



# FOR THE Record

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## Web Exclusive

### **HIT for Effective Healthcare**

*By Andrea Pennington, MD*

HIT is the hot topic for many in the worlds of health informatics and healthcare reform. Those of us in the field have eagerly attended Capitol Hill briefings and advocacy workgroups on the subject in hopes of being part of the highly anticipated, long-overdue reform of the U.S. healthcare system.

The American Recovery and Reinvestment Act includes nearly \$20 billion specifically dedicated to HIT. When we pour over the 100-plus pages of the document that describes various HIT applications, such as electronic medical records (EMRs), computerized physician order entry (CPOE), and clinical decision support systems (CDSS), we see that there is a brave new world of technologies that are poised to rescue us in our time of dire need.

But are they really new? Just because the average healthcare consumer or legislator has only recently been introduced to these terms does not mean they have not been on the lips of the informatics “gurus” for quite some time. In fact, many of these technologies have been extensively reviewed, evaluated, and discussed in peer-reviewed journals for decades.

### **Why HIT and Why Now?**

There is little argument that technology could provide physicians with the necessary support to work smarter and more efficiently. The sheer volume of diseases, conditions, medications, and treatments physicians deal with makes it crucial for technology to be used to help improve the quality of the care we deliver. We simply cannot rely on memory alone to stay abreast of the newest clinical guidelines, patient presentations, and possible medication interactions and side effects. Indeed, if we are to be effective and responsible doctors, we need all the help we can get to manage the information overload. Clearly, technology is the most likely solution.

Right now, healthcare reform is aimed at addressing present concerns with healthcare costs, quality, and accessibility. We all recognize that the cost of healthcare in America is almost incomprehensible. We spend more of our gross domestic product on healthcare than any other industrialized nation in the world. Though we spend trillions each year, we have some of the poorest reported health quality indicators. Further, despite the amount of money we spend, millions of Americans do not have access to any care because they are uninsured.

When addressing these key areas for healthcare reform, experts believe that, over the long haul, HIT offers the most promise for solving many issues, mainly within the area of quality, and perhaps even costs. But which types of HIT are best and for whom?

### **One HIT Solution Does Not Fit All**

Much of the stimulus package is focused on incentives for physicians and hospitals for purchasing EMRs. Although EMR systems are expected to improve quality of care and reduce costs, this conclusion is based more on thoughtful analysis rather than direct observation. The rapid evolution of EMR systems and their low level of penetration into physician's offices are factors that limit the availability of definitive data documenting their impact. Further, more research is needed to determine the most effective implementation of these systems.

Results listed in a new report from the National Research Council suggest that the present use of HIT is misdirected at fulfilling guidelines rather than improving care. The report concludes that greater emphasis should be placed on IT that provides healthcare workers and patients with patient-centered cognitive support and feedback, such as assistance in decision making and problem solving. Of particular interest are CDSS, the so-called "smart systems" that help doctors think better. These show true promise for dramatically improving quality, efficiency, safety, and even cost in both the short term and long term. Such systems have been documented in the literature for decades and could be deployed immediately with low-cost solutions and little disruption to physician workflow. Similarly, CPOE systems have helped reduce medication errors and are seen as a necessary part of a hospital's or health organization's plans for HIT deployment.

### **HIT and Health Disparities: Quality Care for All?**

No one seems to be talking about what healthcare reform and HIT stimulus money means for underserved, underrepresented minorities or the health practitioners who serve them. Many community hospitals, clinics, and rural health centers will not find the same benefits from the adoption of all HIT resources. This brings up the rarely mentioned questions of how HIT will affect the digital divide and whether HIT will meaningfully impact care for underserved populations. Health policy makers recognize that eliminating disparities is essential for both improving quality care to all and cutting healthcare costs. Here is where emerging HIT could help. HIT adoption rates among healthcare providers, however, are low throughout the nation.

Studies completed to date suggest that providers in underserved communities, both rural and urban, have not kept pace with their counterparts. Only 8% of community health

centers have adopted HIT compared with 18% of private, office-based primary care physicians.

There are several factors that explain the low adoption rates. Cost is certainly an issue. Among minority providers, many are not able to afford the needed HIT investments. Therefore, their patients will not be able to benefit from HIT and, as a result, the gap between these patients and nonminority consumers with HIT access could increase.

There is also a lack of culturally and linguistically specific outreach to help increase HIT adoption by consumers and the providers who serve them. If we are to achieve the Institute of Medicine's recommendation for ensuring that quality care is patient centered, then it is critical to provide resources to healthcare providers that have been purposefully designed to address diseases with higher incidence in minority populations. Community partnerships are also essential to attain HIT adoption for all. These should be true partnerships where developers, physicians, and representatives from communities of color and other groups have an opportunity to participate in the development of policies, program implementation, research, and evaluation.

Ultimately, the challenge for developers and researchers is to harness the technical capabilities of HIT in ways that support the social and cultural realities in which we work and live while enhancing our ability to address the health needs of every patient. Those interventions and strategies that integrate efficient, patient-focused solutions with IT will likely be the solutions capable of cost-effectively enabling mass adoption and convenience. It is a lofty goal and one we hope will be attained within the foreseeable future.

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