Case Study



About CHIME

The College of Healthcare Information Management Executives (CHIME) is the professional association for chief information officers and other senior healthcare IT leaders. CHIME enables its members to collaborate; exchange ideas; and advocate the effective use of information management to improve health and healthcare in the communities they serve.

When IT Matters: Improving Care Delivery and Patient Outcomes through Technology



Big Enough to Serve, Small Enough to Care



Chadron Community Sees Hard Work and Benefits in Implementing an EHR

rive years ago, the idea of an electronic health record was a scary one for many of the staff at Chadron (Neb.) Community Hospital and Health Services.

Like many hospitals, its records were entirely on paper. A few of its nurses had little or no experience with computers, let alone digital health records.

Since that time, much progress has been made. Chadron Community made the transition to paperless records, and clinicians have become comfortable with the system and the many benefits it brings to the critical access hospital. Even those resistant to the move to EHRs have been won over, said Anna Turman, the hospital's CIO and COO. "One of our physicians complained recently when the system was down for a while, 'When are we going to get back online and off paper?'" she recalled. "Now, he understands the benefits of having everything in one place."

In addition to having hospital records at the ready, the system enables providers to gain quick access to other information that's crucial to giving care. For example, the system enables clinicians to query state records to find immunization information on patients. Also, images from its digital radiological system are accessible from the EHR.



Chadron Community Hospital and Health Services: Chadron Community Hospital and Health Services in Chadron, Nebraska provides quality health care to the Panhandle of Nebraska and surrounding communities. This 25-bed Critical Access Hospital provides medical and surgical care, obstetrics and newborn care, emergency care, and rehabilitation services. Also available are a wide range of visiting specialists, who come to Chadron to see their patients, bringing specialist care closer to home.



Like Chadron Community, many of the nation's smaller hospitals have made or are making the move to electronic health records. For many of these facilities, it's a difficult leap; keeping pace with changes such as ICD-10, reform initiatives and future iterations of the Meaningful Use program represent large hurdles for front-line providers in remote settings.

Ramping up for Change

Chadron Community "went live" with its records system in July 2011, but preparations for the change started many months prior.

"A great deal of work went into the planning," said Cheryl Cassiday, Director of Nursing for Chadron Community Hospital. "We did a lot to prepare and teach staff, physicians and other providers."

"We went from a complete paper record to completely paperless, and when you do that, the computer becomes one of the training aspects," Turman said. "Even while preliminary planning was under way, the hospital began to offer staff classes in how to use computers and productivity software, and email was used as a tool to get workers used to communicating electronically. Our goal was to have users reach a high comfort level with technology."

In working on the EHR transition, Chadron Community used a multi-disciplinary approach in preparing for the change and selecting a hospital information system. Wide participation ensured that the organization had at least one "super-user" from each department, Turman said.

"Early on, we came to the conclusion that our system had to be something that fit our processes, rather than something that we had to adjust our processes to," she added. "We knew in advance there would be a lot of 'building' with this approach, and we encouraged front-line user involvement.

Anna Turman, CHCIO CIO Chadron Community Hospital

Anna Turman, CHCIO, CPEHR, CPHIT is the Chief Information Officer and Chief Operating Officer for Chadron Community Hospital and Health Services.



She is a strategic business partner

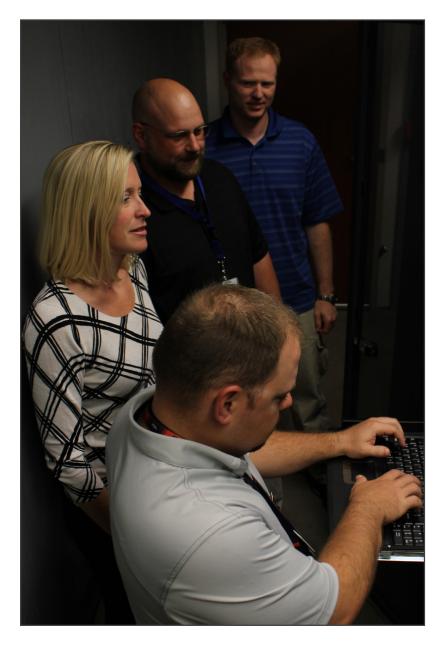
providing information systems vision, process efficiencies and daily management for Chadron Community Hospital, as well as a community services agency providing services in four communities in three counties of rural Nebraska, two physician-owned clinics and a providerbased rural health clinic. Ms. Turman, who has held positions in healthcare organizations for more than 13 years, holds a BFA degree from Colorado State University. She was awarded the Certified Healthcare Chief Information Officer credential by CHIME in 2011, and had previously earned the Certified Professional in Electronic Health Records (CPEHR) and Certified Professional in Health Information Technology (CPHIT) credentials. Turman is the current president of the Nebraska Chapter of HIMSS.



An unintended benefit was a better understanding of and background in the system, which in turn developed their skills to become exceptional trainers and support."

Chadron Community also invested time looking at its work processes before vendor selection, and that helped it understand how the information system would best support care delivery. "We asked ourselves how we were going to provide care at the bedside. Were we going to use computers on carts and have nurses wheel them to the bedside, or would we have fixed workstations in each room?" Turman said. "We wanted to figure how we could make the transition easier and be most conducive to our workflow and quality care. We took an in-depth looked at the processes, and the staff and training before we actually selected a vendor."

"We had to ask ourselves, 'Is that how we want it to look?" said Christina Dixon, a registered nurse and member of the implementation group. "It was good for us to go through each of our assessments, each of our flow sheets...it forced us to look at our paperwork. When we looked at our processes, it gave us an idea how to improve our workflow when the system went live."



The team from Chadron Community took about a year to gather information on various vendors' hospital information systems, compare their offerings and observe product demos before selecting a system from Keane Inc., which since has become a wholly owned subsidiary of NTT Data Corp.

Above from bottom to top, Chadron's clinical IS team: Jordan Raben, Network Services manager; Anna Turman, CIO/COO; Dan Anderson, Application Services Manager; and Ryan Russell, PharmD, Clinical Apps Analyst, Informaticist



Fast Track to Going Live

After selecting the system, Chadron Community had only about six months for the implementation and training process. Besides clinical records, the organization automated its pharmacy, emergency department, physical therapy, human resources and financial department, among other areas.

The new system has facilitated information sharing within the organization, Cassiday said. For example, the planners anticipated the needs of the quality assurance manager, who previously had to pore through charts to get the information needed for reports. With the system's report capabilities, that information on core measures can be gathered automatically, making it easier to get data for submission.

"The system helps to take down some of the silos so it's a more integrated process," Turman said.

While communication and cross-function teamwork were easier at a smaller organization, other challenges existed. "We were using our regular full-time staff to work on this, not someone who could dedicate 100 percent of

"We're isolated rural, and many people don't understand what it's like when it's 100 miles to the next town. Smaller hospitals need to be heard about the challenges we face."

his or her time," Cassiday said. "Still, it was a plus to have the people who are actually doing the job designing the system. They could see it from the staff perspective."

It's easier for hospital staff to find the patient information they need, especially historical information that can provide context to patients' conditions and how to treat them. Safety issues have been significantly improved; for example, physicians' orders are easier to read than when they were quickly written on paper records, Cassiday said.

"With some of the flow sheets, we allow ancillary personnel to document information," she added. "With some aspects of care, it doesn't matter if you're a nurse or nurse's aide. The documentation does show there was contact with the patient. We all have responsibility for our documentation; that has increased over time as well."

Chadron Community Hospital was named a 2014 Most Wired winner for the second consecutive year. Chadron Community Hospital has become The first facility in Nebraska to exchange data with Nebraska Immunization NESIIS in the production environment in real-time, via PHINMS and one of the first to be able to in real time receive Nebraska State Immunization data into our Health Records System.











From left to right: or Chadron's Director of Nursing Cheryl Cassiday, Chadron Community Hospital in Nebraska, and Cassiday speaking at a recent NTT DATA user conference.

Challenges Ahead

Chadron Community was able to attest to Stage 1 of the Meaningful Use program. It's made slower progress toward attesting to Stage 2 of the program, Turman said.

"MU2 has been a tough haul," she admits. "The slow progress has been disheartening for people. We had a powerful group to implement this, and we're so proud of everyone here. It's just a steeper path now. The biggest thing wearing us down is pushing so hard so fast with multiple high priorities. It is constant rapid cycle change of adjusting one thing to meet a requirement that creates unintended ripple effects, which create other problems that constantly adjust workflow. Staff experiences this as constant change. We are making progress but could use some breathing room to celebrate our successes."

Challenges such as implementing records systems or updating applications throughout the organization to shift to ICD-10 coding are large ones for rural organizations, especially for Chadron Community, which operates in a town that has a population of about 5,600 and is located in the northwest corner of Nebraska.

"We're isolated rural, and many people don't understand what it's like when it's 100 miles to the next town," Turman said. "Smaller hospitals need to be heard about the challenges we face."

Chadron Community and other Critical Access Hospitals are able to make progress with challenging healthcare IT because of the unique qualities of their staffs, Turman added. "People that work here have a pioneering spirit; they're working hard on this and doing it for the right reasons."