



THE CAHPS HEALTH PLAN DATABASE

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# CAHPS Health Plan Survey: Methodology

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## 1. OVERVIEW

The CAHPS Health Plan results presentation follows CAHPS consumer reporting methods and summarizes the survey results using 4 consumer reports of their experiences with care for the 5.0 adult and child surveys. It also summarizes results using 4 consumer ratings of their experiences with care for the 5.0 adult and child surveys. Both types of results are described in detail below.

## 2. CONSUMERS' REPORTS OF THEIR EXPERIENCES WITH CARE

CAHPS Health Plan Survey was designed to move beyond satisfaction scores (a function of expectations) to more accurate assessments based on “reports” of consumer experiences. Much investigation went into the design of questions that capture consumer experiences with high-quality care. Most of the CAHPS Health Plan Survey questions ask respondents to report on their experiences with different aspects of their care. These reporting questions are combined into groups that address the same aspect of care or service to arrive at a broader assessment.

The 5.0 version of the CAHPS Adult and Child Health Plan Surveys reporting questions fall into four major “composites” that summarize consumer experiences in the following areas:

Getting needed care.

Getting care quickly.

How well doctors communicate.

Health plan information & customer service.

The exact questions and responses for each composite item for 5.0 adult and child surveys are presented in tables 1 and 2.

**Table 1. 5.0 Adult Medicaid composite items**

	5.0 Adult Medicaid Composite Items	Response Grouping for Presentation
	<b>Getting Needed Care</b>	
<b>Q25</b>	In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed?	Never + Sometimes, Usually, Always
<b>Q14</b>	In the last 6 months, how often was it easy to get the care, tests, or treatment you needed?	Never + Sometimes, Usually, Always
	<b>Getting Care Quickly</b>	
<b>Q4</b>	In the last 6 months, when you needed care right away, how often did you get care as soon as you needed?	Never + Sometimes, Usually, Always
<b>Q6</b>	In the last 6 months, how often did you get an appointment for a check-up or routine care at a doctor's office or clinic as soon as you needed?	Never + Sometimes, Usually, Always
	<b>How Well Doctors Communicate</b>	

	5.0 Adult Medicaid Composite Items	Response Grouping for Presentation
<b>Q17</b>	In the last 6 months, how often did your personal doctor explain things in a way that was easy to understand?	Never + Sometimes, Usually, Always
<b>Q18</b>	In the last 6 months, how often did your personal doctor listen carefully to you?	Never + Sometimes, Usually, Always
<b>Q19</b>	In the last 6 months, how often did your personal doctor show respect for what you had to say?	Never + Sometimes, Usually, Always
<b>Q20</b>	In the last 6 months, how often did your personal doctor spend enough time with you?	Never + Sometimes, Usually, Always
	<b>Health Plan Information &amp; Customer Service</b>	
<b>Q31</b>	In the last 6 months, how often did your health plan's customer service give you the information or help you needed?	Never + Sometimes, Usually, Always
<b>Q32</b>	In the last 6 months, how often did your health plan's customer service staff treat you with courtesy and respect?	Never + Sometimes, Usually, Always

\* Note: Question numbers correspond to the CAHPS 5.0 Adult Medicaid mail survey

**Table 2. 5.0 Child Medicaid composite items**

	5.0 Child Medicaid Composite Items	Response Grouping for Presentation
	<b>Getting Needed Care</b>	
<b>Q46</b>	In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?	Never + Sometimes, Usually, Always
<b>Q15</b>	In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?	Never + Sometimes, Usually, Always
	<b>Getting Care Quickly</b>	
<b>Q4</b>	In the last 6 months, when you needed care right away, how often did you get care as soon as you needed?	Never + Sometimes, Usually, Always
<b>Q6</b>	In the last 6 months, when you made an appointment for a check-up or routine care for your child at a doctor's office or clinic, how often did you get an appointment as soon as your child needed?	Never + Sometimes, Usually, Always
	<b>How Well Doctors Communicate</b>	
<b>Q32</b>	In the last 6 months, how often did your child's personal doctor explain things about your child's health in a way that was easy to understand?	Never + Sometimes, Usually, Always
<b>Q33</b>	In the last 6 months, how often did your child's personal doctor listen carefully to you?	Never + Sometimes, Usually, Always
<b>Q34</b>	In the last 6 months, how often did your child's personal doctor show respect for what you had to say?	Never + Sometimes, Usually, Always
<b>Q36</b>	In the last 6 months, how often did your child's personal doctor explain things in a way that was easy for your child to understand?	Never + Sometimes, Usually, Always
<b>Q37</b>	In the last 6 months, how often did your child's personal doctor spend enough time with your child?	Never, Sometimes, Usually, Always
	<b>Health Plan Information &amp; Customer Service</b>	
<b>Q50</b>	In the last 6 months, how often did customer service at your child's health plan give you the information or help you needed?	Never + Sometimes, Usually, Always
<b>Q51</b>	In the last 6 months, how often did customer service staff at your child's health plan treat you with courtesy and respect?	Never + Sometimes, Usually, Always

\* Note: Question numbers correspond to the CAHPS 5.0 Child Medicaid mail survey

### Weighting Items Within a Consumer Report

Each item of a consumer report is given equal weight in calculating the composite results for CAHPS. Computationally, this implies calculating the mean of each item within the plan and then taking an unweighted distribution of the item means to obtain the composite mean. Equal weighting follows from the fact that there is no evidence to suggest that any item is more important than another. For example, the number of members who have a personal doctor is likely to be larger than the number of members who receive care from a specialist. Therefore, survey results will likely include more responses for a question related to a personal doctor than for one about a specialist. Despite this difference, the item about specialty care is included in the consumer report or composite with equal weighting because it is regarded as potentially important to every member. Another advantage of equal weighting is that the weights are consistent from year to year as well as across plans within the same year.

### 3. CONSUMERS' RATINGS OF THEIR EXPERIENCES WITH CARE

CAHPS collects four separate global ratings to distinguish between important aspects of care. The four questions ask plan enrollees to rate their experiences in the past 6 months with:

- Their personal doctor.
- The specialist they saw most often.
- Health care received from all doctors and other health providers.
- Their health plan.

Ratings are scored on a 0 to 10 scale, where 0 is the “worst possible” and 10 is the “best possible.” The ratings are analyzed and presented in the three-category display used in the CAHPS consumer reports: the percentage of consumers who gave a rating of either 0-6, 7-8, or 9-10. This three-part scale is used because testing by the CAHPS team determined that these cut-points improve the ability to discriminate among plans while simplifying the presentation of results.

The exact questions and responses for the 5.0 adult and child surveys are presented in tables 3 and 4.

**Table 3. 5.0 Adult Medicaid ratings**

	5.0 Adult Medicaid Ratings	Response Grouping for Presentation
	<b>Overall Rating of Personal Doctor</b>	
<b>Q23</b>	Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your personal doctor?	0-6, 7-8, 9-10
	<b>Overall Rating of Specialists</b>	
<b>Q27</b>	We want to know your rating of the specialist you saw most often in the last 6 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?	0-6, 7-8, 9-10

	5.0 Adult Medicaid Ratings	Response Grouping for Presentation
	<b>Overall Rating of Health Care</b>	
<b>Q13</b>	Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months?	0-6, 7-8, 9-10
	<b>Overall Rating of Health Plan</b>	
<b>Q35</b>	Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?	0-6, 7-8, 9-10

\* Note: Question numbers correspond to the CAHPS 5.0H Adult Medicaid mail survey

**Table 4. 5.0 Child Medicaid ratings**

	5.0 Child Medicaid Ratings	Response Grouping for Presentation
	<b>Overall Rating of Child's Personal Doctor</b>	
<b>Q41</b>	Using any number from 0 to 10, where 0 is the worst personal doctor possible and 10 is the best personal doctor possible, what number would you use to rate your child's personal doctor?	0-6, 7-8, 9-10
	<b>Overall Rating of Child's Specialists</b>	
<b>Q48</b>	We want to know your rating of the specialist your child saw most often in the last 6 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate that specialist?	0-6, 7-8, 9-10
	<b>Overall Rating of Child's Health Care</b>	
<b>Q14</b>	Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last 6 months?	0-6, 7-8, 9-10
	<b>Overall Rating of Child's Health Plan</b>	
<b>Q54</b>	Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your child's health plan?	0-6, 7-8, 9-10

\* Note: Question numbers correspond to the CAHPS 5.0H Child Medicaid mail survey

#### 4. CHRONIC CONDITIONS QUESTIONS FOR CHILD SURVEYS

The child survey users choose whether to include the chronic conditions screener items and questions for children with special health care needs. The screener items and questions consist of the following:

- A 5-item screener that uses current health consequences or service-use criteria to non-categorically identify children with special health needs. Children identified by the screener as having a special health care need form the denominator for the questions.
- The CAHPS Health Plan Survey Database does not report the chronic conditions questions at the composite level; instead, results are grouped by content area and reported at the item level. The content areas for the question items are as follows:

- The CAHPS Health Plan Survey Database does not report the chronic conditions questions at the composite level; instead, results are grouped by content area and reported at the item level. The content areas for the question items are as follows:
  - Parents’ experiences with prescription medicine.
  - Parents’ experiences getting specialized services for their children.
  - Family centered care:
    - Parents’ experiences with the child’s personal doctor or nurse
    - Parents’ experiences with shared decisionmaking
    - Parents’ experiences with getting needed information about their child’s care
  - Parents’ experiences with coordination of their child’s care.

The content areas and specific items for the chronic conditions questions in the 5.0 version of the child survey are presented in table 5.

**Table 5. CAHPS 5.0 chronic conditions questions by category**

	5.0 Chronic Conditions Questions by Category	Response Grouping for Presentation
	<b>Parents’ Experiences With Prescription Medicine</b>	
<b>Q56</b>	In the last 6 months, how often was it easy to get prescription medicines for your child through his or her health plan?	Never + Sometimes, Usually, Always
	<b>Parents’ Experiences Getting Specialized Services for Their Children</b>	
<b>Q20</b>	In the last 6 months, how often was it easy to get special medical equipment or devices for your child?	Never + Sometimes, Usually, Always
<b>Q23</b>	In the last 6 months, how often was it easy to get this therapy for your child?	Never + Sometimes, Usually, Always
<b>Q26</b>	In the last 6 months, how often was it easy to get this treatment or counseling for your child?	Never + Sometimes, Usually, Always
	<b>Family Centered Care: Parents’ experiences with the child’s personal doctor or nurse</b>	
<b>Q38</b>	In the last 6 months, did your child’s personal doctor talk with you about how your child is feeling, growing, or behaving?	Yes, No
<b>Q43</b>	Does your child’s personal doctor understand how these medical, behavioral, or other health conditions affect your child’s day-to-day life?	Yes, No
<b>Q44</b>	Does your child’s personal doctor understand how your child’s medical, behavioral, or other health conditions affect your family’s day-to-day life?	Yes, No
	<b>Family Centered Care: Parents’ experiences with getting needed information about their child’s care</b>	
<b>Q9</b>	In the last 6 months, how often did you have your questions answered by your child’s doctors or other health providers?	Never + Sometimes, Usually, Always

	5.0 Chronic Conditions Questions by Category	Response Grouping for Presentation
	<b>Parents' experiences with coordination of their child's care</b>	
<b>Q18</b>	In the last 6 months, did you get the help you needed from your child's doctors or other health providers in contacting your child's school or daycare?	Yes, No
<b>Q29</b>	In the last 6 months, did anyone from your child's health plan, doctor's office, or clinic help coordinate your child's care among these different providers or services?	Yes, No

\* Note: Question numbers correspond to the CAHPS 5.0 Child Medicaid mail survey

## 5. SAMPLING METHODOLOGY

The CAHPS sampling recommendation is to achieve a minimum of 300 completed responses per plan, with a 50-percent response rate. If there are multiple plans in a sponsor's portfolio, the recommendation is to draw equal sample sizes from each of the plans, regardless of the size of the plan membership, so as to achieve 300 completed responses. And the plan samples are not adjusted for unequal probabilities of selection. This logic stems from the principle that the precision of the estimates depends primarily on the size of the sample and not on the size of the population from which it is drawn. Therefore, the given sample size will give the same precision for means or rates regardless of the overall size of the population.

## 6. CASE MIX ADJUSTMENT

Several methodological problems complicate the measurement and reporting of health care data, particularly when reports draw comparisons among health plans, as is the case in this report. Among these challenges is the need to adjust appropriately for case-mix differences. Case mix refers to the proportion of enrollees with serious health conditions and other demographic characteristics that have been demonstrated to affect respondents' reports and ratings of the quality of care received. Case-mix takes into account enrollee characteristics that are not under the control of the plan but may affect measures of outcomes or processes, such as demographic and social characteristics or health status.

Many of the CAHPS questions ask about aspects of access or processes of care that should not vary by enrollee characteristics. Therefore, case-mix adjustment may be less important for CAHPS data than for outcomes of care, which are known to be influenced by enrollee characteristics in a way that is independent of plan performance. Nonetheless, there are at least two reasons why case-mix adjustment might still be necessary. First, there are certain processes that one would expect to vary according to the characteristics of enrollees. For example, one CAHPS question is "how often did your health plan's customer service give you the information or help you needed?" Although it is desirable to communicate clearly with all enrollees, it probably is harder to do so with enrollees who have less education than with other enrollees.

Second, enrollee characteristics might influence the response to questions, even if the process of care is the same for different enrollees. For example, individuals' expectations might strongly influence their response to questions asking for evaluations, such as "how often did you get an appointment for your health care at a doctor's office or clinic as soon as you thought you needed?" If an enrollee has very low expectations for the quality of care, he or she might be very



satisfied with poor quality. Also, certain types of enrollees may have a general tendency to give positive ratings or have biases that are not associated with the quality of care. For example, some groups of enrollees may generally have more trust and confidence in authority figures and institutions, even if there are no differences in their care.

In this report, consumer reports and ratings results were case-mix adjusted but item-level data and frequencies were not case-mix adjusted. Mean scores for composite and ratings measures were adjusted using a linear regression model. The case mix adjustment model included plans members' age, self-reported health status, and education. These variables were entered into the adjustment model as ordered categories. The resulting case-mix adjusted means were tested for significance as described in the next section.

## 7. TESTING FOR STATISTICAL DIFFERENCES

The Sponsor Reports test for statistically significant differences between mean consumer report scores and ratings of individual health plans and the mean of all plan means in the CAHPS Database using the t-test. A significance level of 0.05 or less is considered statistically significant. As described in the previous sections, the mean scores are adjusted for case-mix differences before the statistical tests are applied.

To compute the means, reports and rating responses are grouped into three categories and assigned a score of 1, 2, or 3. Then, significance tests for both the reports and ratings are conducted on the mean scores. Individual plan results that differ significantly from the overall mean are denoted by arrows, either pointing up (significantly higher than the overall mean) or down (significantly lower than the overall mean).

Readers should note that sample size affects significance testing in at least two important ways. First, due to the large sample sizes in the CAHPS Database, not all statistically significant differences may reflect meaningful differences in plan performance. For example, consider the following data:

Composite: Customer Service  
Plan A - 54.2%  
CAHPS Database - 56.4%

Because of the large sample size for the CAHPS Database, it is possible for Plan A to be statistically below the CAHPS Database distribution. However, purchasers and consumers may not consider a difference of 2.2 percentage points to be an important or meaningful difference in performance.

Second, differences in sample size among health plans may mean that two plans with an identical result, but different sample sizes, may produce different results on the statistical significance tests. This is because smaller sample sizes at the plan level yield less precise measures of performance and may be insufficient to achieve statistical significance. Therefore, readers should take sample size into account when interpreting the results of statistical tests. Please refer to the CAHPS Survey and Reporting Kit for more information on substantive or practical significance.

Finally, note that this method of determining statistical differences does not translate into plan-to-plan comparisons. For example, if one plan has an up arrow on a particular item and another plan has no arrow for that item, it does not necessarily mean that the first plan's result is significantly higher than the second because both results were compared to the overall mean.