October 31, 2007

Dear Colleague:

NCQA is pleased to provide you with the *HEDIS*®[1] *2008, Volume 3: Technical Update*. With this release, NCQA freezes the technical specifications for HEDIS 2008 Volume 3.

HEDIS 2007 included a new version of the Consumer Assessment of Healthcare Providers and Systems health plan survey, CAHPS®[2] Health Plan Survey 4.0H. Upon receipt of the CAHPS 4.0H data, NCQA performed a statistical analysis of results among commercial and Medicaid plans and compared them to the results from 2006 (CAHPS 3.0H).

Analysis of CAHPS 4.0H and 3.0H results informed the following changes to the HEDIS 2008 specifications.

- Two questions were removed from the Customer Service composite. Psychometric analyses indicated the questions were less correlated with the overall composite results.
- The Health Promotion and Education question (Q8), a first-year measure in 2007, was approved for public reporting in HEDIS 2008.
- The Coordination of Care question (Q20), a first-year measure in 2007, was approved for public reporting in HEDIS 2008.
- The Shared Decision Making composite was approved for public reporting in HEDIS 2008. The composite was slated to be a first-year measure in 2007 and 2008, as it was proposed to be calculated as a rolling average, but 2007 results indicated that most plans were able to achieve an adequate denominator with only one year of data collection. As a result, the measure *will not* be calculated using rolling average methodology.

  In addition, analysis of results for the sum of response choices "Definitely yes" plus "Somewhat yes" showed ceiling effects and limited ability to differentiate between plan performance; therefore, results for "Definitely yes + Somewhat yes" will not be calculated. Results for "Definitely yes" showed good range and ability to discriminate between plans, and will be used for public reporting.
- The Plan Information on Costs composite is proposed to be calculated as a rolling average and is considered a first-year measure again in 2008. First-year analysis will be performed on the rolling average results in summer 2008. First-year results will be communicated in HEDIS 2009.

Because the changes in this Technical Update result in a substantial number of edits to the *Calculation of HEDIS/CAHPS Survey Results* section, NCQA is releasing the update as an edited version of that section.

Edits are highlighted in green. Additions are underlined and deletions are in ~~strikeout~~ text.

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[1]HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).
[2]CAHPS® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

Please review these revisions and incorporate them into your implementation processes. NCQA, HEDIS Compliance Auditors and NCQA-Certified HEDIS Survey Vendors will consider these items to be part of the specifications.

If you have additional questions about information included in this Update or about other measure specifications, contact us through our Policy Clarification Support (PCS) System at www.ncqa.org/PCS or by phone (888-275-7585).

We wish everyone a successful HEDIS data collection season!

Sincerely,

Cindy Ottone, MHA
Director, Policy

Enclosure

Calculation of HEDIS/CAHPS Survey Results

Specific Guidelines for Calculation of HEDIS/CAHPS Survey Results

Calculation of results

NCQA centrally calculates all HEDIS/CAHPS survey results using data submitted by certified survey vendors. This approach is designed to ensure the comparability of results across health plans. To be used for HEDIS reporting and NCQA Accreditation, HEDIS/CAHPS survey results must be calculated by NCQA.

Question number references

Unless otherwise stated, the calculations in this section refer to question numbers in the 4.0H adult survey for the commercial product line. To calculate results for other versions of the survey, consult Tables S-13 and S-14 and substitute the corresponding questions appropriately.

Complete and valid surveys

A questionnaire must have the final disposition code of "Complete and Valid Survey" for inclusion in survey results calculations.

Appropriate responses

Each specific question must be appropriately answered for inclusion in HEDIS/CAHPS survey results calculations. An appropriately answered question is one that complies with survey and skip-pattern instructions. Conversely, inappropriately answered questions are excluded from results calculation. Examples of inappropriately answered questions include the following.

Inappropriate responses

- *Unanswered questions.* For example, the member skips a question that should have been answered.
- *Questions where the member selected more than one response choice* (except for questions that permit more than one response). For example, the member selects both "Yes" and "No" to Q3.
- *Questions the member should have skipped based on the response to a gate item.* A **gate item** is a question that instructs members to skip subsequent questions based on a particular response. For example, if a member answers "No" to Q3 and provides an answer to Q4, the response to Q4 is not included in HEDIS/CAHPS survey result calculations (members who respond "No" to Q3 are instructed to *skip* Q4).
- *Questions in a skip pattern when the member does not answer the gate item or provides an invalid answer to a gate item.* For example, if a member does not answer Q3 (leaves Q3 blank) and provides an answer to Q4, the response to Q4 is not included in HEDIS/CAHPS survey result calculations.

Small denominator threshold

The health plan must achieve a denominator of at least 100 responses to obtain a reportable result. If the denominator for a particular survey result calculation is less than 100, NCQA assigns a measure result of NA.

- The denominator for a rating question is equal to the total number of responses to that question.
- The denominator for a composite is the average number of responses across all questions used to calculate the composite results (Only questions that are included in the calculation of HEDIS survey results are used to calculate the denominator size).
- The denominators for question summary rates are identified in Table S-12.

Denominator exceptions

~~For CAHPS Health Plan Survey 4.0H, Adult Version, a modified 100 denominator rule is used in the following calculations (question numbers reference the adult survey for the commercial product line).~~

- ~~For the Customer Service composite for the commercial product line, Q37 and Q38 are paired for scoring. A respondent who answers "No" to Q37 is instructed to skip Q38; therefore, the denominator for Customer Service for the commercial product line is the sum of the number of responses to Q35, Q36 and the Q37/Q38 pair, divided by 3.~~

  ~~The formula is: [(Number responses to Q35) + (Number responses to Q36) + (Number "No" responses to Q37 + Number responses to Q38)] / 3.~~

For the CAHPS Health Plan Survey 3.0H, Child Version, a modified 100 denominator rule is used in the following calculations (question numbers reference the child survey (without CCC) for the commercial product line).

- For the Getting Needed Care composite, Q26 and Q27 are paired for scoring. A respondent who answers "No" to Q26 is instructed to skip Q27; therefore, the denominator for Getting Needed Care is the sum of the number of responses to questions 7, 10, 25 and the Q26/Q27 pair, divided by 4.

  The formula is: [(Number responses to Q7) + (Number responses to Q10) + (Number responses to Q25) + (Number "No" responses to Q26 + Number responses to Q27)] / 4.

- For the Customer Service composite for the commercial product line, Q50 and Q51 are paired for scoring. A respondent who answers "No" to Q50 is instructed to skip Q51; therefore, the denominator for Customer Service for the commercial product line is the sum of the number of responses to Q43, Q45 and the Q50/Q51 pair, divided by 3.

  The formula is: [(Number responses to Q43) + (Number responses to Q45) + (Number "No" responses to Q50 + Number responses to Q51)] / 3.

Rolling average (composites)

For the CAHPS Health Plan Survey 4.0H, Adult Version, results for one composite ~~two composites~~ are calculated using rolling average methodology.

~~1. Shared Decision Making~~

2. Plan Information on Costs

The rolling average for a composite result (e.g., composite mean, composite mean variance, composite global proportion, composite global proportion variance) is calculated using member-level responses from the measurement year (Year 2) and the year prior to the measurement year (Year 1). Results are calculated and assigned contingent on denominator size as follows:

- *A health plan with two consecutive years of reported data.* The denominator is the average number of responses across all questions used to calculate the composite results.
  - If the rolling average denominator is less than 100, NCQA assigns a measure result of NA
  - If the rolling average denominator is 100 or more, NCQA calculates a result

- *A health plan that did not report results in the prior year but reports results in the current year.* A result is calculated using data from the current year if the following criteria are met.
  - If the denominator is less than 100, NCQA assigns a measure result of NA
  - If the denominator is 100 or more, NCQA calculates a rate; therefore, health plans that did not report results the prior year can elect to oversample during the current year in order to obtain a reportable rate for a rolling average measure
- A health plan that does not report results for the current year. NCQA assigns a measure result of NR.

Rolling average (question summary rates)

The question summary rates for questions in the ~~Shared Decision Making and~~ Plan Information on Costs composite**s** are also calculated using rolling average methodology. A rolling average numerator is calculated by summing the year 1 and year 2 numerators; a rolling average denominator is calculated by summing the year 1 and year 2 denominators.

- If the denominator is less than 100, NCQA assigns a measure result of NA
- If the denominator is 100 or more, NCQA calculates a rate (provided the health plan has two consecutive years of reported data *or* reported data during the current year)
- If the health plan did not report results for the current year NCQA assigns a measure result of NR

Rating Results

Ratings use a 0–10 scale for assessing overall experience with four concepts.

1. Rating of All Health Care
2. Rating of Personal Doctor
3. Rating of Specialist Seen Most Often
4. Rating of Health Plan

Rating means and variances are calculated for these four rating questions. Several additional questions that may be used by health plans to satisfy Member Connections accreditation standards use the same calculations and are included in this section.

Table S-7 displays questions, response choices and corresponding values used to calculate rating means.

Table S-7: Rating Mean Score Values

Rating of All Health Care		Response Choices	Score Values
Q12	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 12 months?	0 Worst health care possible	1
		1	1
		2	1
		3	1
		4	1
		5	1
		6	1
		7	2
		8	2
		9	3
		10 Best health care possible	3
Rating of Personal Doctor		**Response Choices**	**Score Values**
Q21	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 Worst personal doctor possible	1
		1	1
		2	1
		3	1
		4	1
		5	1
		6	1
		7	2
		8	2
		9	3
		10 Best personal doctor possible	3
Rating of Specialist Seen Most Often		**Response Choices**	**Score Values**
Q25	We want to know your rating of the specialist you saw most often in the last 12 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 Worst specialist possible	1
		1	1
		2	1
		3	1
		4	1
		5	1
		6	1
		7	2
		8	2
		9	3
		10 Best specialist possible	3

Rating of Health Plan		Response Choices	Score Values
Q42	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 Worst health plan possible	1
		1	1
		2	1
		3	1
		4	1
		5	1
		6	1
		7	2
		8	2
		9	3
		10 Best health plan possible	3
Member Connections Questions		**Response Choices**	**Score Values**
Q29	In the last 12 months, how often did the written materials or the Internet provide the information you needed about how your health plan works?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q35	In the last 12 months, how often did your health plan's customer service give you the information or help you needed?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q40	In the last 12 months, how often did your health plan handle your claims quickly?	Never	1
		Sometimes	1
		Usually	2
		Always	3
		Don't Know	Exclude
Q41	In the last 12 months, how often did your health plan handle your claims correctly?	Never	1
		Sometimes	1
		Usually	2
		Always	3
		Don't Know	Exclude

Rating Mean and Variance

Rating means and variances are calculated for each rating question after recoding individual member responses to a score value of 1, 2 or 3. NCQA uses rating means to compare health plans to each other or to compare health plans to aggregate data (statewide or national mean scores). Rating means are also the basis for NCQA accreditation scoring.

NCQA calculates only means for the Member Connections questions (variances are not calculated). To calculate the rating means and variances perform the following for each rating question:

Step 1 Use Table S-7 to convert the member responses to the 1–3 score value.

Step 2 Calculate the mean of all responses. This is the Rating Mean.

Step 3 Calculate the unbiased variance. This is the Rating Mean Variance.

The formula is the standard unbiased variance formula, where *x* is the score value (1, 2 or 3) and *n* is the number of members who provided a valid response:

$$\sum_{i}^{n} \frac{(x_i - \bar{x})^2}{n-1}$$

Numeric Example: Rating Mean and Variance

Rating of All Health Care is calculated from responses to Q12 of the adult survey for the commercial product line. Suppose we have a health plan with 10 members and the following responses.

Member	Q12
1	8
2	8
3	7
4	10
5	9
6	3
7	7
8	8
9	—
10	10

Step 1 Convert the responses to score values.

Member	Q12	Score Value
1	8	2
2	8	2
3	7	2
4	10	3
5	9	3
6	3	1
7	7	2
8	8	2
9	—	—
10	10	3

Step 2 Calculate the mean of all member responses.

Rating Mean = (2 + 2 + 2 + 3 + 3 + 1 + 2 + 2 + 3) / 9 = **2.2222**

Note: *Member 9 did not answer the question. Missing responses are not included in the rating mean calculation.*

Step 3 Calculate the unbiased variance.

Rating Mean Variance = $[(2 - 2.22)^2 + (2 - 2.22)^2 + (2 - 2.22)^2 + (3 - 2.22)^2 + (3 - 2.22)^2 + (1 - 2.22)^2 + (2 - 2.22)^2 + (2 - 2.22)^2 + (3 - 2.22)^2] / (9 - 1)$ = **0.4444**

Rating Question Summary Rate and Rating Question Summary Rate Variance

Two question summary rates and question summary rate variances are calculated for each rating question.

1. Question Summary Rate (8+9+10) and Question Summary Rate Variance (8+9+10) are calculated using Score Values (8+9+10)
2. Question Summary Rate (9+10) and Question Summary Rate Variance (9+10) are calculated using Score Values (9+10)

Step 1 Use Table S-8 to convert the member responses from the 0–10 scale into the 0–1 score value.

Step 2 Calculate the mean of all responses. This is the Rating Question Summary Rate.

Step 3 Calculate the unbiased variance. This is the Rating Question Summary Rate Variance.

The formula is the standard unbiased variance formula, where *x* is the score value (0 or 1) and *n* is the number of responses:

$$\sum_{i}^{n} \frac{(x_i - \bar{x})^2}{n-1}$$

Table S-8: Rating Question Summary Rate Score Values

Response Choices	Score Values (8+9+10)	Score Values (9+10)
0	0	0
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	1	0
9	1	1
10	1	1

Numeric Example: *Rating Question Summary Rate (8+9+10) and Rating Question Summary Rate Variance (8+9+10)*

Rating of All Health Care is calculated from responses to Q12 of the adult survey for the commercial product line. Suppose we have a health plan with 10 members and the following responses:

Member	Q12
1	8
2	8
3	7
4	10
5	9
6	3
7	7
8	8
9	—
10	10

Step 1 Convert the responses to score values.

Member	Q12	Score Value
1	8	1
2	8	1
3	7	0
4	10	1
5	9	1
6	3	0
7	7	0
8	8	1
9	—	—
10	10	1

Step 2 Calculate the mean of all member responses.

Rating Question Summary Rate (8+9+10) = (1+1+0+1+1+0+0+1+1) / 9 = .6667 = **66.67%**

Note: *Member 9 did not answer the question. Missing responses are not included in the rating mean calculation.*

Step 3 Calculate the unbiased variance.

Rating Question Summary Rate Variance (8+9+10) = $(1 – 0.6667)^2$ + $(1 – 0.6667)^2$ + $(0 – 0.6667)^2$ + $(1 – 0.6667)^2$ + $(1 – 0.6667)^2$ + $(0 – 0.6667)^2$ + $(0 – 0.6667)^2$ + $(1 – 0.6667)^2$ + $(1 – 0.6667)^2$] / (9 – 1) = **0.25**

Composite Results

Composite scores are used both to facilitate aggregation of information from multiple specific questions and to enhance the communication of this important information to consumers. Question topics and response choices enable use of the information at the question-specific level and at the composite level. HEDIS/ CAHPS composite means and global proportions are used to compare health plans to each other or to compare health plans to aggregate data (statewide or national mean scores). Composite means are also the basis for NCQA accreditation scoring. Each composite contains questions with the same response choices. Tables S-9 and S-10 display the composite questions, response choices and the corresponding score values used to calculate results.

Table S-9: Composite Mean Score Values—CAHPS 4.0H Adult Survey

	Getting Needed Care	Response Choices	Score Values
Q23	In the last 12 months, how often was it easy to get appointments with specialists?	Never Sometimes Usually Always	1 1 2 3
Q27	In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?	Never Sometimes Usually Always	1 1 2 3
	Getting Care Quickly	**Response Choices**	**Score Values**
Q4	In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed?	Never Sometimes Usually Always	1 1 2 3
Q6	In the last 12 months, not counting the times you needed care right away, 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?	Never Sometimes Usually Always	1 1 2 3
	How Well Doctors Communicate	**Response Choices**	**Score Values**
Q15	In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?	Never Sometimes Usually Always	1 1 2 3
Q16	In the last 12 months, how often did your personal doctor listen carefully to you?	Never Sometimes Usually Always	1 1 2 3
Q17	In the last 12 months, how often did your personal doctor show respect for what you had to say?	Never Sometimes Usually Always	1 1 2 3
Q18	In the last 12 months, how often did your personal doctor spend enough time with you?	Never Sometimes Usually Always	1 1 2 3

Table S-9: Composite Mean Score Values—CAHPS 4.0H Adult Survey *(continued)*

Customer Service		Response Choices	Score Values
Q35	In the last 12 months, how often did your health plan's customer service give you the information or help you needed?	Never Sometimes Usually Always	1 1 2 3
Q36	In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?	Never Sometimes Usually Always	1 1 2 3
~~Q37**~~	~~In the last 12 months, did your health plan give you any forms to fill out?~~	~~No~~	~~*~~
	~~*OR*~~		
~~Q38**~~	~~In the last 12 months, how often were the forms from your health plan easy to fill out?~~	~~Never~~ ~~Sometimes~~ ~~Usually~~ ~~Always~~	~~1~~ ~~1~~ ~~2~~ ~~3~~

~~* Members who select "No" to Q37 are instructed to skip Q38. Members who select "Yes" to Q37 must answer Q38. As a result of this skip pattern, members who appropriately skip Q38 (i.e., who select "No" to Q37) are scored as "Always" (assigned a score value of 3) for Q38.~~

~~** For the Medicaid product line these two questions are not included in the Customer Service composite calculations (only Q31 and Q32 from the adult Medicaid survey are used to calculate Customer Service composites for the Medicaid product line).~~

Claims Processing		Response Choices	Score Values
Q40	In the last 12 months, how often did your health plan handle your claims quickly?	Never Sometimes Usually Always Don't Know	1 1 2 3 Exclude
Q41	In the last 12 months, how often did your health plan handle your claims correctly?	Never Sometimes Usually Always Don't Know	1 1 2 3 Exclude

Note: Members who select "Don't Know" to Claims Processing questions are excluded from the Claims Processing composite calculation and are not included in the denominator calculation.

Shared Decision Making		Response Choices	Score Values
Q10	In the last 12 months, did a doctor or other health provider talk with you about the pros and cons of each choice for your treatment or health care?	Definitely yes Somewhat yes Somewhat no Definitely no	3 2 1 1
Q11	In the last 12 months, when there was more than one choice for your treatment or health care, did a doctor or other health provider ask which choice was best for you?	Definitely yes Somewhat yes Somewhat no Definitely no	3 2 1 1

Table S-9: Composite Mean Score Values—CAHPS 4.0H Adult Survey *(continued)*

	Plan Information on Costs	Response Choices	Score Values
Q31	In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for a health care service or equipment?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q33	In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for specific prescription medicines?	Never	1
		Sometimes	1
		Usually	2
		Always	3

Note: Results for ~~Shared Decision Making *and*~~ Plan Information on Costs *are calculated using rolling average methodology.*

Table S-10: Composite Mean Score Values—CAHPS 3.0H Child Survey

	Getting Needed Care	Response Choices	Score Values
Q7	Since your child joined his or her health plan, how much of a problem, if any, was it to get a personal doctor or nurse for your child you are happy with?	A big problem	1
		A small problem	2
		Not a problem	3
Q10	In the last 12 months, how much of a problem, if any, was it to see a specialist that your child needed to see?	A big problem	1
		A small problem	2
		Not a problem	3
Q25	In the last 12 months, how much of a problem, if any, was it to get the care, tests, or treatment you or a doctor believed necessary?	A big problem	1
		A small problem	2
		Not a problem	3
Q26	In the last 12 months, did you need approval from your child's health plan for any care, tests, or treatment?	No	*
	OR		
Q27	In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your child's health plan?	A big problem	1
		A small problem	2
		Not a problem	3

***** Respondents who select "No" to Q26 are instructed to skip Q27. Respondents who select "Yes" to Q26 must answer Q27. As a result of this skip pattern, respondents who appropriately skip Q27 (i.e., who select "No" to Q26) are scored as "Not a problem" (assigned a score value of 3) for Q27.

	Getting Care Quickly	Response Choices	Score Values
Q15	In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed for your child?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q17	In the last 12 months, when your child needed care right away for an illness, injury, or condition, how often did your child get care as soon as you wanted?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q20	In the last 12 months, not counting the times you needed health care right away, how often did your child get an appointment for health care as soon as you wanted?	Never	1
		Sometimes	1
		Usually	2
		Always	3

Table S-10: Composite Mean Score Values—CAHPS 3.0H Child Survey *(continued)*

Getting Care Quickly		Response Choices	Score Values
Q28	In the last 12 months, how often was your child taken to the exam room within 15 minutes of his or her appointment?	Never	1
		Sometimes	1
		Usually	2
		Always	3
How Well Doctors Communicate		**Response Choices**	**Score Values**
Q31	In the last 12 months, how often did your child's doctors or other health providers listen carefully to you?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q32	In the last 12 months, how often did your child's doctors or other health providers explain things in a way you could understand?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q33	In the last 12 months, how often did your child's doctors or other health providers show respect for what you had to say?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q36	In the last 12 months, how often did doctors or other health providers spend enough time with your child?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Courteous and Helpful Office Staff		**Response Choices**	**Score Values**
Q29	In the last 12 months, how often did office staff at your child's doctor's office or clinic treat you and your child with courtesy and respect?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Q30	In the last 12 months, how often were office staff at your child's doctor's office or clinic as helpful as you thought they should be?	Never	1
		Sometimes	1
		Usually	2
		Always	3
Customer Service		**Response Choices**	**Score Values**
Q43	In the last 12 months, how much of a problem, if any, was it to find or understand this information?	A big problem	1
		A small problem	2
		Not a problem	3
Q45	In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your child's health plan's customer service?	A big problem	1
		A small problem	2
		Not a problem	3

Table S-10: Composite Mean Score Values—CAHPS 3.0H Child Survey *(continued)*

	Customer Service	Response Choices	Score Values
Q50**	In the last 12 months, did you have to fill out any paperwork for your child's health plan?	No	*
	OR		
Q51**	In the last 12 months, how much of a problem, if any, did you have with paperwork for your child's health plan?	A big problem	1
		A small problem	2
		Not a problem	3
	Claims Processing	**Response Choices**	**Score Values**
Q39	In the last 12 months, how often did the health plan handle your child's claims in a reasonable time?	Never	1
		Sometimes	1
		Usually	2
		Always	3
		Don't Know	Exclude
Q40	In the last 12 months, how often did the health plan handle your child's claims correctly?	Never	1
		Sometimes	1
		Usually	2
		Always	3
		Don't Know	Exclude

Note: Respondents who select "Don't Know" to Claims Processing questions are excluded from the Claims Processing composite calculation and are not included in the denominator calculation.

* Members who select "No" to Q50 are instructed to skip Q51. Members who select "Yes" to Q50 must answer Q51. As a result of this skip pattern, members who appropriately skip Q51 (i.e., who select "No" to Q50) are scored as "Not a problem" (assigned a score value of 3) for Q51.

** For the Medicaid product line these questions are not included in the Customer Service composite calculations (only Q79 and Q81 from the child Medicaid survey (with CCC measure) and Q53 and Q55 from the child Medicaid survey (without CCC measure) are used to calculate Customer Service composites for the Medicaid product line).

Composite Mean

Step 1 Use Table S-9 or S-10 to convert response choices to score values for each question in the composite.

Step 2 For each question calculate the mean $\bar{x}_i$, where *i* refers to question i.

Step 3 Calculate the mean of the question means. This is the Composite Mean.

Note: *Each question in a composite is weighted equally, regardless of the number of members responding to each.*

Numeric Example: *Composite Mean*

The composite Getting Care Quickly is a combination of two CAHPS 4.0H questions (Q4 and Q6), each with response choices: Never (N); Sometimes (S); Usually (U); Always (A). Suppose we have a health plan with 10 members and the following responses.

Member	Q4	Q6
1	N	A
2	S	U
3	S	S
4	U	S
5	A	U
6	N	U
7	S	S
8	S	—
9	U	U
10	A	A

Step 1 Convert the responses to score values.

Member	Q4	Q6
1	1	3
2	1	2
3	1	1
4	2	1
5	3	2
6	1	2
7	1	1
8	1	—
9	2	2
10	3	3

Step 2 Calculate the mean for each question.

Q4 = 16/10 = 1.6 Q6 = 17/9 = 1.8888

Note: *For Q6 there are only nine responses. Missing data are not assigned a value of 0.*

Step 3 Calculate the mean of the means.

Composite Mean = (1.6 + 1.8888) / 2 = **1.7444**

Composite Mean Variance

Step 1 Use Table S-9 or S-10 to convert response choices to score values for each question in the composite.

Step 2 Calculate the mean of each question.

Step 3 Subtract the question mean (step 2) from each value.

Step 4 Divide each value in step 3 by the total number of questions in the composite.

Step 5 Divide each value in step 4 by the total number of members responding to the question.

Step 6 For each respondent, sum the step 5 values across the set of questions.

Step 7 Square the step 6 values.

Step 8 Sum the step 7 values across all respondents from the plan.

Step 9 Multiply the step 8 values by the number of respondents (members who answered at least one question in the composite) in the composite and divide this number by the number of respondents minus 1. This is the Composite Mean Variance.
The formula for this equation is:

Let:

i = 1, …, m questions in a composite

j = 1, …, n_i members responding to question i

x_{ij} = score of member j on question i (either 1, 2 or 3)

$\bar{x}_i$ = average score for question i

N = number of members responding to at least one question in the composite

$$\frac{N}{N-1}\sum_{j=1}^{N}\left(\sum_{i=1}^{m}\frac{1}{m}*\frac{x_{ij}-\bar{x}_i}{n_i}\right)^2$$

Note: *Each question is weighted equally, regardless of the number of members responding to each.*

Numeric Example: *Composite Mean Variance*

The composite Getting Care Quickly is a combination of two CAHPS 4.0H questions (Q4 and Q6), each with response choices: Never (N); Sometimes (S); Usually (U); Always (A). Suppose we have a health plan with 10 members and the following responses.

Member	Q4	Q6
1	N	A
2	S	U
3	S	S
4	U	S
5	A	U
6	N	U
7	S	S
8	S	—
9	U	U
10	A	A

Step 1 Convert the responses to score values.

Member	Q4	Q6
1	1	3
2	1	2
3	1	1
4	2	1
5	3	2
6	1	2
7	1	1
8	1	—
9	2	2
10	3	3

Step 2 Calculate the mean for each question.

Q4 = 16/10 = 1.6 Q6 = 17/9 = 1.8888

Note: *For Q6 there are only nine responses. Missing data are not assigned a value of 0.*

Step 3 Subtract the question mean from each value.

Member	Q4	Q6
1	1-1.6 = -0.6	1.1111
2	-0.6	0.1111
3	-0.6	-0.8888
4	0.4	-0.8888
5	1.4	0.1111
6	-0.6	0.1111
7	-0.6	-0.8888
8	-0.6	—
9	0.4	0.1111
10	1.4	1.1111

Step 4 Divide each value in step 3 by the total number of questions in the composite. In this example, there are two questions in the composite.

Member	Q4	Q6
1	-0.6/2 = -0.3	0.5555
2	-0.3	0.0555
3	-0.3	-0.4444
4	0.2	-0.4444
5	0.7	0.0555
6	-0.3	0.0555
7	-0.3	-0.4444
8	-0.3	—
9	0.2	0.0555
10	0.7	0.5555

Step 5 Divide each value in step 4 by the total number of members responding to each question. In this example, for Q4 the total number is 10 and for Q6 the total number is 9.

Member	Q4		Q6
1	-0.3/10 =	-0.03	0.0617
2		-0.03	0.0061
3		-0.03	-0.0493
4		0.02	-0.0493
5		0.07	0.0061
6		-0.03	0.0061
7		-0.03	-0.0493
8		-0.03	—
9		0.02	0.0061
10		0.07	0.0617

Step 6 Sum the step 5 values across the set of questions.

Member	Q4		Q6		Sum
1	-0.03	+	0.0617	=	0.03172839
2	-0.03	+	0.0061	=	-0.02382716
3	-0.03	+	-0.0493	=	-0.07938271
4	0.02	+	-0.0493	=	-0.02938271
5	0.07	+	0.0061	=	0.07617284
6	-0.03	+	0.0061	=	-0.02382716
7	-0.03	+	-0.0493	=	-0.07938271
8	-0.03	+	—	=	-0.03000000
9	0.02	+	0.0061	=	0.02617284
10	0.07	+	0.0617	=	0.13172839

Step 7 Square the step 6 values.

Member		
1	0.03172839 * 0.03172839 =	0.0010066
2		0.0005677
3		0.0063016
4		0.0008633
5		0.0058023
6		0.0005677
7		0.0063016
8		0.0009000
9		0.0006850
10		0.0173523

Step 8 Sum the step 7 values across all respondents from the plan.

Sum = 0.0403484

Step 9 Multiply the step 8 values by the number of respondents in the composite and divide this number by the number of respondents minus 1. In this example, the number of respondents is 10; therefore, the denominator is 9 (10 – 1).

Composite Mean Variance = 0.0403484*10/9 = **0.0448315**

Composite Global Proportion

Step 1 For each question, count the number of members who selected each response choice.

For composites with response choices of "Never," "Sometimes," "Usually" and "Always," response choices of "Never" and "Sometimes" are combined.

For composites with response choices of "Definitely yes," "Somewhat yes," "Somewhat no" and "Definitely no," response choices of "Somewhat no" and "Definitely no" are combined.

Step 2 For each question, determine the proportion selecting each response choice.

Step 3 Calculate the average proportion responding to each choice across all the questions in the composite; these are the Composite Global Proportions.

For composites with response choices of "Never," "Sometimes," "Usually" and "Always" an additional global proportion is calculated by summing the "Always" and "Usually" proportions.

~~For composites with response choices of "Definitely yes," "Somewhat yes," "Somewhat no" and "Definitely no," an additional global proportion is calculated by summing the "Definitely yes" and "Somewhat yes" proportions.~~

Note: *Each question is weighted equally, regardless of the number of members responding to each.*

Numeric Example: *Composite Global Proportion*

The composite Getting Care Quickly is a combination of two CAHPS 4.0H questions (Q4 and Q6), each with response choices: Never (N); Sometimes (S); Usually (U); Always (A). Suppose we have a health plan with 10 members and the following responses.

Member	Q4	Q6
1	N	A
2	S	U
3	S	S
4	U	S
5	A	U
6	N	U
7	S	S
8	S	—
9	U	U
10	A	A

Step 1 Count the number of respondents who selected each response choice.

	Q4	Q6
Never or Sometimes	6	3
Usually	2	4
Always	2	2

Step 2 Calculate the proportion of members who selected each response choice.

Note: *For Q6 there are only 9 responses. Missing data are not assigned a value of 0.*

	Q4	Q6
Never or Sometimes	0.60	0.33
Usually	0.20	0.44
Always	0.20	0.22

Step 3 Calculate the average proportion responding to each category.

Never or Sometimes	(0.60 + 0.33)/2 = 0.4650 = 46.5%
Usually	(0.20 + 0.44)/2 = 0.3200 = 32.00%
Always	(0.20 + 0.22)/2 = 0.2100 = 21.00%
Always + Usually	32.00% + 21.00% = 53.00%

On average, **46.5 percent** of respondents said "Never" or "Sometimes," **32 percent** said "Usually," **21 percent** said "Always" and **53 percent** said "Usually" or "Always" to questions regarding Getting Care Quickly.

Composite Global Proportion Variance

For composites with response choices of "A big problem," "A small problem" and "Not a problem" one global proportion variance is calculated for the global proportion "Not a problem."

For composites with response choices of "Never," "Sometimes," "Usually" and "Always," two global proportion variances are calculated; one for the global proportion "Always" using Score Values (Always) and one for the global proportion "Always + Usually" using Score Values (Always + Usually).

For composites with response choices of "Definitely yes," "Somewhat yes," "Somewhat no" and "Definitely no," one global proportion variance is calculated for the global proportion "Definitely yes." ~~two global proportion variances are calculated; one for the global proportion "Definitely yes" using Score Values (Definitely yes) and one for the global proportion "Definitely yes + Somewhat yes" using Score Values (Definitely yes + Somewhat yes).~~

Step 1 Use Table S-11 to convert response choices to score values for each question in the composite.

Step 2 Calculate the mean of each question.

Step 3 Subtract the question mean (step 2) from each value.

Step 4 Divide each value in step 3 by the total number of questions in the composite.

Step 5 Divide each value in step 4 by the total number of members responding to the question.

Step 6 For each respondent, sum the step 5 values across the set of questions.

Step 7 Square the step 6 values.

Step 8 Sum the step 7 values across all respondents from the plan.

Step 9 Multiply the step 8 values by the number of respondents (members who answered at least one question in the composite) in the composite and divide this number by the number of respondents minus 1. This is the Composite Global Proportion Variance.

The formula for this equation is:

Let:

i = 1, …, m questions in a composite

j = 1, …, n_i members responding to question i

x_{ij} = score of member j on question i (either 0 or 1)

$\bar{x}_i$ = average score for question i

N = number of members responding to at least one question in the composite

$$\frac{N}{N-1}\sum_{j=1}^{N}\left(\sum_{i=1}^{m}\frac{1}{m}*\frac{x_{ij}-\bar{x}_i}{n_i}\right)^2$$

Note: *Each question is weighted equally regardless of the number of members responding to each.*

Table S-11: Composite Global Proportion Variance Score Values

Response Choices	Score Values (Always + Usually)	Score Values (Always)
Never	0	0
Sometimes	0	0
Usually	1	0
Always	1	1
Response Choices	~~Score Values (Definitely yes + Somewhat yes)~~	Score Values (Definitely yes)
Definitely yes	~~1~~	1
Somewhat yes	~~1~~	0
Somewhat no	~~0~~	0
Definitely no	~~0~~	0
Response Choices	Score Values	
A big problem	0	
A small problem	0	
Not a problem	1	

Numeric Example: *Composite Global Proportion Variance (Usually + Always)*

The composite Getting Care Quickly is a combination of two CAHPS 4.0H questions (Q4 and Q6), each with response choices: Never (N); Sometimes (S); Usually (U); Always (A). Suppose we have a health plan with 10 members and the following responses.

Member	Q4	Q6
1	N	A
2	S	U
3	S	S
4	U	S
5	A	U
6	N	U
7	S	S
8	S	—
9	U	U
10	A	A

Step 1 Convert the responses to score values.

Member	Q4	Q6
1	0	1
2	0	1
3	0	0
4	1	0
5	1	1
6	0	1
7	0	0
8	0	—
9	1	1
10	1	1

Step 2 Calculate the mean for each question.

Q4 = 4/10 = 0.4 Q6 = 6/9 = .6666

Note: *For Q6 there are only nine responses. Missing data are not assigned a value of 0.*

Step 3 Subtract the question mean from each value.

Member	Q4	Q6
1	0 – 0.4 = -0.4	0.3333
2	-0.4	0.3333
3	-0.4	-0.6666
4	0.6	-0.6666
5	0.6	0.3333
6	-0.4	0.3333
7	-0.4	-0.6666
8	-0.4	—
9	0.6	0.3333
10	0.6	0.3333

Step 4 Divide each value in step 3 by the total number of questions in the composite. In this example, the number of questions in the composite is 2.

Member	Q4	Q6
1	-0.04/2 = -0.2	0.1666
2	-0.2	0.1666
3	-0.2	-0.3333
4	0.3	-0.3333
5	0.3	0.1666
6	-0.2	0.1666
7	-0.2	-0.3333
8	-0.2	—
9	0.3	0.1666
10	0.3	0.1666

Step 5 Divide each value in step 4 by the total number of members responding to each question. In this example, for Q4 the total number is 10 and for Q6 the total number is 9.

Member	Q4	Q6
1	-0.2/10 = -0.02	0.0185
2	-0.02	0.0185
3	-0.02	-0.0370
4	0.03	-0.0370
5	0.03	0.0185
6	-0.02	0.0185
7	-0.02	-0.0370
8	-0.02	—
9	0.03	0.0185
10	0.03	0.0185

Step 6 Sum the step 5 values across the set of questions.

Member	Q4		Q6		Sum
1	-0.02	+	0.0185	=	-0.0014
2	-0.02	+	0.0185	=	-0.0014
3	-0.02	+	-0.0370	=	-0.0570
4	0.03	+	-0.0370	=	0.0070
5	0.03	+	0.0185	=	0.0485
6	-0.02	+	0.0185	=	-0.0014
7	-0.02	+	-0.0370	=	-0.0570
8	-0.02	+	—	=	-0.02
9	0.03	+	0.0185	=	0.0485
10	0.03	+	0.0185	=	0.0485

Step 7 Square the step 6 values.

Member	
1	-0.0014*-0.0014 = 0.0000021
2	0.0000021
3	0.0032532
4	0.0000495
5	0.0023540
6	0.0000021
7	0.0032532
8	0.0004000
9	0.0023540
10	0.0023540

Step 8 Sum the step 7 values across all respondents from the plan.

Sum = 0.0140246

Step 9 Multiply the step 8 values by the number of respondents in the composite and divide this number by the number of respondents minus 1. In this example the number of respondents is 10; therefore, the denominator is 9 (10 – 1).

Global Proportion Variance “Always + Usually” = 0.0140246*10/9 = **0.0155829**

Question Summary Rates

Table S-12 provides numerators and denominators used to calculate the question summary rates.

Two question summary rates are calculated for questions with response choices "Never," "Sometimes," "Usually" and "Always."

1. Question Summary Rate (Always + Usually) is calculated using a numerator of "(Always + Usually)"
2. Question Summary Rate (Always) is calculated using a numerator of "Always."

~~Two question summary rates are calculated for questions with response choices "Definitely yes," "Somewhat yes," "Somewhat no" and "Definitely no."~~

~~1. Question Summary Rate (Definitely yes + Somewhat yes) is calculated using a numerator of "(Definitely yes + Somewhat yes)"~~

~~2. Question Summary Rate (Definitely yes) is calculated using a numerator of "Definitely yes."~~

To calculate the question summary rates for a specific question:

Step 1 Determine the number of members who selected the numerator response choice(s).

Step 2 Determine the number of members who selected the denominator response choices.

Step 3 Divide the numerator by the denominator and multiply by 100. This is the Question Summary Rate.

Table S-12: Question Summary Rates

	CAHPS 4.0H Survey Questions	Numerator	Denominator
Q4	In the last 12 months, when you needed care right away, how often did you get care as soon as you thought you needed?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q6	In the last 12 months, not counting the times you needed care right away, 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?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q8	In the last 12 months, how often did you and a doctor or other health provider talk about specific things you could do to prevent illness?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q10	In the last 12 months, did a doctor or other health provider talk with you about the pros and cons of each choice for your treatment or health care? ~~*Note: Results for this question are calculated using rolling average methodology.*~~	~~(Definitely yes + Somewhat yes) *and*~~ Definitely yes	(Definitely yes + Somewhat yes + Somewhat no + Definitely no)
Q11	In the last 12 months, when there was more than one choice for your treatment or health care, did a doctor or other health provider ask which choice was best for you? ~~*Note: Results for this question are calculated using rolling average methodology.*~~	~~(Definitely yes + Somewhat yes) *and*~~ Definitely yes	(Definitely yes + Somewhat yes + Somewhat no + Definitely no)
Q15	In the last 12 months, how often did your personal doctor explain things in a way that was easy to understand?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q16	In the last 12 months, how often did your personal doctor listen carefully to you?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q17	In the last 12 months, how often did your personal doctor show respect for what you had to say?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q18	In the last 12 months, how often did your personal doctor spend enough time with you?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)

Table S-12: Question Summary Rates *(continued)*

CAHPS 4.0H Survey Questions		Numerator	Denominator
Q20	In the last 12 months, how often did your personal doctor seem informed and up-to-date about the care you got from these doctors or other health providers?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q23	In the last 12 months, how often was it easy to get appointments with specialists?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q27	In the last 12 months, how often was it easy to get the care, tests, or treatment you thought you needed through your health plan?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q29	In the last 12 months, how often did the written materials or the Internet provide the information you needed about how your health plan works?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q31	In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for a health care service or equipment? *Note: Results for this question are calculated using rolling average methodology.*	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q33	In the last 12 months, how often were you able to find out from your health plan how much you would have to pay for specific prescription medicines? *Note: Results for this question are calculated using rolling average methodology.*	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q35	In the last 12 months, how often did your health plan's customer service give you the information or help you needed?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q36	In the last 12 months, how often did your health plan's customer service staff treat you with courtesy and respect?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q38	In the last 12 months, how often were the forms from your health plan easy to fill out? *Note: The rate for this question is calculated using the response to this question and responses to Q37.*	(Q37: No + Q38: Always + Usually) *and* (Q37: No + Q38: Always)	Q37: No + Q38: (Always + Usually + Sometimes + Never)
Q40	In the last 12 months, how often did your health plan handle your claims quickly?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q41	In the last 12 months, how often did your health plan handle your claims correctly?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q43	In general, how would you rate your overall health?	(Excellent + Very good)	(Excellent + Very good + Good + Fair + Poor)
CAHPS 3.0H Survey Questions		**Numerator**	**Denominator**
Q7	Since your child joined his or her health plan, how much of a problem, if any, was it to get a personal doctor or nurse for your child you are happy with?	Not a problem	(Not a problem + A small problem + A big problem)
Q10	In the last 12 months, how much of a problem, if any, was it to see a specialist that your child needed to see?	Not a problem	(Not a problem + A small problem + A big problem)
Q15	In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed for your child?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q17	In the last 12 months, when your child needed care right away for an illness, injury, or condition, how often did your child get care as soon as you wanted?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q18	In the last 12 months, when your child needed care right away for an illness, injury, or condition, how long did your child usually have to wait between trying to get care and actually seeing a provider?	Same day	(Same day + 1 day + 2 days + 3 days + 4–7 days + 8–14 days + 15 or longer)
Q20	In the last 12 months, not counting the times you needed health care right away, how often did your child get an appointment for health care as soon as you wanted?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)

Table S-12: Question Summary Rates *(continued)*

	CAHPS 3.0H Survey Questions	Numerator	Denominator
Q21	In the last 12 months, not counting the times you needed health care right away, how many days did your child usually have to wait between making an appointment and actually seeing a provider?	(Same day + 1 day + 2–3 days + 4–7 days + 8–14 days)	(Same day + 1 day + 2–3 days + 4–7 days + 8–14 days + 15–30 days + 31 days or longer)
Q25	In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?	Not a problem	(Not a problem + A small problem + A big problem)
Q27	In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your child's health plan? *Note: The rate for this question is calculated using the response to this question and responses to Q26.*	Q26: No + Q27: Not a problem	Q26: No + Q27: (Not a problem + A small problem + A big problem)
Q28	In the last 12 months, how often was your child taken to the exam room within 15 minutes of his or her appointment?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q29	In the last 12 months, how often did office staff at your child's doctor's office or clinic treat you and your child with courtesy and respect?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q30	In the last 12 months, how often were office staff at your child's doctor's office or clinic as helpful as you thought they should be?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q31	In the last 12 months, how often did your child's doctors or other health providers listen carefully to you?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q32	In the last 12 months, how often did your child's doctors or other health providers explain things in a way you could understand?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q33	In the last 12 months, how often did your child's doctors or other health providers show respect for what you had to say?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q36	In the last 12 months, how often did doctors or other health providers spend enough time with your child?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q39	In the last 12 months, how often did the health plan handle your child's claims in a reasonable time?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q40	In the last 12 months, how often did the health plan handle your child's claims correctly?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q41	In the last 12 months, before your child went for care, how often did the health plan make it clear how much you would have to pay?	(Always + Usually) *and* Always	(Always + Usually + Sometimes + Never)
Q43	In the last 12 months, how much of a problem, if any, was it to find or understand this information?	Not a problem	(Not a problem + A small problem + A big problem)
Q45	In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your child's health plan's customer service?	Not a problem	(Not a problem + A small problem + A big problem)
Q46	In the last 12 months, have you called or written your child's plan with a complaint or problem?	Yes	(Yes + No)
Q47	How long did it take for your child's health plan to resolve your complaint? *Note: The rate for this question is calculated using the response to this question and responses to Q46.*	Q47: (Same day + 2-7 days)	Q47: (Same day + 2-7 days + 8-14 days + 15-21 days + More than 21 days) + Q49: (8-14 days + 15-21 days + More than 21 days)
Q48	Was your complaint or problem settled to your satisfaction?	Yes	(Yes + No)
Q51	In the last 12 months, how much of a problem, if any, did you have with paperwork for your child's health plan? *Note: The rate for this question is calculated using the response to this question and responses to Q50.*	Q50: No + Q51: Not a problem	Q50: No + Q51: (Not a problem + A small problem + A big problem)
Q53	In general, how would you rate your child's overall health now?	(Excellent + Very good)	(Excellent + Very good + Good + Fair + Poor)

HEDIS/CAHPS Survey Question Crosswalk

HEDIS/CAHPS survey question numbers vary depending on which version of the survey instrument is used. Tables S-13 and S-14 provide corresponding question numbers for the different versions of the HEDIS/ CAHPS surveys.

Table S-13: Crosswalk of CAHPS 4.0H Survey Questions

Result	Adult Commercial	Adult Medicaid
Rating of All Health Care	12	12
Rating of Personal Doctor	21	21
Rating of Specialist Seen Most Often	25	25
Rating of Health Plan	42	35
Getting Needed Care	23	23
Getting Needed Care	27	27
Getting Care Quickly	4	4
Getting Care Quickly	6	6
How Well Doctors Communicate	15	15
How Well Doctors Communicate	16	16
How Well Doctors Communicate	17	17
How Well Doctors Communicate	18	18
Customer Service	35	31
Customer Service	36	32
~~Customer Service~~ Plan gave forms to fill out	37*	33*
~~Customer Service~~ Forms were easy to fill out	38*	34*
Claims Processing	40	NA
Claims Processing	41	NA
Shared Decision Making	10	10
Shared Decision Making	11	11
Health Promotion and Education	8	8
Coordination of Care	20	20
Plan Information on Costs	31	NA
Plan Information on Costs	33	NA
Rating of Overall Health	43	36
Written materials or Internet provided needed information	29	29

*Question not included in the Customer Service composite calculation~~for the Medicaid product line~~.

Table S-14: Crosswalk of CAHPS 3.0H Survey Questions

Result	Child Commercial (With CCC Measurement Set)	Child Commercial (Without CCC Measurement Set)	Child Medicaid (With CCC Measurement Set)	Child Medicaid (Without CCC Measurement Set)
Rating of All Health Care	49	37	51	39
Rating of Health Plan	78	52	88	62
Rating of Personal Doctor	5	5	5	5
Rating of Specialist Seen Most Often	15	12	15	12
Getting Needed Care	7	7	7	7
Getting Needed Care	13	10	13	10
Getting Needed Care	28	25	28	25
Getting Needed Care	29	26	29	26
Getting Needed Care	30	27	30	27
Getting Care Quickly	18	15	18	15
Getting Care Quickly	20	17	20	17
Getting Care Quickly	23	20	23	20
Getting Care Quickly	31	28	31	28
How Well Doctors Communicate	34	31	34	31
How Well Doctors Communicate	35	32	36	33
How Well Doctors Communicate	36	33	37	34
How Well Doctors Communicate	39	36	41	38
Courteous and Helpful Office Staff	32	29	32	29
Courteous and Helpful Office Staff	33	30	33	30
Customer Service	69	43	79	53
Customer Service	71	45	81	55
Customer Service	76	50	86*	60*
Customer Service	77	51	87*	61*
Claims Processing	65	39	NA	NA
Claims Processing	66	40	NA	NA
Got appointment same day when care was needed right away	21	18	21	18
Got appointment within 14 days for regular/ routine care	24	21	24	21
Health plan made it clear how much to pay	67	41	NA	NA
Called or wrote with complaint or problem	72	46	82	56
Complaint resolved within 7 days	73	47	83	57
Complaint settled to satisfaction	74	48	84	58
Wait time for unresolved complaints	75	49	85	59
Rating of overall health	82	53	92	63

*Question not included in the Customer Service composite calculation for the Medicaid product line.

Confidence Intervals

NCQA does not calculate confidence intervals for HEDIS/CAHPS survey results. The following instructions are provided for health plans and survey vendors who wish to calculate confidence intervals on their own.

Confidence interval for the rating mean and rating question summary rate

The standard error of the rating mean or rating question summary rate should be used to calculate confidence intervals. For example, to calculate an approximate 95% confidence interval, use the formulas:

$$95\%\ \text{CI} = (\textit{Rating Mean}) \pm 1.96\sqrt{\frac{RMV}{n}}$$

$$95\%\ \text{CI} = (\textit{Rating Question Summary Rate}) \pm 1.96\sqrt{\frac{RQSRV}{n}}$$

where *n* is the number of members responding to the rating question, *RMV* is the rating mean variance and *RQSRV* is the rating question summary rate variance.

Confidence interval for the composite mean and composite global proportion

Two means are calculated to calculate the composite mean.

1. A mean is calculated for each question in the composite
2. The mean of these means is calculated (this is the composite mean)

The composite mean variance incorporates the number of respondents, *n,* into the formula.

Where the rating mean variance and rating question summary rate variance are the variances of the distributions of individual responses, the composite mean variance is the variance of the health plan's composite mean itself. Thus, confidence interval calculations should use the square root of the composite mean variance, not the square root of the composite mean variance over *n*. For example, to calculate an approximate 95% confidence interval, use the formula:

$$95\%\ \text{CI} = (\textit{Composite Mean}) \pm 1.96\sqrt{CMV}$$

where *CMV* is the composite mean variance.

The same principal applies to the global proportion variance. To calculate an approximate 95% confidence interval, use the formula:

$$95\%\ \text{CI} = \textit{(Composite Global Proportion)} \pm 1.96\sqrt{CGPV}$$

where *CGPV* is the composite global proportion variance.