



# NURSING HOME SURVEY ON PATIENT SAFETY CULTURE: USER'S GUIDE





Surveys on Patient Safety Culture™

# AHRQ Nursing Home Survey on Patient Safety Culture: User's Guide

**Prepared for:**

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

**Contract No. HHSP233201500026I/HHSP23337004T**

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**AHRQ Publication No. 22-0029**  
**Replaces 18-0038-EF**  
**April 2022**



This project was funded under Contract Number HHSP233201500026I/HHSP23337004T from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. The authors are solely responsible for this document's contents, findings, and conclusions, which do not necessarily represent the views of AHRQ. Readers should not interpret any statement in this product as an official position of AHRQ or of the U.S. Department of Health and Human Services. None of the authors has any affiliation or financial involvement that conflicts with the material presented in this product.

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**Suggested Citation:**

Sorra J, Gray L, Famolaro T, et al. AHRQ Nursing Home Survey on Patient Safety Culture: User's Guide. (Prepared by Westat, under Contract No. HHS290201300003C). AHRQ Publication No. 22-0029 (replaces 18-0038-EF). Rockville, MD: Agency for Healthcare Research and Quality; April 2022. <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/nursing-home/index.html>.

# Contents of This User’s Guide

This AHRQ Nursing Home Survey on Patient Safety Culture User’s Guide and other toolkit materials are available on the AHRQ website ([www.ahrq.gov/sops/surveys/nursing-home](http://www.ahrq.gov/sops/surveys/nursing-home)). These materials are designed to provide nursing homes with basic knowledge about how to administer the SOPS Nursing Home Survey, analyze the data, and report results.

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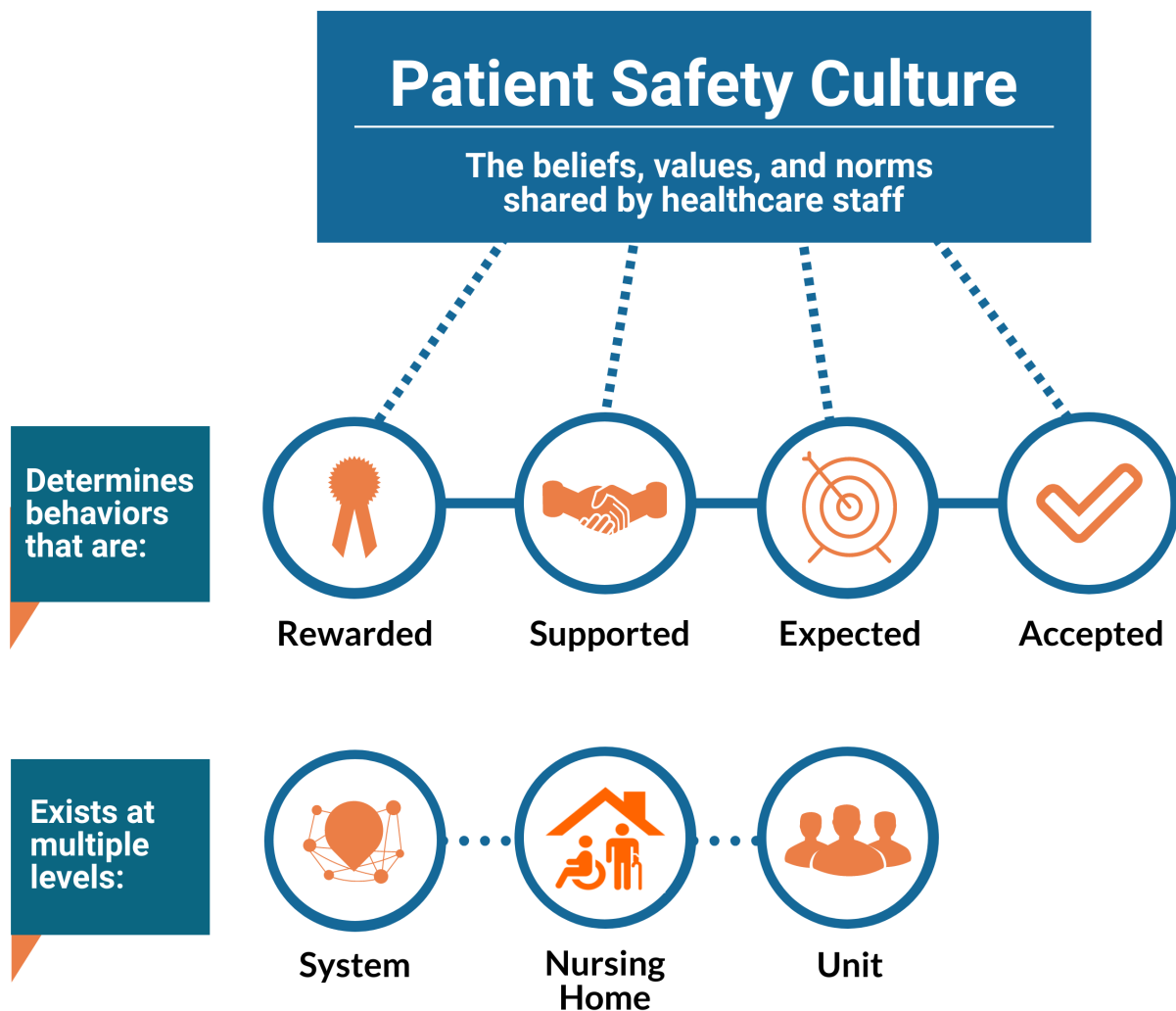
# 1. Introduction

As nursing homes continually strive to improve patient safety and quality, nursing home leadership increasingly recognizes the importance of establishing a culture of patient safety.

Patient safety culture refers to the beliefs, values, and norms shared by healthcare practitioners and staff throughout the organization that influence their actions and behaviors.

Patient safety culture can be measured by determining what is important and what attitudes and behaviors are rewarded, supported, expected, and accepted with regard to patient safety. It is important to broadly establish a culture of patient safety because it exists at multiple levels: within healthcare systems, nursing homes, and units (Figure 1).

**Figure 1. Definition of Patient Safety Culture**



# Development of the Nursing Home Survey on Patient Safety Culture

The Agency for Healthcare Research and Quality (AHRQ) sponsored the development of the Surveys on Patient Safety Culture™ (SOPS®) Nursing Home Survey. The survey is designed specifically for nursing home staff and asks for their opinions about the culture of patient safety at their nursing home. The survey can be used 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, and
- Conduct comparisons within and across organizations.

Under contract to AHRQ, a Westat survey design team conducted the following activities to identify key composite measures of nursing home safety culture, relevant background questions about staff and nursing home characteristics, and appropriate terms and words to use in the survey:

- Reviewed the literature, including existing surveys, pertaining to resident safety, nursing home medical errors and quality-related events, error reporting, safety climate and culture, and organizational climate and culture.
- Conducted background interviews with experts in the field of nursing home safety and administration, as well as nursing home managers and quality improvement directors.
- Developed draft survey items to measure the identified key composite measures.
- Conducted cognitive interviews with administration, providers, and staff throughout the nursing home.
- Obtained input on the draft survey from additional nursing home researchers and long-term care experts.
- Tested the draft survey in a pilot study with more than 5,000 staff working in 40 nursing homes across the United States.
- Examined the reliability and factor structure of the patient safety culture composite measures. Based on these analyses, the final items and composite measures in the *Nursing Home Survey on Patient Safety Culture* were determined to have sound psychometric properties (Sorra, et. al., 2008).



## Survey Items and Composite Measures

The SOPS Nursing Home Survey is intended to help nursing homes assess their patient safety culture and emphasizes resident safety issues. The survey has a total of 51 survey items:

- Forty-two survey items grouped into 12 composite measures that are groupings of two or more survey items that assess the same areas of resident safety culture (Table 1 describes the composite measures).

**Table 1. SOPS Nursing Home Survey Patient Safety Culture Composite Measures**

Patient safety culture composite measure	Definition: The extent to which...	Number of items
Communication Openness	Staff speak up about problems and their ideas and suggestions are valued.	3
Compliance With Procedures	Staff follow standard procedures to care for residents and do not use shortcuts to get their work done faster.	3
Feedback and Communication About Incidents	Staff discuss ways to keep residents safe, tell someone if they see something that might harm a resident, and talk about ways to keep incidents from happening again.	4
Handoffs	Staff are told what they need to know before taking care of a resident or when a resident's care plan changes and have all the information they need when residents are transferred from the hospital.	4
Management Support for Resident Safety	Nursing home management provides a work climate that promotes resident safety and shows that resident safety is a top priority.	3
Nonpunitive Response to Mistakes	Staff are not blamed when a resident is harmed, are treated fairly when they make mistakes, and feel safe reporting their mistakes.	4
Organizational Learning	There is a learning culture that facilitates making changes to improve resident safety and evaluates changes for effectiveness.	4
Overall Perceptions of Resident Safety	Residents are well cared for and safe.	3
Staffing	There are enough staff to handle the workload, meet residents' needs during shift changes, and keep residents safe, because there is not much staff turnover.	4
Supervisor Expectations and Actions Promoting Resident Safety	Supervisors listen to staff ideas and suggestions about resident safety, praise staff who follow the right procedures, and pay attention to safety problems.	3
Teamwork	Staff treat each other with respect, support one another, and feel like they are part of a team.	4
Training and Skills	Staff get the training they need, have enough training on how to handle difficult residents, and understand the training they get in the nursing home.	3

- Nine single-item measures:
  - One survey item asking respondents whether they would tell friends that this is a safe nursing home for their family (also called “willingness to recommend”)

- One survey item asking respondents to provide an overall rating on resident safety for their nursing home
- Seven survey items on respondent background characteristics (job title, tenure in nursing home, hours worked per week, shift, paid by staffing agency, direct interaction with residents, and nursing home unit)

Most of the survey items use 5-point agreement scales (“Strongly disagree” to “Strongly agree”) or frequency scales (“Never” to “Always”) and include a “Does not apply or Don’t know” response option. The survey has a section at the end for open-ended comments.

## Survey Modifications

We recommend administering the survey in its entirety without modifications or deletions. If any changes to the core survey are made (such as changing the wording of the items or response options, changing the order of the items or response options, deleting one or more items), the survey is no longer considered a trademarked SOPS survey. In addition, any changes to the core survey may affect the reliability and validity of the survey, and the survey results will not be comparable with results from other nursing homes.

The successful use of SOPS surveys depends on everyone administering the same items in the same order.

### Changing Background Items

The survey ends with background questions. Your nursing home can modify the responses to these questions. For example, your nursing home may want to modify the responses to the job titles or work areas so they better match the names or titles used within your nursing home.

For instance, in some nursing homes, residents may live in “neighborhood” clusters or communities staffed by a permanent team of clinical and nonclinical workers. To capture information about where a respondent works, the specific name of each neighborhood cluster can be added to the response options for the work area item in the background information section of the survey. This information will enable survey feedback results to be provided to each cluster or neighborhood.

Keep in mind that if your nursing home plans to submit to the SOPS Nursing Home Database, you must recode your modified staff positions, work areas, or other background question response options so they crosswalk back to the original survey’s response options for these questions.

### Adding Supplemental or Custom Items

If your nursing home wants to add items to the survey, add these just before the background items (after Section E and before Background questions). Supplemental items should **not** be added within the core SOPS survey (i.e., **do not** add questions within Sections A–E).

If you would like SOPS technical assistance staff to review your web or paper survey before you administer it to ensure that it is consistent with the trademarked SOPS surveys, email [SafetyCultureSurveys@westat.com](mailto:SafetyCultureSurveys@westat.com).

## 2. Getting Started

Before you begin, it is important to understand the tasks involved in collecting survey data and decide who will manage the project. This chapter is designed to guide you through the planning and decision-making stages of your project.

### Determine Available Resources and Project Scope

Two of the most important elements of an effective project are a clear budget to determine the scope of your data collection effort and a realistic schedule. Think about your available resources:

- What is your budget and what resources are available to conduct this project?
- Who within the nursing home or healthcare system is available to work on this project?
- When do you need to have the survey results completed and available?
- Do you have the technical capabilities to conduct this project in the nursing home, or do you need to consider using an outside company or vendor for some or all of the tasks?

### Decide on Your Data Collection Method

When deciding to use a web or paper survey, or a combination of the two methods, consider:

1. **Your Nursing Home's Experience With Web Surveys.** If you have had previous success surveying nursing home staff using web surveys and achieved high response rates, you may prefer to administer a web survey. If you usually administer paper surveys, it might be better to continue with that data collection method. Alternatively, you may do a combination of the two methods, administering a web survey to staff with an email address and providing a paper survey for staff who do not have an email address.
2. **Logistics.** In small nursing homes, the logistics of administering paper surveys may be manageable. However, web surveys offer several advantages:
  - There are no surveys or cover letters to print, survey packets to assemble, postage or mailing envelopes to arrange, or completed paper surveys to manage.
  - The responses are automatically entered into a dataset, so separate data entry is not needed.
  - The task of data cleaning is reduced because of programmed validation checks built into the web survey.

### Decide Whether Your Survey Will Be Confidential or Anonymous

You need to decide whether your survey will be confidential or anonymous. A **confidential** survey is one where the survey administrators can link survey responses to individuals, but assurances and processes are in place to ensure that identifiable data will not be released in any results. An **anonymous** survey is one where no identifiers are used to link survey responses to individuals. Table 2 shows key differences between confidential and anonymous surveys.

**Table 2. Confidential Versus Anonymous Surveys**

Confidential survey	Anonymous survey
<ul style="list-style-type: none"><li>• Able to track individual respondents – can send followup reminders or second surveys to nonrespondents</li></ul>	<ul style="list-style-type: none"><li>• Unable to track respondents – will need to send thank you/followup reminders or second surveys to everyone</li></ul>
<ul style="list-style-type: none"><li>• Staff may not feel as comfortable completing the survey if they think their responses can be linked back to them</li></ul>	<ul style="list-style-type: none"><li>• Staff may feel more comfortable completing the survey because they have assurance that responses cannot be linked back to them</li></ul>

## Decide Whether To Use an Outside Vendor

You may want to use an outside company or vendor to conduct some or all of your survey data collection, analysis, and report preparation. Hiring a vendor may be a good idea for several reasons:

- Working with an outside vendor may help ensure neutrality and the credibility of your results.
- Staff may feel their responses will be more confidential when they are returned to an outside vendor.
- Vendors typically also have experienced staff to perform all the needed activities and tasks. A professional and experienced vendor may be able to provide your nursing home with better quality results faster than if you were to complete the tasks yourself.

If you plan to hire a vendor, the following guidelines may help you select the right one:

- Look for a vendor with expertise in survey administration, analysis, and reporting.
- Determine whether the vendor can handle all the project components. Some vendors will be able to handle your data analysis and feedback report needs; others will not.
- Provide potential vendors with a written, clear outline of work requirements. Make tasks, expectations, deadlines, and deliverables clear and specific. Then, ask each vendor to submit a short proposal describing the work they plan to complete, qualifications of their company and staff, and details regarding methods and costs.
- Ensure the vendor is using the official AHRQ trademarked version of the SOPS survey, without any changes.

## Plan Your Project Schedule

The sample timeline in Figure 2 can be used as a guideline for administering a web or paper survey. Plan for **at least** 10 weeks from the beginning of the project to the end.

**Figure 2. Task Timeline for Project Planning for a Single Nursing Home**

Task timeline for project planning	Planning	Sample selection and preparation			Data collection				Analysis and reports		
		1	2	3	4	5	6	7	8	9	10
<b>Getting Started – Ch. 2</b>											
Determine Available Resources and Project Scope	✓										
Decide on Your Data Collection Method	✓										
Decide Whether the Survey Will Be Confidential or Anonymous	✓										
Decide Whether To Use an Outside Vendor	✓										
Plan Your Project Schedule	✓										
Form a Project Team	✓										
Establish Points of Contact	✓										
<b>Selecting Your Survey Population – Ch. 3</b>											
Decide Who Should Complete the Survey	✓										
Compile Your Provider and Staff List		↔									
<b>Mode of Survey Administration</b>											
<b>Administering a Web Survey – Ch. 4</b>											
Design and Test SOPS Web Survey		↔									
Publicize and Promote the Survey			↔								
Send a Prenotification Email				✓							
Send a Survey Invitation Email					✓						
Send Weekly Reminder Emails						✓	✓	✓			
Disseminate Weekly Response Rates						↔					
Close Out Data Collection									✓		
<b>Administering Paper Surveys – Ch. 5</b>											
Determine How To Distribute and Return Completed Surveys	✓										
Develop and Assemble Survey Materials		↔									
Publicize and Promote the Survey			↔								
Send a Prenotification Letter (Optional)				✓							
Distribute First Paper Survey Packet					✓						
Distribute Second Paper Survey Packet							✓				
Disseminate Weekly Response Rates						↔					
Close Out Data Collection									✓		
<b>Analyzing the Data– Ch. 6</b>											
Create and Clean Your Survey Data File										✓	
Calculate the Final Response Rate										✓	
Deidentify and Analyze Open-Ended Comments									↔		
Analyze the Data									↔		

## Form a Project Team

Whether you conduct the survey in-house or through an outside vendor, you will need to establish a project team responsible for planning and managing the project. Your team may consist of one or more individuals from your own nursing home staff, system headquarters staff, outsourced vendor staff, or a combination. Their responsibilities will include:

- **Planning and budgeting**—Determine the scope of the project given available resources, plan project tasks, and monitor the budget.
- **Establishing contact persons**—Assign a point of contact in the nursing home to support survey administration, maintain open communication throughout the project, and provide assistance.
- **Preparing publicity materials**—Create fliers, posters, and email and intranet messages to announce and promote the survey in the nursing home.
- **Preparing survey materials:**
  - **Preparing paper survey materials** (if conducting a paper survey)—Print surveys, prepare postage-paid (as needed) return envelopes and labels, and assemble these components for survey distribution.
  - **Programming the web survey instrument** (if conducting a web survey)—Design the instrument, program the survey, and pretest the instrument.
- **Administering the survey:**
  - **Distributing and receiving paper survey materials** (if conducting a paper survey)—Distribute surveys and reminder notices and handle receipt of completed surveys. If administering a confidential survey, identify nonrespondents who should receive followup surveys.
  - **Emailing staff the survey invitation and reminders (if conducting a web survey)**—Distribute email survey invitations and reminder emails over the data collection period. If administering a confidential survey, identify nonrespondents who should receive followup email reminders.
  - **Calculating preliminary response rates**—Monitor survey returns and calculate preliminary response rates.
- **Handling data entry, analysis, and report preparation**—Review survey data for respondent errors and data entry errors in electronic data files, conduct data analysis, and prepare a report of the results.
- **Distributing and discussing feedback results with staff**—Disseminate results broadly to increase their usefulness.
- **Coordinating with and monitoring an outside vendor (optional)**—Outline the requirements of the project to solicit bids from outside vendors, select a vendor, coordinate tasks to be completed in-house versus by the vendor, and monitor progress to ensure that the needed work is completed and deadlines are met.

## Establish a Point of Contact

You will need to establish someone in the nursing home to serve as point of contact (POC) for the survey (e.g., a director of nursing or other administrator). We recommend including contact information for the POC in all survey materials in case respondents have questions about the survey. The nursing home POC has several duties, including:

- Answering questions about survey items, instructions, or staff concerns;
- Helping coordinate survey mailing or web survey email invitation and reminders and receipt of completed surveys; and
- Communicating with outside vendors as needed.

## Perform Additional Tasks for Multiple Nursing Homes

If you plan to administer the survey in multiple nursing homes in your system, you will need to establish a main system-level POC to coordinate data collection in each nursing home participating in the survey. You will also need to consider whether to modify the timeline and use nursing home identifiers.

### Establish a Timeline

When administering the survey in multiple nursing homes, you may need to adjust the timeline to accomplish the tasks for a larger sample.

- Allow more time to assemble survey materials or develop a web survey (e.g., 4 weeks instead of 2 weeks for paper or 3 weeks for web).
- Add a week or more to the data collection and data analysis periods.

### Use Nursing Home Codes or Identifiers

When you administer the survey in multiple nursing homes, you should consider each nursing home as a separate site so that each site can receive its own results, in addition to overall results across sites. You will need to use nursing home-level codes or identifiers to track which surveys come from each nursing home and to produce feedback reports for each nursing home.

For **paper surveys**, you can vary the color of the paper to differentiate responses from Nursing Home A versus Nursing Home B. Or you can print a nursing home code or identifier on the survey by giving each nursing home a unique form number (e.g., Form 1, Form 2, Form 3) to identify different nursing homes. You can print the code or identifier on the survey (e.g., lower left corner of the back page).

For **web surveys**, you can include a nursing home identifier as part of the programming of the survey such that the link used to access the survey is unique to each nursing home or you can add a question asking respondents to select their nursing home from a list.



### 3. Selecting Your Survey Population

This chapter is designed to guide you through selecting your survey population, what type of facility to include and whom to survey.

The SOPS Nursing Home Survey is designed to measure the culture of patient safety at a single nursing home in a specific location or in a special contained area of a facility (e.g., a hospital) that includes only licensed nursing home beds. We therefore consider each unique facility to be a separate site for the purposes of survey administration and providing nursing home-specific feedback.

The survey is **not** designed to be used in:

- Assisted living facilities;
- Community care facilities; or
- Independent living facilities.

If a nursing home is located on a large campus or facility that has a mix of nursing home and other long-term care programs (such as independent living, assisted living, and rehabilitation services), survey **only** the facilities or areas with nursing home beds. Exclude staff who work only in areas with independent living, assisted living, or rehabilitation beds.

#### Decide Who Should Complete the Survey

The survey examines patient safety culture from the perspective of nursing home staff. Everyone asked to complete the survey should have enough knowledge about your nursing home and its operations to provide informed answers to the survey questions. Overall, when considering who should complete the survey, ask yourself:

- Does this person know about the *day-to-day activities* at this nursing home?
- Does this person interact regularly with staff working at this nursing home?

The survey can be completed by all types of nursing home staff—from nursing home administrators, physicians (M.D. or D.O.), physician assistants, and nursing staff to housekeeping, maintenance, and security staff. However, because you want to survey staff with the knowledge and ability to answer the survey questions, we recommend that you consider defining eligible staff members for the survey as follows:

- Staff members, including agency and contract staff, who routinely work in the nursing home.
- Staff members who can read and understand English or Spanish (the survey is available in both languages).
- Physicians and other providers, such as physician assistants and nurse practitioners, who may work as full-time employees in the nursing home or who may visit and provide healthcare to one or more residents. Because it is important to obtain the perceptions of



these caregivers, we recommend including physicians and providers who may spend only a few hours a week in the nursing home, particularly if they have done so regularly for several months or more.

**Physicians or staff working at more than one nursing home.** Some physicians or staff may work in more than one nursing home, so distribute the survey in the nursing home *where they spend most of their time* and instruct them to answer the survey questions about that nursing home only. If they work in multiple areas of a campus or facility that has a mix of nursing home and other long-term care programs, instruct them to think only about the nursing home facility or unit when answering the survey questions.

## Compile Your Provider and Staff List

All providers and staff in your nursing home represent your population. For most nursing homes, we recommend surveying all providers and staff. To do so, you will need to first compile a list that includes several items of information for each provider and staff member:

- First and last name
- Internal nursing home mailing address if paper surveys will be distributed
- Email address if conducting a web-based survey or using email to send prenotification letters, web survey hyperlinks, and reminders
- Staff position or job title
- Work area (if relevant)

Once you compile your list, review it to make sure the information is complete, up to date, and accurate. Make the following corrections:

- Exclude staff who no longer work at the nursing home; and
- Deduplicate names of staff who appear more than once on the list.

## 4. Administering a Web Survey

In this chapter, we describe best practices in web survey design and pretesting; survey administration steps for web surveys, including ways to publicize your survey; and materials that need to be developed. These activities may be conducted by your nursing home staff, outsourced vendor staff, or a combination.

### Design and Test the SOPS Web Survey

When programming your web survey, you need to consider a number of web survey design features. Whether you use commercial off-the-shelf software or have a vendor conduct a web survey, you should assess the various web survey options available to you. Table 3 presents a number of important features for designing a SOPS web survey.

**Table 3. SOPS Web Survey Design Features**

SOPS web survey design feature	Description
Do not force respondents to answer every survey item.	The paper version does not require an answer to every survey item and the web should not either. Further, respondents may have a good reason for not answering a particular item.
Design for mobile devices.	Always design your survey for mobile devices and test your web survey on different types of mobile devices (e.g., smart phones, tablets) to ensure that it is easily viewable and can be completed.
Avoid drop-down boxes.	Drop down boxes make it harder to choose the correct answer and may cause respondents to select the wrong answer, especially from long lists.
Display previous and next page buttons.	Previous and next buttons allow respondents to read through the entire survey and go back to review their answers and make changes if needed.
Limit vertical scrolling and ensure there is no horizontal scrolling.	Display fewer survey items per web page so that the items and response options are all visible without scrolling. If vertical scrolling is necessary for the background items (e.g., unit/work area), ensure that all response options are in a single column to avoid horizontal scrolling (left to right).
Provide a thank you page.	A thank you page indicates to respondents that their survey responses were received and acknowledges their effort in completing the survey.
(Confidential surveys only) Allow answers to be saved automatically on each page.	Automatic saving of answers on each page will prevent the loss of response due to a breakoff and allows respondents to return to complete the survey.

It is essential to thoroughly test the survey. When testing:

- Use the same type of computer that will be available to staff taking the survey at your nursing home. If you have more than one type of computer, be sure to test with a range of computer types. You should also test the web survey using mobile devices with small screens if you think some staff will complete the survey on a smart phone or tablet.
- Test the survey with various internet browsers (e.g., with different iterations of Microsoft Edge, Chrome, Safari, and Firefox), different display settings (screen resolutions set at 800 x 600 pixels versus 1200 x 800 pixels), and so forth.

- Submit test survey responses to ensure that the web survey data entered are captured accurately. Check the web survey data output against the survey data you entered.
- Check to make sure the responses you entered (e.g., *Strongly disagree* through *Strongly agree*) have the correct values (see Chapter 6 for how to code the survey responses). If the web responses are miscoded, there is no way to correct the dataset after the survey has been administered.

Testing will help to ensure that the survey appears and performs as it should despite the different settings and personal preferences that staff may use. For more information on web survey design principles and survey testing, refer to the SOPS webcast “Best Practices for Web-based SOPS Surveys” ([www.ahrq.gov/sops/events/webinars/bestpracticesweb.html](http://www.ahrq.gov/sops/events/webinars/bestpracticesweb.html)) or the following references: Couper (2008); Dillman, et al. (2009); and Tourangeau, et al. (2013).

## Publicize and Promote the Survey

As with paper surveys, we strongly recommend publicizing the survey before and during data collection. Be sure to advertise that nursing home leadership supports the survey. Publicity activities may include:

- Posting fliers or posters in the nursing home, sending staff emails, and posting information about the survey on the nursing home intranet.
- Promoting the survey during staff meetings.
- Having the nursing home senior executive or healthcare system senior executive send a supportive email thanking staff if they have completed the survey and encouraging others to do so.

Publicity materials can help legitimize the survey effort and increase your response rate by including some or all of the following types of information:

- Endorsements of the survey from your leadership;
- Clear statements about the purpose of the survey, which is to assess providers and staff attitudes and opinions about resident safety in your nursing home;
- Description of how the collected data will be used to identify ways to improve resident safety culture in your nursing home;
- Assurance that only summary (aggregated) data will be reported, thus keeping individual responses confidential;
- Assurance of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey);
- Information about the survey vendor, if you have chosen to use a vendor, so staff know that the vendor will be collecting data; and
- Contact information for the designated point of contact (POC) if staff have questions.

For each POC, describe the purpose of the survey and explain their role in the survey effort. Use official nursing home letterhead or an email from nursing home leadership to show support for the POC and the importance of this role. Also provide POCs with a data collection protocol that describes their tasks, along with a proposed timeline. (A sample web survey data collection protocol is available in Appendix A.)

## Administer the Survey

This section outlines the basic web survey data collection steps to achieve high response rates (Figure 3). Response rates are important because low rates may limit your ability to generalize results to your entire nursing home. With low response rates, you face the possibility that the large number of staff who did **not** respond to the survey would have answered very differently from those who did respond. The higher the response rate, the more confident you can be that you have an adequate representation of staff views.

**Figure 3. Web Survey Administration Steps**



### Send a Prenotification Email

Send a prenotification email from a person or email address that is easily recognizable to staff. The email should tell them about the upcoming survey and indicate that they will soon receive an invitation to complete the web survey. If you obtained a letter of support from your leadership, you can attach it to your email or use it as your prenotification email. We recommend that the email include:

- A statement that in a few days the person will receive an invitation from [XXX] to participate in a brief survey on resident safety in the nursing home;
- A statement about the purpose and intended use of the survey and the importance of responding;
- Assurance of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey); and
- Introduction to the survey vendor (if applicable).

### Send a Survey Invitation Email

Send the survey invitation email a few days after sending the prenotification email. The survey invitation message should include the following information:

- Why the nursing home is conducting the survey, how it will use the data, and why the staff member's response is important;
- How much time is needed to complete the survey;

#### What if staff don't have email addresses or computer access?

- Make a set of computers available during the data collection period and/or
- Make paper surveys available (you can later enter your completed paper survey responses into the web survey so all data reside together).

- Assurances that the survey is voluntary and can be completed during work time, to emphasize that nursing home leadership supports the data collection effort;
- Assurance of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey);
- A hyperlink to the survey (If conducting a confidential survey, you may include hyperlinks customized to each respondent but include instructions not to forward the link to others. If conducting an anonymous survey, it will be one general hyperlink for all respondents.);
- Incentives for survey participation (optional); and
- Contact information for the nursing home POC (and system-level POC, if applicable) for questions or help accessing the survey. If someone other than the POC will handle questions about possible technical problems with the survey, provide contact information for that person.

### **Sample Survey Invitation Email**

You are invited to participate in an important survey that is part of our nursing home's resident safety program. All providers and staff are being asked to complete this survey. Your participation is voluntary, but we encourage you to complete the survey to help us improve the way we do things at this nursing home.

The survey will take about 10 to 15 minutes to complete and you may take it during work time. Your individual responses will be kept anonymous [say confidential if you are using respondent identifiers]. Only group statistics, not individual responses, will be prepared and reported.

To complete the secure web survey, use the following link: <http://www...>

[Optional incentive text: In appreciation for your participation, staff will receive (describe incentive).]

Please contact [POC name and job position] if you have any questions about the survey [provide phone number and email address]. If you have a technical problem with the web survey, please respond to this email with a description of your problem or contact [Name, phone number, email].

Thank you in advance for participating in this important resident safety effort.

## Send Weekly Reminder Emails

Email weekly reminders beginning 1 week after the survey invitation email is sent and throughout the survey administration period to boost responses to the survey. For confidential surveys, you can send email reminders only to nonrespondents; otherwise, reminders must be sent to everyone.

The contents of the reminder notices should be similar to the first invitation email but should have a slightly different subject line and wording to capture recipients' attention. You might begin with: "About one week ago an invitation to participate in the Nursing Home Survey on Patient Safety was emailed to you and other staff at our nursing home. If you have already completed the survey, thank you very much and please disregard this reminder." Reminders should always include the instructions and hyperlink for accessing the survey.

Keep in mind that your goal is to achieve a high response rate. If your response rate is too low after emailing the second survey reminder, add another week or two to the survey administration period and continue sending weekly reminder emails.

## Disseminate Weekly Response Rates

Calculate a preliminary response rate at least once a week to track response progress. Divide the number of completed surveys (numerator) by the number of eligible providers and staff who received the survey (denominator).

$$\frac{\text{Number of surveys returned}}{\text{Number of eligible providers and staff who received a survey}}$$

If any staff members' employment ends during data collection, they are still considered eligible and should be included in the denominator even if they did not complete the survey. Chapter 6 discusses how to calculate the final official response rate for your nursing home.

### Consider Using Incentives To Maximize Response Rates

Offering incentives can be a good way to increase responses to a survey because respondents often ask, "What's in it for me?" You may want to offer individual incentives, such as a raffle for cash prizes or gift certificates, or you can offer group incentives, such as catered lunches for your nursing home or work areas with at least a 75 percent response rate. Be creative and think about what would motivate your providers and staff to complete the survey.

## 5. Administering Paper Surveys

In this chapter, we present information on steps for paper survey administration, including how to help you decide how your paper surveys will be distributed and returned, how to promote and publicize your survey, and how to develop and assemble the survey materials. These activities may be conducted by your nursing home staff, outsourced vendor staff, or a combination.

### Determine How To Distribute and Return Completed Surveys

Paper surveys can be distributed through your organization's internal mail delivery system or distributed to nursing home staff through designated points of contact (POCs). To promote participation, you can distribute the surveys at staff meetings and serve refreshments, following these guidelines for distributing surveys:

- Provide explicit instructions for completing and returning the survey.
- Inform staff that completing the survey is voluntary.
- Assure staff that their responses will be kept confidential. Emphasize that reports of findings will include only summary data and will not identify individuals.
- Advise them, if they are completing the survey during a meeting, not to discuss the survey with other staff while answering the survey.
- Allow staff to complete the survey **during work time** to emphasize that nursing home administration support the data collection effort.

Several options are available for respondents to return completed paper surveys:

- **Drop-boxes.** Staff can return surveys to locked drop-boxes placed throughout your nursing home.
- **Internal mail system.** Staff can return surveys through your internal mail system to a designated POC within your nursing home or to a corporate headquarters address.
- **Mail.** If you use a vendor or do not have an internal mail system, staff can mail their completed surveys to the outside vendor or designated POC. If surveys are returned through the mail, you will need to account for return postage in your budget.

Whatever process you choose, it should help reassure staff that their survey responses will remain confidential.

### Develop and Assemble Survey Materials

Estimate the number of surveys you need to print, using the following printing guidelines:

- If you conduct an anonymous survey and plan to send second surveys to everyone, print at least twice the number of surveys as providers and staff on your list. Include a few extra surveys in case some staff misplace theirs.



- If you track responses and will send second surveys only to nonrespondents, you may print fewer surveys overall. For example, if you administer the survey to 80 providers and staff and your nursing home typically gets a 40 percent response after the first survey packet, print 80 first surveys and 48 second surveys (80 staff x 60% nonrespondents = 48), for a total of 128 printed surveys. Add a few extra surveys in case some staff misplace theirs.

## Using Envelopes for Paper Survey Packets

Outer envelopes with staff names are a good idea, even if the survey itself is completed anonymously, to ensure that every staff member receives a survey. Use a slightly larger outer envelope to keep from bending or folding the survey. Include a return envelope in the survey packet, with a preprinted return address/location.

Use your estimate of the number of surveys to print to estimate the number of outer and return envelopes you will need. Returns can be directed to an internal organizational address to avoid postage costs or can be mailed.

If staff will return their surveys by mail, weigh the survey and the return envelope to ensure you have adequate postage on the return envelopes. You can use business reply envelopes so you only pay for the pieces returned. When calculating the total cost of postage, be sure to base the amount on your estimated number of any initial **and** followup surveys that will be returned by mail.

## Publicize and Promote the Survey

We strongly recommend publicizing the survey before and during data collection. Be sure to advertise that nursing home leadership supports the survey. Publicity activities may include:

- Posting fliers or posters at the nursing home, sending staff emails, and posting information about the survey on the nursing home intranet;
- Promoting the survey during staff meetings; and
- Having the nursing home senior executive or healthcare system senior executive send a supportive email or letter of support for the data collection effort.

Publicity materials can help legitimize the survey effort and increase your response rate by including some or all of the following types of information:

- Endorsements of the survey from your leadership;
- Clear statements about the purpose of the survey, which is to assess staff attitudes and opinions about the culture of resident safety in your nursing home;
- Description of how the collected data will be used to identify ways to improve resident safety culture in your nursing home;
- Assurances that only summary (aggregated) data will be reported, thus keeping individual responses confidential;
- Assurance of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey);



- Information about the survey vendor, if you have chosen to use a vendor, so staff know that the vendor will be collecting data; and
- Contact information for the designated POC if staff have questions.

For each POC, describe the purpose of the survey and explain their role in the survey effort. Use official nursing home letterhead or an email from nursing home leadership to show support for the POC and the importance of this role. Also provide POCs with a data collection protocol that describes their tasks, along with a proposed timeline. (A sample paper survey data collection protocol is available in Appendix B.)

## Administer the Survey

This section outlines the basic data collection steps to achieve high response rates. Response rates are important because low rates may limit your ability to generalize results to your entire nursing home. When response rates are low, there is a danger that the large number of staff who did **not** respond to the survey would have answered very differently from those who did respond. The higher the response rate, the more confident you can be that you have an adequate representation of staff views.

Figure 4 outlines the recommended paper survey administration steps.

**Figure 4. Paper Survey Administration Steps**



### Send a Prenotification Letter (Optional)

If you have publicized your survey well and your survey cover letter explains the purposes of the survey, distributing a prenotification letter is optional. If you obtained a letter of support from your leadership, it can serve as your prenotification letter or you can include it when you distribute your first survey packet. We recommend that the prenotification letter include:

- A statement that in a few days the person will receive a packet to participate in a brief survey on resident safety in the nursing home;
- A statement about the purpose and intended use of the survey and the importance of responding;
- Assurance of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey); and
- Introduction to the survey vendor (if applicable).

### Distribute First Paper Survey Packet

About 1 week after publicizing the survey or sending a prenotification letter, distribute a first survey packet to each staff member that includes a supporting cover letter, the survey, and a return envelope. If you want staff to return their surveys by mail, include a preaddressed postage-

paid envelope. The cover letter should be on official nursing home letterhead and signed by a senior executive leader.

The cover letter should address the following points:

- Why the nursing home is conducting the survey, how it will use the data, and why the staff member's response is important;
- How much time is needed to complete the survey;
- Assurances that the survey is voluntary and can be completed during work time, to emphasize that nursing home administration supports the data collection effort;
- Assurances of individual anonymity (if an anonymous survey) or confidentiality of response (if a confidential survey). If you conduct a confidential survey, use individual identifiers (e.g., R001, R002, with a crosswalk back to the individual respondent) on your surveys so that you can distribute second surveys only to nonrespondents;
- How to return completed surveys;
- Incentives for survey participation (optional); and
- Contact information for the nursing home POCs (and system-level POC, if applicable) for questions or help accessing the survey.

Sample cover letter text is shown below.

### **Sample Cover Letter Text for Paper Survey**

You are invited to participate in an important survey that is part of our nursing home's resident safety program. All providers and staff are being asked to complete this survey. Your participation is voluntary, but we encourage you to complete the survey to help us improve the way we do things at this nursing home.

The survey will take about 10 to 15 minutes to complete and you may take it during work time. Your individual responses will be kept anonymous [say confidential if you are using respondent identifiers]. Only group results, not individual responses, will be prepared.

Please complete your survey **WITHIN THE NEXT 7 DAYS**. When you have completed your survey, please [provide return instructions for paper surveys].  
[Optional incentive text: In appreciation for your participation, staff who complete and return their surveys will receive (describe incentive).]

Please contact [POC name and job position] if you have any questions [provide phone number and email address]. Thank you in advance for your participation in this important resident safety effort.

## Distribute Second Paper Survey Packet

To promote a higher response, 2 weeks after the first survey is distributed, distribute a second survey packet (for confidential surveys, you can send the second survey packet only to nonrespondents; otherwise, second surveys must be sent to everyone.). The contents of the second survey cover letter should be similar to the first cover letter but worded differently. You might begin with: “About *X* days ago, a copy of the Nursing Home Survey on Patient Safety was distributed to you and other staff at our nursing home. If you have already returned a completed survey, thank you very much and please disregard this second survey packet.”

Keep in mind that your goal is to achieve a high response rate. If your response rate is still too low after distributing the second survey, add another week or two to the data collection period or consider sending a followup reminder notice. The reminder notices, which can be on a half-page of cardstock, should ask staff to please complete and return their surveys and should include a thank you to those who have done so already.

## Disseminate Weekly Response Rates

Calculate a preliminary response rate at least once a week to track response progress. Divide the number of returned surveys (numerator) by the number of eligible providers and staff who received the survey (denominator).

$$\frac{\text{Number of surveys returned}}{\text{Number of eligible providers and staff who received a survey}}$$

If staff members’ employment ends during data collection, they are still considered eligible and should be included in the denominator even if they did not complete and return the survey. See Chapter 6 for a discussion of how to calculate the final official response rate for your nursing home.

### Consider Using Incentives To Maximize Response Rates

Offering incentives can be a good way to increase responses to a survey because respondents often ask, “What’s in it for me?” You may want to offer individual incentives, such as a raffle for cash prizes or gift certificates, or you can offer group incentives, such as catered lunches for nursing homes or work areas with at least a 75 percent response rate. Be creative and think about what would motivate your providers and staff to complete the survey.

## 6. Analyzing the Data

If you decide to do your own data entry, analysis, and report preparation, use this chapter to guide you through the various decisions and steps. If you decide to hire a vendor for any of these tasks, use this chapter as a guide to ensure that proper data preparation is conducted. If you administer the survey in more than one nursing home, you will need to report the results separately for each participating nursing home.

### SOPS Nursing Home Survey Data Entry and Analysis Tool

AHRQ has developed a SOPS Nursing Home Survey Data Entry and Analysis Tool that works with Microsoft Excel® and makes it easy to input your respondent-level data from the survey. The tool then automatically creates tables and graphs to display your survey results and shows your nursing home's results compared with the latest database results. The tool will also produce results broken out by work area, staff position, and interaction with residents. If your nursing home has administered the survey before, this tool also allows you to compare your results over time. To request the tool, email [DatabasesOnSafetyCulture@westat.com](mailto:DatabasesOnSafetyCulture@westat.com).

## Create and Clean Your Survey Data File

### Code Response Options

The formatted survey provides character or numeric values next to each response option for coding purposes. Table 4 provides the coding for most of the response options found in the survey. For the background characteristics (e.g., staff position, work area), the coding is found next to the check boxes.

**Table 4.** Sample Response Option Coding

Response options by scale	Numerical value
Strongly agree or Always	5
Agree or Most of the time	4
Neither agree nor disagree or Sometimes	3
Disagree or Rarely	2
Strongly disagree or Never	1
Does not apply/Don't know	9

## Identify Problematic or Ineligible Surveys

Examine the survey data for possible problems and remove those surveys or records from your final dataset. Examples of problematic surveys that would make them ineligible for inclusion in the final dataset include:

- **Blank surveys**—Surveys that are completely blank or contain responses only for the background survey items;
- **DNA/DK for all items**—Surveys where all survey items were answered as “*Does not apply/Don’t know*”; or
- **Straightlined responses**—Surveys where all survey items were answered with the same response (since a few survey items are negatively worded, the same exact response to all items indicates the respondent probably did not pay careful attention and the responses are probably not valid).

## Clean the Data

**Paper surveys.** If a respondent marks an answer between two response options (e.g., between Strongly Agree and Agree) or marks two answers for one item, the response must be cleaned to a valid or missing response. Develop and document editing rules that address these problems and apply them consistently. Examples of such rules are to use the highest or most positive response when two responses are provided (e.g., a response with both 2 and 3 would convert to a 3) or to mark all of these types of inappropriate responses as missing.

Once you determine how to handle multiple or unclear responses, you can enter the data directly into an electronic file by using statistical software such as SAS®, SPSS®, or Microsoft Excel®, or you can create a text file that can be easily imported into a data analysis software program. If you use the SOPS Nursing Home Survey Data Entry and Analysis Tool, you can enter paper survey responses directly into the tool. Each nursing home’s data should be entered into a separate Data Entry and Analysis Tool file to generate separate results for each nursing home.

When you enter the data into a software program, each row in your data file should represent one staff member’s responses and each column should represent a different survey item. If you conduct a confidential survey, you can enter the identification number from the survey in the electronic data file and then destroy any information linking the identifiers to individual names. You want to eliminate the possibility of linking responses on the electronic file to individuals.

If you conduct an anonymous survey, include some type of respondent identifier in the data file. Create an identification number for each completed paper survey and write it on the completed paper survey in addition to entering it into the electronic data file. This identifier can be as simple as numbering the returned surveys consecutively, beginning with the number 1. This number will enable you to check the electronic data file against a respondent’s original answers if any values look like they were entered incorrectly.

The next step is to check the data file for possible data entry errors by producing frequencies of responses for each item and looking for out-of-range values or values that are not valid responses.

Most items in the survey require a response between 1 and 5 with a 9 coded as *Does not apply/Don't know*.

Check through the data file to ensure that all responses are within the valid range (e.g., that a response of 7 has not been entered). If you find out-of-range values, return to the original completed paper survey and determine the response that should have been entered for that respondent. If you use the SOPS Nursing Home Survey Data Entry and Analysis Tool, you will not have out-of-range values because the tool will not allow invalid responses to be entered.

**Web surveys.** If you conduct a web survey, you can minimize data cleaning by programming the web survey to only allow valid responses. Your pretesting should ensure that responses are coded and captured correctly in the data file, so the file should not contain invalid values. But you should verify the data by again checking that all responses are within the valid range to ensure that the web survey does not contain any programming errors.

## Calculate the Final Response Rate

After you identify which returned surveys to include in the analysis data file, you can use the following formula to calculate the official response rate:

$$\frac{\text{Number of surveys returned} - \text{incompletes}}{\text{Number of eligible providers and staff who received a survey}}$$

## Deidentify and Analyze Open-Ended Comments

Respondents are given the opportunity to provide written comments at the end of the survey. Comments can be used to obtain direct quotes for feedback purposes, but they should be carefully reviewed and deidentified first to ensure that they do not contain any information that can be used to identify who wrote the comment or individuals referred to in the comments.

You can analyze the comments by reviewing them and identifying common themes (e.g., communication, staffing, teamwork). You can then assign codes to each theme and code each comment. Then you can tally the number of comments per code or theme to get a sense of which themes have the most comments.

## Analyze the Data

If you administer the survey at more than one nursing home, you can produce an overall feedback report that includes data from all your nursing homes, but you should also prepare a separate report for each nursing home.

Ideally, feedback should be provided broadly—to nursing home administrators and management, health system boards of directors, nursing home committees, and nursing home staff—either directly during meetings or through communication tools such as email, intranet sites, or newsletters. The more broadly the results are disseminated, the more useful the information is likely to become and the more likely respondents will feel that taking the survey was worthwhile.



You can customize feedback reports for each audience, from one- or two-page executive summaries to more complete reports that use statistics to draw conclusions or make comparisons. In the feedback reports, include the following types of information:

- How the survey was conducted (paper, web, survey administration period) and your response rate.
- Background characteristics of all respondents—their work area, staff position, , etc.—to help others understand who responded to the survey.
- Item results—do not report results for an item if the total number of respondents is fewer than three for that item.
- Composite measure results—do not report results for a composite measure if any item within that composite measure has fewer than three respondents.
- Breakouts of results by staff position, work area, or other background characteristics. Do not report results for any background characteristic category (e.g., nurses) that has fewer than five respondents in that category and fewer than three respondents to an item in that category.
  - You can still provide breakout results when you have fewer respondents by combining categories. For example, if only two respondents are Physicians and four are Other Providers you can combine these categories for analysis and reporting purposes.

### Minimum Number of Respondents for Feedback Reports

To protect the confidentiality of individual respondents, **do not provide any type of survey feedback report for a nursing home if fewer than 10 respondents complete the survey.** Also, if fewer than three respondents answer a particular survey item, do not report percentages for that item—simply indicate there were not enough data to report results for the item.

## Calculate Frequencies of Response

One of the simplest ways to present results is to calculate the frequency of response for each survey item. To make the results easier to view in the report, you can combine the two lowest response categories (e.g., *Strongly disagree/Disagree* and *Never/Rarely*) and the two highest response categories (e.g., *Strongly agree/Agree* and *Most of the time/Always*). The midpoints of the scales are reported as a separate category (*Neither Agree nor Disagree* or *Sometimes*).

Most of the survey’s items include a *Does not apply/Don’t know* response option. In addition, each survey item will probably have some missing data from respondents who simply did not answer the survey item. *Does not apply/Don’t know* and missing responses are excluded when displaying percentages of response to the survey items. When using a statistical software program, recode the “9” response (*Does not apply/Don’t know*) as a missing value so it is not included when displaying frequencies of response.

## Calculate Item Percent Positive Scores

The survey includes both positively worded items (e.g., “We have enough staff to handle the workload”) and negatively worded items (e.g., “Staff have to hurry because they have too much work to do”). Calculating the percent positive response on an item is different for positively and negatively worded items.

**For positively worded items**, percent positive scores are the combined percentage of respondents within a nursing home who answered “Strongly agree” or “Agree,” or “Always” or “Most of the time.” Table 5 shows an example of calculating an item percent positive score for a positively worded item.

**Table 5. How To Calculate an Item Percent Positive Score for a Positively Worded Item**

Item A3. We have enough staff to handle the workload. (Positively worded item)			
Response	Number of responses	Response percentage	Combined percentages
1 = Strongly disagree	10	10%	30% Negative
2 = Disagree	20	20%	
3 = Neither agree nor disagree	10	10%	10% Neutral
4 = Agree	40	40%	60% Positive
5 = Strongly agree	20	20%	
Total	100	100%	100%
9 = Does not apply/Don't know	10	–	–
Blank = Missing (did not answer)	10	–	–
Total Number of Responses	120	–	–

**For negatively worded items**, percent positive response is the combined percentage of respondents within a nursing home who answered “Strongly disagree” or “Disagree,” or “Never” or “Rarely,” because a negative answer on a negatively worded item indicates a positive response. Negatively worded items are identified in the document *SOPS Nursing Home Survey Items and Composite Measures*. Table 6 provides an example of how to recode negatively worded items to calculate an item percent positive score.

**Table 6. How To Calculate Item Percent Positive Scores for a Negatively Worded Item**

Item A8R. Staff have to hurry because they have too much work to do. (Negatively worded item)				
Original response	Recode	Number of responses	Response percentage	Combined percentages
1 = Strongly disagree	5	20	20%	60% Positive
2 = Disagree	4	40	40%	
3 = Neither agree nor disagree	3	10	10%	10% Neutral
4 = Agree	2	20	20%	30% Negative
5 = Strongly agree	1	10	10%	
Total		100	100%	100%
9 = Does not apply/Don't know	Missing	10	–	–
Blank = Missing (did not answer)	Missing	10	–	–
Total Number of Responses		120	–	–



## Calculate Composite Measure Percent Positive Scores

The 12 patient safety culture composites in the SOPS Nursing Home Survey are composed of three or four survey items. To calculate your nursing home’s score on a particular safety culture composite measure, average the percent positive scores for each item included in the composite measure. Table 7 shows an example of computing a percent positive composite measure score for the composite measure *Compliance With Procedures*.

**Table 7. Example of How To Calculate Item and Composite Measure Percent Positive Scores**

Three items measuring compliance with procedures	For positively worded items, # of “strongly agree” or “agree” responses	For negatively worded items, # of “strongly disagree” or “disagree” responses	Total # of responses to item (excluding missing and does not apply/don’t know responses)	Percent positive response to item
<b>Item A4-positively worded:</b>				
“Staff follow standard procedures to care for residents.”	182	NA	260	182/260 = 70%
<b>Item A6-negatively worded:</b>				
“Staff use shortcuts to get their work done faster.”	NA	160	250	160/250 = 64%
<b>Item A14-negatively worded:</b>				
“To make work easier, staff often ignore procedures.”	NA	190	250	190/250 = 76%
<b>Average percent positive response across the 3 items = 70%</b>				

NA = Not applicable.

- This composite measure has three items—one is positively worded (A4) and two are negatively worded (A6 and A14). Keep in mind that DISAGREEING with a negatively worded item indicates a POSITIVE response.
- In this example, averaging the item-level percent positive scores  $([70\% + 64\% + 76\%]/3 = 70\%)$  results in a composite measure score of 70 percent positive on *Compliance With Procedures*.

## Submit to the SOPS Database

AHRQ has also established the Nursing Home Survey on Patient Safety Culture Database, a central repository for survey data from nursing homes that have administered the survey. If you submit your data, you can compare your nursing home’s results with the overall database results.

### Submitting to the SOPS Database

If your nursing home is interested in submitting its data to the SOPS Nursing Home Database, email [DatabasesOnSafetyCulture@westat.com](mailto:DatabasesOnSafetyCulture@westat.com) or go to <https://www.ahrq.gov/sops/databases/nursing-home/databases/submission.html>.

For free technical assistance on the SOPS Nursing Home Survey, email [SafetyCultureSurveys@westat.com](mailto:SafetyCultureSurveys@westat.com).

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# Appendix A: Sample Data Collection Protocol for the Nursing Home Point of Contact: Web Survey

## Your Data Collection Tasks and Schedule for the Nursing Home Survey on Patient Safety Culture

Listed below are the schedule and tasks for administering a web survey. Fill in the dates for your survey. Post this protocol in your office to remind you of the schedule.

Target date	Activity
Three weeks before survey distribution Date: _____	<b>Print and post publicity materials.</b> Post survey fliers throughout the nursing home (e.g., on bulletin boards, in work areas) and include a post on your nursing home's intranet. Promote survey throughout the data collection period.
One week before starting data collection Date: _____	<b>Email the prenotification message about the survey.</b> Send the invitation to all providers and staff with email access in the nursing home. You can share the message with providers and staff without email access.
Beginning of Week 1 (Start of Survey Data Collection) Date: _____	<b>Email the survey invitation.</b> Include a hyperlink (URL) in the email invitation.
Beginning of Week 2 Date: _____	<b>Distribute 1st reminder.</b> Email your prepared reminder notices to all providers and staff. If you are using identifiers to track respondents (confidential survey), email/distribute reminders only to nonrespondents. It may be sufficient to remind providers and staff in person to complete the survey.
Beginning of Week 3 Date: _____	<b>Distribute 2nd reminder notice.</b> Email your 2nd reminder notice to all providers and staff (or only to nonrespondents if you are using identifiers).
Near End of Week 4 Closeout Date: _____	<b>Check your response rate.</b> If the rate is high enough, close out data collection at the end of Week 4. To increase your response rate, extend data collection by a week or longer. If your response rate is lower than 50 percent, email or distribute 3rd reminders to all providers and staff (or only to nonrespondents if you are using identifiers).
New Closeout Date: _____	<b>Close out extended data collection.</b>

## Appendix B: Sample Data Collection Protocol for the Nursing Home Point of Contact: Paper Survey

### Your Data Collection Tasks and Schedule for the Nursing Home Survey on Patient Safety Culture

Listed below are the schedule and tasks for administering a paper survey. Fill in the dates for your survey. Post this protocol in your office to remind you of the schedule.

Target date	Activity
Three weeks before survey distribution Date: _____	<b>Print and post publicity materials.</b> Post survey fliers throughout the nursing home (e.g., on bulletin boards, in work areas) and include a post on your nursing home's intranet. Promote survey throughout the data collection period.
One week before starting survey data collection Date: _____	<b>Send prenotification letter about the survey.</b> Send the invitation to all providers and staff on your final staff list.
Beginning of Week 1 (Start of Survey Data Collection) Date: _____	<b>Distribute survey packets (cover letter, survey, return envelope) to all providers and staff on the list.</b> Consider distributing the packets at staff meetings and encourage survey participation. Advise providers and staff, however, not to discuss their answers if they complete their surveys during the meeting.
Beginning of Week 3 Date: _____	<b>Distribute a second survey packet.</b> If you are not using individual identifiers to track respondents (anonymous survey), distribute second survey packets to all staff, thanking those who already completed and returned their surveys. If you are using identifiers to track respondents (confidential survey), distribute second survey packets only to nonrespondents.
Near End of Week 4 Closeout Date: _____	<b>Check your response rate.</b> If the rate is high enough, close out data collection at the end of Week 4. To increase your response rate, extend data collection by a week or longer. If your response rate is lower than 50 percent, consider distributing reminders to all providers and staff (or only to nonrespondents if you are using identifiers).
New Closeout Date: _____	<b>Close out extended data collection.</b>

