

Patient Experience Measures from the CAHPS® Nursing Home Family Member Survey

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Introduction

This document reviews the types of patient experience measures associated with the CAHPS surveys and lists the composite and rating measures for the CAHPS Nursing Home Family Member Survey.

Types of Measures

CAHPS surveys generate three types of measures for reporting purposes:

- **Rating measures** are based on items that uses a scale of 0 to 10 to measure respondents' assessment of their provider. This measure is sometimes referred to as the "global rating" or "overall rating."
- **Composite measures (also known as reporting composites)** combine results for closely related items that have been grouped together. Composite measures are strongly recommended for both public and private reporting because they allow for reports that are comprehensive, yet of reasonable length. Psychometric analyses also indicate that composite measures are reliable and valid measures of patients' experiences.^{1, 2, 3}

See **Appendix B** for a basic overview of how the survey items are combined to come up with composite measures; for details on how the CAHPS analysis program calculates composite measures, please see *Instructions for Using CAHPS Analysis Programs*.

- **Single-item measures** are individual survey questions that did not fit into composite measures. These measures are especially useful in reports for providers and other internal audiences that use the data to identify specific strengths and weaknesses.

Measures from the Family Member Survey

The Family Member Survey produces four composite measures and one rating measure:

- Nurses/Aides' Kindness/ Respect Towards Resident
- Meeting Basic Needs: Help with Eating, Drinking, and Toileting
- Nursing Home Provides Information/ Encourages Respondent Involvement
- Nursing Home Staffing, Care of Belongings, and Cleanliness
- Overall Rating of Care at Nursing Home

¹ McGee J, Kanouse DE, Sofaer S, Hargraves JL, Hoy E, Kleimann S. Making survey results easy to report to consumers: How reporting needs guided survey design in CAHPS®. *Med Care*. 1999 Mar;37(3 Suppl):MS32-40.

² Solomon LS, Hays RD, Zaslavsky AM, Ding L, Cleary PD. Psychometric properties of a group-level Consumer Assessment of Health Plans Study (CAHPS) instrument. *Med Care*. 2005 Jan;43(1):53-60.

³ Hays RD, Chong K, Brown J, Spritzer KL, Horne K. Patient reports and ratings of individual physicians: an evaluation of the DoctorGuide and Consumer Assessment of Health Plans Study provider-level surveys. *Am J Med Qual*. 2003 Sep-Oct;18(5):190-6.

Please note that the CAHPS Consortium has not developed and tested labels for these composite measures.

Appendix A lists the questions for each of the measures in the CAHPS Nursing Home Family Member Survey.

Guidance on Reporting Family Member Survey Measures

Users of the CAHPS Family Member Survey may report the results of the survey publicly to inform potential residents and their families and/or privately to inform nursing home providers and support their efforts to improve residents' experiences. While the basic content included in these reports may be the same, the specific content should differ because the purposes differ.

In reports intended for consumers, the goal is to provide information that people can use to assess and compare the performance of nursing homes and identify the ones that best meet their needs. Survey results are typically reported along with other measures of quality and safety. For that reason, the presentation of measures and scores must be concise and easily digestible. The use of composite measures rather than individual items is one way to avoid "information overload" among consumers. For guidance on reporting results of the Family Member Survey to consumers, refer to –

- **Guidelines for reporting CAHPS survey results:** <http://www.ahrq.gov/cahps/consumer-reporting/guidelines/index.html>
- **TalkingQuality:** <http://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/index.html>

A report intended for nursing home providers and managers and other internal audiences must also be clear and concise, but can and should contain more information in order to support use of the results to identify relative strengths and weaknesses. These reports need to provide trend data (when available) and different kinds of comparators, such as local or State averages and percentiles. They can also provide a greater level of detail, such as results at the item level and the full range of survey responses (i.e., the percent that gave each possible response). With this information, nursing homes are equipped to analyze their data and take steps towards improving their residents' experiences.

Appendix A: Measures for the CAHPS Nursing Home Family Member Survey

Organizations using the CAHPS Nursing Home Family Member Survey can report the following composite and rating measures to consumers, nursing homes, and other audiences.

Nurses/Aides' Kindness/ Respect Towards Resident		
Q12	Nurses/Aides treat resident with courtesy and respect	Response Options <ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Q13	Nurses/Aides treat resident with kindness	
Q14	Nurses/Aides really cared about resident	
Q24	Nurses/Aides appropriate with resident displaying behavioral problems	
Q15	Nurses/Aides rude to resident	Response Options <ul style="list-style-type: none"> • Yes • No

Meeting Basic Needs: Help with Eating, Drinking, and Toileting		
Q17	Wait too long for help with eating	Response Options <ul style="list-style-type: none"> • Yes • No
Q19	Wait too long for help with drinking	
Q21	Wait too long for help with toileting	

Nursing Home Provides Information/ Encourages Respondent Involvement		
Q26	Nurses/Aides give respondent timely information about resident	Response Options <ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Q27	Nurses/Aides' explanation to respondent easy to understand	
Q37	Respondent involved in decisions about care	
Q42	Respondent given information about payments/expenses	
Q28	Nurses/Aides discourage respondents' questions	Response Options <ul style="list-style-type: none"> • Yes • No
Q35	Respondent decided not to complain	

Nursing Home Staffing, Care of Belongings, and Cleanliness		
Q11	Able to find a nurse or aide when wanted	Response Options <ul style="list-style-type: none"> • Never • Sometimes • Usually • Always
Q40	Enough nurses/aides	
Q29	Resident's room looks/smells clean	
Q22	Resident looks/ smells clean	
Q30	Public areas look/smell clean	
Q31	Resident's personal medical belongings damaged or lost	Response Options <ul style="list-style-type: none"> • Never • Once • 2+ times
Q33	Resident's clothes damaged or lost	Response Options <ul style="list-style-type: none"> • Never • Once or twice • 3+ times

Rating of Care at Nursing Home		
Q38	Overall rating of care	Response Options <ul style="list-style-type: none"> • 0-10

Appendix B: How to Calculate Composite Scores for Reporting

All users of CAHPS surveys can apply the SAS®-based CAHPS Analysis Program (also referred to as the CAHPS macro) to calculate performance scores for individual items—including the rating measure—and composite measures. The analysis programs and instructions for using those programs are provided when you download a CAHPS survey.

The calculation of CAHPS survey composites uses a proportional scoring method, which basically generates a proportion for each response option.

There are three basic steps to this approach:

1. Calculate the proportion of patient responses in each response category for each item in a composite.
2. Combine these proportions for all items in a composite.
3. Adjust for the case-mix of the patients who evaluated each provider to allow comparison of scores across providers.

The details of the first two steps are spelled out below. The CAHPS Analysis Program handles these calculations as well as the case-mix adjustment.

This approach provides users with several options for reporting. Two recommended strategies are average scoring and “top box” scoring, which involves reporting only the score for the most positive categories (e.g., the proportion of patients reporting “always”).

Applying the Proportional Scoring Method to Nursing Home Survey Composites

Given a composite with five items, where each item has four response options, a provider’s score for that composite is the proportion of responses (excluding missing data) in each response category. The following steps show how those proportions are calculated:

Step 1 – Calculate the proportion of cases in each response category for the first question

P11 = Proportion of respondents who answered “never”

P12 = Proportion of respondents who answered “sometimes”

P13 = Proportion of respondents who answered “usually”

P14 = Proportion of respondents who answered “always”

Follow the same steps for the second question:

P21 = Proportion of respondents who answered “never”

P22 = Proportion of respondents who answered “sometimes”

P23 = Proportion of respondents who answered “usually”

P24 = Proportion of respondents who answered “always”

Repeat the same procedure for each of the questions in the composite.

Step 2 – Combine responses from the questions to form the composite

Calculate the average proportion responding to each category across the questions in the composite. For example:

PC1 = Composite proportion who said “never” = $(P11 + P21 + P31 + P41 + P51) / 5$

PC2 = Composite proportion who said “sometimes” = $(P12 + P22 + P32 + P42 + P52) / 5$

PC3 = Composite proportion who said “usually” = $(P13 + P23 + P33 + P43 + P53) / 5$

PC4 = Composite proportion who said “always” = $(P14 + P24 + P34 + P44 + P54) / 5$

To download the analysis programs and instructions for using them, go to **Get the Nursing Home Surveys and Instructions**: <http://www.ahrq.gov/cahps/surveys-guidance/nh/instructions/index.html>.