

# Health Information Technology: More Than the Money

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ALLIANCE FOR  
HEALTH REFORM

## Introduction

**M**any policymakers, health professionals and other stakeholders envision health information technology (HIT) primarily as a cost-saving tool. Other analysts, however, believe that the main importance of HIT lies in its potential for improving health care quality and reducing health care disparities.

HIT as a tool to enhance quality, patient safety and efficiency appears in the campaign platforms of the presidential candidates and in analyses and reports by the Congressional Budget Office, the Institute of Medicine (IOM) and others.

The IOM reports that medical errors result in 1.5 million preventable injuries each year, and 45,000 to 98,000 annual avoidable hospital deaths. Comparing this performance to that in other countries, the U.S. has the highest number of preventable deaths among 19 leading industrialized nations. An often-cited study shows that patients receive recommended treatments about half the time. By almost any measure, there is much room for quality improvement.

According to one survey, more than half of U.S. residents think HIT should be a top priority for the next president. Yet there are major barriers to overcome before its implementation is the rule rather than the exception throughout the health care system.

## Does HIT Save Money, Improve Quality or Both?

At the June briefing, Congressional Budget Office Director Peter Orszag said that HIT is necessary but not sufficient to generate savings. He used this illustration: If your goal is buttered toast, plugging in the toast-

er is necessary. But that will not yield the desired end product without having bread, butter and available electric current. So, too, HIT might be a necessary component for savings, but it is not sufficient as a cost saver without other simultaneous changes in the health care system.

In a September 2005 study by RAND Health, researchers found potential annual savings of more than \$77 billion from HIT adoption. Referring to these findings, Orszag made a distinction between the CBO's look at *likely* impact on costs and RAND's look at *potential* impact. He said the more important question for policymakers is the likely impact.

Regardless of any cost savings, Orszag asserted that HIT can improve quality and efficiency in the current system in several ways. In addition to avoiding errors that come from illegible handwriting, electronic systems can also prompt prescription of generic rather than brand-name drugs, reduce duplication of diagnostic tests, remind physicians of appropriate preventive care and treatment guidelines and identify drug interactions and patient allergies.

Among its potential advantages, Orszag also noted that HIT might play a role in comparative effectiveness research.

Another panelist, Sara Rosenbaum of the George Washington University (GWU), also highlighted areas in which HIT can help promote quality, including error reduction, improved access to timely information, and patient access to better treatment information (thus allowing consumers to become more actively involved in their health care). E-prescribing and decision

## Fast Facts

- ▲ Health information technology (HIT) can help lessen some patient deaths, medication errors and failure to deliver recommended treatments.
- ▲ HIT tools now available include electronic prescribing, electronic health records (EHR) linked to patient history and practice guidelines, and electronic support for physician diagnosis and treatment options.
- ▲ E-prescribing and decision support have the potential to reduce medication error rates by 50–90 percent.
- ▲ Only 4 percent of physicians have a fully functional EHR system.
- ▲ More than half of U.S. residents think HIT should be a top priority for the next president.
- ▲ Potential government roles could include setting standards and privacy policies, providing consumer protection, and offering financial incentives for HIT adoption.

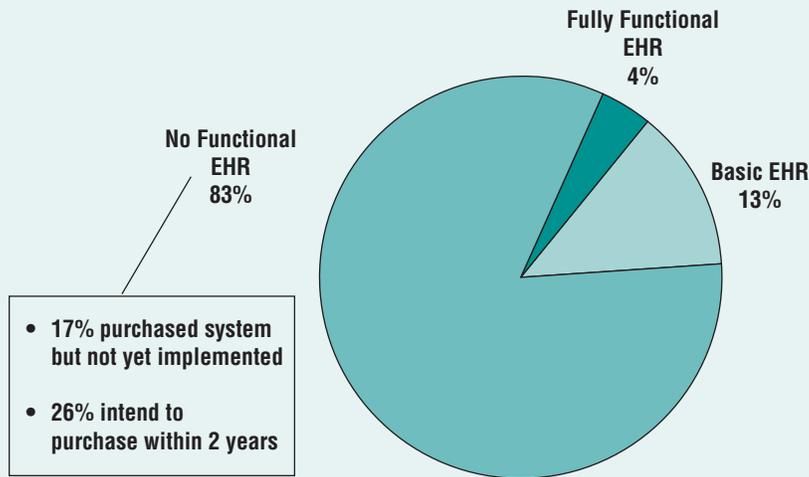
In June 2008, the Alliance for Health Reform, with support from the Robert Wood Johnson Foundation, held a Capitol Hill briefing to examine the premise that health information technology is about much more than cutting health care costs. Panelists were John Lumpkin of the foundation; Peter Orszag of the Congressional Budget Office;



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Sara Rosenbaum of the George Washington University School of Public Health and Health Services; and Janet Wright of the American College of Cardiology. This issue brief draws from information presented at that briefing.

## Current Level of EHR Adoption Among Physicians in Ambulatory Care Settings



The George Washington University School of Public Health and Health Services  
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([www.allhealth.org/briefingmaterials/SaraRosenbaum-1252.ppt](http://www.allhealth.org/briefingmaterials/SaraRosenbaum-1252.ppt))

support have the potential to reduce medication error rates by 50–90 percent, she noted.

### HIT Adoption

Rosenbaum presented the results of a study conducted by GWU's School of Public Health and Harvard's Institute for Health Policy (IHP), which reported that only 4 percent of physicians have a fully functional electronic health record (EHR) system and an additional 13 percent have a basic electronic health record (EHR) system. (The study defines fully functional systems as having the capacity to record patient information and demographics, view and manage results, manage order entry and e-prescribing, and provide clinical decision support. Basic systems lack order entry management and clinical decision support functions.) Though the trend is upward, the rise is slow and shows a widening gap between large and small practices, according to the study.

The largest differences in quality reported between those using fully functional EHR systems and those using basic systems were in delivery of preventive care and chronic illness care that meets guidelines. Some 85 percent of those with fully functional systems reported a positive impact on preventive care, compared to 55 percent of those with basic EHRs. In chronic care, the gap was 82 percent compared to 56 percent.

An encouraging note: physicians who use EHRs say they have a positive impact on the quality of clinical decisions, communication with other providers, communication with patients and

refilling prescriptions—whether they used basic or fully functional EHR systems.

Janet Wright, speaking at the briefing for the American College of Cardiology, confirmed these positive impact and satisfaction findings in the experience of the college's membership. However, Dr. Wright noted that cardiologists are far ahead of most physicians in their take-up rate of HIT and in the use of data registries.

"We are committed to collecting data and to using data to help us guide decision-making," she said. "We are trying to apply the science at the ground level." One reason cited for cardiologists leading the HIT parade: they tend to practice in larger groups, thus giving their offices greater resources, making earlier investment easier. What's more, she said, cardiologists as a group tend to be interested in technology.

### Challenges

There is no lack of agreement on the quality benefits that might derive from widespread adoption of HIT. But the challenges to get there are many.

A major barrier is the cost-to-benefit equation. Who pays the cost and who reaps the benefit? If physicians lay out the cost of outfitting their offices with an HIT system and withstand the disruption to work flow until the office is back up to speed, will they be compensated by third-party payers or their patients? Or must they be satisfied by the knowledge that they are "doing the right thing" to improve quality? If the latter, is that sufficient incentive to incur the economic cost and work flow disruption? The cost is particularly burdensome to small specialty practices and solo practitioners.

Another major barrier relates to the lack of standards. Physicians and other stakeholders are concerned that if they invest in a system, it will soon be outdated or will not be able to communicate with other systems when standards are ultimately put in place. Will their systems be "interoperable"—able to exchange information—with those of pharmacies, hospitals, labs and other medical entities? Some progress is being made along these lines with the opportunity to seek approval by the Certification Commission for Healthcare Information Technology (CCHIT), but is complicated by the fragmentation of the health care system and the different needs of various users.

Privacy remains an issue for a variety of stakeholders—consumers, insurers, hospitals, physicians, other health professionals and researchers.

Privacy worries have helped delay approving federal legislation that seeks to further HIT adoption.

The Office of the National Coordinator for Health IT (ONCHIT) within the Department of Health and Human Services (HHS) has taken some steps to address the Government Accountability Office's 2007 recommendations. These included identifying milestones and the entity responsible for integrating the outcomes of its privacy-related initiatives; ensuring that key privacy principles in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) are fully addressed; and addressing key challenges associated with the nationwide exchange of health information. But HHS has fallen short of fully implementing the recommendation regarding the development of an overall privacy approach, according to a September 2008 GAO report, and has not quelled privacy concerns.

(The issue of privacy and health information security was featured and more fully discussed in a February 29, 2008 Alliance briefing. For details go to [www.allhealth.org](http://www.allhealth.org). Potential legal barriers related to privacy and security are also discussed in the GWU/IHP study.)

### **Moving Forward**

While stakeholders explore how to meet their interests and overcome challenges, there has been innovation and experimentation in the public and private sectors to move HIT forward.

HHS announced in June 2008 a demonstration project providing bonuses to doctors using electronic health records. This Medicare initiative will cover participating physicians in twelve select areas.

Some states are speeding the uptake of HIT. For example, New Hampshire plans to have all providers e-prescribing by October 2008. Minnesota recently enacted a mandate for electronic prescribing by Jan 1, 2011. And in a first step towards standardization, Minnesota is requiring implemented EHRs to be certified by CCHIT. Twenty-one states have Medicaid e-prescribing initiatives.

The private sector appears to be making progress to provide what a growing consumer population wants—a personal electronic health record (PHR) which they control and which is portable when they change providers or insurers. A partnership was announced this summer by Kaiser Permanente and Microsoft to launch a pilot project open to Kaiser employees. If the project is suc-

cessful, it will be expanded to link Microsoft's personal health record service, known as Health Vault, with Kaiser members' patient information—offering this tool to almost nine million members in nine states and the District of Columbia.

Another consumer PHR product was launched in May 2008 by Google and is known as Google Health. Though available to all users with a Google account, it promises even greater convenience and expanded capability to members of a network that includes Beth Israel Deaconess Medical Center, Cleveland Clinic, and a collection of pharmacies, labs and other health businesses. Patients at Beth Israel Deaconess, for example, can access their electronic medical records through the hospital's PatientSite program and save them in a Google Health profile. They can do the same with pharmacies and labs in the network and other medical information they might input on their own.

Several nations are ahead of the U.S. in the adoption of health information technology. Though there are political, cultural and historical differences between the U.S. and nations such as Denmark, the Netherlands, Norway, Australia and New Zealand, all are far in advance of the U.S. in their use of HIT. There may be lessons to learn from their approaches to implementation of EHR systems. The GWU/ IHP study found that government financial and non-financial support, standard setting, physician and medical society leadership, electronic billing mandates and peer influence were the major factors driving implementation of EHR systems.

### **Policy Implications**

Analysts suggest several roles the federal government can play in advancing HIT, such as providing leadership, setting standards, consumer protection and privacy policies, and offering financial incentives. Government programs such as Medicare can set practice standards on e-prescribing, electronic record keeping, and electronic billing. Setting standards would go a long way to ease concerns around interoperability. Providing financial incentives could motivate physicians and others to overcome barriers related to cost and disruption of workflow.

The question of how best to use financial incentives to drive broader scale HIT adoption is still open. Are "carrots" more effective, or "sticks"? Which incentives will stand legal scrutiny? (Federal regulations advanced in 2006 eased somewhat the restrictions under anti-kick-back laws and enabled



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The Alliance is a nonpartisan, not-for-profit group committed to the education of journalists, elected officials and other shapers of public opinion, helping them understand the roots of the nation's health care problems and the trade-offs posed by various proposals for change.

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tax-exempt hospitals and health systems to donate certain HIT to referral sources.)

Medicare has successfully mandated electronic billing for claims payment. Medicaid in some states has done likewise. One could say the “stick” method is highly effective in these examples—if you don’t submit claims electronically, you don’t get paid. Non-payment is a large enough “stick” to be effective and at minimal cost to the program.

This method has evoked greater compliance than programs that offer relatively modest—compared to physician overall income—financial reward to physicians for reporting certain data. The Physician Quality Reporting Initiative is a Medicare program entering its second year that offers a one and one-half percent bonus on Medicare payments to participating physicians. According to Medicare, only 16 percent of physicians and other eligible health professionals submitted quality data and only half of those were eligible for a bonus.

This signals that small financial incentives may not be effective “carrots.” But larger incentives, though more effective, may be too costly to the government.

### Conclusion

Public support is strong for information technology as a tool to improve care quality. With this support, plus the attention being paid by presidential candidates, the interest by policymakers on both sides of the aisle, and the many research studies and reports indicating the potential benefits of health IT, the question is not whether health information in the U.S. will fully enter the technological age, but when.

*For the sources used in writing this issue brief, please send an email to [info@allhealth.org](mailto:info@allhealth.org).*

*To download the webcast, transcript, podcast and resource materials from the briefing on which this paper was based, please go to [www.allhealth.org/briefing\\_detail.asp?bi=131](http://www.allhealth.org/briefing_detail.asp?bi=131).*

## Expert Sources

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## Websites

- ▲ **Alliance for Health Reform** [www.allhealth.org](http://www.allhealth.org)
- ▲ **Certification Commission for Health Information Technology** [www.cchit.org/index.asp](http://www.cchit.org/index.asp)
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