Frequently Asked Questions

Frequently Asked Questions About Ensuring Acceptance of CAHPS Reports

Frequently Asked Questions About the CAHPS Survey Process

Frequently Asked Questions About the Design of the CAHPS Reports

Frequently Asked Questions About the CAHPS Questionnaires

Frequently Asked Questions About Analysis of CAHPS Data

Frequently Asked Questions

Frequently Asked Questions About Ensuring Acceptance of CAHPS Reports

1. How can I maximize the use of the CAHPS report by consumers?

2. How can I maximize the use of the report if I can distribute the CAHPS report booklet, but not the advance notice and reminder information designed to increase consumer awareness of the CAHPS report?

3. Why is it important to distribute the CAHPS report to consumers individually?

4. How should group sponsors make use of the CAHPS survey information to encourage health plans to make quality improvements?

5. We would like to get press attention for these survey results. What kinds of approaches seem to raise attention in the media? How do we get the media to responsibly report the results?

6. Who else is using CAHPS and can I compare my results to those of other sponsors? What is the National CAHPS Benchmarking Database (NCBD)?

Frequently Asked Questions About the CAHPS Survey Process

1. If my members are not asking for plan comparisons, why should I conduct CAHPS?

2. Our state's Medicaid program wants to use CAHPS to help recipients choose among the managed care options available to them. We also have a need for population-based survey data to help monitor the program's operation and identify access problems. Can CAHPS serve both goals?

3. Between the time we drew the sample frames for our project and the deadline for delivering reports, we had a number of changes in the options available to our enrollees. Plans merged, we dropped plan options, and we offered new plan options. How should we handle these situations?

4. Where can I find information and resources to help me work with health plans as I conduct a CAHPS survey and prepare the reports?

5. How can I ensure that I hire a reputable vendor?

6. What can I do to ensure the best possible outcome for the survey once I have selected a vendor?

7. What potential problems may survey vendors encounter when conducting CAHPS?

Frequently Asked Questions About the Design of the CAHPS Reports

1. Where did the topics discussed in the CAHPS report originate?

2. Why does CAHPS use composites to summarize items in the CAHPS survey?

3. Can we incorporate responses to our own questions into existing reporting composites?

4. Why does the CAHPS report use the star symbol in the summary comparison charts?

5. Why does CAHPS use its particular type of bar graphs (100 percent bar graphs) to show the answers people gave to the survey questions?

6. What is the purpose of including both the star charts and the bar graphs in the print report? Why not use one or the other?

7. In the print report, the bar graphs require the use of white and either two colors or shades of one other color. What are the important things to keep in mind if the report is in black and white and/or needs to be photocopied?

8. How and why does CAHPS combine the response categories for the "never/sometimes/usually/always" composites?

9. Why doesn't the report compare plans on cost and coverage?

10. Why doesn't the CAHPS report include comparisons among plans on clinical measures, such as the percentage of patients with a particular disease who got better?

11. If a plan scores well on the topics listed in the CAHPS report, does that mean it will also score well on other measures of quality?

12. What do I do if I want to include HEDIS measures in my report?

13. An earlier version of the report included ratings on specialists and personal doctor/nurse. Why were these dropped?

14. When I show the survey results, what background should I include about differences in HMOs, PPOs, and other types of plans?

Frequently Asked Questions About the CAHPS Questionnaire

1. Have the CAHPS questionnaires been tested and evaluated?

2. Is it fair to hold plans accountable for the experiences that members have with their providers?

3. The data resulting from a CAHPS questionnaire do not provide information on the exact cause of a problem. Therefore, how can providers and plans use the questionnaire results to improve their performance?

4. Why does CAHPS use a 0 to 10 rating scale and not an adjectival rating scale?

5. Why does CAHPS repeat the reference period in every question?

6. Why does CAHPS ask respondents to continue answering questions even if they think they do not belong to the sampled health plan?

7. Why does CAHPS order response options or questions in such a way that the negative wording comes first?

8. Why does CAHPS include only one health status measure in its questionnaires?

9. How did CAHPS determine the method for collecting data about urgent or immediate care?

10. Why doesn't CAHPS keep track of out-of-network care?

11. Why doesn't CAHPS collect information on technical quality?

12. Does the CAHPS questionnaire include measures of unmet needs?

13. Why are there no items on 24-hour access to medical care?

14. Why are race and ethnicity separate items in CAHPS 2.0?

15. Why is "Nurse" included in the definition of primary care provider?

16. Why does CAHPS use the term "health plan"?

17. For what reading level is CAHPS designed?

18. Will the length of this questionnaire and the frequent shifts in response format cause too heavy a burden on respondents?

19. How important is information about trends? Does the new CAHPS 2.0 questionnaire permit a transition from MSS and CAHPS 1.0?

20. Why have you changed the recall and eligibility period to 12 months for commercially insured enrollees while maintaining a 6-month period for Medicaid and Medicare?

21. Is NCQA setting an industry standard by specifying a waiting time more than 15 minutes as too long?

22. Is it really possible to achieve the response rate you anticipate with the survey protocol CAHPS is recommending?

23. Is a 50 percent response rate achievable for Medicaid?

24. Why are the CAHPS materials available in only one foreign language—Spanish?

25. If a sponsor needs to field CAHPS in a language other than English or Spanish, are there any recommendations or guidelines for translation?

Frequently Asked Questions About Analysis of CAHPS Data

1. What is the rationale behind the groupings in the reporting composites? Have these composites been tested for reliability and validity?

2. Why does CAHPS use case-mix adjusters?

3. What is an appropriate level of substantive significance?

4. How should I choose cutpoints for the 0 to 10 scales?

Frequently Asked Questions About Ensuring Acceptance of CAHPS Reports

1. How can I maximize the use of the CAHPS report by consumers?

Sponsors should notify consumers about the CAHPS report in stages. First, advance publicity will alert consumers about when to expect the report and what information the report will provide. Telling consumers that the CAHPS report contains comparative plan information will motivate them to read it. Second, the CAHPS report should be included in the same package with benefits and cost information, so that consumers can assess quality at the same time that they assess benefits and costs. Third, enrollment packages to consumers should be distributed individually, preferably at home, but in individual mail boxes or work spaces if distributed at work. Finally, sponsors should use reminder notices about the CAHPS report after the enrollment packages are distributed. There are lots of ways to notify people about CAHPS, both before and after distributing the report. These include newsletters, postcards, flyers, pay stub inserts, E-mail distribution, or web site notices.

2. How can I maximize the use of the report if I can distribute the CAHPS report booklet, but not the advance notice and reminder information designed to increase consumer awareness of the CAHPS report?

If pre- and postdistribution publicity is not feasible, the one essential strategy is to distribute the CAHPS report in the same package with other enrollment information on benefits and costs. When materials are distributed separately, consumers, especially first-time users, may not associate the CAHPS report with the enrollment process, or they may make their health plan decision before receiving the CAHPS report. To avoid this problem, include the CAHPS report together with benefits and cost information.

3. Why is it important to distribute the CAHPS report to consumers individually?

The more sponsors can personalize the distribution of the CAHPS report, the more likely consumers will be to recognize and use it. The best way to distribute the report is by mailing it directly to consumers' homes because it increases the chance that other family members will use the report. This also decreases the chance that the report will be overlooked at work. The next best means is direct distribution to employees at work, such as through an office mailbox. The least effective form of distribution is to place reports at a central work site location, because it will only reach consumers who are actively interested in comparing plans. CAHPS is designed to prompt consumers to

consider quality of care as a factor in choosing a health plan, even if they are not actively searching for a new plan. Therefore, personalizing the distribution of the report is essential so that the process of getting reports to consumers does not undermine the work of surveying consumers and creating the report.

4. How should group sponsors make use of the CAHPS survey information to encourage health plans to make quality improvements?

Direct communication with the plans, as well as providing CAHPS information to consumers, is likely to be important in encouraging quality improvement. Plans will want to use the detailed survey results to help them identify where they can improve services to their enrollees. The focus of interactions with health plans may change as the CAHPS survey and reports become more familiar to sponsors and health plans, but these interactions always will be important to the success of CAHPS as a quality improvement effort.

5. We would like to get press attention for these survey results. What kinds of approaches seem to raise attention in the media? How do we get the media to responsibly report the results?

Given the complicated nature of press interactions, no single approach will always work. However, the following actions probably will increase the likelihood of widespread, accurate reporting of the survey results:

- Providing a simple summary of the data that draws key conclusions.
- Dedicating resources to staff press contacts and to active promotion of the publication of results.
- Having senior staff in the sponsoring organization involved in press conferences and available for interviews at the time the data are released.
- Preparing advance plans for contact with the press and encouraging them to develop vignettes that describe positive experiences or improvement stories.

6. Who else is using CAHPS and can I compare my results to those of other sponsors? What is the National CAHPS Benchmarking Database (NCBD)?

A number of sponsors used CAHPS in 1997 and 1998. These sponsors represent purchasers, such as state Medicaid agencies, state health departments, private employers, purchasing coalitions, Federal agencies, and health plans. Specifically, the Oklahoma Health Care Authority, the New Jersey Department of Health, Ford Motor Company, Central Florida Health Care Coalition, Vermont Employers Health Alliance, Minnesota Medicaid, United Health Care, and the Health Care Financing Administration (for Medicare managed care plans) have all used CAHPS. For more information about these CAHPS projects, sponsors should contact the CAHPS ***Survey Users Network (SUN) Help Line*** at **(800) 492-9261**.

The National CAHPS Benchmarking Database (NCBD) was set up to pool data from different CAHPS sites, promote comparisons across CAHPS projects, and create national benchmarks. This project is in its first full year of implementation after the 1998 pilot phase. The NCBD is now administered by Westat (in partnership with the Quality Measurement Advisory Services (QMAS) and The Picker Institute).

Frequently Asked Questions About the CAHPS Survey Process

1. If my members are not asking for plan comparisons, why should I conduct CAHPS?

Consumers cannot ask for information before they know it exists. A key component of the CAHPS survey and reporting is motivating consumers to read information on quality of care that complements benefits and cost information. Getting consumers to use the comparative plan information in the CAHPS report is a long-term process, and sponsors can expect that consumers will be on a "learning curve" both in their motivation to use the materials and how well they understand and use the information. The CAHPS information is also vital for benefits staff. It can be used for negotiating contracts, quality improvement, and counseling employees about their benefit choices.

2. Our state's Medicaid program wants to use CAHPS to help recipients choose among the managed care options available to them. We also have a need for population-based survey data to help monitor the program's operation and identify access problems. Can CAHPS serve both goals?

CAHPS can certainly be adapted to serve both goals, although sponsors may need to add survey questions that are not in the CAHPS item sets, use more complicated sampling strategies than those recommended in CAHPS, or perform additional data analysis to obtain the information they require. In addition, using the data for program monitoring requires a sample that is representative of the overall Medicaid population. Such a sample would include relatively more members of larger health plans, while equal-sized samples per plan are appropriate for making interplan comparisons. All of these provisions require added resources, as well as team discipline to maintain control over the survey's length and content.

3. Between the time we drew the sample frames for our project and the deadline for delivering reports, we had a number of changes in the options available to our enrollees. Plans merged, we dropped plan options, and we offered new plan options. How should we handle these situations?

In general, sponsors should try to present to their enrollees the options available to them at the time they receive the reports, so that they can use the reports to make plan selections. For this reason, the final list of plans in the report should match the list of names of plans available to the enrollees. Each of the situations mentioned in the question requires a different analytic solution.

If plans merge, their survey results need to be combined in an appropriate way. Our recommendation is that sponsors present a single number for the new plan that represents each old plan's score multiplied by that plan's proportion of the total membership for both plans. This approach may not make sense if one of the plan's networks is being dissolved in the merger. In this case, you may want to use the results for the plan whose network is being retained.

If sponsors drop a plan option, they should not present data for that plan in the report. Furthermore, they should remove the survey results for this plan from the average for all plans that are being used for comparisons in the project.

If sponsors offer a new plan option, they should list the plan in the report and include a note that describes why no data are presented. The plan does not need to be listed on every chart in the report.

4. Where can I find information and resources to help me work with health plans as I conduct a CAHPS survey and prepare the reports?

The CAHPS consortium members have tried to anticipate many of the questions that health plans will ask. Sponsors can use information about specific topics in the ***CAHPS 2.0 Survey and Reporting Kit*** to address many of the methodological questions raised by plans. Another resource is the CAHPS Survey Users Network (SUN), which was created as a way for sponsors to talk with and gain the experience of other CAHPS users. The SUN web site (www.cahps-sun.org) provides much experience and contacts to guide sponsors in addressing questions from health plans and consumers.

Perhaps the most important way that sponsors can anticipate and deal with health plan questions and concerns is to gain their early and full "buy-in" before conducting the CAHPS survey. Most plans will already be familiar with the CAHPS survey because the National Committee for Quality Assurance (NCQA) has adopted the CAHPS survey as

the HEDIS (Healthplan Employer Data and Information Set) Member Satisfaction Survey for accreditation purposes. However, it remains important to engage plans as partners in surveying and providing consumers with the CAHPS reports. Different levels of cooperation may be needed depending on whether employers conduct the survey and sampling, or if the samples are drawn from health plan membership rosters. Reviewing with health plans the survey methodology, the analysis program, how comparative ratings are computed, and how different plan response rates are managed before the survey takes place will help to forestall many questions.

5. How can I ensure that I hire a reputable vendor?

Many survey vendors will be capable of conducting the CAHPS survey. Sponsors may want to consider using one of the two following options when selecting a vendor. The first options is the NCQA list of certified vendors. Because NCQA requires plans to conduct a satisfaction survey of plan members as one part of HEDIS accreditation (an adapted version of the CAHPS survey), this list should provide vendors capable of conducting the CAHPS survey. The second option is the Health Care Financing Administration's (HCFA) list of certified vendors. Finally, the CAHPS Survey Users Network (SUN) was created to give sponsors a way to talk to and gain from the experience of other CAHPS users. This web site (www.cahps-sun.org) or ***SUN Help Line* (800-492-9261)** can help sponsors contact each other to discuss their experiences with selecting and working with survey vendors. SUN also maintains a list of vendors that have been used by all the current and previous CAHPS sponsors.

6. What can I do to ensure the best possible outcome for the survey once I have selected a vendor?

The ***Hiring and Managing Your CAHPS Vendor*** appendix addresses managing a survey vendor during survey implementation. The fundamental principle in this process is that sponsors should play an active role in overseeing and monitoring vendors to ensure the successful implementation of the survey. Three management concepts flow out of this principle:

- Before the survey is implemented, sponsors and vendors must meet to outline and agree on expectations and assumptions for how the survey will be conducted. While the survey contract lays out many details of the process, sponsors and vendors will benefit from clear expectations at the start of the project. This should include the type and experience of staff to work on the project.

- Vendors should provide a clear list of project milestones and a timetable for completion. Milestones should include the goals for response rates during the survey (mail and phone), contract deliverables, and any other agreed-upon topics.

- Sponsors and vendors should hold weekly meetings in which they discuss the current status of the project milestones and timetable. Ongoing communication, especially discussion of any potential problems and ways to solve them, is vital to the success of project implementation.

7. What potential problems may survey vendors encounter when conducting CAHPS?

The two most significant areas where problems can occur are response rates and telephone numbers and addresses to be used for the survey. Problems with response rates include an overall low rate (i.e., below the CAHPS recommended 60 percent) or different rates among plans. These problems affect data quality and the ability to report the CAHPS information to consumers. Problems with telephone numbers and addresses include variation in the accuracy and quality of the information, but they can be addressed by the survey vendor early in the implementation process.

Frequently Asked Questions About the Design of the CAHPS Reports

1. Where did the topics discussed in the CAHPS report originate?[1]

The main purposes of CAHPS are to collect information based on consumer experiences with health plans and to report this information to consumers to help them select the best health plan for themselves and their families. To do this, both the CAHPS survey and report focus on: (1) topics that consumers have identified as important to their health plan selection decision and (2) topics for which consumers are the best or only judge. These topics include, among others, communication skills of care providers, access to services on evenings and weekends, and paperwork burdens. Team members reviewed all available qualitative and quantitative research, published and unpublished, to identify these topic areas. We also conducted our own qualitative research (interviews and focus groups with consumers) with draft versions of both the survey and report to make sure these products represented consumer interests in ways that meet their needs.

2. Why does CAHPS use composites to summarize items in the CAHPS survey?

Research shows that people have trouble thinking about or remembering more than five to seven ideas at a time. When people get too many ideas or pieces of information at one time they tend to be overwhelmed and may stop paying attention to the information provided. To keep the reporting of CAHPS survey results comprehensive as well as brief, CAHPS developed and tested groupings of related questionnaire items to report most of the survey results. We call these groupings "composites." Testing during the development of the CAHPS products showed that consumers found the five composites easy to understand and were satisfied with the level of detail. For more information about items included in each composite, see the ***CAHPS 2.0 Survey and Reporting Kit***.

[1] See: "Making Survey Results Easy to Report to Consumers: How Reporting Needs Guided Survey Design in CAHPS," *Medical Care*, vol 37 (3), 1999.

3. Can we incorporate responses to our own questions into existing reporting composites?

The reporting composites for the CAHPS survey were designed to summarize health plan members' various experiences with health care providers and plans. The items in each composite were selected to ask members about a finite set of events that could occur during their membership with a particular health plan. The items are grouped into reporting composites based on two criteria: (1) the items all relate to conceptually similar events, and (2) the response options to questions in the composite are the same. By grouping items with the same response options, we reduce the potential for consumers to misunderstand the results.

Each CAHPS reporting composite was tested in focus groups with plan members to determine the most salient dimensions of quality. The CAHPS consortium then conducted one-on-one cognitive interviews with consumers to ensure that the reporting composite labels and descriptions were easily understood. These composites were designed to include items that could be understood by plan members to represent similar experiences. Items within these composites that did not fit into the reporting category were reworded or removed to ensure consumer understanding. Adding other questions to these reporting composites, even if they are related to similar topics, may confuse consumers. Similarly, adding other questions to these composites may change the psychometric properties of the reporting composites. In addition, changing the composition of these reporting topics may make comparisons between different sponsors' surveys impossible. All sponsors should use the same set of standard CAHPS reporting composites and items. We recommend that no other items be added to these reporting composites.

Sponsors could, however, include other items that they believe are similar to a reporting composite in the same section of their reports to consumers. For example, a sponsor may ask members other questions about plans that seem similar to getting information from written materials, filling out paperwork, and getting help from customer services. Members' responses to these questions could be reported in the same section of the CAHPS report to consumers.

4. Why does the CAHPS report use the star symbol in the summary comparison charts?

The CAHPS reporting templates use a combination of comparison charts with star symbols and bar graphs to present the results of a CAHPS survey with consumers. The stars show the results of statistical tests that compare plans to determine which are significantly "better than average," "average," or "below average." We know from recent studies and our own testing that consumers like the charts with star symbols because they are an easy way to get the big picture of plan comparisons and identify patterns in the survey results. In the CAHPS templates, these charts show health plans as the rows in the table and survey topics (the clusters of questions) as the columns. Consumers can focus on a topic of particular interest and compare across plans, or they can focus on a plan of particular interest and compare across topics.

Consumer testing conducted for CAHPS and for other projects by a CAHPS team member has shown that many people tend to skim quickly through a report and pay attention to a legend only if they think they don't know what the symbols mean. Since many readers make a quick assumption about symbols, and because they often ignore or miss the legend, they are sometimes wrong. Ideally, then, the particular symbols that are used should be hard to misinterpret, and the legend should be designed and placed in a way that draws attention.

Testing has shown widespread familiarity with the use of stars as ratings, such as for movies or restaurants, or in school. It is easy for people to make the correct interpretation that three stars is highest or best, one star is lowest, and two stars is in between, even without consulting the legend. Testing of other symbols, including many with simpler shapes, has revealed a greater potential for misinterpretation. For example, although a great many people who work in the health care and survey industries are familiar with Consumer Reports and its color-coded circle symbols, many consumers have never seen the magazine or its symbols. Testing has shown that people who read quickly through a chart, paying little attention to legends, are especially prone to misinterpret symbols that use a combination of coding by shape and by color or pattern. It appears that the cues they get from shape may conflict with the cues they get from color. In particular, people make different inferences about color. For example, some people think of the color black as connoting a "black mark," which is bad. When black is used to mean "better than average," they may misinterpret it as "worse than average." Others interpret a white circle outlined in black as being "empty" and therefore not good, so using such a symbol to mean "better than average" would not work well.

Because performance reporting is relatively new, there is much more work to be done to identify the most effective ways to share survey results with consumers. It may be that further testing will identify symbols that work as well as or better than stars. Though stars are familiar and resistant to misinterpretation, the shape of stars makes for a somewhat cluttered appearance, and some people feel that using stars as the symbols tends to trivialize the chart.

There is also the concern that consumers tend to interpret the stars as indicating absolute rather than relative performance on the survey. Changing to symbols other than stars is not likely to help this problem, since it stems from the more fundamental challenge of understanding the complex relationship between absolute and relative performance. For example, it is difficult for many people to grasp that one star does not indicate "poor" performance if there are differences among plans that are all performing quite well. And conversely, when all plans are performing poorly, three stars does not indicate that a plan is performing well, but rather that it is performing poorly, though not as poorly as some others. To help address this challenge of interpretation, CAHPS recommends that reports use a combination of bar graphs that give information on absolute levels of performance and stars (or other symbols) that indicate relative performance (how well each plan did compared to the survey average), plus some explanatory text that calls attention to the issue.

5. Why does CAHPS use its particular type of bar graphs (100 percent bar graphs) to show the answers people gave to the survey questions?

The CAHPS reporting templates use a type of bar graph called a 100 percent bar graph because it shows the full distribution of responses to survey questions and it is relatively easy for consumers to interpret whether they want to focus on the high end (which shows the most favorable responses), the low end (which shows the least favorable), or both.

We use graphs rather than tables of numbers (such as percentages) to show the survey results because graphs have greater visual appeal to consumers. We use bar graphs rather than pie charts because pie charts do not lend themselves to easy comparisons across plans. We tested several types of bar graph formats for ease of comprehension before selecting 100 percent bar graphs with three categories for use in the templates. In these graphs, the high end of the scale (percentages for the most favorable response) and the low end (percentages for the least favorable response) are both solid colored, and the middle (percentages in the middle) is white in the print reports and light colored in the computer report.

For the clusters of CAHPS questions that ask "how often" certain experiences occurred, the 100 percent bar graphs show the percentages for "always," "usually," and a combined percentage for the remaining responses of "sometimes" or "never." For these topics, "always" is the most favorable or positive response, and is consistently on the far right of the horizontal bars. Questions that ask for a rating on a scale from 0 to 10 are grouped into three categories in the bar graphs, and questions that ask whether people have had problems with access or care are shown with percentages for "big problem" as the least favorable response, "small problem" in the middle, and "no problem" as the most favorable response. Again, the most favorable response is on the far right (see ***Question 7*** in the "***Frequently Asked Questions About the CAHPS Questionnaire***").

We found that the 100 percent bar graph divided into three categories was flexible and simple to understand because the white or light center makes it easy for people to focus on either extreme—the high end or the low end—to compare across plans. Using the same style graph with consistent color coding makes it easier for people to skim through the graphs and make accurate interpretations. The 100 percent bar graph has the important advantage of showing the full distribution of responses. We know from focus group studies and from our testing that some people object to graphs that show only the top one or two categories that indicate the most favorable response. They wonder about what is not being shown (is something being hidden at the low end?), or they may simply prefer to make their comparisons based on lowest scores rather than highest ones.

6. What is the purpose of including both the star charts and the bar graphs in the print report? Why not use one or the other?

The star charts and the bar graphs provide different information about survey results. The star charts show the relative performance of plans (in other words, how well each plan included in the survey performed compared to the average of all plans). The bar graphs show the actual survey results for each plan. The charts and graphs complement each other. When national or regional benchmarks for CAHPS performance become available, sponsors will be able to add this information to the CAHPS reports, too. Also, we know that consumers have different decisionmaking styles. Results from some of our demonstration sites indicate consumers tend to be divided fairly equally between those who prefer to use the star charts in decisionmaking and those who prefer to use the bar graphs in decisionmaking. Therefore, including both kinds of charts will work for most consumers. More empirical evidence is needed to better understand what types of information will best work for most consumers. Other experiments are ongoing within the CAHPS project that will explore consumer decisionmaking styles.

7. In the print report, the bar graphs require the use of white and either two colors or shades of one other color. What are the important things to keep in mind if the report is in black and white and/or needs to be photocopied?

It is essential that the center of the graph be white. This separates the more positive survey responses from the more negative survey responses and enables consumers with different decisionmaking styles to successfully use a variety of heuristics to interpret the graphs. The sample CAHPS report template uses two colors, but spot color (shades of a single color) can be used effectively to screen back the color on one side of the graph and give the effect of two colors. The best test of whether black and white or spot color will photocopy effectively is to test it by running a few copies. This information does not apply to the computer template. White does not work well as the center color in the bar graphs on a computer screen.

8. How and why does CAHPS combine the response categories for the "never/sometimes/usually/always" composites?

We combined these four possible responses into three in the bar to simplify the presentation of data. In deciding which two responses to combine, we looked at results from repeated demonstrations of the CAHPS survey instruments. These indicated that the "never" response option is seldom selected by respondents. For example, less than 5 percent of the respondents typically select the "never" response to questions such as, "How often did doctors or other health care providers listen carefully to you?" Combining "never" and "sometimes," therefore, results in no loss of information.

In contrast, combining the "always" and the "usually" responses would have resulted in a significant loss of information. In CAHPS demonstrations, about 50 percent of respondents say that their health care providers "always" listen, explain, and respect their comments. Another 20 percent stated that their providers "usually" listen, explain, and respect their comments. Combining these categories would reduce the ability of these items in the CAHPS survey to discriminate properly. In other words, the information about health plans that consumers can use to examine plan performance is contained in the top two responses to the "never/sometimes/usually/always" questions.

9. Why doesn't the report compare plans on cost and coverage?

We are acutely aware that consumers care a great deal about cost and coverage. However, such issues are not included in the CAHPS questionnaire for several reasons. First, in the commercial sector, the employer purchasing health plan benefits is the first to decide about such critical issues as copayments and coverage. Hence, enrollee experience with respect to cost and coverage usually does not reflect the plan characteristics as much as it does the decisions of the employer purchasing the coverage options. Second, enrollees' experiences with respect to cost and coverage will be driven a great deal by their own health care needs and perceptions of a plan's value. For example, a high-income family whose employer pays 95 percent of health care costs may judge Acme Health Plan coverage as a good value, while a low- or middle-income family whose employer pays a much lower proportion of the cost may judge the same plan with identical benefits as too expensive or as offering insufficient coverage. Factual information on the actual costs and coverage associated with the plan offered to a particular consumer is far more useful. Most sponsors provide this information through booklets and charts that they distribute to potential plan members during open season.

Finally, a key premise of the CAHPS questionnaire is that it focuses on topics for which enrollees are the best source of information. In this case, information about costs and coverage are routinely available from employers and plans in considerable detail and probably much more accurately than enrollees could ever provide it. In the future, we may work with sponsors to include plan-provided cost and coverage information in CAHPS reports. During this first phase of CAHPS, however, we decided to give priority to reporting the survey data.

10. Why doesn't the CAHPS report include comparisons among plans on clinical measures, such as the percentage of patients with a particular disease who got better?

We did not include clinical measures in the CAHPS survey or report because CAHPS focuses on quality assessments from the consumer point of view. Consumers tend to define quality in terms of such factors as the provider's ability to offer clear, easy-to-understand explanations of diagnoses or treatment options. Other people, such as clinicians or health services researchers, are better prepared to provide measures assessing clinical performance of health plans. Question 12 below provides advice for reporting one set of clinical measures for managed care plans (NCQA's HEDIS) within CAHPS reports.

11. If a plan scores well on the topics listed in the CAHPS report, does that mean it will also score well on other measures of quality?

The topics contained in the CAHPS survey were selected to provide a broad understanding of health plan performance from the plan member's perspective. Although the topics cover various subjects, they do not provide a comprehensive picture of plan performance. The topics assessed in the CAHPS survey reflect concerns that plan members have expressed in interviews and focus groups. The CAHPS survey covers members' experiences with health care providers and their office staffs, as well as the health plan, including customer service.

Plan members' reports about their experiences with the plan and its providers may not be related to health plans' reports about the technical quality provided by doctors and nurses or other measures of health plan quality. These plan members' reports about their experiences may not be related to measures of other services from health plans. For example, patients' reports about experiences with plan customer service are probably not associated with immunization rates among young children or mammography rates for women. The topics from the CAHPS survey complement, rather than duplicate, other indicators of quality.

12. What do I do if I want to include HEDIS measures in my report?

Including other types of data in the CAHPS report, such as HEDIS results collected from health plan administrative databases and medical records, can give readers a more complete view of plan performance. HEDIS and other similar performance measures convey information about clinical results and preventive care processes, which complement CAHPS data from the consumer perspective.

A growing number of report cards for consumers present HEDIS data and serve as examples. Research on some of these reports has shown that a subset of HEDIS measures, if clearly explained, are of interest to and understood by consumers. For example, measures most suitable for reporting to consumers include childhood and/or adolescent immunization status, advice to smokers to quit, breast cancer screening, cervical cancer screening, prenatal care in the first trimester, check-ups after delivery, beta blocker treatments after a heart attack, eye exams for people with diabetes, follow-up after hospitalization for mental illness, and adults' access to ambulatory health services. The selection of measures should reflect the target audience. For example, a report for Medicare beneficiaries should include measures more relevant to seniors, such as beta blocker treatment after a heart attack and eye exams for people with diabetes, and should exclude measures related to maternal and child health. Similarly, a report for Medicaid recipients should emphasize maternal and child health measures.

To report HEDIS data in a way that is meaningful to consumers, it is important to provide contextual information. For example, consumers need to understand that health plans are able to influence the quality of their health care. Consumer understanding of each measure is aided by using clear, concise definitions that are free of technical jargon and by explaining why the measure is important.

Although HEDIS performance measures have been reported along with survey data from consumers, there has been little research to date on the most effective ways of presenting data from these two sources. However, based on the limited work that has been done, we recommend that results be grouped by topic rather than data source. For example, survey data and HEDIS data that related to the same topic (e.g., performance measures on "access to services" and CAHPS data on "Getting Needed Care") should be grouped together, and perhaps even reported on the same page. However, we do not recommend combining HEDIS data and consumer survey data into new composite measures. Nor do we recommend revising or relabeling CAHPS reporting categories to make them fit better with HEDIS measures. To report HEDIS measures that do not fit topically within CAHPS reporting categories, it is best to create new categories for those measures.

Several research projects are currently designing and testing reporting formats that combine technical quality data (e.g., HEDIS) and consumer survey information (e.g., CAHPS). Results from these projects will be incorporated into future CAHPS products and updates.

Getting Technical Assistance from SUN

Contact the ***SUN Help Line*** at **(800) 492-9261** for examples from these projects.

13. An earlier version of the report included ratings on specialists and personal doctor/nurse. Why were these dropped?

The 0 to 10 ratings of specialists and personal doctor or nurse were not dropped from the CAHPS 2.0 report. These questions were removed from the CAHPS 2.0 standard reporting template to preserve space. This was one of several steps taken to significantly shorten the 1.0 report.

To determine which questions we should retain in the 2.0 report, we interviewed health plan members and asked them to assess the importance of the overall ratings developed for the CAHPS survey. The ratings of specialists and personal doctors or nurses were viewed as less important than ratings of all health care providers and the health plan. The ratings of health providers are more global than ratings of specialists and personal doctors or nurses. Consumers seemed to understand the distinction between ratings of types of providers (a specific measure), and ratings of all health care received (a general measure). Because these items are all positively associated, some redundancy of information is probable. Thus, we felt that by reducing the number reported, consumers were not losing important data.

If desired, sponsors can include all of these ratings questions in their report. Three of the four items relate to health care providers and the other asks members to rate their health plans. Two of the items related to providers ask members to rate their personal doctor or nurse or rate their specialists. These two items are completed by a smaller number of plan members. The rating of all care provided by doctors and nurses is more general than these two ratings of specialists or personal doctors or nurses. Depending upon the population, interest in specialty care or care received from a personal doctor or nurse may be high. For example, if the population includes a significant proportion of patients with chronic illnesses, the report should contain ratings of specialists. We encourage sponsors to include these measures where appropriate.

Because these single item ratings measure either general or specific care and only four ratings are included in the survey, we do not recommend combining any of the 0 to 10 ratings in composites scores for reporting. Combining all of the 0 to 10 ratings would combine ratings of providers and plans in a single measure. These items should reported as separate (“single”) items.

14. When I show the survey results, what background should I include about differences in HMOs, PPOs, and other types of plans?

The consumer testing conducted during the development of the CAHPS reporting template revealed that people were often confused about the differences in types of plans. Therefore, we think it is useful to give readers some background on types of plans and to remind them about the differences in plan type as they review the survey results. This is done by grouping plans according to type or by indicating their type as a column in the comparison charts.

There are several resources sponsors can use to develop text that describes various types of plans. The original CAHPS template has explanatory text that compares fee-for-service, HMOs, PPOs, and POS plans.

The CAHPS templates include systematic comparison of plan types at a very general level. This serves as a point of departure and general model for sponsors. Because the types of plans included in CAHPS surveys differ from project to project, and because the boundaries between types of plans are not nearly as clear-cut as these explanatory notes imply, we expect sponsors will need to edit this text heavily to make it accurate and appropriate for their survey and reporting purposes. Some sponsors may want to insert a condensed version of text from the open enrollment materials they give to employees.

The approach we use in the templates emphasizes "trade-offs" as a relatively neutral way to highlight potential advantages and disadvantages of different plan types. It sums up the impact on access and cost, both of which are very important to consumers and are sometimes misunderstood. The bulleted lists and column format make it relatively easy for people to skim the comparisons so that they can focus on topics of particular personal interest. It also emphasizes the key concept of "network" and its implications for them personally, both in terms of how they get access to care and what they have to pay.

Getting Technical Assistance from SUN

For examples from other CAHPS projects, contact the ***Sun Help Line*** at **(800) 492-9261**.

Frequently Asked Questions About the CAHPS Questionnaires

1. Have the CAHPS questionnaires been tested and evaluated?[2]

Yes. In fact, CAHPS probably has been tested more completely than any previously used consumer survey. In addition, the CAHPS development team, together with researchers from the NCQA from the fall of 1997 to the spring of 1998, conducted a detailed comparative analysis of the items in the CAHPS questionnaire and NCQA's Member Satisfaction Survey (MSS). These questionnaires were merged to form the current CAHPS questionnaire. This testing is noteworthy because it was so extensive and because of the wide array of techniques used. These included focus groups, in-depth cognitive testing, pilot studies, methodological experiments, and large demonstration studies, such as the demonstrations in Washington State, Kansas, and New Jersey.

There are two different and complementary approaches to assessing the reliability and validity of a questionnaire: (1) cognitive testing, which bases its assessments on feedback from interviews with people who are asked to react to the survey questions, and (2) psychometric testing, which bases its assessments on the analysis of data collected by using the questionnaire. Although many existing consumer questionnaires about health care have been tested primarily or exclusively using a psychometric approach, the CAHPS team views the combination of cognitive and psychometric approaches as essential to producing the best possible survey instruments. Consequently, both methods have been included in the CAHPS project.

The cognitive testing method provided useful information on respondents' perceptions of the response task, how respondents recalled and reported events, and how they interpreted specified reference periods. It also helped identify words that could be used to describe health care providers accurately and consistently across a range of consumers (e.g., commercially insured, Medicaid, fee-for-service, managed care, lower socioeconomic status (SES), middle SES, low literacy, higher literacy) and helped explore whether key words and concepts included in the core questions worked equally well in both English and Spanish.

[2] See "The Use of Cognitive Testing to Develop and Evaluate CAHPS 1.0 Core Survey Items." *Medical Care*, vol 37 (3), 1999; and "Psychometric Properties of CAHPS Survey Member," *Medical Care*, vol 31 (3), 1994.

2. Is it fair to hold plans accountable for the experiences that members have with their providers?

Although staff model HMOs have a clear relationship between a health plan and the providers of health care, the majority of current managed and non-managed care models do not have such a close working relationship. Furthermore, many physicians provide services under a variety of health plans.

In this context, it is reasonable to ask whether meaningful data are being provided about health plans. If health plans have no effect on physician behavior, and individual physicians are providing care for more than one plan, one would expect no difference in provider-related experiences. However, some health plans try to affect the behavior of providers as they take care of covered patients. To the extent that those efforts have an effect, good or bad, they may show up in the results of the CAHPS questionnaires. In fact, test results clearly show that some IPA model health plans produce quite distinctive experiences for members with respect to access to services and specialists. Other examples show that the interactions between providers and patients are not related to the plan to which the patient belongs. These are exactly the kinds of things that CAHPS is designed to measure. In the event that plans are not affecting the interactions, as noted, then there will not be predictable plan differences.

3. The data resulting from a CAHPS questionnaire do not provide information on the exact cause of a problem. Therefore, how can providers and plans use the questionnaire results to improve their performance?

CAHPS is well designed to compare plans with respect to patients' various areas of interest. CAHPS questions are designed to work across all kinds of providers and health plans. Thus, they have to focus on patients' experiences in a way that does not assume any particular characteristics of health plans or providers. As a result, the questions focus on what happened to patients, not why. Second, CAHPS is designed to be used with samples of health plan members who get their health care from various providers. It is true that many of the problems experienced by enrollees will be caused by the behavior of providers. However, unless a sample is designed to produce a minimally adequate number of responses about any particular provider, there is no way to link respondent experiences to individual providers.

If users have a need for further information about why certain problems occur, they need to collect additional data. One option for collecting these data is to add questions to a CAHPS questionnaire or use other methods, such as focus groups and medical records reviews, to supplement a survey. These other methods can be used to further define problems initially identified through a survey.

4. Why does CAHPS use a 0 to 10 rating scale and not an adjectival rating scale?

During the cognitive testing phases, the CAHPS development team examined four alternative rating scales:

- Excellent, very good, good, fair, or poor.
- Very good, good, OK, not very good, not good at all.
- Excellent, very good, good, OK, not very good, not good at all.
- A scale from 0 to 10, where 0 is as bad as something can be, 10 is as good as something can be, and 5 is OK or average.

The team arrived at the following conclusions about six key issues related to rating scales:

Psychometrics. In general, having more response alternatives is better. In particular, because ratings of health care tend to be positive, the rating task with only two clearly positive categories ("very good" and "good") provides the least discrimination, while the 0 to 10 measure appears to provide the most.

Appropriateness for self-administration and telephone use. A challenge for telephone interviewing is to make sure the respondents can retain in memory all the response options when they answer questions. The five and six adjective-response tasks are likely to stretch respondents' capacities in this respect. A clear advantage of the 0 to 10 response task is that respondents have no difficulty in retaining awareness of all the response alternatives.

Appropriate for use in other languages. Comparability of wording from one language to another is always problematic. The words "fair" and "poor" in particular have been found to be difficult to translate into Spanish in a way that retains equivalent distance between categories. A major advantage of the 0 to 10 task is the ease of translation of numbers from one language to another.

Ease of preparing reports. It is difficult to present distributions of answers across five or six categories in a way that is meaningful to the general population. The team felt such data should be collapsed into two or three categories for most audiences. The most appropriate way to report the results from the 0 to 10 rating is as a mean or average, which is a simple and easy way to communicate the questionnaire findings to consumers.

Ease of interpretation of results. It is argued that an advantage of the adjectival rating tasks is that the words communicate meaning. However, this advantage can be viewed as a shortcoming as well. The meaning of a CAHPS rating must be established by comparing results from plan to plan, rather than by deriving meaning from the words in a rating scale themselves. Helping readers achieve an appropriate interpretation of ratings may be easier using a numerical rating scale because it focuses them solely on comparative results rather than on the words used.

Respondent acceptance. Although one would not choose a rating task based solely on respondent preference, acceptability to respondents is important. When respondents were asked about their preferences among the various rating tasks outlined above, the numerical rating was as acceptable to respondents as the adjectival tasks.

Thus, according to each of the criteria considered, the 0 to 10 rating tasks compares favorably with any of the adjectival alternatives.

5. Why does CAHPS repeat the reference period in every question?

The reference period for a questionnaire item is the time period the respondent is being asked to consider when answering the question. Questions that fail to make reference periods explicit leave room for different individuals to interpret the items differently. More specifically, without a specified reference period, respondents with varying enrollment histories will base their answers on different periods of time. A person who has been enrolled in a plan for 5 years could answer about the previous 5 years, while a person enrolled for 8 months could respond about those 8 months. To standardize the assessment of quality for different respondents, the CAHPS instrument uses an explicit reference period.

6. Why does CAHPS ask respondents to continue answering questions even if they think they do not belong to the sampled health plan?

The health care industry is currently in flux and there are frequent mergers and acquisitions. Each merger results in a new name for each of the health plans involved in the transaction. During the testing of CAHPS products in various sites across the country, it became apparent that many enrollees do not recognize their plan if it is presented under a new name. Of course, this is most likely to happen with recent plan name changes, but confusion about names also occurs with plans that have changed names less recently. These name changes can be invisible to enrollees if they passively choose to stay with their current plan by not responding during their employer's open enrollment period. In addition, the exact name of their health plan is often not salient for people who have little need for health care, and some respondents who refer to a plan by a nickname mistakenly say they do not belong to their plan when it is referred to by its

more formal name. Inviting respondents to fill in the name of the plan to which they think they belong and to complete the questionnaire with this plan in mind, allows eligibility decisions to be made by researchers armed with the name history of the plan in question. The potential loss of valid information is therefore minimized.

7. Why does CAHPS order response options or questions in such a way that the negative wording comes first?

CAHPS presents the never-to-always response options in the order from "never" to "always" and the problem format response options from "a big problem" to "not a problem." Because survey methods studies show that respondents tend to be reluctant to use negative response options, putting the negative responses first yields a better distribution of responses.

For the problem format questions, CAHPS uses the format, "how much of a problem, if any, was it to [do X] ... a big problem, small problem, not a problem?" The "if any" wording conveys to the respondent that he/she can choose "not a problem" if that applies. In situations where doing X was a problem for the respondent, he/she can convey how much of a problem it was.

8. Why does CAHPS include only one health status measure in its questionnaires?

Health status has been demonstrated to affect patient experiences in ratings of health plans. If plans differ significantly in the composition of the populations they serve in this respect, it could account for different ratings and answers. Analysts and sponsors use health status items in two ways: (1) to examine the different experiences of those who have special needs and make higher demands on their plan; (2) to adjust the results they present to their constituency to account for this difference in populations across plans. Therefore, at the outset the CAHPS consortium believed it important to include health status measures in the questionnaire.

We have conducted analyses that have shown that the single question on self-reported health status alone accounts for almost all the variance in ratings of health care and health plans that can be associated with health status. Adding other items from the SF-12 or a Chronic Condition List adds very little to the ability to adjust populations in this way. For surveys aimed at people with chronic conditions, more elaborate measures of health status are recommended. However, for surveys of cross-sections of plan members, such as CAHPS, this single question is all that is needed.

9. How did CAHPS determine the method for collecting data about urgent or immediate care?

One of the issues that the CAHPS development team has worked hardest on is how to capture people's experiences when they need medical care right away. There are two challenges. First, there are a variety of medical conditions for which patients might want immediate attention, ranging from an acute emergency to a worrisome symptom or condition in a child. Sorting respondents and their problems into meaningful categories, by degree of urgency, is not feasible. Moreover, the subgroups would quickly begin to get very small.

Second, responses to a need for immediate care will vary by the time of day the need arises, the configuration of the plan, and the provider. One controversy the team dealt with was whether to include emergency room care in this question. During testing, it became clear that in some settings, and at some times of the day or night, the emergency room is the place that patients go to have their medical care needs met. Excluding emergency room care, therefore, appeared to be inappropriate because it is one of the ways that some plans and providers provide immediate care. The intent of these questions is to define a set of people who need care quickly and to ask them how often they were successful in getting care "as soon as they wanted." The question specifically allows for the care to be provided in any setting, because the real issue is whether or not people get the care they need. The "as soon as you wanted" qualifier is a way of acknowledging the fact that the urgency of the need for care varies for the different kinds of situations for which people might be answering this question.

10. Why doesn't CAHPS keep track of out-of-network care?

CAHPS instruments have been criticized because respondents are not asked to differentiate between the care they receive from network providers and those received from out-of-network providers. There are three reasons why CAHPS instruments do not attempt to separate sources of care. First, CAHPS instruments are supposed to work across all kinds of plans. "Out-of-network" is a concept that is meaningful for some plans, but not for others. Thus, such a concept would confound plan comparison. Second, we have found that it is virtually impossible to construct a survey instrument that sorts care by who provided it or where it was provided. One of the challenges of designing an instrument is the fact that people get care from many sources and from many sites. Respondents are not able to reliably distinguish between care that is and is not provided in the network. The complexity of such questions makes it impractical. Third, we think that the approach used in the CAHPS instrument, whereby sources of care are not sorted, is the appropriate way to collect data in any case. We are describing the experiences that members of a health plan have in getting the care they want or need. If going out of network is a significant element of the care that a member of a particular plan receives, the effect on patient experience should be documented. To the extent that consumers' experiences with out of network care is poor, it should appear in the answers respondents give.

11. Why doesn't CAHPS collect information on technical quality?

One of the fundamental design principles that guided the CAHPS survey development was to ask consumers only those questions to which they could give meaningful answers. Because of this, the CAHPS questionnaire examines the issue of quality solely from the consumer's perspective. For example, through focus groups and interviews, we know that consumers consider the amount of time health providers spend with them as an important indicator of quality, so we included this item in the questionnaire. Focus groups and interviews with consumers also showed us that consumers tend to think about technical competence or good medical care in terms of providers doing a good job of explaining health care options and developing a respectful relationship with patients. We include questions on these topics in the CAHPS questionnaire. We also included a rating of care by all doctors and other health professionals, because that seemed to capture the type of overall quality of care measure that consumers could provide.

The information that CAHPS provides—quality from the consumer perspective—is one piece of the total picture of quality, and it rightfully has received careful attention, resources, and expertise. Ideally, over time, a successful education and communication effort will result in products that integrate consumer-measured quality assessments and technical quality information with cost and benefits information to successfully educate consumers and help them make better-informed health plan decisions.

12. Does the CAHPS questionnaire include measures of unmet needs?

At several stages in the CAHPS process, we considered developing questions that would measure whether people had ever needed appointments or services, but were never able to receive them. This was because we were concerned that some people would not respond to certain CAHPS items if they had had an unmet need, for example, had needed a specialist, but had never been able to obtain a referral. We did not want to eliminate such individuals in the assessments of health plans. Surprisingly, we found little support for this concept among our respondents in cognitive or field tests for a number of reasons:

- Respondents did not relate to the concept of the patient as a determiner of need. One way we attempted to test this was by using the phrase "did you think you needed..." to include experiences where the consumer as well as the provider could identify a need:
  - "In the last 6 months, how often did you see a specialist when you thought you needed one?"

- "In the last 6 months, when you tried to be seen for an illness or injury, how often did you see a doctor or other health professional as soon as you wanted?"

- Respondents were confused by this terminology and often told interviewers that they could not determine with certainty whether or not they needed to receive care.

- The concept of not getting needed medical care was not meaningful to certain populations. For example, seniors enrolled in Medicare generally could not conceive of needing medical attention and not receiving it in a timely and appropriate manner.

- We hypothesized that the size of the population who had some form of health coverage but who did not eventually receive needed care would be quite small. It might be that we did not uncover this in the groups participating in CAHPS tests.

The CAHPS team recently decided to test the concept of "unmet need" in an upcoming field test to gain more information about the extent of this concern. Test questions have been added to the Medicare fee-for-service field test to gather further evidence. An example of the questions follows:

- "In the last 12 months, was there ever a time you tried to get health care for an illness or injury, but were *not* able to get it?"

- "Was this because of something the health plan or doctor did, or did *not* do?"

Results will be analyzed to determine if additional items might be required to address unmet needs.

13. Why are there no items on 24-hour access to medical care?

The CAHPS core questionnaire contains several items on access to medical care. In developing these items, we gave careful consideration to the types of care that are common across all care delivery systems and the care needs of the majority of consumers. The CAHPS supplemental items on access to care focus on the needs and experiences of special populations, such as individuals with a chronic condition or those on Medicaid, and asked about experiences that are relevant to a large enough proportion of people in those populations. The number of consumers who need and use 24-hour access to medical care in a 6-month or 12-month period is not large enough to provide data that can be analyzed or reported in a meaningful way.

14. Why are race and ethnicity separate items in CAHPS?

The CAHPS race and ethnicity items were developed by the Federal Office of Management and Budget in order to create standard measures for use by federal agencies and others to collect uniform data on race and ethnicity. Ethnicity is often used as a case-mix adjuster or in other descriptive presentations of CAHPS data and, as a result, it is important to collect it as a separate variable from race.

15. Why is "Nurse" included in the definition of primary care provider?

The National Committee on Quality Assurance (NCQA)-CAHPS converged questionnaire does not seek to define a primary care provider. When using the term "Personal Doctor or Nurse," the questionnaire seeks to clarify the person the patient sees most often who might be most knowledgeable about the patient's medical history. A patient's main interactions might be with a nurse practitioner. Since the term "Nurse Practitioner" may be unfamiliar to many respondents, the questionnaire uses the term "Nurse."

16. Why does CAHPS use the term "health plan"?

One of the goals of CAHPS is to use language that is applicable to all our populations so that there are as few item differences as possible. During the various stages of CAHPS development, we tested a number of phrases the could be used to refer to the provider and/or payor of health care, including "health insurance plan," "HMO-Health Maintenance Organization," and a blank for the Medicare managed care plan, which allowed respondents to fill in the actual health plan name. As a result of very early testing, CAHPS 1.0 used the phrase "health insurance plan" for all populations, including Medicare and Medicaid. However, as we expanded our cognitive and field testing following CAHPS 1.0, we discovered that many respondents outside of a typical fee-for-service insurance plan did not think of their health care coverage as "insurance." This was particularly true for Medicaid, Medicare managed care, and people enrolled in traditional managed care plans. We further tested this issue during the Medicare fee-for-service cognitive tests. We tested three variations: "your health plan," "your health insurance," and "Medicare and any other insurance you have." We found that people generally understood all three phrases to mean basically the same thing. In CAHPS 2.0, we adopted the phrase "your health plan" because (1) it worked well with populations in managed care and fee-for-service, (2) it shortened a phrase that was used repeatedly in the questionnaire, and (3) translated well in Spanish language versions.

17. For what reading level is CAHPS designed?

The CAHPS team has been concerned from the beginning about the reading level of the questionnaire because of the anticipated use by a large number of Medicaid programs. As part of the development process, we asked independent consultants to evaluate the questionnaire and recommend ways in which the reading level could be reduced. The CAHPS 1.0 core questionnaires also were subject to extensive cognitive testing across all population groups to reach the desired reading level. The 2.0 questionnaires are at a sixth grade reading level. While many Medicaid programs are mandated to provide written materials at the fourth grade reading level, the questionnaires necessarily include topics and word choices that could only be reduced to the sixth grade level. The supplemental items are even more complex, as they involve text about chronic illness, and they could be reduced only to the eighth grade level.

18. Will the length of this questionnaire and the frequent shifts in response format cause too heavy a burden on respondents?

The length of the 2.0 instrument is, in fact, shorter than both the original NCQA Member Satisfaction Survey (MSS) and 1.0 CAHPS questionnaires. Furthermore, the CAHPS instrument dramatically reduces the number of response formats that were used in the previous questionnaires, and it does not use the grid format included in the original MSS questionnaire. Although some may think this makes answering the questions more difficult, the decision to drop the grid format was made after testing and in collaboration with NCQA. Our testing indicated that the grid format confuses many respondents. As a result of dropping the grid, the converged questionnaire is three pages longer than the earlier MSS questionnaire, but it has fewer questions and fewer response formats. The addition of the three pages does not lead to a greater response burden or higher mailing costs. Furthermore, experience to date shows that the CAHPS instrument yields response rates at least as high as those achieved with the MSS.

19. How important is information about trends? Does the new CAHPS 2.0 questionnaire permit a transition from MSS and CAHPS 1.0?

While developing the converged questionnaire, the CAHPS-NCQA team considered the need to maintain trends a priority. This was one reason for including the five key questions from the MSS questionnaire: referral to a specialist, getting necessary care, delays in getting care, waiting time for an appointment for an urgent illness or injury, and waiting time for a regular appointment.

At this time we have deferred the development of a protocol for longitudinal analyses using a sample design containing a panel (i.e., surveying the same respondents in subsequent years). However, we designed the questionnaire so that such analyses could be conducted later if a panel is added to the sample design. For example, one of the changes made to the MSS last year, in response to recommendations made by the CAHPS team, was to introduce an explicit reference period. The absence of a reference period had made it impossible to cleanly interpret data collected with the previous MSS questionnaire.

20. Why have you changed the recall and eligibility period to 12 months for commercially insured enrollees while maintaining a 6-month period for Medicaid and Medicare?

The CAHPS development team initially decided to stipulate that respondents had to be enrolled in a plan for at least 6 months because they thought it was the shortest period for which plan members would have sufficient plan experience to report on. Six months was also a reasonable length for a recall (reporting) period. Furthermore, this relatively short period of time would maximize the number of health plan members who could participate in the survey. Despite the 6-month eligibility criterion, CAHPS surveys conducted in the commercial sector included only consumers who had been enrolled in their health plan for 12 months or more. The reason for this is that it takes 5-6 months to field a CAHPS survey and produce reports. Sponsors often begin a survey in May so that the reports containing questionnaire results will be ready in the fall, in time for people to go through the decisionmaking process before a January enrollment period. Requiring 6 months of enrollment before the beginning of the survey field period would mean no new enrollees—an important survey population—could be included because the field portion of the survey would take place about 2 months before the enrollment period. Given this survey time frame, the only way to capture new enrollees would be to use a shorter eligibility period, such as 3 months. However, three months is simply not a long enough exposure to a health plan to provide the basis for a valid assessment of its performance.

As a result of this issue, we now recommend a 12-month eligibility period and 12-month reporting period for the commercial sector. Because there is a more rapid turnover of health plan membership in Medicaid than in the commercial sector and because there is no set open enrollment period around which the survey needs to be timed, we continue to recommend 6-month eligibility and reporting periods for the Medicaid survey. We also recommend that sponsors who are interested in comparing health plan performance for Medicaid versus non-Medicaid consumers oversample Medicaid consumers who have been enrolled for 12 months or longer to match the eligibility distribution for their commercial plans.

21. Is NCQA setting an industry standard by specifying a waiting time more than 15 minutes as too long?

The inclusion of 15 minutes in the question about the waiting time to see a health care provider is not intended to set a standard. Rather, it is a yardstick. Data from several CAHPS demonstration sites show a high proportion of patients reporting that providers see them within 15 minutes. The goal of the CAHPS questions is to enable consumers and sponsors to compare plans. In this case, if one wanted to compare waiting times, asking patients how often they are seen in less than 15 minutes is the right way to do it. The data show that if we picked a much longer waiting period, there would be very little variance among plans because the vast majority of people are seen in less than half an hour. Moreover, in our testing, respondents told us that a question using a period much longer than 15 minutes would seem inappropriate because, to many respondents, a wait longer than that is not acceptable.

22. Is it really possible to achieve the response rate you anticipate with the survey protocol CAHPS is recommending?

We believe that a response rate of 60 percent—the goal we have set for CAHPS—cannot be achieved with a mail questionnaire only. However, we believe that a mixed-mode protocol involving a mail questionnaire combined with telephone follow-up can increase the response rate to 60 percent. Thus, we recommend such a mixed-mode protocol. A phone only or phone followed by mail protocol—if acceptable to NCQA—may also achieve the designed response rate.

It is reasonable to expect some concern about the possibility of bias being introduced through the use of a mixed-mode protocol. However, we have conducted extensive testing and development work to eliminate mode effects. Thus, we are comfortable recommending a mixed-mode protocol. We have no reason to believe that different sequences of data collection strategies would result in significant differences in bias among plans so long as there are no gross differences in response rates.

23. Is a 50 percent response rate achievable for Medicaid?

We agree that this is a higher rate than some sponsors have achieved and that by requiring this rate we are raising the traditionally accepted minimum. Survey results are more representative of the target population when better response rates are achieved. This is a goal for which we would like to see sponsors strive.

A number of current CAHPS programs have achieved a 45 percent rate with little trouble using a mixed-mode approach. We are confident that by employing the mixed-mode approach and by expending a little additional effort in locating respondents and following up by telephone with nonrespondents, sponsors can reach better and better response rates.

Getting Technical Assistance from SUN

For further information about data collection methods and meeting desired response rates, contact the ***SUN Help Line*** at **(800) 492-9261**.

24. Why are the CAHPS materials available in only one foreign language—Spanish?

CAHPS had resources to test and develop the CAHPS questionnaires in one non-English language. The number of Spanish-speakers in the United States was a factor in the decision to produce a Spanish-language translation of CAHPS. According to U.S. census data, Spanish is the most common non-English language spoken in homes in the United States. A second factor was that the questionnaires and other materials could be translated into Spanish using terms that are understood by almost all Spanish-speakers, including those who speak different dialects. This is not the case with other languages.

25. If a sponsor needs to field CAHPS in a language other than English or Spanish, are there any recommendations or guidelines for translation?

Some survey sponsors, such as local, state, or Federal Government agencies, may have written guidelines or directives regarding the selection of translators and the process used to translate any surveys the sponsor distributes. These guidelines would take precedence over CAHPS recommendations. A full description of the translation procedures used and recommended by CAHPS can be found in the CAHPS Special Supplement issue of Medical Care. CAHPS recommends translation, back-translation, and review. This process consists of a translator rendering the English language questionnaire into the target language—Tagalog, for example. A back-translator will then take the Tagalog-language material and translate it into English. A reviewer will compare the work product of the original translator and the back-translator in order to determine what changes, if any, should be made to the Tagalog translation in order to accurately represent the content of the original English-language questionnaire. CAHPS recommends using professional translators who are native speakers of the target language. One source for professional translators is the American Translators Association annual membership directory. When selecting a translator, it is always a good idea to check references by speaking with some of the translator's former clients.

Frequently Asked Questions About Analysis of CAHPS Data

1. What is the rationale behind the groupings in the reporting composites? Have these composites been tested for reliability and validity?

The reporting composites for the CAHPS survey were designed to summarize specific categories of health plan members' experiences with health care providers and plans. Reporting composites assist consumers by grouping related questionnaire items together, thereby reducing the amount of information contained in the report. The composites were designed to include items that could be understood by plan members to represent experiences similar to their own. Items within these composites that did not fit into the reporting category were reworded or removed to ensure consumer understanding.

Each CAHPS reporting composite was tested in focus groups with plan members. The CAHPS consortium conducted cognitive interviews with consumers to ensure that the reporting composites and their labels were easily understood. We also conducted psychometric analyses using data collected during pilot tests. These analyses indicated that the composites were reliable and valid measures of member experiences. In addition, items in each reporting composite were tested and found to be internally consistent. For example, reliability coefficients (Cronbach's alpha) in one pilot test among four health plans using the instrument that most resembled the final CAHPS 2.0 instrument ranged from a low of 0.68 for the "Getting Needed Care" composite to a high of 0.90 for the "Communication with Doctors" composite. These composites are positively associated with members' ratings of overall care provided by doctors and nurses and ratings of health plans (see also ***Question 3*** in the ***"Frequently Asked Questions About CAHPS Reports"***).

2. Why does CAHPS use case-mix adjusters?

One important policy decision in the analysis of CAHPS data is whether and how to adjust the data for different case-mix patterns. The CAHPS development team has studied this issue and incorporated their recommendations into the SAS code for CAHPS 2.0. The following is a description of the importance of the adjustment and how it is implemented.

When comparing health plans on the basis of the ratings by individuals covered by those plans, it is important to adjust the data for patient characteristics known to be related to systematic biases in the way people respond to survey questions. This is called case-mix adjustment and can be automatically performed by the CAHPS analysis program. For example, if sponsors know that people of a particular age group are reluctant to report problems and persons of that group are disproportionately enrolled in certain plans, they may want to account for that when comparing data among plans.

However, it is important to recognize that differences in patterns of responses may reflect real differences in quality of care as well as systematic biases. There is no absolute way to separate these two types of differences, but the most popular methods for adjusting the data to account for them are regression, stratification, and propensity score analysis, with regression being by far the most commonly used method.

Two patient characteristics frequently found to be associated with patient reports about the quality of their medical care are health status and age. People in worse health tend to report lower satisfaction and more problems with care than do people in better health. Older patients tend to report more satisfaction and fewer problems than do younger patients, although this association is usually not as strong as the one between health status and ratings.

Some CAHPS field test results confirm these general findings. For example, RAND and Harvard's field tests revealed that consumer ratings about health care were consistently higher for those in better health. Health status correlated with overall rating of health care, rating of personal doctor or nurse, and rating of the health plan, respectively, in a sample of chronically ill adults.

Health status may be related to ratings of care because sicker persons are more likely to give negative ratings in general (response tendency), because some people are likely to give negative ratings about anything, including their health and the medical care they receive (correlated error), or because they get worse care. There is the same ambiguity with the age association.

Case-mix adjustment is intended to minimize the effects of differences between plans in background characteristics. The weighting algorithm for the CAHPS composite ratings contributes one kind of case-mix adjustment, because it causes the items of a composite to be weighted together in the same proportions regardless of differences in the response rates to the different items at different plans.

Another kind of case-mix adjustment is applied to all of the items and potentially affects all reported results with the exception of the bar graphs for "never" to "always" composites and "yes/no" items. This part of the adjustment uses a regression methodology, also called covariance adjustment. The adjuster variables are chosen by the user of the software. Because this has been a common choice in CAHPS so far, we illustrate this methodology using the adjuster variables of age and health status. If there are both adult and child records in the same analysis, there are three additional adjuster variables: child indicator, age X child interaction, and health status X child interaction. The inclusion of these three additional variables has the effect of fitting separate regression coefficients for the adjuster variables among children and adults.

If data are missing for an adjuster variable, the program either deletes the case or imputes the plan mean for that variable. The user is able to choose one or the other option. The latter procedure avoids losing observations due to missing data. It is

acceptable in this setting because typically the adjustment and the amount of missing data on adjusters are small.

The 2.0 version also permits the sponsor to forgo case-mix adjustment. CAHPS recommends that sponsors run and review both case-mixed and non if they are considering using only non-case-mixed.

3. What is an appropriate level of substantive significance?

Substantive significance refers to an absolute difference between health plans scores that must be achieved before a change is considered meaningful. If two health plans had significantly different average scores based on the p-value criterion, the difference between the plans' average scores may still not be large enough to be meaningful. The CAHPS analysis program allows the sponsor to specify a significant difference that is substantive, but this criterion can only be used in conjunction with the p-value criterion.

If a CAHPS sponsor wants to establish a substantive level of significance, it must decide on a specific percentage difference based on the minimum absolute theoretical difference from the overall mean that is meaningful. The example presented below explains this concept.

Assume the analysis of an global rating question (one that uses a 0 to 10 rating scale) has a mean score across all health plans of 6. To determine a level of difference between plans that is substantively large:

1) Determine Global Ranking Question overall mean (0 to 10 scale) = 6. Determine the distance from the mean to the nearest bound:

   a) Compute the distance from the lower bound

      = Mean (6) – lower bound (0) = 6

   b) Compute the distance to the upper bound

      = Upper bound (10) – Mean (8) = 4

   c) Determine the smaller differences

      = Minimum (6,4) = 4

2) Decide what percentage of this distance (i.e., 4) is a meaningful difference between plans. This fraction is what is entered in the CAHPS analysis program.

The second, and much simpler, method available in the analysis program is to specify an absolute difference that must exist between the plan mean and the mean for all plans in the analysis for a difference to be considered significant. For this method, the user only needs to specify the absolute difference that will be considered meaningful.

4. How should I choose cutpoints for the 0 to 10 scales?

There are several considerations that suggest recoding or transformation of the response scales to the CAHPS questions, prior to calculation of means used in summaries and hypothesis tests. (The term "compression" has also been used because the transformations that have been considered generally involve reducing the number of categories.)

- Transformation of the responses may improve our ability to discriminate among plans, i.e. improve the signal-to-noise ratio. On general statistical principles, it would not be surprising if the analysis of very skewed data (e.g., 0 to 10 satisfaction scales where the median is around 8) were improved by a transformation that reduced skewness. In these surveys in particular, it is very plausible that the difference between 0 and 2, both indicating strong dissatisfaction, carries less information than the difference between 8 and 10, typically reflecting average and maximum satisfaction respectively. Therefore, compression of the lower part of the scale (by combining categories at the low end) may remove some meaningless variation from the data.

- CAHPS reports often use three-category bar charts. Some designers and readers of reports prefer that the plan ranking and hypothesis tests be based only on data that are reported in full in those charts (i.e., on the corresponding three-point categorization of the responses for each plan). There is no a consensus on the importance of this criterion; although there are anecdotes about apparent inconsistencies between summary ratings of plans and the information displayed in bar charts, we have not yet jointly examined such a case to determine exactly what had happened and why. Nonetheless, we have been motivated by this consideration to make use of three-level compressions of the original scales.

- In simulations, the validity of the F test for equality of all plan means, and of the t test of the difference between a plan and the mean of all other plans, is better when the data are transformed to be less skewed. This is a less important argument for transformation because it is easy to correct for skewness by slightly adjusting the degrees of freedom of the test.

The CAHPS team investigated these issues using statistics from several independent CAHPS implementations, focusing on the effect of various compressions on the F statistic for between-plan differences. This statistic is generated by the standard CAHPS analysis software as a global measure of the degree of between-plan variation. Because the test is calculated as the ratio of the variance of between-plan differences to the within-plan variance (random variation), a transformation which takes out random variability while keeping real differences between plans will tend to generate a larger value of the F statistic. The relative values of the F statistic for different transformations, applied in any particular site, may reflect particular features of that site or sample. By applying the same comparisons at a number of sites, we tried to determine which transformations have consistently good performance in distinguishing among plans. We considered a number of three-level compressions of each of the types of CAHPS response scales.

- For the 11-point (0 to 10) global items, results were not entirely consistent across implementations or items, but generally the 10/9/8-0, 10/9-8/7-0 or 10-9/8-7/6-0 split did best in discriminating among plans.

- For the 3-point problem items (3=not a problem, 2=yes, small problem, 1=yes, big problem), the statistics with the original scale (3/2/1) are virtually indistinguishable from the obtained by combining the “big” and “small” problems (3/2-1). Therefore, this 2-category collapsing is acceptable for reporting.

- For the 4-point frequency scales (1=never, 2=sometimes, 3=usually, 4=always) individual items, the most successful 3-point compression combined “never” and “sometimes” (4/3/2-1), consistent with the approach used in the current reports format. Similar results were obtained for composites that combined several items with this response format.

Another consideration that may affect the decision on the compression rule is the desire to avoid making the criterion too stringent for including a response in the top segment of a three-part compression, since the same breakdown of responses is included in the reports. In particular, for the rating scales many sponsors may be reluctant to restrict the top category to only the “10” responses, even though this worked well statistically in most data sets. Plans might resist a categorization that classified a “9” response into a lower category than “excellent.” This consideration lends support to a 10-9/8-7/6-0 compression for these items (i.e., 10 or 9 is recoded as “3” and reported in the highest bar, 8 or 7 are recoded as “2” and reported in the second bar, and the remaining categories are recoded as “1” and reported in the lowest bar). This analysis is mandated by NCQA for HEDIS reporting. On the other hand, in some situations, especially when the mean rating is very high, the 10/9-8/7-0 compression may give better between-plan discrimination and more informative bar chart displays. The CAHPS 2.0 macro has an option that allows the user to choose between these two compression schemes.