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Fallon Clinic

WORCESTER, MA – HealthAlliance Hospital and Fallon Clinic are the first two healthcare organizations to go live with SAFEHealth (Secure Architecture For Exchanging Health Information), a regional health information exchange based in Worcester, Mass.

When Fallon Clinic patients at HealthAlliance Hospital's emergency department give their consent, ED physicians can access their medical charts from the clinic in real time. Armed with relevant clinical data, ED physicians can deliver care in a timely, cost-effective manner.

"Our basic belief is the use of technology can significantly improve patient safety," said Val Slayton, the CMO of HealthAlliance. "Our doctors need information on the patient at the point of care to impact clinical decisions."

Fallon Clinic, and partners Fallon Community Health Plan and the UMass Memorial Health Care System, developed SAFEHealth with a \$1.5 million grant from the Agency for Healthcare Research and Quality and internally donated resources.

In this HIE model, a federated proxy edge server sits within each participating healthcare organization's four walls, said Larry Garber, MD, medical director for informatics at Fallon Clinic.

The clinic preloaded two years' worth of clinical notes along with new data from its electronic health record system, keeping the proxy edge server up to date. Only copies of clinical data that the healthcare organization is willing to share are on the server.

Through the registry process, the system checks whether a consent form was signed and what data can be shared. "This is all happening in the background," Garber said. "It fits into the workflow."

Patient consent can also occur at registration. "We get consent when and where it's most relevant," Garber said.

Once the consent is entered into the consent portal, physicians have access to the data. Whatever workflow occurs during the patient's stay, identical copies of the data flows into both EHR systems at the hospital and clinic, he said.

Fallon Clinic wrote the software using the Microsoft .NET framework. It provides the software free. The only cost to participating healthcare organizations is the purchase of Microsoft's SQL server and its license.

Garber pointed out that it's a one-time cost of \$2,000 for small healthcare organizations and approximately \$15,000 for large organizations that have a lot of data. The only ongoing cost is the maintenance, which he estimated at \$500 per year, or 20 percent to 25 percent of the upfront cost.

"RHIOs have so many layers and spent a ton of money," he said. His philosophy is that the most important thing is to make the connection between the healthcare organizations.

"There's no need to formalize a RHIO," he said. "This is a low-cost, simple, elegant model."

The SAFEHealth architecture is legally simpler and lowers the cost. Fallon Clinic already has an Enterprise Master Patient Index (EMPI) that it monitors, so it acts as the trusted authority to host the EMPI, which eliminates the cost of maintenance for participating healthcare organizations. An estimated 1 million patients are preloaded in the EMPI.

Contrary to the community health information networks of the 1980s and HIEs and RHIOs that are struggling to become sustainable, this model delivers financial value to all stakeholders, said Richard Mohnk, the CIO of HealthAlliance Hospital.

A large number of Fallon Clinic's managed care patients end up at HealthAlliance's ED, he said. By being able to share information such as a medication list and clinical history, ED doctors can provide better care for the patients. Not only do the health plans of the patients benefit, with fewer tests being ordered, but HealthAlliance and Fallon Clinic build a strong relationship that will result in more patient referrals, Mohnk said.

HealthAlliance is a member of the UMass Memorial Health Care system. Fallon Clinic hopes to expand to all hospitals in the system and throughout central Massachusetts, said Garber. At some point the CONNECT, a software gateway that connects health IT systems to HIEs using the NHIN standards, may be added "when appropriate" to be a "node in the NHIN network," he said.

While it's too early to glean any statistics on improved clinical outcomes, Slayton and Garber recalled one ED doctor's response when all of the patient's relevant data popped up on the screen: "Sweet!"