

Preparing a Questionnaire Using the CAHPS® Health Plan Survey 5.0

Introduction.....	1
Incorporating Supplemental Questions	1
Core Items	1
Supplemental Items.....	1
Placement of Supplemental Items.....	2
Concerns About Questionnaire Length	2
Translating CAHPS Surveys Into Other Languages	3
Formatting CAHPS Surveys	3
Formatting Mail Questionnaires	3
Formatting the Scripts for Telephone Surveys	6
Formatting Web-Based Surveys	6

Documents Available for the CAHPS Health Plan Survey 5.0

This document is part of a comprehensive set of instructional materials that address implementing the Health Plan Survey, analyzing the data, and reporting the results. All documents are available on the [Agency for Healthcare Research and Quality's Web site](#). For assistance in accessing these documents, please contact the CAHPS Help Line at 800-492-9261 or cahps1@westat.com.

Questionnaires

- *CAHPS Health Plan Survey: Overview of the Questionnaires*
- *Health Plan Survey 5.0* (Adult and Child, English and Spanish)
 - *Medicaid Survey 5.0*
 - *Commercial Survey 5.0*

Supplemental Items

- [Supplemental Items for the Health Plan Survey 5.0](#)

Some supplemental items for this survey are intended to be administered together. Learn more about these item sets:

- [People with Mobility Impairments](#)
- [Children with Chronic Conditions](#)

Survey Administration Guidelines

- *Preparing a Questionnaire Using the CAHPS Health Plan Survey*
- *Fielding the CAHPS Health Plan Survey*
- *Sample Notification Letters and Emails for the CAHPS Health Plan Survey*
- *Sample Telephone Script for the CAHPS Health Plan Survey*

Reporting Measures and Guidelines

- *Patient Experience Measures from the CAHPS Health Plan Survey*

Available for all CAHPS surveys

- [Analyzing CAHPS Survey Data](#): Free programs for analyzing the data, guidance on preparing survey results for analysis, and instructions for using the CAHPS Analysis Program.
- [Translating Surveys and Other Materials](#): Guidelines for translating surveys and selecting translators and translation reviewers.

Introduction

This document explains how to use the core and supplemental items from the CAHPS Health Plan Survey to construct a questionnaire that meets your needs. It focuses on steps you can take when preparing a questionnaire to ensure that it is consistent with your project's objectives and will generate useful information. These steps include—

- Incorporating supplemental questions
- Translating the questionnaire
- Formatting the questionnaire

Incorporating Supplemental Questions

Like most CAHPS surveys, the Health Plan Survey includes core items and supplemental items.

Core Items

Core items are questions that are **included in every questionnaire** to ensure standardization and comparability. They are applicable across populations, payers, and delivery systems. For more information on the topics covered by these items, refer to *CAHPS Health Plan Survey: Overview of the Questionnaires*

Supplemental Items

Supplemental items are questions that may be added to the core items to customize the questionnaire to meet users' specific needs. Users of the CAHPS Health Plan Survey are free to incorporate supplemental items in order to meet the unique needs of their organizations, local markets, and/or audiences.

If you are interested in adding topics to your Health Plan Survey, you can browse and select items from a catalog of [supplemental items developed by the CAHPS team](#). These items address issues of interest to certain audiences, payers, or delivery systems, such as questions about coordination of care or interpreter services.

Some of them were developed together to focus on a specific topic. To learn about these item sets and associated measures, refer to—

- [People with Mobility Impairments](#)
- [Children with Chronic Conditions](#)

Some supplemental items cover events that occur with low frequency in the general population or services that are less likely to be covered by all plans. **You should include them only if your sample design is likely to yield a sufficient number of responses to those questions for statistical analysis and reporting.** To learn more about the minimum number of responses needed and the implications for sample size, refer to *Fielding the CAHPS Health Plan Survey*.

You also have the option of adding your own items to the core questionnaire. Please follow the instructions provided in the next section for placement of these items in your survey.

Placement of Supplemental Items

The lists of supplemental items available for this survey include detailed instructions for placing items in the Health Plan Survey. These instructions were designed to ensure consistency across surveys in the location and order of items and to support survey users in creating questionnaires that flow in a fashion that is consistent with how respondents think about the topics.

Whenever you add items, be sure to:

- **Renumber** the supplemental item and **ALL** subsequent items so that they are consecutive. Each questionnaire should start with question #1 and continue sequentially. Do not start renumbering within sections or any other place in the survey. Use integers only and not letters (e.g., 5a, 5b, AH1, AH2).
- **Revise ALL skip instructions** in the questionnaire to make sure they point respondents to the correct item number. Make sure you have already renumbered the survey items consecutively, then update the skip instructions to match the new survey item numbering.
 - Skip instructions may change from what is indicated in the item based on other supplemental items that are used.
 - Skip instructions should be formatted consistently.
 - Skip instructions in the formatted items often refer to “[core question] #x” where x represents an item number from the core survey. Be sure to delete “core question” and make sure the item number in the skip instructions is correct after renumbering.
- **Format the items** as needed to fit into the two-column format (if you are preparing the survey to be mailed).

If you are placing your own items into the questionnaire, append them in a new section **before** the “About You” section. Adding new items prior to core items is strongly discouraged as it creates a different context around the core items and may influence responses to the core items.

Concerns About Questionnaire Length

If you choose to add either CAHPS supplemental items or your own items, pay attention to the length of the questionnaire. The longer the questionnaire, the greater

the burden on the respondent. That said, research by the CAHPS grantees indicates that, up to a point, survey length has little impact on response rates.¹

Translating CAHPS Surveys Into Other Languages

To help identify and reduce ethnic and racial disparities in health care, survey users may want to field translations of the survey that assess the experiences of individuals who are not fluent in English. Spanish translations of the surveys are available from AHRQ; translations in other languages would have to be developed by survey users and/or their vendors.

The AHRQ Web site offers guidance on [translating surveys and other materials](#) into a language other than English or Spanish. To translate CAHPS surveys into another language, the recommended approach is for two translators to each produce a forward translation. Another bilingual reviewer then reviews the two forward translations against each other and compares them to the original English survey to develop the final Spanish survey.

Formatting CAHPS Surveys

To ensure consistency across surveys, please observe the following guidelines when formatting your survey to be administered by mail, telephone, or the Web. Survey users should carefully consider which mode would be the most desirable and appropriate for their enrollee population. For guidance on survey modes, please refer to *Fielding the CAHPS Health Plan Survey*.

Formatting Mail Questionnaires

The CAHPS Team strongly recommends taking steps to maximize the visual appeal and readability of mail questionnaires. A well-formatted questionnaire contributes to response rates, completion rates, and the accuracy of responses.

The surveys available from the AHRQ Web site are formatted to be self-administered mail questionnaires that are explicitly designed to be easy to read. Important elements include the two-column format, the use of white space, and the font size and type (12-point Times New Roman). Please retain these elements if you add supplemental items to your questionnaire. The table below provides detailed recommendations for formatting the survey.

To minimize the number of pages required to print the questionnaire, survey users are often tempted to orient response options horizontally instead of vertically, especially for the 0-10 ratings items. However, research has shown that respondents are often confused by the horizontal orientation, which can lead to invalid responses.

¹ To learn more, see: Gallagher PM, Fowler FJ. Notes from the Field: Experiments in Influencing Response Rates from Medicaid Enrollees. 2000 Proceedings, Data Quality Section. American Statistical Association; Alexandria, VA; 971-976.

Therefore, the CAHPS Team strongly recommends maintaining the vertical orientation that is shown in the formatted questionnaires.

Guidelines for Questionnaire Formatting

Element	General recommendation	Rationale
General		
Layout	2 columns with line separating columns	Makes survey navigation easier for respondents
Margins	Top & Bottom = 1 inch; Left & Right = 0.75 inch; Header = 0.5 inch; Footer = 0.4 inch	Makes navigation easier for respondents
Orientation	Vertical	Avoids the confusion caused by the horizontal orientation of response options
Section Headings		
Font size	Should appear slightly larger than item text. Use 13 pt. as a guide (although font sizes can vary in actual size).	Minimum size necessary to ensure readability
Font style	Any sans serif font (e.g., Arial), title case, bold, with line above and line below to separate heading from item text	Provides contrast to serif font and style used for text
Spacing	Double space before box and single space after box	Provides white space around heading
Item Text		
Font size	Minimum 12 pt.	Minimum size necessary to ensure readability
Font style	Any serif font (e.g., Times New Roman)	Improves readability
Visual emphasis	Item number bold, item text not bold; bold to emphasize individual words (instead of underlining)	Improves readability, facilitates identification of key words in item
Spacing	Single space (plus 6 pts. at end of item)	Improves readability
Hanging indent and tab after item number	0.4 inch	Improves readability

Element	General recommendation	Rationale
Response Options		
Font size	Minimum 12 pt. (Can use 12 pt. as a rough guide since size varies with style)	Minimum size required for readability
Font style	Any serif font (same as item font)	Improves readability
Spacing	Half line between item text and responses	Improves readability
Skip instructions	Bold	Emphasizes instruction to go to an item that is not sequential
Spacing between response and new item	Single plus additional 6 points	Improves readability
Indentation	Use vertical alignment of response options	Creates white space and improves readability
Precodes		
Use of precodes	Optional	Facilitates data entry
Location and style	Left of check box as superscript	De-emphasizes code for respondent
0-10 responses	Do not use precodes on 0-10 responses	Redundant with response options
Responses that are numbers	Do not use precodes on responses that are numbers	Minimizes possibility that respondents confuse precodes with response options

Formatting the Front Cover

The front cover of the formatted questionnaires is designed to identify the questionnaire for survey users and vendors; it is not intended for distribution to health plan enrollees. The CAHPS Team recommends developing a customized cover that explains the purpose of the survey and identifies its sponsor. Be sure to include:

- The name of the survey sponsor
- The sponsor's logo, if appropriate
- A statement about the voluntary nature of the survey and the confidentiality of all responses. Please use or adapt the statement provided with the questionnaires.

Respondents may not recognize the names of some survey sponsors, such as state or regional organizations. In those cases, consider including the name of an entity that is

more familiar to respondents, such as the health plan. This tactic increases the likelihood that the respondent will complete the survey.

Because appearances are important, use color and graphics to make the front cover of the questionnaire booklet attractive. One potentially low-cost option is photographs, many of which are in the public domain. Be sure to consider the message communicated by any graphics or photos you choose; for example, are the people in the photo representative of your survey population?

That said, while it can be useful for a questionnaire to be attractive and appealing to respondents, the design should not overshadow the questions and instructions in the survey. It is important to strike a balance between appearance and utility.

Formatting the Scripts for Telephone Surveys

If you are planning to implement telephone surveys, refer to the instructions and model in *Sample Telephone Script for the CAHPS Health Plan Survey*. Make sure to keep the following guidelines in mind:

- If you add questions to the survey, adapt them to the format used in the script.
- If you include CAHPS supplemental items in your survey, follow the placement instructions provided with the items.
- Include a “DON’T KNOW” (DK) and “REFUSED” (REF) response option, either in a Computer Assisted Telephone Interview (CATI) program or on the interviewer’s manual notation sheet. “DON’T KNOW” and “REFUSED” responses would typically not be read aloud on the telephone. Unless otherwise noted, “DON’T KNOW” and “REFUSED” responses should follow the same skip pattern as the “NO” response option.
- Omit the last two questions of the core questionnaires that ask about receiving assistance in completing the questionnaire. These are not included in telephone scripts because interviews should not be conducted with proxy respondents.

Formatting Web-Based Surveys

As access to the Internet continues to rise, Web-based surveys are becoming more prevalent. Web-based surveys can offer convenience to respondents and cost-effectiveness to survey users. However, it is important to keep in mind that not all patients with email addresses have sufficient knowledge or literacy to navigate a Web-based survey. Survey users need to carefully consider whether or not this is an appropriate mode for their patient population. Web surveys may be more appropriate for populations that use a patient portal, routinely communicate with their health care provider via email, or are known to use the Internet.

If you determine that Web-based surveys are appropriate for you, please consider the following guidelines:

- Keep screen design simple so that the survey experience is similar across a range of Internet browsers, e.g., Chrome, Firefox, Safari, and platforms, including personal computers, Macs, tablets, and smart phones.
- Work with your vendor or in-house survey team to test the survey on multiple browsers and platforms. When testing the survey in different browsers and platforms, check for consistency in:
 - The presentation of images, colors, and fonts.
 - Functionality (i.e., all features operate as intended).
 - Usability, particularly on mobile devices.
- Avoid designs that require the user to scroll to see all of the content. Avoid large logos or design elements at the top of the page as this increases the need for scrolling.
- Use a font type that promotes readability on a web page, such as Verdana or Arial.
- Provide a welcome screen that emphasizes the ease of response, is motivational, and instructs the user on how to proceed to the survey.²
- Use a single column and display one or two questions per screen to make it easier for respondents to follow skip patterns and to complete the survey on mobile devices.
- Follow the general formatting guidelines provided for the print version (with respect to spacing, vertical response options, etc.). If using both mail and Web versions of the survey, keep the survey formats as consistent as possible to reduce the potential for differences between modes due to formatting.²

² Dillman DA. Mail and Internet surveys—The tailored design method. New York: John Wiley & Sons, Inc.; 2000.