients from one unit to another, <u>important information is often</u> <u>left out</u> . (F4R)	Things "fall between the cracks" when transferring patients from one unit to another. (F3R)	45%	34%	11%	Major wording change
During shift changes, important patient care information is often left out. (F5R)	Important patient care information is often lost during shift changes. (F5R)	55%	45%	10%	Major wording change
During shift changes, there is adequate time to exchange all key patient care information. (F6)		73%			New 2.0 item
	Problems often occur in the exchange of information across hospital units. (F7R)		37%		Dropped 1.0 item
	Shift changes are problematic for patients in this hospital. (F11R)		42%		Dropped 1.0 item



HSOPS 2.0 Item Text	HSOPS 1.0 Item Text	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	Type of Change
		HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	
Patient Safety Rating	Patient Safety Grade				Minor wording change
How would you rate your unit/work area on patient safety? (E1) (Poor, Fair, Good, Very Good, Excellent)*	Please give your work area/unit in this hospital an overall grade on patient safety. (E1) (Excellent, Very Good, Acceptable, Poor, Failing)	66%	77%	-11%	Major change in wording and response options
Number of Events Reported	Number of Events Reported				No wording change
In the past 12 months, how many <u>patient</u> safety events have you <u>reported</u> ? (D3) (None, 1 to 2, 3 to 5, 6 to 10, <u>11 or more</u> )	In the past 12 months, how many event reports have you filled out and submitted? (G1) (No event reports, 1 to 2, 3 to 5, 6 to 10, 11 to 20, 21 event reports or more)	45%	44%	1%	Minor change in wording and response options

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

\* The response options for the Patient Safety Rating (E1) on HSOPS 2.0 are presented in reverse order compared with HSOPS 1.0. In addition, the response options were changed.



Table A-2 displays the background questions for HSOPS 2.0 and HSOPS 1.0, with wording changes in HSOPS 2.0 shown in red underlining. One HSOPS 1.0 background question was dropped in HSOPS 2.0. In addition, the staff position question was moved to the first question in HSOPS 2.0. There are more staff position and unit/work area categories in HSOPS 2.0, so fewer respondents have to choose the "Other" category.

HSOPS 2.0 Background Question Text	HSOPS 1.0 Background Question Text
What is your position in this hospital? (Question 1)	What is your staff position in this hospital? (H4)
Nursing	a Registered Nurse
1 Advanced Practice Nurse (NP, CRNA, CNS, CNM)	b Physician Assistant/Nurse Practitioner
2 <u>Licensed Vocational Nurse (LVN), Licensed Practical</u>	c LVN/LPN
<u>Nurse (</u> LPN <u>)</u>	d Patient Care Asst/Hospital Aide/Care Partner
3 Patient Care <u>Aide</u> , Hospital Aide, <u>Nursing Assistant</u>	e Attending/Staff Physician
4 Registered Nurse (RN)	f Resident Physician/Physician in Training
Medical	g Pharmacist
5 Physician Assistant	h Dietician
6 Resident, Intern	i Unit Assistant/Clerk/Secretary
7 Physician, Attending, Hospitalist	j Respiratory Therapist
	k Physical, Occupational, or Speech Therapist
<u>Other Clinical Position</u> 8 Dietitian	I Technician (e.g., EKG, Lab, Radiology)
8 Dieti <u>t</u> ian 9 Pharmacist <u>, Pharmacy Technician</u>	m Administration/Management
10 Physical, Occupational, or Speech Therapist	n Other, please specify:
11 Psychologist	
12 Respiratory Therapist	
13 Social Worker	
14 <u>Technologist,</u> Technician (e.g., EKG, Lab, Radiology)	
Supervisor, Manager, Clinical Leader, Senior Leader	
15 Supervisor, Manager, Department Manager, Clinical	
Leader, Administrator, Director	
16 Senior Leader, Executive, C-Suite	
<u>Support</u>	
17 <u>Facilities</u>	
18 Food Services	
19 Housekeeping, Environmental Services	
20 Information Technology, Health Information Services,	
Clinical Informatics	
21 <u>Security</u>	
22 <u>Transporter</u>	
23 <u>Unit</u> Clerk, Secretary, <u>Receptionist</u> , <u>Office Staff</u>	
<u>Other</u>	
24 Other, please specify:	

#### Table A-2. Background Question Differences Between HSOPS 2.0 and HSOPS 1.0



#### Table A-2. Background Question Differences Between HSOPS 2.0 and HSOPS 1.0 (continued)

HSOPS 2.0 Background Question T	HSOPS 1.0 Background Question Text
<b>What is your primary <u>unit or work area</u> in th</b> Question 2)	ospital?What is your primary work area or unit in this hospital? (Section A, first question)
<u> Multiple Units, No specific unit</u>	a Many different hospital units/No specific uni
Many different hospital units, No specific	it b Medicine (non-surgical) c Surgery
Medical/Surgical Units	d Obstetrics
2 <u>Combined Medical/Surgical Unit</u>	e Pediatrics
3 <u>Medical Unit (Non-Surgical)</u>	f Emergency department
4 <u>Surgical Unit</u>	g Intensive care unit (any type)
Patient Care Units	h Psychiatry/mental health
5 <u>Cardiology</u>	i Rehabilitation
6 Emergency Department, Observation, Sh	<u>Stay</u> j Pharmacy
7 <u>Gastroenterology</u>	k Laboratory
8 <u>ICU (all adult</u> types)	l Radiology
9 Labor & Delivery, Obstetrics & Gynecolog	m Anesthesiology
10 <u>Oncology, Hematology</u>	n Other, please specify:
11 Pediatrics (including NICU, PICU)	
12 Psychiatry, Behavioral Health	
13 <u>Pulmonology</u>	
14 Rehabilitation, Physical Medicine	
15 <u>Telemetry</u>	
Surgical Services	
16 Anesthesiology	
17 Endoscopy, Colonoscopy	
18 Pre Op, Operating Room/Suite, PACU/Po	)p, Peri Op
Clinical Services	
19 <u>Pathology, Lab</u>	
20 Pharmacy	
21 Radiology <u>, Imaging</u>	
22 <u>Respiratory Therapy</u>	
23 Social Services, Case Management, Disch	e Planning
Administration/Management	
24 Administration, Management	
25 Financial Services, Billing	
26 Human Resources, Training	
27 Information Technology, Health Informat	
Management, Clinical Informatics	
28 Quality, Risk Management, Patient Safet	
Support Services	
29 Admitting/Registration	
30 Food Services, Dietary	
31 Housekeeping, Environmental Services, F	<u>ities</u>
32 Security Services	
33 <u>Transport</u>	

<u>Other</u>

34 Other, please specify:



	HSOPS 2.0 Background Question Text	HSOPS 1.0 Background Question Text
Но	w long have you worked in this <u>hospital</u> ? (G1)	How long have you worked in this <u>hospital</u> ? (H1)
a b c d	Less than 1 year 1 to 5 years 6 to 10 years 11 <u>or more years</u>	<ul> <li>a Less than 1 year</li> <li>b 1 to 5 years</li> <li>c 6 to 10 years</li> <li>d 11 to 15 years</li> <li>e 16 to 20 years</li> <li>f 21 years or more</li> </ul>
	this hospital, how long have you worked in your rrent <u>unit/work area</u> ? (G2)	How long have you worked in your current hospital work area/unit? (H2)
a b c d	Less than 1 year 1 to 5 years 6 to 10 years 11 <u>or more years</u>	<ul> <li>a Less than 1 year</li> <li>b 1 to 5 years</li> <li>c 6 to 10 years</li> <li>d 11 to 15 years</li> <li>e 16 to 20 years</li> <li>f 21 years or more</li> </ul>
	pically, how many hours per week do you work in s hospital? (G3)	Typically, how many <u>hours per week</u> do you work in this hospital? (H3)
a b c	Less than <u>30</u> hours per week <u>30 to 40</u> hours per week <u>More than 40</u> hours per week	<ul> <li>a Less than 20 hours per week</li> <li>b 20 to 39 hours per week</li> <li>c 40 to 59 hours per week</li> <li>d 60 to 79 hours per week</li> <li>e 80 to 99 hours per week</li> <li>f 100 hours per week or more</li> </ul>
	your staff position, do you typically have direct eraction or contact with patients? (G4)	In your staff position, do you typically have direct interaction or contact with patients? (H5)
a b	YES, I typically have direct interaction or contact with patients NO, I typically do NOT have direct interaction or contact with patients	<ul> <li>a YES, I typically have direct interaction or contact with patients</li> <li>b NO, I typically do NOT have direct interaction or contact with patients</li> </ul>
		How long have you worked in your current specialty or profession? (H6)
		<ul> <li>a Less than 1 year</li> <li>b 1 to 5 years</li> <li>c 6 to 10 years</li> <li>d 11 to 15 years</li> <li>e 16 to 20 years</li> <li>f 21 years or more</li> </ul>

#### Table A-2. Background Question Differences Between HSOPS 2.0 and HSOPS 1.0 (continued)



Table A-3 displays the two HSOPS 1.0 composite measures and associated survey items that were dropped from HSOPS 2.0. The composite measure *Overall Perceptions of Patient Safety* was dropped because the single Patient Safety Rating question in HSOPS 2.0 was deemed to be sufficient as an overall assessment of patient safety.

Scores on the HSOPS 1.0 composite measure *Teamwork Across Units* were highly correlated with *Handoffs and Transitions*, so items similar in content to both of these composite measures were included in a single HSOPS 2.0 composite measure, *Handoffs and Information Exchange*; therefore *Teamwork Across Units* was dropped from HSOPS 2.0.

#### Table A-3. HSOPS 1.0 Composite Measures and Associated Items Dropped From HSOPS 2.0

Overall Perceptions of Patient Safety	
It is just by chance that more serious mistakes don't happen around here. (A10R)	
Patient safety is never sacrificed to get more work done. (A15)	
We have patient safety problems in this unit. (A17R)	
Our procedures and systems are good at preventing errors from happening. (A18)	
Teamwork Across Units	
There is good cooperation among hospital units that need to work together. (F4)	
Hospital units do not coordinate well with each other. (F2R)	
It is often unpleasant to work with staff from other hospital units. (F6R)	
Hospital units work well together to provide the best care for patients. (F10)	



## Appendix B: How To Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0 and Compare Scores

Appendix B provides guidance on how to conduct a simultaneous administration, where half of the providers and staff are asked to complete HSOPS 1.0 and the other half are asked to complete HSOPS 2.0. Information about differences in scores that a hospital can expect between HSOPS 2.0 and HSOPS 1.0 is also presented for hospitals that conduct a simultaneous administration and want to compare their scores on the two survey versions.

# How To Conduct Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0

Only larger hospitals with at least 1,000 providers and staff should conduct a simultaneous administration. The reason for this recommendation is that hospitals need a sufficiently large number of providers and staff to produce reliable and accurate measurements on both surveys at the same time.



#### Figure B-1. Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0

**Decide Whether To Conduct a Census or a Sample.** The first step is to decide whether to conduct a census of all providers and staff or administer to a sample of providers and staff. General information on how to decide between a census or sample, and how to compile a provider and staff list, is explained in Chapter 3 of the *AHRQ Hospital Survey on Patient Safety Culture Version 2.0 User's Guide*.

To administer surveys to a sample of providers and staff, refer to Table B-1, which shows the minimum sample sizes needed to conduct a simultaneous administration of both HSOPS 1.0 and HSOPS 2.0. For example, according to Table B-1, if a hospital has 1,500 providers and staff, it will need to sample at least 1,200 of them to conduct a simultaneous administration: 600 to receive HSOPS 1.0 and 600 to receive HSOPS 2.0.

#### Table B-1. Minimum Sample Sizes for Simultaneous Administration of HSOPS 1.0 and HSOPS 2.0

			mum le Size	Total Number Respo			
Total Number of Providers and Staff	Total Minimum Sample Size	HSOPS 1.0 <sup>*</sup>	HSOPS 2.0 <sup>*</sup>	HSOPS 1.0*	HSOPS 2.0*		
Fewer than 1,000	Simultar	Simultaneous Administration Not Recommended					
1,000-1,399	1,000	500	500	250	250		
1,400-2,599	1,200	600	600	300	300		
2,600 – 7,999	1,400	700	700	350	350		
8,000 or more	1,500	750	750	375	375		

\*Sample sizes are based on the following assumptions: simple random or systematic random sampling; a response rate of 50 percent; and a con



- Step 3. Assign each alternating person to receive either HSOPS 1.0 or HSOPS 2.0. For example, the first person would be assigned to HSOPS 1.0, the second person to HSOPS 2.0, the third person to HSOPS 1.0, etc., until each name on the list is assigned to one of the two survey versions.
- Step 4. Count the number assigned to each survey to ensure that about an equal number of providers and staff were assigned to HSOPS 1.0 and HSOPS 2.0.

Table B-2 provides an example of assignment of providers and staff to HSOPS 1.0 or HSOPS 2.0 for a simultaneous administration. The example is for a hospital that wants to administer to a minimum sample of 1,000 providers and staff, where 500 will receive HSOPS 1.0 and 500 will receive HSOPS 2.0.

				Survey	Version
Name	Email	Unit	Staff Position	HSOPS 1.0	HSOPS 2.0
First_LastName01	First_LastName1@hospital.org	ED	Nurse	х	
First_LastName02	First_LastName2@hospital.org	ED	Nurse		х
First_LastName03	First_LastName3@hospital.org	ED	Nurse	х	
First_LastName04	First_LastName4@hospital.org	ED	Nurse		х
First_LastName05	First_LastName5@hospital.org	ED	Physician	х	
First_LastName06	First_LastName6@hospital.org	ED	Physician		х
First_LastName07	First_LastName7@hospital.org	ICU	Nurse	х	
First_LastName08	First_LastName8@hospital.org	ICU	Nurse		х
First_LastName09	First_LastName9@hospital.org	ICU	Nurse	х	
First_LastName10	First_LastName10@hospital.org	ICU	Physician		х
First_LastName11	First_LastName11@hospital.org	ICU	Resident	х	
•	•	•		•	•
•		•	•	•	•
•		•	•	•	•
First_LastName999	First_LastName999@hospital.org	NICU	Physician	x	
First_LastName1000	First_LastName1000@hospital.org	NICU	Physician		х
			Total	500	500

#### Table B-2. Example of Provider and Staff List Assignment to HSOPS 1.0 or HSOPS 2.0

Once assignment of providers and staff to each survey version is complete, simultaneous administration of the surveys can begin. For further information about how to administer the surveys and analyze the data, refer to the *AHRQ Hospital Survey on Patient Safety Culture Version 2.0 User's Guide*.



### How To Compare Scores From a Simultaneous Administration

This section provides information about differences in scores that a hospital can expect when comparing scores between HSOPS 2.0 and HSOPS 1.0 after a simultaneous administration. Tables B-3 and B-4 show score differences between HSOPS 2.0 and HSOPS 1.0 from the 2019 pilot test and the range of difference scores that a hospital can expect when comparing the two survey versions (with a simultaneous administration).

Table B-3 provides an example of how to interpret the expected range of difference scores on one composite measure: *Organizational Learning—Continuous Improvement*. This composite measure was 4 percentage points higher on HSOPS 2.0 for the 2019 pilot hospitals. While 4 percentage points was the average difference on this measure from the 2019 pilot hospitals, other hospitals are likely to have difference scores that vary from this average—some hospitals will have smaller difference scores and other hospitals will have larger difference scores. Results from the 2019 pilot hospitals were used to predict the range of difference scores that any given hospital can expect when comparing HSOPS 2.0 and HSOPS 1.0 (with a simultaneous administration of both surveys).<sup>1</sup>

As shown in Table B-3, a hospital can expect that its HSOPS 2.0 score on *Organizational Learning—Continuous Improvement* will be between 2 percentage points and 6 percentage points *higher* than its HSOPS 1.0 score (i.e., its HSOPS 2.0 score for this composite measure will be plus or minus (+/-) 2 percentage points of the pilot hospitals' average difference of 4 percentage points, so the range of difference scores will be 2 percentage points to 6 percentage points).

HSOPS 2.0 and 1.0 Composite Measures	Hospital	Pilot Average sitive HSOPS 1.0	Difference: HSOPS 2.0 – HSOPS 1.0	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0
Organizational Learning – Continuous Improvement (Same name in HSOPS 1.0)	72%	68%	4%	+/- 2% [2% to 6%]

## Table B-3. Example of Composite Measure Expected Range of Difference Scores BetweenHSOPS 2.0 and HSOPS 1.0

<sup>&</sup>lt;sup>1</sup> The range of expected differences is based on a 95% prediction interval that takes into account uncertainty in the estimate due to sampling, as well as variability of individual hospitals around the average. The standard error for a prediction interval will be wider than the standard error for a confidence interval, which only takes into account uncertainty due to sampling.



Table B-4 displays composite measure scores and differences in HSOPS 2.0 and HSOPS 1.0 scores. It also displays item scores and score differences from the 2019 pilot test for the 24 survey items that can be compared between HSOPS 2.0 and HSOPS 1.0. Table B-4 is identical to Table A-1 in Appendix A except for one additional column that shows the range of difference scores that any given hospital can expect when comparing HSOPS 2.0 and HSOPS 1.0. This additional column is only relevant for hospitals that conduct a simultaneous administration of both surveys. Interpret the range of difference scores column in Table B-4 as described in the example in Table B-3.

Table B-4 contains the following information:

- 1. HSOPS 2.0 composite measure and item text (with wording changes in HSOPS 2.0 shown in red underlining);
- 2. HSOPS 1.0 composite measure and item text;
- 3. Average percent positive scores for composites and items on HSOPS 2.0 and HSOPS 1.0 from the 2019 pilot test;
- 4. The difference between HSOPS 2.0 and HSOPS 1.0 average percent positive scores for the 24 survey items that can be compared;
- 5. The range of difference scores that any given hospital can expect when comparing HSOPS 2.0 and HSOPS 1.0 scores; and
- 6. The type of change—major and minor wording changes, no changes, dropped HSOPS 1.0 items, or new HSOPS 2.0 items.

### **SOPS Hospital Survey Data Analysis Tools**

AHRQ has developed several data analysis tools that use Microsoft<sup>®</sup> Excel<sup>®</sup> to help generate and display survey results. To request these tools, email <u>DatabasesOnSafetyCulture@westat.com</u>

**SOPS Hospital Survey Data Entry and Analysis Tools**—enable hospitals to enter or input results from individual survey responses into the tools which then automatically create tables and graphs to display survey results. Tools are available for both HSOPS 1.0 and HSOPS 2.0.

#### SOPS Hospital Survey Simultaneous Administration Results Comparison

**Tool**—for hospitals that conduct a simultaneous administration of HSOPS 1.0 and HSOPS 2.0. The tool makes it easy to input percent positive scores from a simultaneous administration of HSOPS 1.0 and HSOPS 2.0. The tool then automatically calculates difference scores to help hospitals understand the differences in scores that are due to changes that were made in HSOPS 2.0 rather than changes in patient safety culture.



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores a Hospital Can Expect	Type of Change
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Hospital Management Support for Patient Safety	Management Support for Patient Safety	68%	70%	-2%	+/- 2% [-4% - 0%]	Minor wording change
The actions of hospital management show that patient safety is a top priority. (F1)	The actions of hospital management show that patient safety is a top priority. (F8)	81%	75%	6%	+/- 2% [4% to 8%]	No change
Hospital management provides adequate resources to improve patient safety. (F2)		70%				New 2.0 item
Hospital management seems interested in patient safety only after an adverse event happens. (F3R)	Hospital management seems interested in patient safety only after an adverse event happens. (F9R)	54%	57%	-3%	+/- 2% [-5% to -1%]	No change
	Hospital management provides a work climate that promotes patient safety. (F1)		77%			Dropped 1.0 item



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Teamwork	Teamwork Within Units	81%	79%	2%	+/- 1% [1% to 3%]	Major wording change
In this unit, we work together as <u>an</u> <u>effective</u> team. (A1)	When a lot of work needs to be done quickly, we work together as a team to get the work done. (A3)	88%	83%	5%	+/- 3% [2% to 8%]	Major wording change
During busy times, staff in this unit help each other. (A8)	When one area in this unit gets really busy, others help out. (A11)	86%	70%	16%	+/- 2% [14% to 18%]	Major wording change
There is a problem with disrespectful behavior by those working in this unit. (A9R)		69%				New 2.0 item
	In this unit, people treat each other with respect. (A4)		77%			Dropped 1.0 item
	People support one another in this unit. (A1)		85%			Dropped 1.0 item



HSOPS 2.0 Composite Measure	% Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of	
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Communication About Error	Feedback and Communication About Error	68%	65%	3%	+/- 2% [1% - 5%]	Major wording change
We are informed about errors that happen in this unit. (C1)	We are informed about errors that happen in this unit. (C3)	66%	66%	0%	+/- 3% [-3% to 3%]	No change
When errors happen in this unit, we discuss ways to prevent them from happening again. (C2)	In this unit, we discuss ways to prevent errors from happening again. (C5)	72%	73%	-1%	+/- 5% [-6% to 4%]	Minor wording change
In this unit, we are informed about changes that are made based on event reports. (C3)	We are given feedback about changes put into place based on event reports. (C1)	66%	56%	10%	+/- 3% [7% to 13%]	Major wording change



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Organizational Learning – Continuous Improvement	Organizational Learning – Continuous Improvement	72%	68%	4%	+/- 2% [2% - 6%]	No wording change
This unit regularly reviews work processes to determine if changes are needed to improve patient safety. (A4)		71%				New 2.0 item
In this unit, changes to improve patient safety are evaluated to see how well they worked. (A12)	After we make changes to improve patient safety, we evaluate their effectiveness. (A13)	68%	66%	2%	+/- 6% [-4% to 8%]	Major wording change
This unit lets the same patient safety problems keep happening. (A14R)		78%				New 2.0 item
	We are actively doing things to improve patient safety. (A6)		78%			Dropped 1.0 item
	Mistakes have led to positive changes here. (A9)		60%			Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Staffing and Work Pace	Staffing	56%	52%	4%	+/- 4% [0% - 8%]	Major wording change
In this unit, we have enough staff to handle the workload. (A2)	We have enough staff to handle the workload. (A2)	52%	49%	3%	+/- 3% [0% to 6%]	Added "In this unit"
Staff in this unit work longer hours than is best for patient care. (A3R)	Staff in this unit work longer hours than is best for patient care. (A5R)	51%	47%	4%	+/- 3% [1% to 7%]	No change
<u>This unit relies too much on</u> temporary, <u>float, or PRN</u> staff. (A5R)	We use more agency/temporary staff than is best for patient care. (A7R)	62%	64%	-2%	+/- 19% [-21% to 17%]	Major wording change
The work pace in this unit is so rushed that it negatively affects patient safety. (A11R)	We work in "crisis mode" trying to do too much, too quickly. (A14R)	59%	46%	13%	+/- 9% [4% to 22%]	Major wording change



HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Supervisor, Manager, <u>or Clinical Leader</u> Support for Patient Safety	Supervisor/Manager Expectations & Actions Promoting Patient Safety	81%	76%	5%	+/- 2% [3% to 7%]	Minor wording change
My supervisor, manager, <u>or clinical</u> <u>leader</u> seriously considers staff suggestions for improving patient safety. (B1)	My supervisor/manager seriously considers staff suggestions for improving patient safety. (B2)	80%	75%	5%	+/- 3% [2% to 8%]	Minor wording change
My supervisor, manager, <u>or clinical</u> <u>leader</u> wants us to work faster <u>during</u> <u>busy times</u> , even if it means taking shortcuts (B2R)	Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts. (B3R)	78%	76%	2%	+/- 5% [-3% to 7%]	Minor wording change
My supervisor, manager, or clinical leader takes action to address patient safety concerns that are brought to their attention. (B3)		86%				New 2.0 item
	My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures. (B1)		77%			Dropped 1.0 item
	My supervisor/manager overlooks patient safety problems that happen over and over. (B4R)		77%			Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Reporting Patient Safety Events	Frequency of Events Reported	74%	64%	10%	+/- 13% [-3% to 23%]	Major wording change
When a mistake is <i>caught and corrected before <u>reaching</u> the patient,</i> how often is this reported? (D1)	When a mistake is made, but is caught and corrected before affecting the patient, how often is this reported? (D1)	64%	58%	6%	+/- 14% [-8% to 20%]	Minor wording change
When a mistake <u>reaches the patient and</u> could <u>have harmed</u> the patient but <u>did</u> not <u>,</u> how often is this reported? (D2)	When a mistake is made that could harm the patient, but does not, how often is this reported? (D3)	84%	74%	10%	+/- 10% [0% to 20%]	Major wording change
	When a mistake is made but has no potential to harm the patient, how often is this reported? (D2)		60%			Dropped 1.0 item



Table B-4. Composite Measure	and Item Expected Range o	f Difference Scores Between	HSOPS 2.0 and HSOPS 1.0 (continued)

HSOPS 2.0 Composite Measure	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
and Item Text	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Communication Openness	Communication Openness	76%	63%	13%	+/- 3% [10% to 16%]	No wording change
In this unit, staff speak up if they see something that may negatively affect patient care. (C4)	Staff will freely speak up if they see something that may negatively affect patient care. (C2)	83%	75%	8%	+/- 2% [6% to 10%]	Added "In this unit"
When staff in this unit see someone with more authority doing something unsafe for patients, they speak up. (C5)		72%				New 2.0 item
When staff in this unit speak up, those with more authority are open to their patient safety concerns. (C6)		74%				New 2.0 item
In this unit, staff are afraid to ask questions when something does not seem right. (C7R)	Staff are afraid to ask questions when something does not seem right. (C6R)	73%	66%	7%	+/- 2% [5% to 9%]	Added "In this unit"
	Staff feel free to question the decisions or actions of those with more authority. (C4)		47%			Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	Scores a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Response to Error	Nonpunitive Response to Error	61%	43%	18%	+/- 7% [11% - 25%]	Minor wording change
In this unit, staff feel like their mistakes are held against them. (A6R)	Staff feel like their mistakes are held against them. (A8R)	57%	50%	7%	+/- 7% [0% to 14%]	Added "In this unit"
When an event is reported <u>in this unit</u> , it feels like the person is being written up, not the problem. (A7R)	When an event is reported, it feels like the person is being written up, not the problem. (A12R)	54%	45%	9%	+/- 6% [3% to 15%]	Added "In this unit"
When staff make errors, this unit focuses on learning rather than blaming individuals. (A10)		69%				New 2.0 item
In this unit, there is a lack of support for staff involved in patient safety errors. (A13R)		65%				New 2.0 item
· · · · · · · · · · · · · · · · · · ·	Staff worry that mistakes they make are kept in their personnel file. (A16R)		34%			Dropped 1.0 item



HSOPS 2.0 Composite Measure and Item Text	HSOPS 1.0 Composite Measure	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
	and Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Handoffs and Information Exchange	Handoffs and Transitions	58%	40%	18%	+/- 5% [13% - 23%]	Major wording change
When transferring patients from one unit to another, <u>important information is</u> <u>often left out</u> . (F4R)	Things "fall between the cracks" when transferring patients from one unit to another. (F3R)	45%	34%	11%	+/- 11% [0% to 22%]	Major wording change
During shift changes, important patient care information is often left out. (F5R)	Important patient care information is often lost during shift changes. (F5R)	55%	45%	10%	+/- 8% [2% to 18%]	Major wording change
During shift changes, there is adequate time to exchange all key patient care information. (F6)		73%				New 2.0 item
	Problems often occur in the exchange of information across hospital units. (F7R)		37%			Dropped 1.0 item
	Shift changes are problematic for patients in this hospital. (F11R)		42%			Dropped 1.0 item



HSOPS 2.0 Item Text	HSOPS 1.0	2019 Pilot Hospital Average % Positive		Difference: HSOPS 2.0 –	FOR SIMULTANEOUS ADMINISTRATIONS ONLY: Range of Difference Scores	Type of
	Item Text	HSOPS 2.0	HSOPS 1.0	HSOPS 1.0	a Hospital Can Expect When Comparing HSOPS 2.0 and HSOPS 1.0	Change
Patient Safety Rating	Patient Safety Grade					Minor wording change
How would you rate your unit/work area on patient safety? (E1) (Poor, Fair, Good, Very Good, Excellent)*	Please give your work area/unit in this hospital an overall grade on patient safety. (E1) (Excellent, Very Good, Acceptable, Poor, Failing)	66%	77%	-11%	+/- 4% [-15% to -7%]	Major change in wording and response options
Number of Events Reported	Number of Events Reported					No wording change
In the past 12 months, how many patient safety events have you reported? (D3) ( <u>None</u> , 1 to 2, 3 to 5, 6 to 10, <u>11 or</u> more)	In the past 12 months, how many event reports have you filled out and submitted? (G1) (No event reports, 1 to 2, 3 to 5, 6 to 10, 11 to 20, 21 event reports or more)	45%	44%	1%	+/- 11% [-10% to 12%]	Minor change in wording and response options

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

\* The response options for the Patient Safety Rating (E1) on HSOPS 2.0 are presented in reverse order compared with HSOPS 1.0. In addition, the response options were changed.

