

# Preparing a Questionnaire Using the CAHPS® Health Plan Survey

|  |          |
|--|----------|
| <b>Introduction .....</b>  | <b>1</b> |
| <b>Incorporating Supplemental Questions .....</b>  | <b>1</b> |
| Placement of Supplemental Items .....  | 2        |
| Concerns About Questionnaire Length .....  | 2        |
| HEDIS® Items .....   | 3        |
| <b>Translating CAHPS Surveys Into Other Languages .....</b>  | <b>3</b> |
| <b>Formatting CAHPS Surveys .....</b>  | <b>3</b> |
| Formatting Mail Questionnaires .....   | 3        |
| Formatting the Scripts for Telephone Surveys .....   | 6        |
| Formatting Web-Based Surveys .....   | 7        |
| <b>Appendix A. Comparison of the 5.0 and 5.0H Versions of the CAHPS Health Plan Survey (For Adults).....</b> | <b>8</b> |

## Documents Available for the CAHPS Health Plan Surveys

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

For descriptions of these documents, refer to: *What's Available for the CAHPS Health Plan Surveys 5.0*.

### Questionnaires

- *CAHPS Health Plan Surveys: Overview of the Questionnaires*
- *Health Plan Survey 5.0* (Adult and Child, English and Spanish)
  - *Medicaid Survey 5.0*
  - *Commercial Survey 5.0*
- *Health Plan Survey 4.0* (Adult and Child, English and Spanish)
  - *Medicaid Survey 4.0*
  - *Commercial Survey 4.0*

### Supplemental Items

- *Supplemental Items for the Adult Surveys* (English and Spanish)
- *Supplemental Items for the Child Surveys* (English and Spanish)
- *About the Item Set for People with Mobility Impairments*
- *About the Item Set for Children with Chronic Conditions*

Note: The CAHPS team is currently reviewing all supplemental items for this survey. These items will be released for use with the Health Plan Survey 5.0 as they are finalized.

### 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*
- *Translating CAHPS Surveys*

### Data Analysis Program and Guidelines

- *CAHPS Analysis Program* (SAS)
- *Instructions for Analyzing Data from CAHPS Surveys*

### Reporting Measures and Guidelines

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

## 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** are questions that are **included in every questionnaire** to ensure standardization and comparability. They are applicable across populations, payers, and delivery systems.
- **Supplemental items** are questions that may be added to the core items to customize the questionnaire to meet users' specific needs.

For more information on the topics covered by these items, refer to *CAHPS Health Plan Survey: Overview of the Questionnaires*

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. To support that kind of customization, this survey includes two lists of optional supplemental items that may be added to the core items:

- *Supplemental Items for the Adult Survey*
- *Supplemental Items for the Child Survey*

These supplemental items address issues of interest to certain audiences, payers, or delivery systems, such as questions about care for chronic conditions or translation services. Some 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*.

Some of the supplemental items are combined into large item sets that focus on a specific topic. For descriptions of these item sets and associated measures, refer to—

- *About the Item Set for Children with Chronic Conditions*
- *About the Item Set for People with Mobility Impairments*

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 documents *Supplemental Items for the Adult Survey* and *Supplemental Items for the Child 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 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.<sup>1</sup>

### HEDIS® Items

Health plans seeking accreditation from the National Committee for Quality Assurance (NCQA) or providing Health Plan Employer Data and Information Set (HEDIS) measures for reporting purposes submit results of a modified version of the CAHPS Health Plan Survey known as CAHPS 5.0H. The items that have been added to that version of the survey are available in the supplemental set for those survey users who wish to add them to their own questionnaires. [Appendix A](#) provides a crosswalk of CAHPS 5.0H and the core CAHPS Health Plan Survey 5.0.

### Translating CAHPS Surveys Into Other Languages

To 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 core and supplemental items are available, as are associated materials such as sample telephone scripts and notification letters.

To translate the CAHPS surveys into Spanish, two translators each produced a forward translation. Another bilingual reviewer then reviewed the two forward translations against each other and compared to the original English survey to develop the final Spanish survey. For guidance on translating a survey into a language other than English or Spanish, please see [Translating CAHPS Surveys](#) or contact the CAHPS User Network at [cahps1@westat.com](mailto:cahps1@westat.com) or 1-800-492-9261.

### 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

---

<sup>1</sup> 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.

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. 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   |
|-------------------------|--|---|
| <b>General</b>          |  |   |
| <b>Layout</b>           | 2 columns with line separating columns   | Makes survey navigation easier for respondents                                |
| <b>Margins</b>          | Top & Bottom = 1 inch;<br>Left & Right = 0.75 inch;<br>Header = 0.5 inch;<br>Footer = 0.4 inch                         | Makes navigation easier for respondents                                       |
| <b>Orientation</b>      | Vertical   | Avoids the confusion caused by the horizontal orientation of response options |
| <b>Section Headings</b> |  |   |
| <b>Font size</b>        | 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                                  |
| <b>Font style</b>       | 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                       |
| <b>Spacing</b>          | Double space before box and single space after box   | Provides white space around heading   |
| <b>Item Text</b>        |  |   |
| <b>Font size</b>        | Minimum 12 pt.   | Minimum size necessary to ensure readability                                  |
| <b>Font style</b>       | Any serif font (e.g., Times New Roman)   | Improves readability  |

| Element   | General recommendation  | Rationale   |
|---|---|---|
| <b>Visual emphasis</b>                          | Item number bold, item text not bold; bold to emphasize individual words (instead of underlining) | Improves readability, facilitates identification of key words in item         |
| <b>Spacing</b>                                  | Single space (plus 6 pts. at end of item)   | Improves readability  |
| <b>Hanging indent and tab after item number</b> | 0.4 inch  | Improves readability  |
| <b>Response Options</b>                         |   |   |
| <b>Font size</b>                                | Minimum 12 pt. (Can use 12 pt. as a rough guide since size varies with style)                     | Minimum size required for readability   |
| <b>Font style</b>                               | Any serif font (same as item font)  | Improves readability  |
| <b>Spacing</b>                                  | Half line between item text and responses   | Improves readability  |
| <b>Skip instructions</b>                        | Bold  | Emphasizes instruction to go to an item that is not sequential                |
| <b>Spacing between response and new item</b>    | Single plus additional 6 points   | Improves readability  |
| <b>Indentation</b>                              | Use vertical alignment of response options  | Creates white space and improves readability                                  |
| <b>Precodes</b>                                 |   |   |
| <b>Use of precodes</b>                          | Optional  | Facilitates data entry  |
| <b>Location and style</b>                       | Left of check box as superscript  | De-emphasizes code for respondent   |
| <b>0-10 responses</b>                           | Do not use precodes on 0-10 responses   | Redundant with response options   |
| <b>Responses that are numbers</b>               | 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, it can be helpful to 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 in *Supplemental Items for the Adult Survey* and *Supplemental Items for the Child Survey*.
- 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 browsers, computers, and devices.
- Use a font type that promotes readability on a web page, such as Verdana or Arial.
- Work with your vendor or in-house survey team to test the survey using personal computers, Macs, and tablets.
- Provide a welcome screen that emphasizes the ease of response, is motivational, and instructs the user on how to proceed to the survey.<sup>2</sup>
- Display more than one question on the screen at a time, as it can be helpful for respondents to see questions in the context of related information.
- 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.<sup>2</sup>

---

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

## Appendix A. Comparison of the 5.0 and 5.0H Versions of the CAHPS Health Plan Survey (For Adults)

| Short Item Title  | Item Number in the CAHPS Health Plan Survey 5.0 | Item Number in the CAHPS Health Plan Survey 5.0H |
|---|---|--|
| Covered by xx health plan   | 1   | 1  |
| Fill in name of health plan   | 2   | 2  |
| Had an illness, injury, or condition that needed care right away                | 3   | 3  |
| Got care for illness/injury as soon as needed                                   | 4   | 4  |
| Made any appointments for check-up or routine care at doctor's office or clinic | 5   | 5  |
| Got non-urgent appointment as soon as needed                                    | 6   | 6  |
| Number of times visited doctor's office or clinic                               | 7   | 7  |
| Patient and provider talked about specific things to prevent illness            | H1  | 8  |
| Patient and provider talked about starting or stopping prescription medicine    | H2  | 9  |
| Patient and provider talked about reasons to take medicine                      | H3  | 10   |
| Patient and provider talked about reasons not to take medicine                  | H4  | 11   |
| When talking about medicine, provider asked patient for opinion                 | H5  | 12   |
| Rating of all health care   | 8   | 13   |
| Easy to get necessary care, tests, or treatment                                 | 9   | 14   |
| Have a personal doctor  | 10  | 15   |
| Number of times visited personal doctor for care                                | 11  | 16   |
| Doctor explained things in a way that was easy to understand                    | 12  | 17   |
| Doctor listened carefully to enrollee   | 13  | 18   |
| Doctor showed respect for what enrollee had to say                              | 14  | 19   |
| Doctor spent enough time with enrollee  | 15  | 20   |
| Got care from doctor/provider other than personal doctor                        | H6  | 21   |

| Short Item Title  | Item Number in the CAHPS Health Plan Survey 5.0 | Item Number in the CAHPS Health Plan Survey 5.0H |
|---|---|--|
| Doctor seemed informed and up-to-date about care received from other doctors/providers                  | H7  | 22   |
| Rating of personal doctor   | 16  | 23   |
| Made any appointments to see a specialist   | 17  | 24   |
| Got appointment with specialist as soon as needed   | 18  | 25   |
| Number of specialists seen  | 19  | 26   |
| Rating of specialist  | 20  | 27   |
| Got written or Web-based information on how health plan works   | H8  | 28   |
| How often info provided needed information on how health plan works                                     | H9  | 29   |
| Got information/help from health plan's customer service  | 21  | 30   |
| Customer service gave necessary information/help  | 22  | 31   |
| Customer service was courteous and respectful   | 23  | 32   |
| Health plan gave consumer forms to fill out   | 24  | 33   |
| Forms easy to fill out  | 25  | 34   |
| Rating of health plan   | 26  | 35   |
| Rating of overall health  | 27  | 36   |
| Rating of overall mental or emotional health  | 28  | 37   |
| Had a flu shot/spray since July 1, (year)   | H16   | 38   |
| Currently smoke every day, some days or not at all  | H17   | 39   |
| Number of visits consumer was advised to quit smoking   | H18   | 40   |
| Number of visits medication was recommended/discussed to help consumer quit smoking                     | H19   | 41   |
| Number of visits doctor or provider discussed methods and strategies for quitting smoking with consumer | H20   | 42   |
| Enrollee takes aspirin daily or every other day   | H21   | 43   |

| Short Item Title  | Item Number in the CAHPS Health Plan Survey 5.0 | Item Number in the CAHPS Health Plan Survey 5.0H |
|---|---|--|
| Enrollee has health problem or takes medication that makes aspirin unsafe | H22   | 44   |
| Provider has discussed risks/benefits of aspirin                          | H23   | 45   |
| Enrollee aware of having specific health condition(s)                     | H24   | 46   |
| Doctor diagnosed specific health condition(s)                             | H25   | 47   |
| Enrollee got health care 3 or more times for same condition or problem    | 29  | 48   |
| Condition lasted for at least 3 months                                    | 30  | 49   |
| Enrollee needs or takes prescription medicine                             | 31  | 50   |
| Medicine was for condition that lasted for at least 3 months              | 32  | 51   |
| Enrollee age  | 33  | 52   |
| Enrollee male or female   | 34  | 53   |
| Enrollee highest grade level completed                                    | 35  | 54   |
| Enrollee Hispanic or Latino   | 36  | 55   |
| Enrollee race   | 37  | 56   |
| Someone help enrollee complete survey                                     | 38  | 57   |
| How that person helped  | 39  | 58   |