



Upgrading Health Care

States promote health information technology

By Sarah Donta

Although the U.S. health care system is known worldwide for its high-tech advances, when it comes to adopting information technology, the health care sector lags behind many other industries. While other professions have eagerly embraced electronic tools, the doctor's office has become the last bastion of the handwritten record.

For years, health care experts have recognized that improving health information technology (HIT) has the potential to control or reduce health care costs and improve the quality of care. But actually implementing new technology faces major barriers.

Improving Communication

Health information technology can be defined simply as the use of technology to help health care providers communicate. This can include online educational resources for providers and consumers, electronic medical records, registries, diagnostic and monitoring tools, bar codes, electronic prescribing, and electronic processing of payments and claims. For state policymakers and others interested in the "big picture" of health care, implementing HIT is about the infrastructure and capability necessary for purchasers, providers, payers and researchers to share information securely at the touch of a button.

Health information technology has the potential to reduce medical errors, improve the quality of care, help doctors track important information about patients, and give consumers more information about their own providers, finances and overall health.

"IT is changing the way work gets done," said Dr. David Brailer, the first national coordinator for health information technology. "Decisions get made differently. Facts are recalled differently. Those are all positive things. It's much easier and less frustrating for a clinician to have tools that can do all that."

On April 27, 2004, President Bush issued an executive order calling for "widespread deployment of health information technology within 10 years to help realize substantial improvements



“It’s not just about technology. It’s about changing the culture, mindset and finances of health care.”

—Dr. David Brailer,
national coordinator for
health information technology

in safety and efficiency.” In May 2004, he appointed Brailer to implement the executive order.

Brailer helped establish the National Health Information Network (NHIN) to meet these goals and provide the infrastructure necessary to integrate health information technology nationwide. The network is a nationwide utility that allows for the

secure and seamless exchange of health information. The NHIN, sometimes called the “Medical Internet,” would allow doctors’ offices, hospitals, clinics and laboratories to exchange information securely in real time. It would also connect clinicians to data about their patients at the point of care. Capital expenses would be paid by public and private investments, and private organizations would operate the network. Federal agencies would use it to collection and share data.

“Health care information exchange interoperability is not just about the technology. It’s about the legal, financial, cultural, clinical, operational and organizational policy issues that come up whenever we allow on a widespread basis information to be shared among and across doctors, patients and other players,” Brailer said.

In order to develop this network, the federal government has developed Regional Health Information Organizations (RHIOs) to oversee the exchange of health care information. RHIOs consist of stakeholder groups that make sure that the networks meet the needs of individual communities and comply with national goals and policies.

“Our goal, very simply, is to have every American covered by [an RHIO]. We want to see the basic RHIO infrastructure up and running within two years in the United States. And I think we’re well on our way toward doing that,” said Brailer. Since funding has been an issue, the Agency for Healthcare Research and Quality, part of the U.S. Department of Health and Human Services, announced \$139 million in contracts to states and pilot programs for three years for HIT projects starting in October 2004. Although Congress denied the department’s request last year for an additional \$50 million appropriation for 2005, Brailer said HHS expects more funding in 2006.

Health IT Barriers

Despite this plan and the numerous benefits incorporating health information technology could bring to the medical community, a survey by Medscape and the Commonwealth Fund showed that physicians have been slow to adopt HIT. The report, titled *Information Technologies: When Will They Make It into Physicians’ Black Bags?*, found the following:

- Seventy-nine percent of physicians use electronic billing.
- Only 27 percent of physicians use electronic medical records or order tests, procedures or drugs electronically.
- Only 6 percent of physicians routinely use electronic clinical decision support systems.
- Only 3 percent of doctors communicate with patients by e-mail; 7 percent communicate with other doctors by e-mail.

Given that the U.S. health care system has a reputation as the most technologically advanced, practitioners’ reluctance to adopt new information technology seems almost ironic. Although other industries have eagerly implemented many of these technologies or their counterparts, several factors have slowed their adoption in health care:

- *High implementation costs.* Implementation of HIT takes a significant amount of time and money—money that some cash-strapped doctors’ offices simply do not have. Other health care entities may have more resources to implement the latest HIT. However, the decentralized nature of the U.S. health care system means that returns on investment for HIT may be hard to document. For instance, a clinic that uses an electronic reminder system for ensuring patients with expensive chronic illnesses receive the care they need is not paid any more than its competitors that don’t do this. Providers that use HIT to improve care face a double whammy: Although they spend the time and money on new technologies, their income may decrease because their patients are healthier and need fewer doctor visits.
- *Effectiveness.* Another challenge for health care purchasers and providers is determining which technologies will yield the biggest bang for the buck. There is not much solid scientific evidence on which technologies are cost-effective or improve quality. The high price tag of implementing a new software program, for instance, along with the training needed for health care professionals and staff, is hard

to justify without strong evidence that the new technology will make the delivery of care more efficient, reduce errors or simplify health care for patients.

- *Privacy.* Patients, physicians and government officials all have concerns about sharing personal health care information. The Health Insurance Portability and Accountability Act of 1996 addressed this concern by requiring the U.S. Department of Health and Human Services to set standards for protecting confidentiality and security of health data. The department developed rules to ensure the security of electronic health information, including medical, administrative and financial records. These rules were published in the *Federal Register* on February 20, 2003, and are available at www.hhs.gov/ocr/hipaa/.

State Actions

Seeing the potential for health information technology to decrease costs and improve quality, some states have moved forward with efforts to promote HIT and electronic information networks in health care.

Delaware

The Delaware Health Information Network is a statewide health information and electronic data interchange program managed by the Delaware Health Care Commission. Created in 1997, this initiative was established to reduce costs, increase competition, and improve access to care by providing easy access to timely, reliable and relevant health care information.

“Our vision is that of a sort of hub, if you will, that connects and transmits information to clinicians with patient permission,” explained Paula Roy, executive director of the commission. “We focus on how you move data across labs, hospitals and providers so that physicians can make better decisions.”

The initiative provides resources and information for policy-makers, physicians, patients and researchers. Some features planned for the future include:

- medical record access for patients and health care professionals;
- links to proposed state and federal legislation;
- information on state health programs and outside insurance programs;
- a Digital Health Library; and
- links to health resources, such as Intellihealth, Kaiser Permanente and Hospital Finder.

Funding for the network comes from local foundations and a grant from the Agency for Healthcare Research and Quality. “Those amounts of money are allowing us to move forward, but they’re only seed money,” Roy said. “The investment to build and operate these kinds of systems is significant. One of the things we are putting the finishing touches on is a revenue model and sustainability model.”

Rhode Island

Through a partnership with SureScripts, the Rhode Island Quality Institute has founded an e-prescribing initiative to modernize the prescription process and improve prescribing accuracy for physicians, pharmacists and patients. Rhode Island is working as a test site for implementing a statewide electronic system among all retail pharmacies and all prescribers in the state.

The pilot program linked 39 physicians to 70 percent of Rhode Island’s pharmacies. More than 10,000 prescriptions went through the system. To date, the results have been very positive. Streamlining the renewal process reduced the processing time by more than half. Calls to and from the physicians’ offices have been reduced as well. At Anchor Medical, a 10-physician office, e-prescribing led to 50 fewer phone calls per day.

“We were finally able to produce for our clinical community a genuine, bona fide value-added program. Not just another unfunded mandate, but value added. That helped our adoption tremendously here,” said Laura Adams, president and CEO of the Rhode Island Quality Institute.

Health information technology offers many potential benefits to the health care industry and to states. However, some key players are concerned about privacy issues, high start-up costs and unproven effectiveness of some technologies. Because of the health care system’s incentive structure, many observers believe that government funding and leadership will be essential for widespread adoption of these new technologies.

The potential to improve quality, reduce medical errors, and ultimately reduce health care costs is the enticing vision that is stimulating innovation at the national and state levels.

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Internet Resources

In December 2004, The Council of State Governments hosted a teleconference titled “Upgrading Health Care: State Plans for Health Information Technology.” To hear an audio recording of the conference or for more information about health information technology, please visit www.csg.org (keyword: Health IT).