Can Health Information Technology Be the Answer?

Is it possible to improve health care quality and patient safety and moderate the growth of health-care costs at the same time?

Across the nation, a growing number of caregivers, policymakers, employers and consumers believe this can—and must—be done. Making better use of information technology is increasingly seen as an effective way to accomplish these goals simultaneously.

Many states, including Maine, are actively supporting the development of electronic clinical health information exchanges or HIEs. These information-exchanges are designed to quickly and efficiently give doctors and other providers the information they need—when it is needed most—to make more informed patient care decisions.

Simply put, an HIE is a sophisticated electronic information network that gathers key patient clinical information from multiple independent electronic sources and combines this information with the latest available prescription drug and laboratory test information for a patient. A caregiver can then access this information, with the patient’s consent, to make the best possible treatment and care decisions.

HIEs can reduce unnecessary or duplicative tests and prescriptions. They can also lead to fewer medical errors and much more efficient coordination and communications among doctors, hospitals and others who are involved in the treatment of individual patients. In fact, HIEs are one of only a few widely agreed-upon strategies for significantly slowing health spending without placing quality and patient safety at risk. The HIE concept has been embraced by leading political figures on both sides of the aisle. In fact, Hillary Clinton and Newt Gingrich are among the most outspoken proponents of HIEs at the national level.

Health Information Exchanges—A Major National Trend

Today, electronic health information-sharing is one of the biggest and important trends throughout the country. The federal government has made the development of a national information-sharing system a high priority. In late 2006, Health and Human Services Secretary Michael Leavitt called for an expansion of health information technology as one of the four “pillars” in the federal government’s strategy for transforming America’s healthcare system.

The majority of individual medical records in Maine are still kept in paper files. Sharing this information among doctors and hospitals caring for a patient is costly, inefficient and can lead to medical errors.

Fast Facts

• Health Information Exchanges (HIEs) are one of the most important developments in health care across the nation.

• Two analyses over the past 24 months have concluded that savings between $40 million to $50 million per year will be achieved in Maine by transitioning from our current paper-based medical record system to a new electronic network.

• Mainers now spend $1 billion per year on prescription drugs. If doctors could access a patient’s complete medication profile, there would be fewer unnecessary and duplicative prescriptions, saving lives while trimming costs.
To guide this effort, the federal government recently created the Office of the National Coordinator of Health Information Technology (ONC), and federal officials in the Medicare and Medicaid programs are now making some financial incentives available to promote adoption of health information technology among physicians. Other agencies such as the Veterans Administration and the federal Agency for Health Research and Quality have made substantial investments in the development of these systems.

Health information technology also is a major topic on Capitol Hill. Last summer the U.S. House of Representatives approved the Better Health Information System Act (HR 4157). Efforts are now underway to combine this legislation with the Wired For Health Act ($1418) that was passed with strong bipartisan support by the Senate last winter.

**Interest and Support Is Growing Among States**

Although federal support is growing, the real action in health information technology is happening at the state level. Both the National Conference of State Legislatures and the National Governors Association have taken significant steps to promote the adoption of health information technology. In 2006 several governors issued executive orders calling for the rapid development of information technology across their states. In Rhode Island, the legislature approved a $20 million bond package aimed at advancing a statewide health information system.

States that have aggressively pursued these strategies have secured substantial federal and private foundation funding. The federal government and other funders are anxious to demonstrate how HIEs will improve quality and moderate costs. As a result, states that have brought together key stakeholders and have a plan in place are receiving important funding support.

**How Maine Fits Into the Health Information Equation**

Today, Maine is positioned to become one of the first states in the nation to build a statewide HIE. This effort is being driven by a broad based public-private partnership called HealthInfoNet. In 2006 HealthInfoNet was formally incorporated as an independent nonprofit organization governed by a highly-experienced Board of Directors representing a broad range of stakeholders from across the state. From the beginning, consumers have been engaged to help shape policies and procedures that will protect patient privacy and security.

On the basis of Maine’s progress with HealthInfoNet, our state has been selected by the federal government as one of nine states to serve as a HIE “case study” site. Other states interested in developing their own HIEs will use these case studies to help guide their own work.

Developing and deploying health information technology is a key element of Maine’s State Health Plan. The Plan describes how HealthInfoNet, telemedicine and other systems are a key element of the state’s strategy for improving care for all residents.

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**Statewide public opinion research done in late 2006 found strong support for the HIE concept.**

Here’s how Maine citizens responded to the following questions:

When you need medical care, how important do you think it is that…

- …you have easy access to all the information in your own medical record?
- …doctors you see—with your permission—have access to all your medical records, including primary care and specialist report, test results, and medications?
- …care from different doctors and other health care professionals be well-coordinated?

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Protecting Privacy and Building Consumer Trust

As Americans rely more on computers—and conduct more business online—concern has grown over privacy and security issues. Rarely a month goes by without news of a stolen laptop, identity theft or large information systems being penetrated by hackers.

In Maine, HealthInfoNet is being designed to meet rigorous patient privacy and system security standards. Consumer involvement has been a priority for HealthInfoNet since the project’s inception. A consumer stakeholder group was established in late 2005 to develop recommendations relating to privacy and security and consumer awareness and buy-in. As a result of the consumer process, the HealthInfoNet Board includes consumer representation and a Consumer Advisory Committee. This group, which held its first meeting in early 2007, will advise the Board on the development of systems that will allow consumers greater access to their own medical records and oversee efforts aimed at building consumer awareness and trust in the new statewide system.

Statewide public opinion research conducted by HealthInfoNet in the fall of 2006 found strong support for systems that will result in improved coordination of care and communication among doctors and other caregivers. A series of eight focus groups were held in Presque Isle, Bangor, Portland and Lewiston and Auburn. In addition, some 600 randomly selected Mainers were interviewed via phone.

The chart on page 2 shows how Maine people responded when they were asked how important it is to have easy access to their own medical information, for doctors to have access to the information, and for care by different health professionals to be well-coordinated.

How Do HIEs Impact Health Spending?

The majority of individual medical records in Maine are still kept in paper files. Sharing this information among doctors and hospitals caring for a patient is costly, inefficient and can lead to medical errors. Two analyses over the past 24 months have concluded that savings between $40 million to $50 million per year will be achieved in Maine by transitioning from our current paper-based medical record system to a new electronic network. Nearly one-third of these total annual savings would be experienced by MaineCare, as improved clinical information-sharing leads to fewer unnecessary hospitalizations, duplicative tests and prescriptions and a reduction in medical errors. In fact, savings achieved in a single year would offset the estimated five year cost of building and operating the new statewide system.

How Will A Statewide HIE Work In Maine?

Across the nation, as well as in Maine, doctors, hospitals and other caregivers are transitioning from paper medical records to electronic medical records known as EMRs. HealthInfoNet will be the key bridging network that allows information from EMRs, pharmacies, labs and other sites to be gathered and then shared, with the patient’s consent, with all medical professionals involved in the patient’s care.

Physicians and their patients should begin to benefit from Maine’s emerging HealthInfoNet system over the next two years. By 2008, a doctor somewhere in Maine will click an icon on a computer and have immediate access—for the first time ever—to comprehensive electronic information about her patient from sources outside of the physician’s own provider network or office electronic medical record or EMR.

What Information Will Physicians Access Through HealthInfoNet?

Here’s an example: a primary care doctor in a rural community in Penobscot County is caring for a patient who has just been discharged from a hospital some distance away. In addition to the patient information already available in the physician practice’s own medical record, the physician will be able to access:

- A complete and up-to-date medication profile that will provide a complete picture of the drugs prescribed by all the doctors and hospitals involved in the patient’s care;
- Lab results from a test performed the previous day at the hospital or private laboratory;
- Key data elements from the patient’s inpatient stay at the hospital;
- A report from a physician specialist in another community who admitted the patient to the hospital after an office visit earlier the same week.

Armed with this information, the patient’s primary care physician will be able to make a much more informed decision about the patient, without waiting for paper reports or records to be faxed or mailed to her office.

“For far too long, America has invested too little in health information technology. It’s time for a change. If we create privacy-protected electronic medical records for every citizen who wants them, we will save money and, most important, we will save lives.”

Newt Gingrich, Former Speaker, U.S. House of Representatives
Over time, as participation in HealthInfoNet expands, the same physician treating the same patient—again with a single click on an icon—also will immediately access information from an emergency department visit her patient had at a Hancock County hospital while vacationing at Acadia National Park.

In the future, the same doctor will be a single click away from information from her patient’s recent treatment at a major medical center in Massachusetts and a prescription filled at a Los Angeles pharmacy while her patient was on a business trip to the West Coast.

Physicians who do not have an electronic medical record or EMR system will be able to securely access more information about their patients from HealthInfoNet if they have a computer and Internet connectivity.

Who Will Benefit From An HIE in Maine?

Every Maine resident is expected to benefit from a coordinated and secure statewide HIE.

• Patients will benefit from improved care and better coordination among their various caregivers; HIEs will moderate the growth of healthcare costs, resulting in more affordable care and insurance coverage;
• Over time, HIEs will help provide patients with easier access to their own medical information;
• Patients without health insurance frequently do not have a primary care doctor— or a medical record; HIEs can serve as a “virtual” medical record that can help provide doctors the information they need to give the best possible care;
• Physicians and other caregivers will have access to the information they need to make more informed treatment decisions;
• Employers will see a moderation in the growth of costs that should lead to more affordable coverage for their workers;
• MaineCare and other government systems will experience cost savings.

How Is HealthInfoNet Being Funded?

Private foundations, providers, payers, government agencies and business have contributed more than $2 million to drive forward HealthInfoNet’s development. In 2004, the Maine Health Access Foundation (MeHAF), the State of Maine’s Center for Disease Control and the Quality Forum as well as the nonprofit Maine Health Information Center (MHIC) became the earliest proponents for the development of a statewide information-sharing system. For the first 18 months of HealthInfoNet’s existence, MeHAF, the State, and the MHIC served as the early Steering Committee that oversaw the feasibility, planning and implementation plan for the new system. Shortly after HealthInfoNet’s 2006 establishment as an independent nonprofit, MeHAF awarded its first-ever $1 million challenge grant to HealthInfoNet to help it move toward implementation in 2007. An intensive business planning process is now underway to determine HealthInfoNet’s long term plan for financial sustainability. In the meantime, HealthInfoNet is in the process of raising the estimated $6 million needed to build the technical network and begin first-stage implementation this year. Both the state and federal government have been asked to contribute because HealthInfoNet will lead to improved care for all Maine people, including those served by MaineCare and Medicare.

Improving Care For MaineCare Beneficiaries

HealthInfoNet has partnered with MaineCare to pursue major Medicaid Transformation Grant funding through the federal Centers for Medicare and Medicaid Services (CMS). Maine will soon learn if its grant proposal has been approved. Through this project, HealthInfoNet will develop a patient level medication history that will result in improved care and reduced costs for MaineCare beneficiaries. This partnership also will allow the rapid development of a coordinated “e-prescribing” system that will provide physicians a fast and efficient tool for ordering prescriptions electronically. Systems of this kind have been shown to be effective in avoiding duplicative and unnecessary prescriptions that are costly and can lead to medication errors.

Protecting the Public’s Health

Since its inception, HealthInfoNet has also been perceived as a unifying information system for clinical health care data and the state’s Center for Disease Control and Prevention’s Integrated Public Health Information System (IPVIS). This will allow development of a technical interface designed to allow these two systems to share information (allowed by Maine and federal privacy laws and regulations) needed to protect the public’s health.

For more information

Please visit www.hinfonet.org or contact HealthInfoNet Executive Director Devore Culver at dculver@hinfonet.org.