

CAHPS: Health Information Technology Report of Cognitive Interview Findings

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The following is a summary of the main findings from the cognitive testing of items about health information technology to be included as supplemental items in CAHPS surveys.

Methods

Cognitive interview subjects were drawn from the Center for Survey Research (CSR) volunteer database as well as from a list of volunteers from the Beth Israel Deaconess Medical Center (BIDMC). The volunteers were contacted to ascertain if they were appropriate subjects. Then those who had screened in were called by specially-trained cognitive interviewers who explained the purposes of the activity and arranged to conduct an in-person or phone interview at the person's home, at the Center for Survey Research (CSR) or in a public location.

Interviewers followed a semi-structured protocol. The interview schedule included the items from the survey instrument and a set of structured probes designed to reveal how respondents understood questions and went about answering them. Respondents were given one sheet of paper during the course of the interview with the alternative question about after visit summaries. Participants were asked to read the item aloud and mark down their answer. After the subject completed the self-administered question, the interviewer administered the cognitive probes.

The remainder of the items were interviewer administered: the interviewers read the questions to the subjects, obtained answers to each question, then proceeded to the cognitive probes.

With respondents' written permission, all interviews were audio tape recorded. Interviewers used the tape recordings to later review the interviews and record their observations. All subjects received a \$60 cash incentive to participate. The interviews were conducted in February, 2008, by Deanne Dworski-Riggs and Marsha Schofield.

Findings

Our goal was to complete three cognitive interviews, including at least one person who used an online medical system other than BIDMC. Two respondents used the BICMC system and one used the Marino Health Center's online services.

Table 1. Participant Characteristics

ID	Gender	Race	Age	Education	Health Center
1	F	Black	37	High School Graduate	Beth Israel
2	F	White	36	College Graduate	Beth Israel
3	M	Hispanic	55	More than 4 year College Graduate	Marino Health Center

The next section presents the item wording for each question tested, followed by a descriptive account of the problems or issues found to be associated with each item and recommendations for future action to address any identified issues.

Email**1. In the last 12 months, did you email this doctor with a medical question?**

- Yes
- No --> If No, Go to next section

None of the subjects had any difficulty with this item. Respondents 1 and 3 answered yes and respondent 2 answered no. Of those who answered yes one person has emailed “*once or twice*” and the other had emailed about seven times. Everyone understood the term “medical question.” Definitions included “*knowledge about my situation, my medical history...*” and “*any particular question about my health or some symptoms I was experiencing or medication I was taking.*” The subject who gave the latter definition was not talking about asking for refills. Rather, she had asked her doctor about whether she should continue a specific medication in light of her symptoms.

Recommendation: Retain item as worded.

2. In the last 12 months, when you emailed this doctor, how often did you get an answer to your medical question as soon as you needed?

- Never
- Sometimes
- Usually
- Always

There were no problems with this item. Respondent 1 answered always, respondent 3 selected usually, and respondent 2 skipped this question. Respondents definitions of “as soon as you needed it” ranged from 3-4 hours to 3-4 days.

Recommendation: Retain item as worded.

NEW. In the last 12 months, when you emailed this doctor, how often were all of the questions in your e-mail answered?

- Never**
- Sometimes**
- Usually**
- Always**

There were no problems with this item. Respondent 3 answered always, respondent 1 selected usually, and respondent 2 skipped this question. Respondents understood that “all of the questions in your email” was asking about the doctors *“response and depth of information.”* Respondent 1 choose usually because her doctor sometimes only answers one of her questions when she sends multiple questions in an email.

Recommendation: Retain item as worded.

Online lab/test results

1. Does this doctor’s office put your laboratory or other test results on a web site for you to see?

- Yes**
- No --> If No, Go to next section**
- Don't Know --> If Don't Know, Go to next section**

All three respondents said yes to this question. Respondent 3 did not focus solely on his healthcare center’s website. During probes he referred to other HIT systems, saying that his doctor *“can share results with other doctors online.”* He also talked about using other sites like WebMD to do internet research to educate himself about his test results. This problem (including other web site when answering) recurred throughout the interview with this participant.

Also, respondents had slightly different definitions of what should be included as lab and test results. Respondents agreed that tests like blood testing and urine analyses count; however they were conflicted whether to include x-rays and MRIs. Respondents 1 and 3 included x-rays, but respondent 2 said she would not.

Recommendation: Use the same method for identifying “this doctor” to clarify which web site patients should be reporting on. At the beginning of the survey instrument, have a label with the name of the patient’s web site and explain that “for the rest of the questions ‘this web site’ refers to the web site shown above.” Refer to “this web site” in all relevant items.

2. In the last 12 months did you look for your lab or other test results on the web site?

- Yes**
- No --> If No, Go to next section**

There were no problems with this item. Respondents 1 and 3 selected Yes and respondent 2 answered No.

Recommendation: Retain Item as worded.

3. In the last 12 months, was it easy to find these lab or other test results on the web site?

- Yes, Always**
- Yes, Sometimes**
- No**

This was another question where Respondent 3 did not limit himself to answering for his patient web site. Although the one time he went on his patient web site the results were easy to find, he answered “yes, sometimes” because *“it depends on...whether it requires more research on my own part.”*

There were no other problems. Respondent 1 answered yes and Respondent 3 skipped this question.

Recommendation: Retain Item as worded.

4. In the last 12 months, how often were these lab or other test results put on the web site as soon as you needed them?

- Never**
- Sometimes**
- Usually**
- Always**

Respondents had different ways of interpreting “as soon as you needed them.” Respondent 1 answered with an exact time of 48 hours. Respondent 2 said that the results should be up within a few days of when the doctor tells her to expect them by. For example, if the doctor tells her the results will be ready in two weeks, that is an acceptable wait time for her. Finally, Respondent 3 interpreted the question to mean “*prompt enough to be able to seek second opinions, make decisions, etc.*” If this question is intended to measure patient satisfaction with wait time, then these differences in interpretation are not a problem. However, if the goal of the question is to measure how long patients have to wait for lab results, then the question should be reworded.

Recommendation: If it is a problem that patient responses are subjective, define “as soon as you needed them.”

5. In the last 12 months, how often were these lab or other test results presented in a way that they were easy to understand?

- Never
- Sometimes
- Usually
- Always

For this question, we found that patients who were provided similar information about test results (e.g. test names, their scores, and the normal ranges) had very different answers (one answered Always and the other answered Never) based on their expectations. For the respondent who answered Always, having to do additional research to understand the lab results was part of being a good patient; however for the respondent who answered Never having to go “*to Ask Jeeves and Web MD to figure out what the test was and if it was important*” meant that the results were not easy to understand. How respondents evaluated whether the labs were “easy to understand” appeared to depend on their willingness to do additional research.

Also, the respondents did not think about the response options for item as a frequency. Rather, they seemed to be reporting how easily they understood the results. They did not use the sometimes or usually categories at all.

Recommendation: If it is not a problem that patient responses are subjective, retain item as worded.

Online Medication List

1. Does this doctor's office put a list of the prescription medicines you take on a web site for you to see?

- Yes**
- No --> If No, Go to next section**
- Don't Know --> If Don't Know, Go to next section**

All three respondents answered Yes to this question. This item created a problem in subsequent items when respondent 2, who did not take any prescription medications, answered Yes, because she knows "*there is a section*" on the web site for a listing of prescription medications.

This is another question where respondent 3 when formulating his response thought about other web sites in addition to the patient web site his doctor uses.

Recommendation: Add the following item at the beginning of this series as an additional screener to allow respondents who do not have any prescription medication to skip the items about the list of prescription medicines:

Do you now take any medicine that this doctor prescribed for you? If No, skip to the next section. [Cognitive testing would be in order.]

2. In the last 12 months, did you look at this list of your prescription medicines on the web site?

- Yes**
- No --> If No, Go to next section**

All three respondents answered yes to this question. This item was problematic for respondent 2. Once again she answered yes, because she had looked at this section of the website even though she did not take any prescription medication.

Recommendation: Adding a screener will allow people who do not take prescription medicine to skip this question (*cf.* the recommendation for Q1).

3. In the last 12 months, how often was the list of prescription medicines up to date?

- Never**
- Sometimes**
- Usually**
- Always**

Respondent 2 (who does not have any prescription medications) answered always to this question, because the fact that there were not prescription medicines listed meant the list was up to date.

Respondent 1 answered never, because although she uses this web service frequently the list was only up to date once.

Respondent 3 did not have a problem with this item. He answered always.

The respondents had different opinions of what it meant for the list to be “up to date.” Respondent 3 define “up to date” as including “*any changes or updates of medications prescribed.*” Similarly, respondent 2 thought the list should contain her prescription history, including medicines that were prescribed, renewed, and discontinued. However, respondent 1 thought the list should only contain medicines the patient is currently taking, rather than the entire prescription history.

Recommendation: Adding a screener will allow people who do not take prescription medicine to skip this question.

Consider changing the question wording to: How often did this list of prescription medicines include all the medicines you are taking? NB: needs cognitive testing.

After Visit Summary (AVS)

1. Some doctors supply patients with notes describing what was discussed during the visit. Does this doctor supply you with visit notes?

- Yes**
- No --> If No, Go to next section**
- Don't Know --> If Don't Know, Go to next section**

There were no problems with this item. Respondent 3 answered Yes, but the other two answered no. They all defined visit notes as a “*summary of the points that were brought up at the appointment or the next steps,*” “*if there was a diagnosis,*” and any “*recommendations...for me and for follow up.*”

Recommendation: Remove item in favor of the alternative (see below).

2. Are these notes put on a web site for you to see?

- Yes
- No --> If No, Go to next section
- Don't Know --> If Don't Know, Go to next section

There were no problems with this item. Respondent 3 answered yes, the other two respondents skipped.

Recommendation: Remove item in favor of the alternative (see below).

ALTERNATIVE VERSION FOR 1 & 2.

Does this doctor put notes describing what was discussed during the visit on a web site for you to see?

- Yes
- No --> If No, Go to next section
- Don't Know --> If Don't Know, Go to next section

There were no problems with this item. The answers to this question were consistent with the answers to questions 1 and 2. Respondent 3 answered yes to both questions 1 and 2 as well as this alternative question. Respondents 1 and 2 answered no to question 1 as well as this alternative question.

Recommendation: In order to reduce the number of items and thereby the burden on respondents, replace questions 2 and 3 with this alternative question.

3. In the last 12 months did you look on the web site at notes about any of your visits to this doctor?

- Yes
- No --> If No, Go to next section

There were no problems with this item. Only respondent 3 answered yes. The other two respondents skipped this question.

Recommendation: Retain Item as worded

4. In the last 12 months, how often was it easy to find these notes on the web site?

- Never
- Sometimes
- Usually
- Always

This is another question where respondent 3 thought about other web sites instead of answering only for the patient site his doctor uses. Respondent 3 answered usually and the other respondents skipped.

Recommendation: Retain item as worded.

5. In the last 12 months, how often were these notes easy to understand?

- Never
- Sometimes
- Usually
- Always

There were no problems with this item. Respondent 3 answered always. He defined easy to understand as “*available for a lay person to begin to comprehend.*” The other two respondents skipped this question.

Recommendation: Retain item as worded.

Online Appointments

1. Can you make appointments at this doctor's office by email or on a website?

- Yes
- No --> If No, Go to next section
- Don't Know --> If Don't Know, Go to next section

Respondents understood this item and answered appropriately. All three answered yes. Two had used the system and one had not, but knew it exists because she had seen it on the web site.

Recommendation: Retain item as worded.

2. In the last 12 months, did you use email or a web site to make an appointment at this doctor's office?

- Yes
- No --> If No, Go to next section
- Don't Know --> If Don't Know, Go to next section

The respondents seem to understand this item. Respondents 1 and 3 answered yes and Respondent 2 answered no.

However, it is unclear whether the cognitive goal that respondents understand that "E-mail refers to either a special e-mail system or the general use of e-mail" was met. When asked the probe: "are they asking about regular e-mail *or* a special kind?" all the respondents talked about "*a special kind*" of email. They described it as "*on a secure server*" and "*within the system itself.*" The fact that no one mentioned regular email may be because the probe was phrased as an either-or question. (This phrasing may have deterred respondents from answering both.) Also, the web sites respondents used all relied on "special email" to make appointments. Therefore, this data does not allow us to confirm that respondents understood regular email is included in this item, however it is possible that respondents would correctly include personal email if that is how they make appointments.

Recommendation: Add the word either with visual emphasis to signal to the reader that both modes should be included. The question would read:
...did you use **either** email or a web site to make an appointment...

3. In the last 12 months, how often was it easy to make an appointment at this doctor's office by email or on a web site?

- Never
- Sometimes
- Usually
- Always

Neither of the two respondents who answered this question interpreted it correctly. Respondent 1 answered usually. She answered usually because scheduling an appointment online is slower than over the phone, but requires less effort. She has been making appointments for over five years and described the system as getting "*friendlier*" and "*easier to navigate*." She did not mention any difficulties with the two appointments she made this year. Therefore, she did not seem to be using the scale as a frequency.

Respondent 3 answered always even though he said it took him a few days to figure out how to make appointments. This answer is surprising given that he described himself as very comfortable using the internet.

Recommendation: Change this question from a frequency to a yes/no item:

In the last 12 months, how often was it easy to make an appointment at this doctor's office by email or on a web site?

- Yes
- No

Alternatively, the question wording could be changed to:

In the last 12 months, was it easy to use this system to make an appointment by email or on a web site at this doctor's office?

- Never
- Sometimes
- Usually
- Always

Either of these options would require cognitive testing.

Shared Decision Making

1. Choices for your treatment or health care can include choices about medicine, surgery, or other treatment. In the last 12 months, did this doctor tell you there was more than one choice for your treatment or health care?

¹ **Yes**

² **No → If No, Go to End**

Respondent 1 was unsure whether “this doctor” still referred to her primary care physician. She wanted to report on her orthopaedist because she had discussed treatment options with him.

One respondent did not include medicine when answering.

Recommendation: Switch the order of the question to “surgery, medicine or other treatment” so that respondents are more likely to take medicine into account.

2. In the last 12 months, did this doctor talk with you about the good things and bad things about each choice for your treatment or health care?

¹ **Yes**

² **No**

All the respondents seemed to understand the item; however one respondent did not like the item wording. She felt that *“it’s too general, I’m not sure what it means. Also a little judgmental, like there is a value in there, good and bad is a value statement. If talking about making choices, there shouldn’t be a value attached to it, but more here are the facts, if you don’t do treatment here’s what could happen to you.”*

Recommendation: Change item wording from “good things and bad things” to “reasons for and reasons against.”

3. In the last 12 months, when there was more than one choice for your treatment or health care, did this doctor ask which choice was best for you?

1 Yes

2 No

There were not problems with this item.

Recommendation: Retain item as worded.