Minnesota is moving toward statewide health information exchange, but we still have a ways to go.

BY HOWARD BELL

Minnesota has set a January 1, 2015, deadline for all hospitals and clinics to have an electronic health record (EHR) system that allows them to securely share patient information with other clinics and hospitals outside of their organization. And it looks like the state will meet that deadline in some fashion.

Already, 87 percent of clinics in Minnesota use EHRs and an estimated 90 to 95 percent of clinic-based physicians in the state work in facilities that have them, according to the Minnesota Department of Health. About 80 percent of those EHR systems are certified as “exchange-ready”—meaning they can share patient information in a way that meets state and federal requirements.

The state has created a system in which a digital hub, the Health Information Exchange Bridge (HIE-Bridge), will facilitate the sharing of information. Hospitals and clinics will be able to tap into it through their own EHR systems to request or receive information from others. To begin with, all information will be exchanged in a standard report called a “continuity of care document” (CCD). A CCD will include information about a patient’s immunizations, medications, medical problems, test results, allergies, care plan and insurance.

Avoiding tin-can tangle

Exchanging information through a hub is cheaper and more efficient than everyone connecting to everyone else on their own, says Clark Averill, chair of the board for the Community Health Information Collaborative (CHIC), which oversees HIE-Bridge, and director of information technology for St. Luke’s Hospital in Duluth. With a centralized hub, he says, “you avoid thousands of point-to-point connections that create an untenable tangle of tin cans connected by strings.”

CHIC’s HIE-Bridge is already used by 11 hospitals, 63 clinics and two long-term care facilities in northeastern Minnesota. The system will be upgraded by September 30, and it will take at least another year after that to get the entire state connected, says Cheryl Stephens, Ph.D., CHIC’s president and CEO. CHIC also manages a patient consent repository (patients may opt out of allowing their health information to be exchanged).

The HIE-Bridge will be a two-lane structure, with one lane for sending out (pushing) information and the other for retrieving (pulling) information about patients. A hospital might use HIE-Bridge’s record locator to identify all the hospitals and clinics that have cared for a patient and then send them (push) all a secure electronic message about that patient. Or if a patient is admitted to the emergency department, the hospital could use HIE-Bridge to identify others who treated the patient and request (pull) information going back as far as five years. The information can be imported into the patient’s EHR if the system has that capability or attached to the record if it doesn’t.

RSVP

CHIC has invited all Minnesota hospitals and clinics to subscribe to HIE-Bridge. So far, sign-up has been slow. HealthPartners’ chief information officer Alan Abramson, Ph.D., thinks his organization and others will eventually subscribe partly because HIE-Bridge is currently the only full-service HIE service provider.

Most Twin Cities-area health systems are in no hurry to sign up for a couple of reasons. “The fees charged to connect to HIE-Bridge are an issue,” Abramson says. “And we’re already exchanging a CCD level of patient information electronically with nearly all users of EPIC EHR software.” EPIC users in the metro area have been exchanging patient information for
a few years using EPIC’s CareEverywhere software. Abramson says by the end of 2013 HealthPartners hopes to exchange information with non-EPIC users using its CareElsewhere software. “Everyone’s kind of waiting for someone else to go first with CHIC because the more subscribers you have, the less expensive it is for everybody,” he says. Meanwhile, EPIC users see little need to subscribe to HIE-Bridge, as it largely duplicates what they’re already doing.

But the 2015 mandate requires subscribing to an HIE service provider. “The goal,” says Stephens, “is to not have silos of patient information, but to have seamless push and pull exchange among all providers.”

That will mean bringing together separate efforts in geographic pockets around the state, according to Abramson. “You’ve got CHIC in the northeast, EPIC users in the metro area and Mayo’s Beacon network in the southeast.”

Beacon is a network of hospitals, clinics, schools and public health departments in 11 southeastern Minnesota counties that need to subscribe to HIE-Bridge, as it largely duplicates what they’re already doing.

The HIE infrastructure
The Duluth-based Community Health Information Collaborative (CHIC) is the organization designated to oversee construction and operation of the infrastructure for exchanging health information electronically in Minnesota. Its HIE-Bridge platform might be considered the state’s main highway. HIE-Bridge is connected to the national network called eHealth Exchange.

Three health data intermediaries (HDIs) will soon be connected to HIE Bridge. Surescripts, primarily used for e-prescribing, now also offers push and query exchange capabilities. Likewise, Emdeon, which has been used for lab transactions and e-prescribing, now also offers push and query messaging. ApeniMED offers push messaging. A clinic or hospital that subscribes to an HDI will connect indirectly to CHIC’s HIE-Bridge.

Initially, Minnesota clinics and hospitals will exchange information using continuity of care documents (CCDs). Like cars on a highway, CCDs are the vehicles for conveying patient information.—H.B.
are exchanging asthma action plans for children. CHIC’s role would be to link these regional exchanges to the statewide network, Abramson says, “which is probably the direction we’re headed.”

Miles to go
A number of hospitals and clinics are on track to meet many of the 2015 interoperability goals, according to Jennifer Fritz, deputy director of the Minnesota Department of Health’s Office of Health Information Technology. And many are well into meeting federal meaningful use Stage 2 requirements that include exchange of patient information with providers outside their system. But technical and cost hurdles remain.

Vendors are still scrambling to upgrade some clients’ EHRs so they can exchange CCDs. “Many providers don’t realize they can’t export a CCD until they connect to HIE-Bridge,” Stephens says.

And exchange needs to become simpler for users, according to Averill. “The ultimate goal is seamless, purely electronic exchange of patient information where data is automatically placed in the patient’s record without interrupting EHR workflow,” he says. “Right now, we’ve got manual electronic exchange, where you can send and receive CCDs, but you need a middle step of manual intervention to get the data into a patient record.”

Getting physicians up to speed on using EHRs has been another challenge, one which Paul Kleeberg, M.D., has been dealing with as clinical director for Minnesota’s federally funded Regional Extension Assistance Center for Health Information Technology (REACH). REACH’s field staff have spent the past three and a half years helping mostly smaller clinics and hospitals implement EHR systems and achieve meaningful use. Abramson says he frequently gets “blow-back” from frustrated physicians. “What I hear is ‘Why can’t you IT guys just make this happen? Why does it have to be so hard?’ These are big, complex systems that take hours of time to get comfortable with using—and now we’re adding exchange, another thing for physicians to learn. It’s especially frustrating for physicians when they have to leave their EHR workflow to send or receive summaries of care that are just a bare-bones snapshot...

National exchange coming
Minnesota clinics and hospitals that subscribe to the state’s health information exchange network will eventually be able to connect to a nationwide exchange.

The eHealth Exchange will allow Minnesota providers to electronically share patient information with providers in other states, according to Cheryl Stephens, Ph.D., president and CEO of the Duluth-based Community Health Information Collaborative (CHIC), which is guiding the state’s efforts related to health information exchange. “It’ll enhance the quality of care for Minnesotans who winter in the South and then return to Minnesota,” she says. “Providers in each state are kept abreast of any changes in the patient’s health status.”

A Minnesota physician searching for information about a patient will be able to send a query through Minnesota’s health information exchange to providers around the country who either subscribe to the eHealth Exchange or indirectly access it through their state exchange. There currently are no plans to charge for this, although that could change, Stephens says.

The eHealth Exchange has 41 subscribers that include large medical centers, state health information exchanges and federal agencies. Altogether, those entities represent more than 30,000 users, more than 65 million people and more than 1 million shared patient records.

Minnesota clinics and hospitals will be able to use the nationwide exchange to share patient records with federal agencies including the Centers for Medicare and Medicaid Services, the Department of Defense, the Social Security Administration and the Veterans Affairs (VA) Department. Being able to exchange information with the Department of Defense and the VA will allow physicians in the community to combine into one record the care received by patients who transition from active duty to veteran status. It will also greatly reduce processing time for Social Security Disability claims.—H.B.
Averill believes statewide HIE eventually will be “very routine.” But when the January 2015 deadline for interoperable exchange rolls around, he predicts not all EHRs will be talking to each other seamlessly. “It will still take a person doing something to make the electronic exchange work,” he says, “similar to the step required to check email. All exchange won’t happen within a physician’s routine EHR workflow.”

Meanwhile, mandates, money and the quest for quality will motivate physicians to forge ahead with exchange across different health systems and EHRs. “Interoperability,” says Averill, “has become critical to providing the best care.”

Howard Bell is a medical writer and frequent contributor to Minnesota Medicine.