



**Health Information Technology-  
Consumer Assessment of Healthcare  
Providers and Systems  
Stakeholders Meeting**

**Meeting Summary**

**June 28, 2006**

## **Introduction**

On June 28, 2006, the Agency for Healthcare Research and Quality (AHRQ) convened a group of national experts and stakeholders to discuss potential topics for new survey items that could capture the patient's perspective on health information technology (HIT). AHRQ is considering integrating these survey items into Consumer Assessment of Healthcare Providers and Systems (CAHPS) questionnaires, which assess the patient-centeredness of care by asking consumers and patients to report and rate their experiences with health care services. The information derived from these items could be used to compare how well providers are performing from the patient's perspective and offer providers guidance on how they might improve that experience of care.

Helen Burstin, M.D., M.P.H., Director of AHRQ's Center for Primary Care, Prevention, and Clinical Partnerships, and Charles Darby, Project Officer for AHRQ's CAHPS program, co-hosted the meeting. Invited participants represented HIT experts and implementers as well as health care organization, consumers, and the CAHPS Research Consortium. See Appendix A for a list of the attendees.

This document reviews the impetus for this meeting, provides some background on the CAHPS program, and summarizes the many issues participants raised about appropriate domains for survey items related to HIT.

## **Purpose of Meeting**

Carolyn Clancy, M.D., AHRQ Director, commented that the Agency knew it had to learn more about the patient's experience with HIT when the 2004 AHRQ/Kaiser Family Foundation survey revealed how aware patients are of the use of this technology in health care settings. According to Dr. Burstin, this idea took off after a recent meeting with the Indian Health Service (IHS), which wanted to assess the impact of a new electronic medical report on patients. As it became clear that IHS had identified a new information need, AHRQ staff turned to the CAHPS survey, which has become the national standard for assessing patients' experiences with care. They developed a plan for creating a new set of survey items to explore this aspect of health care.

HIT currently is a major issue on the national agenda. There is a presidential directive to create personal health records by 2014. AHRQ—along with many other organizations—has made a significant investment in investigating how HIT can improve the quality and safety of care. As AHRQ works to get HIT in the hands of physicians as well as patients, it becomes increasingly important to assess its impact on the value of care, particularly from the consumers' perspective. There is a common assumption that the impact will be positive. However, it is not known how patients perceive these changes and their effect on the privacy, security, and confidentiality of health care information.

Dr. Burstin urged attendees to consider how the use of HIT tools may affect patients' experiences. Are patients aware of what physicians are doing with HIT, or is it invisible to them? Does the technology create a barrier between the patient and the physician, or facilitate communication and access? Finally, how could information about patients' perceptions of HIT be used to improve the experience of care?

## **Overview of CAHPS Program**

To provide additional context for the discussion, Mr. Darby summarized the CAHPS program and how HIT items would fit into the family of CAHPS survey products. The CAHPS program began with a round of grants awarded in 1995 to RAND, the Research Triangle Institute (RTI),

and Harvard. This group of researchers, along with Westat, AHRQ, and the Centers for Medicare & Medicaid Services (CMS), are collectively referred to as the CAHPS Research Consortium. At the time, the program focused on asking consumers to report on their experiences with health plans (versus their satisfaction, which was the norm at the time) and supporting the development of comparative reports that would facilitate informed decisionmaking by enrollees. Thanks to major users like CMS, the National Committee for Quality Assurance (NCQA), and State Medicaid programs, the Health Plan Survey became the national standard. In 2003, nearly 130 million people were enrolled in health plans that administer the CAHPS survey.

## **CAHPS Family of Surveys**

In the second, more diversified phase of the CAHPS program, the Consortium (now composed of RAND, the American Institutes for Research (AIR), Harvard, Westat, AHRQ, and CMS) developed a broader set of instruments for both ambulatory care and facility care. In 2004, the CAHPS name, which initially stood for Consumer Assessment of Health Plans Study, was changed to reflect this expanded focus: Consumer Assessment of Healthcare Providers and Systems.

### **CAHPS Family of Surveys**

<b>Ambulatory Care</b>	<b>Facility Care</b>
Health Plan Survey	CAHPS Hospital Survey
ECHO Survey (behavioral and substance abuse services)	CAHPS In-Center Hemodialysis Survey
Clinician and Group Survey	CAHPS Nursing Home Surveys (in development) <ul style="list-style-type: none"> <li>▪ For residents</li> <li>▪ For families</li> </ul>

All surveys are composed of a core set of questions, which all sponsors administer, and supplemental items, which sponsors can add to the survey to meet their needs. New questions about HIT are most likely to become a small set of supplemental items for the Clinician and Group Survey (attached), but they could be expanded over time to suit other instruments. (AHRQ will distribute a copy of this survey to participants.)

## **CAHPS Principles**

CAHPS surveys are subject to a rigorous development process that includes a literature review, a review of existing measures, focus groups and other consumer research, cognitive testing, field testing, and stakeholder input. Today's meeting is one of several ways in which stakeholders will have an opportunity to provide input into the development of survey items. Several basic principles underlie the development of all CAHPS products.

- **Consumer-driven.** The domains (or topics) covered in CAHPS surveys must meet two criteria: they must be important to consumers and patients, and they must be aspects of care for which consumers and patients are the best or only source of information. Mr. Darby noted that the Consortium started with what consumers care about because of the initial focus on public reporting. Because of the greater emphasis on use of the surveys

for quality improvement, the Consortium now is expanding a bit beyond what patients say they want to know.

- **Emphasis on adoption and use.** AHRQ does not create CAHPS data, but makes this tool available for others for data collection purposes. Consequently, the Consortium puts a great deal of effort into supporting the dissemination and use of CAHPS surveys. For example, the development process for all surveys encompasses both questionnaires and reporting mechanisms. While the original emphasis was on use of the surveys for public reporting, the Consortium has more recently turned its attention to uses related to quality improvement as well as Maintenance of Certification, pay-for-performance, and accountability.
- **Standardization.** Standardization of content, survey administration, and reporting is a key characteristic of CAHPS surveys. This enables providers, plans, survey sponsors, and patients to compare the performance of health care organizations.
- **Stakeholder input.** The Consortium involves stakeholders throughout the process to ensure that the tool is as relevant and useful as possible.
- **Best science.** The surveys build on the best science available with respect to survey design, content, and analysis.

## Scope: HIT Elements

Mr. Darby began by listing a “starter set” of ways in which HIT is used with patients. (The original list is in italics below; it also is repeated in Appendix B.) He asked the group to comment on whether the listed concepts are clear and comprehensive. He added that it would help to hear clarifications of terminology as well as information needs. This section summarizes the group’s responses and additions to this list.

### 1. Online access to patient’s own information

This could include both inputting and viewing of patient data. Thomas Craig noted the importance of viewing the patient as not just a recipient but also a generator of information.

- a. *Viewing of test results*
- b. *Viewing of patient’s personal visit history, medication and immunization history, and other personal information*
- c. *Access to patient’s full medical record*
- d. Monitoring of health status (e.g., weight, blood pressure)

### 2. Patients’ access to care

- a. *Online appointment scheduling*—Patients are more likely to be able to request an appointment than to schedule one. However, Robert Tavares noted that many patients do not even know where to make appointments. More generally, they do not know how to navigate the provider community.

### 3. Electronic messaging between the patient and the provider or practice

- a. *Online prescription refills*
  - i. Refill request
  - ii. Referral request

- b. *Online facilitation of paper/telephone interactions, such as reminders about tests or appointments and other messages*
  - c. *E-visits or Web visits that enable the patient to consult a physician about a specific question (reimbursable in some markets)*—Peter Basch, M.D., noted that these visits may take place in the context of the chronic care model or a model of proactive care.
  - d. *Visit summaries after office visits, emailed to the patient*
  - e. Online provision of the patient’s administrative information (e.g., registration information, benefits, source of coverage)—This could be provided by the patient before the visit.
- 4. Providing health information**
- a. *Prescribed health information (information therapy) either as part of a personal health connection or accessed or sent separately*—Josh Seidman, Ph.D., M.H.S., noted that this also could be considered part of “electronic messaging” above.
  - b. Performance information at the level of clinicians or practice sites
- 5. Use of the computer to capture and view information about the patient and support the communication process within the physician’s office**—Dana Gelb-Safran, Sc.D., noted that one purpose of this tactic is to remove certain aspects of the typical visit so that the visit can focus on the physician-patient interaction. One way to do this is “agenda-setting,” where patients plan an agenda for the visit ahead of time; this could be done electronically. (This approach is consistent with the first of the “Four Habits of Highly Effective Doctors,” described in R. M. Frankel and T. Stein. Getting the most out of the clinical encounter: The four habits model. *Journal of Medical Practice Management* 2001 January–February;16(4):184–91. Review.)

## **General Issues and Questions**

During the discussion of the various ways in which HIT is used, the group discussed several issues of broader import.

### **HIT Definition**

John Tooker, M.D., M.B.A., commented that the group has not really defined HIT. It might help to define it from the patient’s perspective (e.g., the ability to use e-mail to communicate with one’s physician). Then, the questions would be what HIT functions and resources are required to meet those needs. Most physicians do not have electronic health records, and most patients do not have personal health records. It may be better to parse this list by functionality. Mr. Darby agreed with the need to determine what HIT functions are most useful to patients.

### **HIT Prevalence**

Alison Rein questioned the use of this starter set, noting that most institutions use HIT only at a basic level.

## Other HIT Dimensions

Ms. Rein expressed concern that a list focusing on uses of HIT may miss some critical dimensions from the patient's perspective. She noted several aspects of HIT that have implications for patients:

- Interoperability—Lorraine Doo noted that various groups are working on standards for interoperability and portability. While this is not necessarily something that a patient can assess, it could affect their experience.
- Transferability of information
- The ability to determine role-based access rules—This refers to giving access to information to certain providers but not others. Role-based access rules may raise liability concerns for providers.
- Audit control—The patient may be able to see what is on the provider's screen, but has no idea where the data go through the information exchange system.

Dr. Gelb-Safran added asynchronicity to this list. One of the benefits that HIT offers is the ability to see or use information when it is convenient to individuals.

On a related note, Ms. Rein commented that the HIT vendor also may be a consideration. There may be more parallels between types of systems than across practices. Patients' experiences may depend more on the application than the environment in which it is used. In response, Dr. Burstin noted that some researchers have found that environment makes a great difference. Dr. Seidman concurred, noting that applications are rolled out in different ways and experiences vary.

## HIT Visibility

Another issue is whether the use of certain technologies is evident to the patient. William Munier, M.D., M.B.A., noted that there are many things that a doctor may do that are not visible to the patient. However, but the patient may benefit from the technology and appreciate the result. For example, a parent calling a pediatrician in the middle of the night may not realize that the physician has electronic access to the child's medical records. Patients obtaining a quicker diagnosis from physicians do not know that this happens because the doctor obtains laboratory values more quickly. Catherine DesRoches, Dr.P.H., M.P.H., echoed this concern that patients may have no idea that physicians use tools such as e-prescribing. Mr. Darby noted that one option would be to ask about aspects of the care experience that should be affected by the technology (e.g., the timeliness of obtaining information from physicians).

## HIT: Patient Interest and Comfort

Dr. DesRoches commented that some patients may not be interested in using technology to "front-load" the visit. Any questions about HIT would have to account for the fact that some patients do not want to use technologies that are available to them. Elaborating on this point, Dr. Tooker added that one cannot assume that patients want to use HIT. A related problem is that patients may be thought to be health literate when they are not.

## Understandability of the Information

Dr. Seidman noted that online access to information is only useful to the extent that the patient understands what the information means and that it meets the patient's needs, recognizing that people have different needs for information at different times. Dr. Basch concurred, pointing out that not all of the information relayed to the patient actually furthers the physician-patient

relationship and increases the knowledge of patients. For example, when laboratory values are normal, the physician may simply register the fact that there is nothing out of line and forward the data to the patient. But, are those data understandable to the patient? Do they help the patient understand whatever next step was suggested?

Dr. Tooker further noted that it is not necessarily helpful to give people a great deal of information. It can be overwhelming to go to Web sites. Providers need to understand what is on a Web site and the level at which it is written. As patients become better informed, it becomes more feasible to move toward shared decisionmaking, a more sophisticated exchange of information, and more active engagement in care.

## **Fit with CAHPS Surveys**

Joyce Dubow questioned how items about patients' experiences with HIT fit with the CAHPS surveys: How does a CAHPS survey lend itself to understanding these issues better? She also expressed concern about the idea of collecting this information through physician or group-level analysis. Many of the HIT uses discussed during this meeting seem more appropriate at the health plan level. She asked how the information arising from such items would be actionable by physicians and more generally, how the information would be used. For example, the Markle Foundation has examined the impact of being able to communicate test results using HIT and found that consumers like certain things. However, how does it help the physician group to receive this kind of information?

In response, Dr. Gelb-Safran, a member of the CAHPS Consortium, commented that research indicates that asking about something specific that happened in a specific setting provides the highest quality data. If the question is asked in a broad way, the information is "noisier." In addition, information at a broad level does not help anyone improve. This is why it is helpful to ask about a specific medical practice. The practice can use the information to understand how its application of HIT affects patients, indicating where it works well and where it does not. At the same time, it is possible to examine data across all providers in a plan to obtain broader data if desired.

Steve Garfinkel, Ph.D., also a Consortium member, added that the CAHPS program has traditionally focused on aspects of care in that the entity can be held accountable for as well as aspects about which the respondent is knowledgeable. When the Consortium drafts items for this supplemental set, it will take into account the kinds of issues that Ms. Dubow raises. For example, the Consortium would not design questions that ask about a system that the physician cannot control. Not everything being discussed at this meeting can be included in a CAHPS supplemental set.

Finally, Dr. Burstin noted that HIT is becoming an essential part of the patient's experience of care. As Dr. Clancy commented, the currency of health care includes communication and information. This seems to make experience with HIT a natural fit for what CAHPS surveys are designed to assess. Dr. Burstin also pointed out that CAHPS surveys support informed decisionmaking. There may soon come a time when information about patients' experiences with a practice's HIT will influence patients' choices. Ms. Dubow argued that the issue is the nature of the interaction, not how it was achieved. It may not be important to the patient to know how the physician accomplishes good communication. In response, Dr. Munier noted that after his practice had been paperless for several years, a patient survey revealed that a number of patients had joined the practice because it was paperless.

## Content: Domains to Include in the Survey

Based on the morning's discussion, Mr. Darby produced a lengthy list of suggested topics, or domains, representing aspects of care that patients could report on and are likely to want to know. The following reflects Mr. Darby's list as well as additional suggestions offered by the group during the ensuing discussion:

- Ease of access to information—Did HIT make it easier for you to obtain answers to your questions?
- Speed of access to information
- Problems in accessing information or using technology
- Facilitation of patient inputting of information
- Awareness of information
- Understandability of information
- Completeness of information
- Trustworthiness of information—Did you trust the information you received? Dr. Seidman commented that there may be better ways of capturing information about patient trust
- Volume of information—Are you getting the right amount of information? This could also be thought of as “dosage,” representing both quantity and frequency
- Usefulness of information—Does the information answer your questions? To learn how the information helped, one could use specific questions such as “Did the information help you talk to your doctor?”
- “Actionability” of the information—Did you receive information you could act on?
- Impact on efficiency—From your perspective as a patient, did HIT make the visit more efficient? An example of this would be not having to carry paper from the physician's office down to the laboratory for a test
- Impact on quality—Did the HIT facilitate better communication with the provider? Did the information help you make a change that benefited your health or helped you manage your health?
- Impact on safety
- Impact on convenience—Patients can report on the extent to which HIT makes care more convenient. An example would be enabling the patient to provide information one time rather than having to repeat it for multiple caregivers
- Impact on relationship with the physician
- Impact on the nature of the interaction—Did the technology make the interaction with the provider seem impersonal?
- Security of the data
- Privacy of the information—Ms. Rein noted that in some systems, participation in HIT is a prerequisite for getting care. A CAHPS survey could ask about the voluntary nature of participation



- Access controls—This refers to not only control of data coming in, but of who can see the data
- Degree to which technology is visible or invisible to the patient

### ***Related Issues***

Richard Frankel, Ph.D., suggested having parallel measures for physicians. There may be a gap between the patient's concerns and experiences and the provider's perspective on the same issue (e.g., privacy).

Melissa Bradley emphasized the need to also consider who might be left out of the equation. The survey could ask respondents about the barriers to using technology. Dr. Burstin noted that some data already exist on this issue. For example, health systems know the rate of sign-ups for personal health records.

### **Priorities among Domains**

Noting that AHRQ's goal is to produce something useful to the field, Mr. Darby asked participants to comment on what they think is most important and where these survey items could have the greatest impact.

Ms. Rein pointed out that the answer depends on the starting point. There is a wide spectrum of applications, from fairly primitive to very sophisticated. However, many health systems do not even have access to HIT. Mr. Darby asked whether data are available on what *is* being done today (i.e., what applications are more (or less) common). Dr. DesRoches responded that this information exists; it is known what technologies are more or less prevalent in physicians' offices.

Dr. Burstin reiterated that AHRQ would not expect the supplemental items to be used by all users of the Clinician & Group Survey. Moreover, these items could be regarded as a way to drive adoption, assuming patients see HIT as something of value. For example, it would be useful to know how HIT affects patients served by the Veterans Health Administration, which is far ahead of most systems. Dr. Basch expressed some concern about that mindset, noting the need to be careful about what is trying to be encouraged. Participants should not spur adoption of HIT for its own sake, but as a way to provide better care for less money. Dr. Burstin emphasized the key issue of scalable benefit. It helps for practices to see what things they could do, or do better, to improve the patient's experience.

As one suggestion for selecting priorities, Dr. Gelb-Safran proposed focusing first on the uses of HIT that meet two criteria: they are sufficiently prevalent and patients are aware of them. Patients could be asked whether their physician's office uses a certain technology and how it affects them. However, that is going out on a limb with respect to what CAHPS surveys do.

Another approach suggested by Terry Hammons, M.D., M.S., is to examine what drives overall CAHPS ratings in provider communities, such as those in Massachusetts, that heavily use HIT. Ms. Rein asked whether there might be an opportunity to focus on health (safety net) clinics, since studies show that there is great value to HIT in those settings. Mr. Darby responded that CAHPS surveys are not widely used in these clinics, in part because the Clinician & Group Survey still is being tested.

## Existing Information on Patients' HIT Experiences

In the last part of the meeting, participants suggested sources of information on this topic or potential partners:

- Dr. Frankel referred to a Kaiser study that found that patients reported some improvement in their experience of care but felt less well known by the physician.
- Keith McInnes, M.Sc., suggested that AHRQ examine the Health Technology Assessment tool, which asks about usefulness and ease of use (Davis, 1989). He also suggested studying how other industries, such as airlines and banking, assess similar issues.
- A few people suggested examining studies sponsored by the Markle Foundation and findings from Harris Interactive polls.
- Dr. DesRoches referred to work conducted at the Institute for Health Policy, Massachusetts General Hospital, to determine how to measure the adoption of electronic health records. She suggested that it might be useful to incorporate that work with the efforts of the CAHPS program. She noted that a database is in development at <http://www.hitadoption.org>. Eventually, 36 surveys will be included on this Web site, with ratings for content and other features.
- In response to a question from Mr. Darby regarding efforts by NCQA and/or health plans to reward practices for using HIT, Ms. Dubow commented that NCQA now has voluntary accreditation standards on this issue. The standards focus on innovations in member services, including e-prescribing, e-referrals, e-appointments, and enrollment in disease management programs. NCQA also is examining the nature of the information delivered to enrollees and how useful it is. Mr. McInnes commented on a project in which he contacted commercial plans to learn about patients' views of information technology. He often was referred to the organization's marketing department. He interpreted this to mean that health plans regarded HIT as a way to differentiate themselves.
- Cary Sennett, M.D., M.P.H., suggested examining Bridges to Excellence, which links financial incentives to the use of HIT.
- Mr. McInnes noted that the American Cancer Society allowed Harvard to insert questions about computer use into a study of cancer surveys. He will share those items with AHRQ staff.
- Dr. Hammons suggested that the Medical Group Management Association could help AHRQ with a pilot of the items. He also recommended piggybacking on survey efforts under way in Massachusetts. Dr. Gelb-Safran agreed, noting that this also is a way to gauge receptiveness to paying for this kind of data. She offered to follow up with the Massachusetts Health Quality Partners, which is about to field a specialist survey and will then field another primary care provider survey.
- Dr. Tooker referred to a project of three American Board of Medical Specialties called Improving Performance in Practice, which is in a second phase with family practices in North Carolina and Colorado. He offered to talk to these boards about possibly testing these new items.
- Ms. Doo commented that the Office of the National Coordinator for Health Information Technology is considering holding hearings on the use of HIT and patients' experiences with it. She also noted that CMS plans to initiate a pilot test in

December 2006 that will focus on patients' use of HIT and its impact (e.g., did it increase compliance?).

## **Next Steps**

Dr. Burstin and Mr. Darby thanked participants for their contributions. The next immediate steps will be to distribute the summary of the meeting and revisit the work plan. Focus groups with patients are an important next step. Dr. Burstin also clarified that the CAHPS process includes field testing of the items to ensure they work. AHRQ will keep participants informed of progress along the way, and may ask specific subgroups to take part in conference calls.

## Appendix A: Participants

**Peter Basch, M.D.**, Medical Director, eHealth Clinical Informatics, MedStar Health

**Melissa Bradley**, RAND Corporation

**Helen Burstin, M.D., M.P.H.**, Director, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality

**Carol Cain, Ph.D.**, Health IT Portfolio Manager, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality

**Susan Christensen, Esq.**, Senior Advisor, Agency for Healthcare Research and Quality

**Carolyn Clancy, M.D.**, Director, Agency for Healthcare Research and Quality

**Thomas Craig**, Office of Quality and Performance, Veterans Health Administration (10Q)

**Katherine Crosson, M.P.H.**, Associate Director, Center for Quality Improvement and Patient Safety, Agency for Healthcare Research and Quality

**Charles Darby, M.A.**, Social Science Administrator, Center for Quality Improvement and Patient Safety, Agency for Healthcare Research and Quality

**Catherine DesRoches, Dr.P.H., M.P.H.**, Assistant in Health Policy, Institute for Health Policy, Massachusetts General Hospital

**Lisa Dolan-Branton, R.N.**, Senior Advisor for Community Based HIT, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality

**Lorraine Tunis Doo**, Centers for Medicare & Medicaid Services

**Joyce Dubow, M.U.P.**, Associate Director, AARP Public Policy Institute

**Richard Frankel, Ph.D.**, Professor of Medicine and Geriatrics, Indiana University School of Medicine, Regenstrief Institute (participated via telephone)

**Steve Garfinkel, Ph.D.**, Managing Research Scientist, American Institutes for Research

**Dana Gelb-Safran, Sc.D.**, Director, The Health Institute, Tufts-New England Medical Center (participated via telephone)

**Elizabeth Goldstein, Ph.D.**, Director, Division of Consumer Assessment of Healthcare Surveys, Center for Beneficiary Choices, Centers for Medicare & Medicaid Services

**Terry Hammons, M.D., M.S.**, Senior Vice President, Research and Information, Medical Group Management Association

**Angela Lavanderos**, Management Analyst, Center for Primary Care, Prevention and Clinical Partnerships, Agency for Healthcare Research and Quality

**Keith McInnes, M.Sc.**, Department of Health Care Policy, Harvard Medical School

**William B. Munier, M.D., M.B.A.**, Senior Advisor for IT and Quality, Office of the Director, Agency for Healthcare Research and Quality

**Michelle Murray**, Program Analyst, Office of the National Coordinator for Health Information Technology

**Ron Pace**, Information Technology and Acquisition Advisor, Telemedicine & Advanced Technology Research Center, Army Medical Research and Material Command

**Virginia Price**, Acting Director, Veterans Services Portfolio; Program Director, My HealthVet, Office of Information, Veterans Health Administration

**Alison Rein, M.S.**, Assistant Director, Food and Health Policy, National Consumers League

**Josh Seidman, Ph.D., M.H.S.**, President, Center for Information Therapy

**Cary S. Sennett, M.D., Ph.D.**, Senior Vice President, Strategy and Communications, Ingenix

**Gregg Taliaferro, Ph.D.**, Research Fellow, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality

**Robert M. Tavares**, Vice President, Voice of the Consumer, Definity Health (UnitedHealth Group)

**John Tooker, M.D., M.B.A.**, Deputy Executive Vice President and Chief Operating Officer, American College of Physicians

**P. Jon White, M.D.**, Agency for Healthcare Research and Quality

**Scott Young, M.D.**, Care Management Institute, Kaiser Permanente

## **Appendix B: Original List: How HIT Is Used with Patients**

1. Online access to patient's own information
  - a. Viewing of test results
  - b. Viewing of patient's personal visit history, medication and immunization history, and other personal information
  - c. Access to patient's full medical record
  
2. Patients' access to care
  - a. Online appointment scheduling
  
3. Electronic messaging between the patient and the provider or practice
  - a. Online prescription refills
  - b. Online facilitation of paper/telephone interactions, such as reminders about tests or appointments and other messages
  - c. E-visits or Web visits that enable the patient to consult a physician about a specific question (reimbursable in some markets)
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4. Providing health information
  - a. Prescribed health information (information therapy) either as part of a personal health connection or accessed or sent separately
  
5. Use of the computer to capture and view information about the patient and support the communication process within the physician's office