



MICHAEL BUCK

Metro Health's Dr. Brad Clegg, at left, and CIO Bill Lewkowski are joined near some of the hospital's computer terminals by staff, from left, Sue Theel, Ameer Slesman, Michella VanVuren, Karen Middendorf and Heidi Winn.

Epic software helps Metro Health minimize paper

Elizabeth Slowik

Metro Health this month celebrated the activation of the final piece of its Epic software system, the result of a multi-million dollar, multi-year effort that reaches virtually every corner of the hospital, outpatient centers and thousands of patients.

"It touches every employee and every patient. It changes the way we deliver care," said Dr. Brad Clegg, chief of medical informatics for Metro Health. "It's absolutely massive."

Among the last pieces of the system, produced by a company in Wisconsin, to go live was computerized physician order entry. That means doctors use a computer program to communicate to nurses details of the patient treatments they want to be carried out.

It's an approach that has encountered resistance among some doctors, particularly since the 2002 debacle at Cedars-Sinai Medical Center in Los Angeles. That hospital was forced to dump a three-month-old, \$34 million computerized order entry system after frustrated doctors, who'd had no input, rebelled against it.

That cautionary tale shaped Metro Health's decision to involve doctors in technology matters right from the get-go eight years ago, Clegg said. Prompted by the Institute of Medicine's 1999 landmark report on patient safety, the hospital decided that bringing Metro Health into the computer age would be important and unavoidable.

"They really needed to get a handle on patient safety and they believed that going forward with electronic medical records would be a big factor," Metro Health CIO Bill Lewkowski said.

"Just from a patient satisfaction and experience standpoint, if I'm a patient and going from one service area of an organization to another, I don't want to go through the whole process of who am I, what I'm here for. I want to be known across the whole system."

At the same time that hospital administrators were laying plans for building the new facility in Wyoming, which opened in 2007, Lewkowski and Clegg joined forces to lay out the digital future. After it was decided to pursue one integrated system and three potential vendors were identified, Metro Health's physicians stepped in, Clegg said.

"Our leadership was very kind in privileging the physicians, not to make the decision but to be heavily involved in the decision, and they were," Clegg said. "We had 25 physicians that attended extensive demonstrations of these three vendors and, without exception, they picked Epic."

Yet at first, Epic had no product of the scale needed by Metro Health, he said. "We were too small for the targets that they typically pick," he said, noting that the system is used by huge, far-ranging health systems such as Kaiser Permanente in California.

After trying smaller-scale software, Metro Health now has become an enterprise solution. "We have essentially every single product they create, from the operative area to ambulatory to the emergency department, up on the floors, the OB department. Each area has a separate Epic product, kind of their own little best-of-breed, but they are all fully integrated," Clegg said.

The outpatient centers saw the first implementation of Epic in October 2006, he said. Over the next year, Epic was introduced in nine outpatient centers and 80 physicians working in them.

Work on the inpatient system began in the summer of 2008, following Metro Health's move from Grand Rapids to Wyoming.

In addition to computerized physician order entry, the computer system now handles nursing flow charts and orders, and results for the laboratory, radiology and pharmacy, Lewkowski said.

"Every single workstation, every single bed in the hospital is now driven and controlled and monitored both in and by Epic," Clegg added. "So whether I'm a newborn where my first order for my hepatitis shot is placed in there, or if I'm a 90 year old that's coming in here with heart failure, those patients and those orders are all placed in Epic. There's not a sheet of paper."

Clegg said he expects the system will also help Metro Health and its doctors' offices track quality data that insurance companies now demand, which can impact public quality ratings as well as reimbursements.

Dr. Frank Belsito is even using the system to exchange e-mail with patients, who also have online access for setting appointments and viewing their test results and medical records. Belsito said many doctors are wary of the time-consuming qualities of e-mail. But he said he has found that it actually saves time by eliminating telephone calls.

"A patient is calling the office, waiting on hold, then they ask their question, they (office personnel) write it down, route it to the physician, get an answer, somebody has to call them back. Now a patient can be at work, at lunch, they can e-mail me a message and I can respond to it," he said, adding that he easily checks e-mail several times a day since he is already using the computer. E-mail has been popular with patients from their 20s into their 80s, he added.

Today, the electronic medical record incentives in the American Recovery and Reinvestment Act coupled with health care reform are giving big pushes to those who are behind in the computer revolution, Lewkowski said.