Good day, everyone, and welcome to our Webcast on "CAHPS Moving Forward: Innovations in Tools and Research." My name is Dale Shaller, and I’ll be the moderator for our Webcast today.

Today we are presenting one in a series of Webcasts on CAHPS, which stands for Consumer Assessment of Healthcare Providers and Systems, produced by the CAHPS User Network, funded by the Agency for Healthcare Research and Quality. Our focus today is to take a step back, to present a fairly comprehensive overview of the CAHPS program. Because many of our previous Webcasts have focused on specific survey instruments or topics, we thought it might be very helpful to the many veteran as well as newer users of CAHPS to take a bit broader view today.

So we’ll be highlighting some of the key accomplishments of the CAHPS program during the past five years and put them into the context of how CAHPS is designed to advance the science of patient experience assessment. We'll also review the growing evidence regarding the value and impact of CAHPS, especially in light of some frequently raised issues. And of course, we will attempt to provide answers to your questions as we go.

To guide us through our discussion today, we’re pleased to have three of the most senior members of the CAHPS team, starting with Caren Ginsberg, who directs the CAHPS division within the Center for Quality Improvement and Patient Safety at the Agency for Healthcare Research and Quality, or AHRQ.

Paul Cleary, who is Professor of Public Health at the Yale School of Public Health, who served as Principal Investigator for the Yale and formerly Harvard CAHPS team since the beginning of the CAHPS program in 1995.
And Ron Hays, Adjunct Researcher at the RAND Corporation and Professor of Medicine at UCLA, who's also served as Principal Investigator for the RAND CAHPS team and also for the past 20 years.

So, we clearly have a lot of experience and expertise related to CAHPS and the field of patient experience, measurement, reporting and improvement more broadly to draw on for this Webcast. And again, I’m Dale Shaller, and I've been involved with the CAHPS program since its inception as well in 1995, serving on the Harvard-Yale team and also with the CAHPS User Network.

Before we begin, just a few of the standard housekeeping details. If you need any help at any time during the Webcast, you can use the Q&A icon. And another common problem some people have is when your computer freezes during the presentations, and if that happens, you can hit your F5 button on your keyboard to refresh your screen. It may be that you're just experiencing a lag in the advancement of the slides because of the speed of your Internet connection. So, you can also try logging in and out to solve that problem if it occurs for you.

So, given the large number of participants on our Webcast today, we'll be taking questions submitted online only. And to ask a question, you click the Q&A icon to get that Q&A box to appear, and all you need to do is type your question in the textbox and select “Submit.” It will be helpful for us to know who you are, so please if you would feel comfortable, identify yourself when you submit your questions.

And you can submit your questions at any point during the presentations today, and we'll address them during the couple of Q&A sessions that we have planned throughout the Webcast.

Today's slides are available for downloading by clicking on the icon at the bottom of your screen that says “Download Slides.” That will generate a PDF version that's available during the Webcast for downloading from the Webcast platform, and you can save that as you like.

The slides are available now, but there will be a recording archive of the Webcast that will be available in a few weeks, and everyone who has signed up to participate as an attendee on today's Webcast will be notified when that recording is available.

We also have a number of additional resources available that relate to the topics that we'll be discussing today, and those are available under the Resources icon, again on the console of today’s Webcast.

So without further ado, I'm really pleased to turn things over to Caren Ginsberg for an overview of the CAHPS program. Caren.

I'm Caren Ginsberg. I direct the CAHPS program at AHRQ, the Agency for Healthcare Research and Quality, and I’m delighted to welcome you today to this Webcast to discuss what we’ve been doing for the past several years.

Before I do that, before I turn this over to Ron and Paul to talk about the work that they've been doing and their teams, I wanted to give you a little bit of background about AHRQ and the CAHPS program.
So AHRQ is basically a research and development agency. That's what we do. We're an R&D agency. We invest in research on the nation's health care delivery system to make health care safer and improve quality. We generate measures and data used by providers and policy-makers, and we create materials to teach and train health care systems and professionals to put the results of research into practice.

And, and this is a new initiative for us, we're helping health care delivery organizations evolve in learning health care systems to ensure that patients receive safe and up-to-date and high-quality care by putting data into practice.

You can learn more about Learning Health Systems on our Web site. Recently, I’m so happy to tell you that CAHPS was featured as a product fostering Learning Health System in an AHRQ meeting.

One thing that we don't do at AHRQ is require data collection and reporting of CAHPS data. If you see a mandate for data collection, the mandates come from other agencies or organizations. We have voluntary reporting programs.

So as Dale mentioned, CAHPS stands for Consumer Assessment of Healthcare Providers and Systems, and what we do is develop standardized surveys and related products that measure patients' experience with their care, actual experiences in a health care setting with their health plan, and we do this according to established principles of survey development and design. We've been around for a while. We were first funded in 1995 to work on a survey of patients' experiences with health plans, and as you'll see, we're in a number of settings now. We have tools and materials for a number of settings and situations.

We assess quality of care from the patients' point of view across different settings, and the surveys are trademarked by AHRQ and the trademark is held by AHRQ. In order to be called a CAHPS survey, the survey has to adhere to our standard practices and design principles.

So this is where we start, from our underlying premise. Our underlying premise in all of our work is that understanding a patient's perspective in health care is vital for enhancing the quality and safety of their care and for creating a patient-centered care environment. And this is where we want to go. Here are the aims of our programs. We want to conduct research on patient experience of care concepts and patient experience of care measurements. We create CAHPS tools, and it's not just surveys and supplemental item sets and how to administer them. We have lots of different tools. You can find them on our Web site and the Resources tab on this Webcast. We have an Ambulatory Care Improvement Guide, a macro for analyzing data. We have a number of podcasts. We have a new literature review on CAHPS survey administration just posted yesterday. We have Webcasts like this. We have a searchable bibliography of research relating to CAHPS.

And finally, one of the most important aims of our program is to support the CAHPS users.

So to accomplish the work of the CAHPS program, we fund two cooperative agreements: Yale University and the RAND Corporation. And I'm thrilled to announce that RAND and Yale have just been awarded the next round of cooperative agreement funding to work with AHRQ on CAHPS and patient experience. So I'm delighted by this news that they're going to be working with us for the next five years.
And I want to say that a cooperative agreement is kind of like a grant, but it’s a little different in that cooperative agreements have a strong partnership with the funding agency. So that the CAHPS program is really a program we work closely together on all initiatives and we work in partnership.

So the work of the cooperative agreement is to conduct independent research moving CAHPS and patient experience forward, develop tools, ensure that the surveys meet the standards of development that we set and conduct quality improvement research and other activities. We also fund a user network contractor, Westat, to support research, to produce tools, to develop and maintain our voluntary databases for our Clinician & Group and Health Plan Surveys, to report data and to provide technical support.

Ginsberg, Slide 13
So the oversight body for the CAHPS program is the CAHPS Consortium consisting of our staff, our grantees RAND and Yale, our support contractor, and then we bring in as we need to other governmental agencies and other organizations, private stakeholders, depending on what we’re working on at the moment.

Ginsberg, Slide 14
So here are some of the uses of CAHPS surveys, and not just by CMS, who you might have seen work with CAHPS surveys a lot, but other kinds of organizations as well. Value-based payment, public reporting, accreditation and certification, quality improvement, and health services research. And I just want to say a note about the health services research. We have voluntary databases for our Clinician & Group and Health Plan Surveys, as I mentioned. We are happy to provide you with de-identified data if you send us a request for data. Tell us what you’re going to do, and if we can make you a dataset for your research, we're more than happy to be able to do that.

Ginsberg, Slide 15
So here are some takeaways I’d like you to think about when you listen to the remainder of the program. The first is that our work is patient focused. It’s entirely patient focused when we develop our instruments. We start survey development by asking patients what high-quality health care is and what’s important to measure. We conduct extensive testing with patients to make sure that surveys and items are relevant to them, and we ask survey questions for which patients are the best or sometimes the only source of the information.

We have a legacy of listening and responding to user needs, and it’s really important as users to keep in touch with us so that we know what your concerns are and so that we can try to figure out a way to help you. If it means research and we can work with you on research, we can investigate ideas together, but we don’t know unless you contact us. There’s contact information at the end of this Webcast. So please keep in touch with us, tell us what your concerns are. We want to hear about it.

And then we are a partnering group of people. We value our partnerships with different organizations, plans, patient groups in our product development and testing and if you would like to find a way to work with us or partner on a development or testing project, please let us know and maybe we can find a way to make that happen.

So you can contact us by the email address at the end of the Webcast. There's also contact information on our Web site as well.

Thank you, everybody. Dale, I'm going to turn this back to you.
Dale Shaller
Hays, Slide 16
Great. Thanks so much, Caren. We're now pleased to move to the next segment of our Webcast. I'm going to turn this over to Ron Hays, who will review the science behind the development of CAHPS surveys, some recent updates to the CAHPS survey suite and research that is related to survey administration methods. Ron?

Ron Hays
Hays, Slide 17
Thank you very much, Dale. As a reminder, the first CAHPS surveys were developed two decades ago and you've heard about the start in 1995 so it was shortly thereafter the first survey was targeted at health plans. There are now a variety of CAHPS surveys available for assessing ambulatory care, such as the Clinician & Group Survey, the Surgical Care Survey and the Home Health Care Survey.

There are also facility care surveys such as the hospital, nursing home and hospice care surveys.

Hays, Slide 18
All CAHPS surveys are developed with these core principles. They focus on issues for which patients are the best or only source. The majority of questions ask about patient experiences with specific aspects of care, such as communication with providers, but the surveys also include overall ratings of care.

The surveys are developed with extensive stakeholder feedback and rigorous testing that includes focus groups, cognitive interviews and field tests with patients. And all of the surveys and guidance materials are available for free.

Hays, Slide 19
The CAHPS team uses a series of steps in developing surveys, beginning with a review of the published and grey literature to see what has been done before. Then we obtain input from stakeholders and technical experts about suggested content and measurement strategies. We also conduct focus groups to identify what is most important to patients and family members. After we draft survey items, we evaluate them in one-on-one interviews, revise them as needed and then conduct field tests with enough respondents to evaluate the psychometric properties of the measures.

Hays, Slide 20
The CAHPS team updates surveys as needed over time. For example, when we released the Clinician & Group 3.0 Survey two years ago, we added items to assess provider's use of information to coordinate care. The Cancer Care Survey is the first condition-based survey that cuts across treatment modalities. There are three variants of the survey: radiation therapy, drug therapy and surgery. The Home and Community-Based Services Survey is the first program-based as opposed to setting-based CAHPS survey.

Hays, Slide 21
Recently we have worked to facilitate access to and use of CAHPS surveys. For example, we reconciled supplemental items to make them consistent with the latest version of CAHPS surveys. In addition, Narrative Elicitation items were added to the supplemental item set at the end of last year. You will find a new search tool on the CAHPS Web site to identify the supplemental items.

We also created an interactive Your CAHPS Tool that shows the content of Clinician & Group Survey items by composite. The tool also constructs surveys tailored to the user based on the core and supplemental items of interest and adheres to the CAHPS guidance on item wording and placement.
We developed five open-ended, supplemental items to go with the Clinician & Group Survey. The protocol was evaluated and refined initially using two rounds of testing with members of GFK's knowledge panel. In addition, hour-long interviews were conducted with a sub-sample of participants. The narrative data from these five items were compared to the in-depth interviews to ensure that they captured the full picture of patient experiences, reflect both positive and negative aspects of care, paint a picture that is understandable and meaningful, and represent patients with a range of health states and demographic characteristics.

The items were field tested by the California Healthcare Performance Information System and Massachusetts Health Quality Partners. In these field tests, participants had to opt in to answer the narrative questions, and about one-fourth of them did so.

This year, we conducted an experiment to evaluate different approaches to enhance completion of the items. We obtained response rates of 60% or higher to these items by randomizing people in MHQP’s annual CAHPS survey to different types of encouragement. Explicit emphasis on clinicians’ using and valuing the information yielded the highest rates of participation.

The narrative items are valuable for quality improvement by providing actionable examples of care assessed by the CAHPS Clinician & Group Survey, highlighting aspects of care within the survey domains that are not directly asked about, and finally, identifying aspects of care not assessed in the survey. In fact, analysis of the knowledge panel data indicated that 83% of comments had actionable content.

The CAHPS surveys have traditionally been designed to support multiple modes of data collection, including mail only, phone only and mail-phone mixed mode. We evaluated Web as a mode and found that it was less expensive but response rates tended to be lower than mail and phone surveys.

The CAHPS team also did a study of distributing surveys in-office and found that many eligible patients never received the survey. In addition, in-office administration was deemed more expensive than mail because dedicated staff time is needed for administration.

Open-ended, single-item and customized surveys can be useful for quality improvement, but standardized surveys are essential for comparisons between providers.

So a little bit about our plans for future research here in the CAHPS V cycle. We plan to further assess the Narrative Elicitation Protocol, including screening for actionable content and evaluating natural language processing of narrative responses. In addition, we plan to develop narrative protocols for other settings such as cancer and hospital care.

We will also continue evaluating different modes of data collection such as Web, tablets and smartphones, and we will also be exploring a variant of the CAHPS Clinician & Group Survey that simplifies item wording and presentation.
Further, we will be developing additional care coordination and shared decision-making items. And finally, we plan to develop new items on patient engagement and patient safety.

Dale Shaller

Hays, Slide 30

Great. Thank you so much, Ron, for that overview of developments within the suite of CAHPS survey instruments and some of the research underway with respect to additional supplemental items as well as work on survey administration methods.

We've got a number of questions that have come in. One of the foundational issues that you touched on is the focus of CAHPS on experience as opposed to satisfaction. Can you elaborate on why that is the focus of CAHPS?

Ron Hays

Yes. There's something on the CAHPS Web site that sort of goes into detail about this written document. Patient satisfaction is great if you want to know the bottom line how do people feel without knowing any details, but the CAHPS program has always been about reporting the information to other consumers and using it for a lot of purposes, including QI. The CAHPS team, therefore, focuses on specific reports about care and has a few global rating items that are somewhat similar to satisfaction. They're bottom-line indicators, but most of it is concentrated on what specifically has happened because that's more objective and less subjective than the patient satisfaction and more useful for quality improvement and other purposes.

Dale Shaller

Great. Thank you. Let me just remind everyone, again, how to ask a question. You click on the Q&A icon and just type a question in the box and hit “Submit.”

Another question that's come up relates to the response rates for the narrative questions that you reviewed. Were there, to your knowledge, Ron, based on the research that was done, any differences in response rates by characteristics of the respondents? Especially in terms of race or ethnicity.

Ron Hays

That's probably a good question that Steven may know the answer to. I'm not certain that I have that handy.

Dale Shaller

My recollection as a member of the team that worked on that field test research is that we actually found very little difference in terms of the characteristics that we were able to measure, and those were the standard case mix characteristics that are included in the survey instrument itself. So we were able to look at age and gender and education and self-reported health status, and there were very few differences across those characteristics and response rates. We don't collect information on SES specifically, but on the other variables there was very little difference.

So, I can add that in. Steven, I don't know if you're on, if you can elaborate.

Ron Hays

The other thing, of course, is that in this CAHPS V there will be more opportunities to look at sub-group differences.
**Dale Shaller**
Exactly. And so you alluded to some of the research that is now underway in terms of demonstration projects that are getting down into the field further and doing data collection in actual care settings as well as in the context of health plan enrollee responses to these questions.

**Ron Hays**
Right.

**Dale Shaller**
Here’s a broader question related to just response rates in general and efforts underway by the CAHPS team to look into strategies for addressing declining response rates. Any comments on that?

**Ron Hays**
Well, that was partially covered in what I went over in terms of looking at different modes of data collection. We always have thought that mixed mode is often very important, but also I referred to a simpler version of the Clinician & Group Survey.

One of the reasons for that is especially in safety net populations to try to see if a survey that is really easy for people to read—of course, we try to do that from the beginning, but even simpler versions of the surveys, if that will enhance response rates.

So I think there’s a variety of things we’re trying to do, but it’s certainly a big issue for everyone in the survey field.

**Dale Shaller**
Several other questions related to response rate, so I think it’s kind of a hot topic. Are we finding, Ron, in any of the research or the field testing that respondents are getting older? Any information on that as the changing demographics of our country?

**Ron Hays**
Well, if we have more older people, then we would tend to get more older respondents, but I don’t think it's disproportionately older. One thing we know about older respondents is that actually response rates tend to be better until they get to be very, very old or sick, very sick so as the country ages, that actually could help a little bit with the response rates. But in terms of directly answering that question, I don’t think that there's anything substantial that’s happened.

**Dale Shaller**
We have a question about addressing non-English languages and plans to translate or test additional languages beyond the standard Spanish translation that we do for all CAHPS instruments. Can you elaborate on other translations to other languages?

**Ron Hays**
Well, there’s CAHPS guidance on translations on the Web site, the CAHPS Web site. Anyone who needs a translation that doesn’t exist, there is guidance to help with that, but we’ve also done translations for special circumstances in the past, like Chinese language in California and a variety of other languages. Some of those translations are available, but it's primarily on a case-by-case basis beyond Spanish. We can provide input and guidance on translation, and in some cases if it's significant enough, in a particular application we will actually do a special translation.
Dale Shaller
Thank you. Here’s a question related to what you were mentioning toward the end of your remarks, Ron, on the simpler safety net version of the survey that’s under development. The question is, ‘Will this be a completely different version of the current CG-CAHPS Survey? How much shorter might it be in length?’ Can you just elaborate a little bit more on that?

Ron Hays
Yeah, it’s the same length essentially, but the idea is that we are working on parsing the presentation in such a way that it’s broken up into simpler phrases. CAHPS surveys and surveys in general are presented, for example, in a paper version where you will just randomly truncate and go to the next line based on the margin, whereas this approach is that you break it up into its particular parts so it parses the compound and complex sentences into their grammatical components. That’s one way to help with answering them.

And there’s also- it’s presented sort of like a stanza in poetry so that it makes it easier for people to process the information. Now, there is some simplification of wording, but the idea is to keep it equivalent. It’s really just a preliminary version at this stage. What we’d like to do is in safety net populations, randomize people to the new version and then compare that with people who complete the traditional CAHPS Clinician & Group Survey to see if there is equivalence or not but also to see if it improves response rates and item completion rates.

Dale Shaller
Right. Another question is kind of related to survey length and how that affects response rates. Beyond the simplification that you’re describing for safety net practices, are there other ways or research that’s been done to just look at the reduction in survey length itself? So, item reduction from the current 31 surveys in CG-CAHPS to a smaller number. I believe RAND has done some research on that.

Ron Hays
Yeah, we published an article in Medical Care that showed one approach that you could use to shorten a survey. Of course, it’s always a tradeoff. If you shorten a survey too much, then people start to worry about what you’ve taken out. But probably one example for sure that the RAND team at least wants to explore in this version of CAHPS is the In-Center Hemodialysis Survey because we’ve gotten a lot of feedback that that’s quite long. And we know that is the case.

It was developed sort of as a long form, and we’re acknowledging that it could be shortened using some of the approaches that we showed in the Medical Care article. Basically you see how well you can represent the composite by a subset of items. In some cases, you can do a pretty good job and shorten it that way.

Of course, as I said originally, you have to be careful that you don’t cut out something that is really important to people. But if you’re just trying to represent the composite and you’ve got a lot of items, you can cut it down.

Dale Shaller
Yeah. Paul, I know that Yale is planning to do some research in the new phase of CAHPS, moving forward with randomizing subsets of questions. I think this relates to the whole issue of survey length and response rates and finding new ways of maximizing efficiency in survey administration. Can you address that?

Paul Cleary
Sure. First I want to emphasize that both RAND and Yale are spending an enormous amount of time thinking about these issues of response rates and burden that people really all over the country are raising. As Ron said, there’s really two main approaches to improving response rates and/or reducing burden.
One is the mode. One experiment that Ron didn't mention, in a large health care system in Massachusetts we did an experiment last year using patient portals where people could respond by Internet and so on. We're writing that up now, but the bottom line is it actually had very, very little impact on the response rates.

That will be coming out soon, and we'll be doing other experiments of that. But more specifically to your question, Dale, we're planning an experiment to try and administer a small subset of items to random subsets of patients and see if across an entity—let's say a practice—we can get enough information to estimate a score for that practice with much, much lower burden on patients.

The trouble is there's a tradeoff. If you reduce the—let's say you have a composite of four items and you reduce it to two, you lose half the information and you may need more than twice as many people. So there's a tradeoff, but we're going to be evaluating that and doing a variety of experiments to see if we can find modes that increase response rate, reduce burden and see, just like Ron described well, what we can do about the length that will reduce burden but not compromise the reliability. Everyone on the phone I think appreciates that when a practice gets a CAHPS score, they'd love to reduce the burden but they also want that to be as reliable as possible, especially when payment is dependent on that or value assessments are based on that. So that's a tradeoff we're constantly balancing.

**Dale Shaller**
Right. Very good. Thanks. Very helpful. We'll be very anxious to see how that new research plays out.

Here's a question that I think either Paul or Ron could address clearly. It relates to the look-back period or the timeframe in which the respondent is asked to think back about the care that they've received. Currently with CG-CAHPS, the 3.0 version, it uses the six-month timeframe, so questions are framed in terms of the last six months. The question has to do with how much do we know people responding to the survey actually use that lens? Has there been any sort of research that confirms people really think about six months or 12 months? What do we know about respondents' cognitive thinking about the timeframe?

**Ron Hays**
Yeah, there's a lot that goes into that question. We definitely know whenever you ask a timeframe that what's most predominant is recent experience. Not every respondent literally thinks back through the whole time interval that you specify, but we do believe it's important to have some timeframe that's reasonable to get enough experience to report upon, and six months seems like a pretty good target.

We also have, as you know, visit-specific type items that we've experimented with, and if you compare those kind of responses, like your last visit what happened, to what you say when you're asked about a longer period of time, then you do see clearly that you don't get as much discrimination, as much variance in responses and those responses to the specific items are not that highly correlated with the responses over a longer period of time. So it would take a much larger sample of patients with specific visits or specific recall intervals to be able to get reliable and valid data about a unit that you're interested in comparing.

**Dale Shaller**
Right. Very helpful. We have a question here on suggestions for stratifying responses. The question specifically addresses the use of zip codes to stratify respondents but they've had difficulty, and I'm not quite sure if it's an access to the zip code of the respondent. I'm not quite sure how that question gets answered without knowing what data are collected when the survey is administered. Any thoughts about stratification based on zip code? It's something that can be done if you actually have a zip code identifier, correct?
Ron Hays
Yes. If you have the data, you could definitely stratify on it.

Paul Cleary
Yeah, we’ve done research studies like that. I assume the idea is to try and get a proxy for socioeconomic status or even race or ethnicity. You could look, for example, if patients from particular regions got comparable or better or worse care and so on like that. It can be done. As Ron said, it depends on what data you have.

Ron Hays
I can see you might want to do that just to see if there’s variance within zip code whether or not you know the characteristics, just to see if certain areas are different in the experiences of care, for whatever reason.

Dale Shaller
Back to the theme of response rates, there’s a question based on a study in California that found that improving response rates by 1% would also improve H-CAHPS performance by a corresponding 1%. I don’t know if you’re familiar with that study, but could you comment on that finding, the correlation between response rates and actual response scores?

Ron Hays
Well, I think there is publications in Medicare CAHPS about this sort of thing. I don’t know that particular study. It would be useful to get the reference about the 1%, going to 1% response rate being related to 1% improvement in scores. We’d have to see the study and look at it in detail.

There is a lot of evaluation in the Medicare CAHPS Survey, and Marc Elliott has publications in that regard that would be probably useful as background information. I don’t think you could say for sure that increasing the response rate is going to lead to mean differences in the scores. It may have in this particular study that's being referred to, but I don’t think that's generally the case.

Dale Shaller
Going back to the issue of timeframe in the survey, the comment or question here is related to do responses in the six-month timeframe report more positively compared to the 12-month timeframe? And what’s the rationale or the basis for being able to combine six-month and 12-month questions for analysis? Paul, I think you did that study in your Connecticut project.

Paul Cleary
Yeah, we actually did an experiment using the six- and 12-month both. There's two issues that come up: sampling frame and recall. There were relatively small differences between the six- and 12-month recall period and the actual scores themselves. As Ron said, obviously if you ask about 12 months, people have more experiences to relate to. On the other hand, if you ask about six months, the general feeling is that people are going to more accurately reflect on that 12 months. In fact, the early research showed that you get the most accurate reporting of, for example, hospitalizations by asking for two weeks. Obviously we don't have samples to do that with, but that was part of the rationale for moving to a shorter timeframe.

We have a report coming out about those differences. There are differences, but they're relatively small.

Dale Shaller
There's a very close question that dovetails to what you just addressed because the question has to do with the issue of the impact of six months in the context of safety net communities. I believe the research that you just described was done in—they were community health centers, correct?
Paul Cleary
Correct.

Dale Shaller
But that finding holds up with that population.

Paul Cleary
Yeah, it was done in a large—16 community health centers in Connecticut. They allowed us to do an experiment.

Dale Shaller
Right. And that, I believe, is a paper that has been worked on in manuscript form and will be eventually published, right?

Paul Cleary
Hopefully momentarily.

Dale Shaller
Okay. Well, we'll look for that. This is a question, and I believe some of you prior answers to items related to new survey administration techniques have touched on this, but this is specifically asking about the use of IRT methods for reducing respondent burden. Either Paul or Ron, could you address what does IRT mean, for those on the Webcast who aren't familiar with that term, and is that basically the idea of sequencing into questions in a tailored way depending on what the answer has been to a prior question?

Ron Hays
Yeah, so when Paul was talking earlier, I was going to add this, but then I sort of hesitated about it. We have a paper in the Dental CAHPS Pediatric Survey—it's not an official CAHPS survey, but we actually experimented with that several years ago. We reported item response there, IRT results. But I think this question in particular would be if you did, for example, a computer adaptive test which would allow you to have different questions asked of different people. Depending on how they answer one question, based on that response you give them a different question which is most likely to be informative.

There's a lot behind it, but it does have some potential. I was going to say that we may be looking at that idea in this version of CAHPS, CAHPS V. One of the things that's a little bit complicated is IRT works best when you're talking about individual characteristics like their health. The Promise Project is a good example of where IRT has taken off, and now it's routine for patient health to use item response survey methods for the reasons that there are a lot of benefits of it, including shorter administration time.

But when we're talking about CAHPS, the unit is not the person. It's really a higher level. So some of the benefits of IRT can be realized because you're sampling individuals, but you always have to think about the higher-level unit that we're really interested in. Plus we don't have long banks of items like you do and you can have in patient health and other contexts. We have a pretty parsimonious set of items as they are.

Now, in examples like I said, in-center hemodialysis, there are composites that have a lot of items. Their IRT would really be useful. But in a lot of the CAHPS measures, we don't have that many items. Yeah, we can save some time, and in particular what Paul was referring to where we're going to have subsets of items randomized to people, analogous to that we could have the whole CAHPS set of composites administered but just a subset of items that are most informative and reliable at the individual level selected.
So it does have some potential, but it's more complicated than an individual health assessment.

**Paul Cleary**

Another difference people often forget is that adaptive testing works better where there's a spectrum or range of performance. Let's take functional status. Some people can't get out of bed. Some people can run five miles. You don't want to ask everyone the same question, so if you say, "Can you go up or down stairs?" it sort of segments your population and you can ask more appropriate questions.

Another example is cognitive performance tests like mathematics or something. In CAHPS, you don't have that range of performance in terms of communication. Your scale is much more homogeneous, so you're trying to combine questions not to capture a full range of experiences—I mean, you are, but predominantly to improve the reliability around your estimates.

**Dale Shaller**

We have a number of questions that we have not had time to get to. We have just a few more minutes in this segment, so let me just throw out a couple of questions I think might have a fairly quick response. One is related to the grade level, the reading level, of the current 5.0 CAHPS survey. This questioner has been advised to have a Fourth Grade reading level for their population. Are we at the fourth grade level with 5.0?

**Ron Hays**

We've talked about this before. That's a very tough bar to meet. We originally had planned on sixth grade level for a lot of the CAHPS surveys. It may vary across survey. But it's often hard to ask the type of things you need to ask about and still stay at that level. We're mindful that we want to get it down as low as we can, but in some cases, it's virtually impossible to get to something like a fourth grade level.

One thing I should say is the survey I mentioned—that's the Clinician & Group Survey—that's the easier version. One of the things we've done in a preliminary sense is to look at the effective reading level, and when you break it up into the compound sentences into their components, the effective reading level does go down. So that's one of the benefits of it as well. Instead of a real long sentence, for example, when you're breaking it up into parts it is easier to read, and so that could help with that challenge.

**Dale Shaller**

One final question, I think, before we move on. This has to do with the—the question is framed in terms of validity, but I think it actually may be reliability, and that's related to sample size. Do we have a recommended end for data to be considered, quote, statistically valid? Quick answer to that?

**Ron Hays**

We have guidance on every survey that will say the sample size needed to achieve different levels of reliability, so that's all available on the CAHPS Web site. It depends on the unit of comparison. Health plans, originally it was about 300 complete, but it's not absolute. And then if it's individual providers, doctors, it might be closer to 30 to 40 completes. It just depends on the empirical data that we've gathered and estimated the reliability based on that.

**Dale Shaller**

Right.
Paul Cleary
We’ve even estimated the difference—the number of providers in a group influences that. All that guidance has been calculated and published on the Web site.

Dale Shaller
And as a general point, a lot of the questions that have come up do get addressed in the materials and resources available on the CAHPS site. I know many of you are familiar with where to go to find that, but at the end of the Webcast we’ll remind you of how to get to those resources and how to ask questions that we don’t get to today. We have a lot of questions that have come in. They’re all excellent. We’ll try to get to them after we move to our next segment.

Paul, we’re going to turn now to you and have you talk a little bit about the value and impact of CAHPS.

Paul Cleary

Sure. Before I start—thank you, Dale—I just want to mention that we all believe, and I suspect almost everyone on the call believes, that assessing patient-centered care has inherent value. It’s one of the cardinal features of quality care described by the Institute of Medicine in their publication Crossing the Quality Chasm. I and many, many people would argue that it is part of the definition of quality, so irrespective of whether it’s associated with cost or process or outcomes, it is important.

However, there are both positive questions—what else is it related to? Is it either correlated with or influences other processes and outcomes?—and then the past several years, there’s also been concern, and that is if you ask CAHPS questions, are you truly facilitating patient-centered care or is it possibly counterproductive?

Because of these repeated questions that have come up, in 2014 we did a very extensive review of the literature. I won’t go through all the gory details, but among all the studies examined—and the CAHPS team has done many, but people throughout the country and even in other countries have done related studies—but the vast majority either have positive or no associations between patient experiences and a whole range of things that people are interested in, including process of care, hospital readmissions and outcomes.

I won’t go through these. I’m putting these slides up mainly to give you a flavor of the things that have been studied and that have been shown in peer reviewed studies to be related to patient-related communication or trust in physicians and so on. I often get the question, Well, is it related to this or related to that? We’re just trying to make people aware that there’s a very large scientific literature, much of it done by people outside of the CAHPS Consortium supporting this.

So on this particular slide, there are several studies that are referenced down below showing the relationship between patient experiences and clinical processes. For example, hospitals with higher CAHPS scores do better on measures of heart attack treatment, congestive heart failure, pneumonia, surgery and so on.

We don’t know exactly why that is. One theory is that well-run hospitals are well run, so a hospital that does well with myocardial infarction treatment also attends to patients’ needs. But it also may be causal, so if you communicate better with patients, you explain the purpose of the medications, they may do better.
Similarly, their ratings of hospitals are associated with performance on a variety of other process indicators for 19 different conditions. Overall ratings and willingness to recommend the hospital are lower in hospitals that consistently perform poorly on cardiac process measures.

This is not always the case, and it's not necessarily true that a hospital that does better at communicating with patients does better on AMI treatment, but as you look over dozens of studies, they tend to be positively related.

**Cleary, Slide 35**
The same is true with efficiency. One of the comments we frequently hear is, well, we don't have time to do this or it's going to cost too much to talk to patients or meet their needs, and so on. And patient experiences are related to—for example, longer waits for primary care visits are related to more non-urgent emergency department visits. So if it's hard to get access to primary care, people might be using the emergency room. Children with asthma whose physician reviewed long-term therapeutic plans have fewer emergency department visits, and so on.

This is an area where our inference is that this is causal. Really communicating with patients, reviewing plans and so on had positive outcomes. And overall ratings of hospital care and discharge planning are associated with lower 30-day readmission rates. Again, I won't go through all the details of these. The references are below. But I just want to emphasize how broad and deep this literature is.

**Cleary, Slide 36**
Another area that's closely related but often talked about differently is safety. And again, it's not necessarily the case that a hospital that does better patient-centered care is going to have more safety, but there's also reasons to think that it would be. So if you're communicating with, attending to, aware of patient needs, there are a variety of safety indicators that are better. Here is a summary of several studies to that effect.

This last point I think is a very important one. Hospitals whose patients report better experiences also have employees with more positive perceptions of the patient safety culture. Other studies have shown that if patients are satisfied, staff are satisfied. And that's not an ephemeral kind of association. We know from large literature and studies of organizations that if employees are supported in providing the best possible care, they have higher satisfaction. And if they're supported, it is much more likely that they're going to tend to patient needs and patients are going to perceive better patient-centered care.

So again, a lot of complex relationships I'm describing, but they form a very compelling picture that providing patient-centered care is at least associated with and probably leads to both better processes and outcomes and often is associated with general indicators of staff performance.

**Cleary, Slide 37**
So then the final question, I remember many years ago I was presenting to a large group, and we were doing a study of cardiac care in New Hampshire. The cardiologist said, "Well, is it related to better outcomes?" and I thought, well, it doesn't matter if it's related to better outcomes. If I'm in your hospital, you should answer my questions. You should deal with my pain. You should explain the purposes of my medication. He kept asking about outcomes.

And in fact, we did do a study with that group in New Hampshire that showed that better patient-centered care was related to better outcomes, but we weren't sure that it wasn't just that bigger hospitals did this better and
provided better cardiac care, so we did a large study in the Veterans Administration and found that better patient-centered care was associated with one-year survival. And I’ll show you a graph from that in a second.

We also found that- Glickman found that higher patient ratings were associated with lower hospital mortality, controlling for a variety of indicators of clinical performance.

One thing I will mention, and I’ll mention it again, is that there may be an association between better patient-centered care at the end of life. Marc Elliott did a paper where we were concerned are providers neglecting patients at the end of life. We found actually the converse, that when people are sicker and towards the end of life, they get more attention, at least in the study we did.

In that particular study, people who were closer to death were actually getting more patient-centered care, and if you just looked at that without too much attention, you’d say, "Oh, patients who got better patient-centered care died more quickly," but that’s not the takeaway from that.

Cleary, Slide 38
This next graph is this study that I just mentioned to you in the Veterans Administration. The blue line is the survival of patients with the best patient-centered care, and the black line is the survival of patients with poor patient-centered care. You can see the patients with better patient-centered care had better survival. Once you adjust for everything—and there were a lot of things adjusted for—these lines get much, much closer.

But at the end of the story and the story is published, patient-centered care was statistically significantly associated with survival. And so, the answer to those cardiologists I was speaking to many years ago is every study we’ve done indicates that better patient-centered care is indeed related to better outcomes.

Cleary, Slide 39
I’m going to pick on one study to describe just because we have heard hundreds of people literally bringing this study to our attention. It was done by Fenton and colleagues, and they did a large study and they showed that better patient ambulatory care experiences were associated with higher mortality rates. And they actually argued that it might be counterproductive to focus on patient-centered care for a variety of reasons, one of which might be that they were not paying enough attention to technical care.

Cleary, Slide 40
Many people have cited this study, saying, "See, we shouldn’t be measuring patient-centered care. It’s creating perverse incentives, and providers are focusing on the wrong thing." Not only was this study contrary to the many studies that I’ve described to you, but there were a couple other problems. The effect was so large that in our mind, it was implausible. In other words, if you go back and look at the coefficients, in their study the effect of good patient experience on mortality was more dangerous than major chronic conditions. That just seemed implausible.

Another problem was that, as everyone on this call knows, not all care is amenable to intervention. If you have end-stage cancer, it doesn’t matter whether you’re talked to politely or not. As a matter of fact, there’s very little you can do with certain patients. And people have characterized deaths that are or are not amenable to medical care. So obviously if you’re going to say the process of care affected mortality, you want to look at the subset of deaths that people say are amenable to care.

There were some issues of timing. I mentioned this previous study where you want to control for confounding because, for example, patients near the end of life may be getting better patient-centered care just because they have higher needs.
So we took the same data that Fenton used. We used exactly the same model. We just did a couple things differently. We divided the data into amenable and non-amenable deaths. We considered the timing of patient experiences and looked at the individual items.

And we found that only patients who received more of a physician's time were more likely to die. That was the only item that was related to death, and only for deaths that were not amenable to medical care. So in other words, in terminal patients they were indeed getting more of a physician’s time, and that was probably the association that Fenton and colleagues were observing.

And so, we think this does not support the argument that patient-centered care can be counterproductive.

This is related to another argument that we frequently hear that providing unwelcome advice can lead to lower patient care scores. A classic here is that if I tell a patient who wants opioids that they can't have opioids, they will rate my hospital lower. We have actually heard the argument that that has created an incentive for physicians to inappropriately provide psychotropic medications.

We find that on the face of it implausible. I certainly don't know any physician who would inappropriately prescribe opioids because of some survey results, but it's a question that a lot of people care about. We looked at a related issue. We happened to have data on smoking advice, so that's something where you can imagine a physician being reluctant to give advice to quit smoking if the patient got mad about it.

We analyzed some data and looked at pay-for-performance for Medicare Advantage publicly reporting. And again, the concern would be that receiving poor experience of care scores might lead providers not to do something that the patient didn't want. As I mentioned, this is relevant to the opioid example.

I won't go through the details of this study except to say that if you look at these graphs here, the patients who were always advised to quit smoking actually gave better scores than those who were not advised to quit smoking. So the simple version of this story is that the patients who got the you might consider it unwanted or unpleasant advice actually gave better ratings of care.

By the way, there's some other studies here along the left about the lack of evidence to support the concern that potential negative patient experience ratings are related to unwelcome medical advice. The article that was cited before also reviews all this literature. So if you hear this argument that, "Well, if we give patient surveys, providers are going to do inappropriate things," A, we find it totally implausible, but, B, no study that has been done has supported that assertion.

So in summary, awareness of experience can help providers to address their requests. There are effective strategies to promote positive experiences, even when patient requests require discussion, i.e., they come in and they ask for medication, and they request inappropriate antibiotics. And their assessments of care are much more strongly associated with good communication than with whether they did or did not get a desired treatment. Patients don't rate care better when they get inappropriate antibiotics. They do rate care better when they have a reasonable conversation about those issues.
So the second question, maybe the ultimate question of this entire Webcast, is: Can quality of care be improved in this area?

As Dale mentioned, the slides can be downloaded, but we have spent a lot of time, effort and thought creating tools for improving patient experiences. This particular slide details a patient experience improvement inventory.

Many years ago we created something called the CAHPS Ambulatory Care Improvement Guide. We did a review of all the literature related to each of the CAHPS dimensions, what had been done to improve it, what data was there to show the effectiveness or efficacy or efficiency of doing those different things, and we compiled now—and that has been updated to include a wide range of strategies that you can see on this slide, and some of those strategies are detailed.

So if you're in a health care system and someone says, "What can we do to improve patient-centered care?" with the help of AHRQ we have spent a lot of time trying to compile resources and tools for that.

And there's actually pretty good data that it works. We looked at the HCAHPS data since it was publicly reported, and on this slide is a simple graph over about a three-year period, and we looked at the extent of improvement. And again, this is a national survey, as I think everyone knows. There's more than 3,500 hospitals in the country participate. These analyses pick cohorts of hospitals, taking into account hospitals that came in or out of the system and so on.

And over this time, CAHPS scores have significantly improved. There is, as you might expect, heterogeneity, but after you take into account the usual kind of methodological problems, they range from about a 4% loss to a 6.5% gain. And there are some notable groups of hospitals that seem to do better, larger hospitals, for-profit hospitals and so on. Our post hoc explanation of that is that facilities or systems with resources have been more effective at addressing these kinds of issues.

But the bottom line is that these patient experiences can be improved and have been improved, and we think systematically measuring and providing feedback about that has facilitated that improvement.

That's just repeating what I just said. We have experienced the same thing in ambulatory care. These are data on the left from Medicaid ambulatory care surveys and on the right from Medicare, and they show the different lines or composites. This is from the CAHPS Health Plan Survey Database Chartbook.

Hospitals improved. Medicaid ambulatory care facilities, Medicare ambulatory care facilities have improved. The tools are available there to facilitate these improvements.

So in summary, CAHPS surveys provide information about aspects of care that providers can and do improve. In response to the first question, Ron pointed out some of the important reasons why we shifted many years ago from satisfaction to reports, but another one of the reasons is that reports are actionable. If I say I'm not satisfied with Yale New Haven hospital; they don't quite know what to do about that. If I say no one explained
the purposes of my medications, they know what to do about that and they now have a patient experience
department to address those kind of issues.

And I hope I have at least given you a 20,000-foot view of a very large literature that almost uniformly supports
the argument that improving patient experiences does not lead to inappropriate or inefficient care or result in
tradeoffs with high-quality clinical care.

So I'm sure I've raised a lot of questions, and I'll open it up.

**Dale Shaller:**

_Shaller (closing), Slide 55_

Thank you so much. That was a terrific review of a vast amount of literature related to some very important
issues that I know have been the focus of research for a number of years. That's a very helpful summary.

Let me point out again that some of the literature citations that support many of the findings that Paul
reviewed are available in the Resources section of your console for the Webcast today. You might want to check
those out. There is a citation specifically to the Xu et al. study that Paul referred to regarding the Fenton
reanalysis, and I believe that's on Slide 39 of our slide deck today. And again, if you have any questions in terms
of follow-up with these specific findings, you can email us, and we'll talk about the contact information at the
end of today's Webcast.

We've had a number of questions come through that relate to survey issues that pertain to decisions that aren't
made exactly by the CAHPS teams working with AHRQ. They relate more to issues that CMS, the Centers for
Medicare and Medicaid Services, and other organizations that actually issue the requirements for survey use
are wrestling with.

But, Paul, you did touch on the issue of the effect of survey design on opioid prescribing, and there was a
question that actually came in very early with respect to some of the new question development that's
underway. I just wondered if you might want to venture a comment with respect to the development of the new
pain questions that CMS is considering for moving from pain experience to pain communication. Please feel
free to opt out if you don't think you want to take that one.

**Paul Cleary**

Sure. I saw that question came in from a long-time person who's worked in this field for many, many years. I've
given you our view of the fact that these questions are not counterproductive or create perverse incentives. That
having been said, there are a large number of people who either believe or are concerned about such a possible
effect, and that concern—obviously the opioid epidemic is horrific in the United States. We think that has
nothing to do with asking patients about how well their pain was managed, and in fact, traditionally one of the
big issues in hospitals was undermanagement of pain.

Be that as it is, the concern was so great that CMS and the CAHPS team concurred that the perception was such
that it would undercut the value of those data, and so one thing that CMS did is not score hospitals on the pain
questions, and then in collaboration with CAHPS investigators developed new questions that weren't actually
about the provision of pain medication, but pain communication.

The idea was that we still believe that pain management is a critical aspect of hospital care that is often done
less than optimally, but that by focusing on communication, it would be less susceptible to the perception that
the questions were creating a perverse incentive for providers to prescribe opioids.
Dale Shaller
Okay. There's a question related to just one of the last slides that you presented, Paul. I'm not sure that there is a great answer to this, but I'm going to ask you anyway in terms of the uptick that was observed on the slide of the Healthline survey scores related to Medicaid and Medicare in the last couple of years. Any thoughts about why we could be experiencing that sudden rise, particularly in the composites that showed that jump?

Paul Cleary
Well, I'm sure everyone on the call probably has theories. One is the sunshine effect, and it's a signal effect. I don't think there's any doubt that there's more conversation about attention to concern about meeting the legitimate needs of patients, so patient-centered care is now part of our lexicon. People are focusing on that. And if your facility is being surveyed every year about this, A, that's a signal that this is an important aspect of care quality, and according to all the principles of quality improvement, you can't improve performance unless you measure performance and this gives us a way of measuring how we're doing.

I think health plans throughout the country, everyone on this call—Dale, you and I have presented at hundreds of hospitals and health plans, and often people are quite surprised that their patients don't have the same perception of communication or access that the managers or clinicians do. When people become aware of that, everyone I know wants to provide the best possible care, so it gives both a signal, it creates motivation and provides a metric that people can use in quality improvement programs. So whether you use PDSA or you use dashboards, whatever the technique is, people now have a metric that they can start gauging where they're falling short and where they need to put their improvement efforts.

Dale Shaller
Very good. Thank you. I will also mention that the source of the data that we're asked about comes from, as you mentioned, Paul, the CAHPS Database, which is a resource available free online and through the chartbooks that the CAHPS team, through the user contract, produces each year.

And there's another question-I mention this because another question came up earlier with respect to benchmark data and national averages available for the CAHPS Clinician & Group Survey and the PCMH supplemental items. We definitely have that information available. Again, with the CAHPS site URL that we'll be giving you, if you don't already know it, you can access the CAHPS Database and look at the summary-level scores that are provided based on what is really a voluntary program of survey users using a CG-CAHPS or Health Plan Survey for Medicaid or CHIP populations submit their data. That information is available, again, for comparison to your own survey scores.

So we have a number of other questions that we're going to try to get to within our remaining ten minutes. One has to do with I think a question that relates to the growing number of requirements from various sources with respect to how do we reconcile using a given survey when we're being asked to use another survey for a particular program. Any thoughts either from Ron or Paul—or, Caren, bring you back into this, too—in terms of alignment of survey requirements across multiple requirements, and what kind of progress is being made in that area?

Paul Cleary
I'll just say: not enough. For example, in the state of Connecticut, we've been working, but it's very difficult because if you're thinking about the types of survey I could get, I might get one from Medicare, I might get one because I go to an NCQA-accredited health plan. I'm part of an ACO. There's four or five, six, surveys. In addition, several questioners have asked about the other either proprietary or other organizations that ask questions.
So one of the things, the CAHPS team has been having coordination calls with a variety of entities to try to get people to standardize to the extent possible at least the core components of what we’re asking about. It’s tough business, but if you’re part of an organization, you’ll say, “Well, we need to ask our own survey,” it may be better in certain respects, but there’s also tremendous value to try to standardize to the extent possible what we’re asking individuals.

Ron Hays
Yeah, so I think I’m just going to echo the same thing Paul said. We do actively try to minimize variation in survey items whenever we’re working with whoever we’re working with, including CMS, so that at least there’s consistency in different contexts whenever possible.

Dale Shaller
I think overall there’s clearly been a dominant theme in the questions we’ve received today with respect to encouraging greater response rates or how do we maximize response rates and participation. There’s kind of a general question with respect to best practices that you may be able to advise participants with respect to encouragement of survey responses. Beyond the administration issues that we’ve discussed, are there cues, incentives? What are the roles, if there are any, of trying to motivate responses beyond the actual specific modes that are being used?

Ron Hays
Well, I think partly we have to look at the guidance. We do have good guidance on the Web site, but it’s not one thing, for sure. We definitely know that. We’ve even looked—I don’t think we mentioned it on this Webinar yet, but we have looked at incentives, for example, and we know that pain people, it does make substantial difference in response rates, but we also know that’s not practical in a lot of cases. So we mainly are saying that there’s a range of things you need to do, and it’s a combination that’s going to maximize the likelihood of a higher response rate.

Paul Cleary
We’re continuing to research those. As you know, Dale, for example, we did a whole series of focus groups last year on just the wording of solicitations. Are people more motivated by “this is going to be used to improve your care” or “this is going to be used to evaluate your health care system”? In some of the narrative work that RAND and Yale did, there were fairly substantial differences in response rates to different types of solicitations, and that type of work is continuing, and as we get findings, we will make that available.

Dale Shaller
Yeah, exactly. Ron, you did touch on some of the differences in response rates that were achieved with different—actually kind of even subtle wordings in the invitation language that went out and were also in some of the demonstration projects that are underway with this new Narrative Elicitation Protocol, looking at ways to embed more invitational language in the cover letters that go out or the advance emails that go out requesting responses. So there is quite a bit of work underway to address some of those issues.

Ron Hays
Yes. I should say real quickly, one of the things that we know is problematic is if people feel like they’re completing surveys and they’re not being attended to. So some way of letting them know the value of the survey, and I think that’s what the Narrative Elicitation Protocol experiment showed. If they find it valuable and it’s actually going to be useful, then there’s much more likelihood they’re going to respond.
Dale Shaller

Right. Before we leave the Elicitation Protocol, there was a question with respect to the natural language processing that can be used that's being developed by a number of firms to analyze in more of a quantitative, mechanical, machine-oriented way the vast number of comments that can be collected not only through surveys, as we're proposing, but also through social media and online postings.

The CAHPS team is looking at how that field is developing. We are also contrasting what is available now. We'll be doing this in our demonstration projects with the more time-intensive, labor-intensive, qualitative research methods that we've used to date, looking at narrative content. In the short term, we want users to know that the coding that's been developed very painstakingly over time is available by contacting us. The CAHPS Reports Narrative team can provide you some guidance for using a qualitative approach to analyzing open-ended comments and narrative information from patients. We'll be publishing some interesting results on that coming forward with respect to the actionability ideas that Ron had mentioned.

We are very close to the end of our 90 minutes, and I think we've tried to cover as many of the questions as we could fit in. We really want to thank our speakers, Caren, Ron and Paul, for your excellent presentations and your responsiveness to the questions that have been directed to us.

Shaller (closing), Slide 56

I want to thank all of the participants on today's Webcast and especially those of you who did submit questions. We invite you to contact us at any time moving forward with respect to questions that you may have, information that we maintain on the Web site that you might not be able to readily find, and any other issues or suggestions that you have for the CAHPS team.

Shaller (closing), Slide 57

I also want to encourage you, if you've not already signed up to receive news alerts, we have a listserv called the GovDelivery listserv that has the ability to request through a subscription process to receive news alerts and updates about the CAHPS program, and you can do so very simply by subscribing to the CAHPS GovDelivery listserv at the URL shown on this site. It's simple. It's free. It's a great way to stay up to date on new research findings and educational programming available from the CAHPS Consortium.

Shaller (closing), Slide 58

So, in conclusion, I do want to again thank you all for joining our Webcast today. The evaluation survey will pop up in a new window as you exit the Webcast, so please do complete the survey because your feedback is important to us. So please do that and submit the survey when you're done.

And again, we've talked about these resources in terms of contact information that's available anytime by email at this email address, by this 1-800 phone number, and of course at the CAHPS Web site which is at the URL shown here.

Again, all participants today will get an email in the next few weeks when the archived recording of this Webcast is available. Until then, we look forward to hearing from you and working with you as partners in the continuing development and application of CAHPS surveys for the purposes of improving patient- and family-centered care in today's health care system.

So thank you all, and have a great rest of your day.