

Steps for Calculating Individual Items and Composite Scores for the Home Health Care CAHPS Survey

I. Overview

CMS began publicly reporting Home Health Care CAHPS (HHCAHPS) Survey results on the Home Health Compare website in April 2012. HHCAHPS Survey results are reported on Medicare's Care Compare website at: <https://www.medicare.gov/care-compare/>. HHCAHPS Survey results are published quarterly and include each HHA's most recent four quarters of data. This document describes how the three individual items and two composite measures are being calculated:

Individual Items

- Talk About Home Safety (Question 2)
- Review Medicines (Question 3)
- Talk About Medicine Side Effects (Question 4)

Composite Measures

- Care of Patients (Questions 6, 7, 10, 11, and 13). On Medicare Care Compare, results for this composite are shown as "Patients who reported that their home health team gave care in a professional way."
- Communications Between Providers and Patients (Questions 5, 8, 9, 12, and 16). On Medicare Care Compare, results for this composite are shown as "Patients who reported that their home health team communicated well with them."

Composite measures are composed of four or more questions that ask about related topics or domains of care. The individual questions included in each HHCAHPS composite measure are shown in *Exhibit 1*.

This document provides instructions for calculating HHCAHPS Survey individual items and composite scores. Note that the HHCAHPS Coordination Team statistically adjusts the data for differences in HHCAHPS scores resulting from differences in patient mix. The instructions below are for calculating scores from one quarter of data. To calculate scores for a specific reporting period, the HHCAHPS Coordination Team determines the average score for each measure across all four quarters in the reporting period.

Exhibit 1. Home Health Care CAHPS Survey Composites

Care of Patients Composite ("Patients who reported that their home health team gave care in a professional way.")	Response Categories
Q6. In the last 2 months of care, how often did home health staff from this agency seem to be aware of all the care or treatment you were getting at home?	Never, Sometimes, Usually, Always
Q7. In the last 2 months of care, how often did home health staff from this agency treat you with care – for example, when moving you around or changing a bandage?	Never, Sometimes, Usually, Always
Q10. In the last 2 months of care, how often did home health staff from this agency treat you with courtesy and respect ?	Never, Sometimes, Usually, Always
Q11. In the last 2 months of care, how often did you feel that home health staff from the agency cared about you as a person ?	Never, Sometimes, Usually, Always

Care of Patients Composite (“Patients who reported that their home health team gave care in a professional way.”)	Response Categories
Q13. In the last 2 months of care, how often have the services you received from this agency helped you take care of your health?	Never, Sometimes, Usually, Always
Communications Between Providers and Patients Composite (“Patients who reported that their home health team communicated well with them.”)	Response Categories
Q5. In the last 2 months of care, how often did home health staff from this agency keep you informed about when they would arrive at your home?	Never, Sometimes, Usually, Always
Q8. In the last 2 months of care, how often did home health staff from this agency explain things in a way that was easy to understand?	Never, Sometimes, Usually, Always
Q9. In the last 2 months of care, how often did home health staff from this agency listen carefully to you?	Never, Sometimes, Usually, Always
Q12. In the last 2 months of care, did home health staff from this agency provide your family or friends with information or instructions about your care as much as you wanted?	Yes, No, I don’t know, I did not want or need this
Q16. When you contacted this agency’s office, did you get the help or advice you needed?	Yes, No

II. Calculating Individual Item Measures

The three HHCAHPS individual items are whether the agency staff talked about home safety with the patient (Question 2), whether agency staff reviewed medicines with the patient (Question 3), and whether agency staff talked about medicine side effects with the patient (Question 4).

A. Calculating the Talk About Home Safety Measure (Question 2)

In Question 2, respondents are asked “When you first started getting home health care from this agency, did someone from the agency talk about **ways to help make your home safer**?” For example, they may have suggested adding grab bars in the shower or removing tripping hazards.” Responses are “Yes,” “No,” “I don’t know,” or “I did not need help with home safety.”

The scoring for Question 2 will represent the proportion of respondents who answered “Yes”. The steps for calculating the Talk About Home Safety score are shown below.

Step 1 Identify the cases to be included in this calculation. Include only cases that pass the completeness criteria described in Section IX of the Protocols and Guidelines Manual.

Step 2 Calculate the proportion “P” of survey responses in the quarter with a response of “Yes.”

The proportion P is defined as follows: $P = X/Y$, where

- the numerator X is the number of respondents in the quarter who answered the question “Yes”, and
- the denominator Y is the total number of respondents in the quarter who answered Question 2.

Example

If 110 respondents answered Question 2 and 82 of the respondents answered the question with “Yes”,

then $X = 82$ and $Y = 110$. The ratio of $82 / 110 = 0.745$

To compute a score for the Talk About Home Safety measure based on survey data from four quarters, average the results obtained from each of the four separate quarters.

B. Calculating the Review Medicines Measure (Question 3)

In Question 3, respondents are asked “Has someone from the agency ever **reviewed the prescribed and over-the-counter medicines** you were taking? For example, they might have asked you to show them your medicines and talked with you about how and when to take each one.” Responses are “Yes,” “No,” “I don’t know,” or “I don’t take any medicines.”

The scoring for Question 3 will represent the proportion of respondents who answered “Yes”. The steps for calculating the Review Medicines score are shown below.

Step 1 Identify the cases to be included in this calculation. Include only cases that pass the completeness criteria described in Section IX of the Protocols and Guidelines Manual.

Step 2 Calculate the proportion “P” of survey responses in the quarter with a response of “Yes.”

The proportion P is defined as follows: $P = X/Y$, where

- the numerator X is the number of respondents in the quarter who answered the question “Yes”, and
- the denominator Y is the total number of respondents in the quarter who answered Question 3.

Example

If 110 respondents answered Question 3 and 82 of the respondents answered the question with “Yes”,

then $X = 82$ and $Y = 110$. The ratio of $82 / 110 = 0.745$

To compute a score for the Review Medicines measure based on survey data from four quarters, average the results obtained from each of the four separate quarters.

C. Calculating the Talk About Medicine Side Effects Measure (Question 4)

In Question 4, respondents are asked “In the last 2 months of care, did home health staff from this agency talk with you about any **side effects** of your medicines?” Responses are “Yes,” “No,” “I don’t know,” or “I don’t take any medicines.”

The scoring for Question 4 will represent the proportion of respondents who answered “Yes”. The steps for calculating the Talk About Medicine Side Effects score are shown below.

Step 1 Identify the cases to be included in this calculation. Include only cases that pass the completeness criteria described in Section IX of the Protocols and Guidelines Manual.

Step 2 Calculate the proportion “P” of survey responses in the quarter with a response of “Yes.”

The proportion P is defined as follows: $P = X/Y$, where

- the numerator X is the number of respondents in the quarter who answered the question “Yes”, and
- the denominator Y is the total number of respondents in the quarter who answered Question 4.

Example

If 110 respondents answered Question 4 and 82 of the respondents answered the question with “Yes”,

then $X = 82$ and $Y = 110$. The ratio of $82 / 110 = 0.745$

To compute a score for the Talk About Medicine Side Effects measure based on survey data from four quarters, average the results obtained from each of the four separate quarters.

III. Steps for Calculating Composite Measure Scores

A composite measure combines the results from multiple questions that ask about a common or related topic area or domain. The steps for computing a “score” for each of the two HHCAHPS composite measures are provided in this section.

A. Calculating the Score for the Care of Patients Composite

The score for this composite is produced by combining responses to the five questions below:

- Q6. In the last 2 months of care, how often did home health staff from this agency seem to be aware of all the care or treatment you were getting at home?
- Q7. In the last 2 months of care, how often did home health staff from this agency treat you with care – for example, when moving you around or changing a bandage?
- Q10. In the last 2 months of care, how often did home health staff from this agency treat you with courtesy and respect?

- Q11. In the last 2 months of care, how often did you feel that home health staff from the agency cared about you as a person?
- Q13. In the last 2 months of care, how often have the services you received from this agency helped you take care of your health?

Note that the response categories are “Never”, “Sometimes”, “Usually”, and “Always”.

The scoring on this composite will represent the proportion of respondents who responded “Always” to these questions. The steps for calculating an agency’s score for the Care of Patients Composite are presented below.

Step 1 Identify the cases to be included in this calculation. Include only cases that passed the completeness criteria described in Section IX of the Protocols and Guidelines Manual.

Step 2 For each of the five questions above, calculate the proportion ($P = X/Y$) of cases in the quarter as follows:

P1 = Proportion of respondents whose response to Question 6 is Always.

P2 = Proportion of respondents whose response to Question 7 is Always.

P3 = Proportion of respondents whose response to Question 10 is Always.

P4 = Proportion of respondents whose response to Question 11 is Always

P5 = Proportion of respondents whose response to Question 13 is Always

The proportions P1 through P5 are defined as follows: $P = X/Y$, where:

- The numerator X for each question in the composite is the number of respondents in the quarter who gave the most positive response to each (that is, responded “Always” to Questions 6, 7, 10, 11 and 13).
- The denominator Y for each question in the composite is the total number of respondents in the quarter who answered the question.

Step 3 Average the proportions calculated for the five questions to derive the score for the Care of Patients Composite.

Composite score for the Care of Patients Composite = $(P1 + P2 + P3 + P4 + P5) / 5$

The denominator in this equation should include only those questions in the composite that had at least one nonmissing response across the HHA’s respondents in the quarter. If a question was completely missing for all respondents in an HHA in the quarter, then this equation does not include that question. For example, if all of the respondents in the HHA did not answer the last question in the composite (Q13), then the numerator should be divided by 4 instead of 5.

Example

If 110 respondents answered Question 6, 105 answered Question 7, 100 answered Question 10, 100 answered Question 11, and 120 answered Question 13, then:

If 100 of the total of 110 responses to Question 6 are Always, then $P1 = 100 / 110 = 0.909$

If 90 of the total of 105 responses to Question 7 are Always, then $P2 = 90 / 105 = 0.857$

If 80 of the total of 100 responses to Question 10 are Always, then $P3 = 80 / 100 = 0.800$

If 80 of the total 100 responses to Question 11 are Always, then $P4 = 80 / 100 = 0.800$

If 110 of the total of 120 responses to Question 13 are Always, then $P5 = 110 / 120 = 0.917$

Then, $(P1 + P2 + P3 + P4 + P5) / 5 = (0.909 + 0.857 + 0.800 + 0.800 + 0.917) / 5 = 4.283 / 5 = 0.857$

To compute a score for this composite based on survey data from four quarters, average the results obtained from each of the four separate quarters.

B. Calculating the Score for the Communications Between Providers and Patients Composite

The score for this composite is produced by combining responses to the five questions below.

- Q5. In the last 2 months of care, how often did home health staff from this agency keep you informed about when they would arrive at your home?
- Q8. In the last 2 months of care, how often did home health staff from this agency explain things in a way that was easy to understand?
- Q9. In the last 2 months of care, how often did home health staff from this agency listen carefully to you?
- Q12. In the last 2 months of care, did home health staff from this agency provide your family or friends with information or instructions about your care as much as you wanted?
- Q16. When you contacted this agency's office, did you get the help or advice you needed?

Note that the response categories for Questions 5, 8, and 9 are "Never", "Sometimes", "Usually", and "Always". The response categories for Question 12 are "Yes", "No", "I don't know", and "I did not want or need this". The response categories for Question 16 are "Yes" and "No". The scoring on this composite will represent the proportion of respondents who answered "Always" or "Yes" to all of these questions.

The steps for calculating an agency's score for this composite are provided below.

Step 1 Identify the cases to be included in this calculation. Include only cases that passed the completeness criteria described in Section IX of the Protocols and Guidelines Manual.

Step 2 For each of the five questions above, calculate the proportion ($P = X/Y$) of cases in the quarter as follows:

$P1$ = Proportion of respondents whose response to Question 5 is "Always."

P2 = Proportion of respondents whose response to Question 8 is “Always.”

P3 = Proportion of respondents whose response to Question 9 is “Always.”

P4 = Proportion of respondents whose response to Question 12 is said “Yes.”

P5 = Proportion of respondents whose response to Question 16 is “Yes.”

The proportions for P1 through P5 are defined as follows: $P = X/Y$, where:

- The numerator X for each question in the composite is the number of respondents in the quarter who gave the most positive response to each question (that is, responded “Always” to Questions 5, 8 and 9 or “Yes” to Questions 12 and 16).
- The denominator Y for each question in the composite is the total number of respondents in the quarter who answered the question. Responses of “I don’t know” or “I did not want or need this” in Question 12 should not be included in the denominators of those respective proportions.

Step 3 Average the proportions calculated for the five questions to derive the score for this composite, as follows.

Communications between Providers and Patients Composite = $(P1 + P2 + P3 + P4 + P5) / 5$

The denominator in this equation should include only those questions in the composite that had at least one nonmissing response across the HHA’s respondents in the quarter. If a question was completely missing for all respondents in an HHA in the quarter, then this equation does not include that question. For example, if all of the respondents in the HHA did not answer the last question in the composite (Q16), then the numerator should be divided by 4 instead of 5.

Example

If 110 respondents answered Question 5, 105 answered Question 8, 100 answered Question 9, 120 answered Question 12, and 110 answered Question 16, then:

If 100 of the total of 110 responses to Question 5 are Always, then $P1 = 100 / 110 = 0.909$

If 90 of the total of 105 responses to Question 8 are Always, then $P2 = 90 / 105 = 0.857$

If 80 of the total of 100 responses to Question 9 are Always, then $P3 = 80 / 100 = 0.800$

If 110 of the total of 120 responses to Question 12 are Yes, then $P4 = 110 / 120 = 0.917$

If 90 of the total of 110 responses to Question 16 are Yes, then $P5 = 90 / 110 = 0.818$

Then, $(P1 + P2 + P3 + P4 + P5) / 5 = (0.909 + 0.857 + 0.800 + 0.917 + 0.818) / 5 = 4.301 / 5 = 0.860$

To compute a score for this composite based on four quarters of data, average the results obtained from each of the four separate quarters.