On the road to the EHR: The Watertown Regional Medical Center Experience

By Eileen Pech, MSJ; Sandy Meyers, RHIA; and Patty T. Sheridan, MBA, RHIA

Federal deadlines for implementing Electronic Health Record systems are challenging the resourcefulness of hospitals and physicians throughout the United States.

Patty Thierry Sheridan, President of Chicago-based CARE Communications, Inc., and Sandy Meyers, Health Services Research Administrator, were convinced that many HIM leaders are succeeding in transforming the traditional paper-oriented hospital culture into quality-based electronic record keeping and the subsequent means to qualify for meaningful use. They teamed up to study HIM operations at hospitals of varying sizes and experiences to learn:

- How they made the journey from paper records to electronic health record (EHR);
- What barriers they encountered and how they overcame them.

"Then," said Sheridan, "We wanted to share these experiences with HIM practitioners who are at various stages of EHR implementation and tell them –

- 'This is how it changed the work.'"

The insights gained will be detailed in a series of case studies beginning with the *CARE* team's 2010 visit to:

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Accommodating approximately 17,000 emergency room visits and 2,800 admissions each year, Watertown reaches out through 14 hospital-owned, community-based clinics, to serve residents of a two-county area. As part of a regional medical center operating in affiliation with the University of Wisconsin in Madison, Watertown is able to provide local access to world class medical specialists, clinical programs and health research. A leader in early EHR conversion, Watertown has been designated a Stage 6 electronically evolved hospital based on the Health Care Information and Management Systems Society scale of 0 to 7.

EVOLUTION OF AN IDEA

Events and strategies that shaped Watertown's Electronic Health Record environment

As early as 1998, John Kosanovich, Watertown's Chief Executive Officer, foresaw the need for electronic medical records and assembled a leadership group to bring it about. Hospital department heads agree that due to their CEO's vision of progress through fiscal responsibility, the changeover to the EHR was well planned, and because the hospital did not borrow a lot of money, it is in the black today.

Taking an incremental approach to EHR, Watertown began implementation in November 1998. "We probably would have had it done earlier, but the software wasn't ready," said Sharon Trimborn, Manager of Quality and Patient Safety.

"When we started 11 years ago, most physicians couldn't use the computer," recalled Jennifer Laughlin, Chief Information and Privacy Officer. "The internet was just starting, and very few doctors did e-mail."

Consequently, said Gail Gerth, Clinical Systems Manager, it was thought to be "impossible" to ask a busy physician to take five minutes to enter a note into the computer when that same note used to take 30 seconds when hand written. It was thought to be neither "economically or emotionally feasible and everybody would quit."

To address such challenges, Laughlin, who originally had been hired as Medical Records Coordinator, took on additional Medical Staff Director responsibilities. This enabled her to attend staff meetings, build relationships and trust, and promote the EHR agenda.

"For whatever reason, our physicians got it," Laughlin said. Dr. Jeff Meade, pediatrics; Dr. John McGuinness, gynecology; and Dr. Bruce Cochrane, family practice; became champions of EHR development. Drs. Meade and McGuinness already were using digital record keeping in their private practice clinics. Meade became involved in the hospital's EHR development shortly after vendor selection. McGuinness became a point person for hospital change. He now serves as Information Technology (IT) advisor, receiving additional compensation for helping to develop templates, order sets, and new directions for electronic record keeping.

"When Watertown went digital, It was HUGE Just to have comfort with the basic technology," Dr. Meade said. Now Watertown includes mandatory use of EHR records in any contract with new providers, a requirement that Laughlin said appears to be welcomed by most medical professionals, especially young physicians.

"When we start talking about computerized provider order entry system templates (CPOE), etc., with new physicians that come on from University or other hospitals, anesthesiologists or other groups that we contract with," Laughlin recalled, "They say they are relieved not to have to write in more detail."

Allaying staff concerns about the transition from paper to computer was another challenge. Employees feared for their jobs and worried that processing would take longer. Although skills and work schedules changed and some tasks were outsourced, Laughlin and Gerth agreed the staff essentially has remained the same. Flexible scheduling has enabled one Watertown coder and the lead transcriber to work at home instead of the hospital.

TRANSFORMING THE HEALTH INFORMATION MANAGEMENT DEPARTMENT

Overcoming obstacles on the path to completion

Meditech was the system purchased to develop Watertown's electronic record

As system implementation began, Laughlin's work changed from being the EHR project's "cheerleader" to its technician "trying to help us get to a different place with our architecture."

Suzanne Von Behren, head of Health Information Management, said electronic record keeping already had started before she came to Watertown two years ago, "But they still had some paper in HIM." A former student at Watertown, Von Behren said it was "really fun" to come back to the hospital nearly 15 years later. "We no longer had to do a lot of the traditional functions like filing."

Nevertheless, 11 years into conversion to electronic record keeping, the system is still a hybrid. Although some documents are scanned in at discharge, and pathology and cardiovascular reports are entered in from their respective laboratories, three HIM employees continue to go to the nursing units to collect records for scanning. The collection includes anesthesia and post operative notes, consent forms, electrocardiograms, obstetric notes, face sheets and other external documents. Some doctors continue to dictate or do a template on a progress note that must be scanned.

However, HIM employees found many pluses to the new system.

"From the analyst's point of view, the work has gotten a little quicker," one employee noted. As analysts check for missing reports, making sure, for example, that all records include a copy of discharge instructions, or as they verify clinical pertinence by matching the chart against a set of criteria, they find the new legibility a plus. "You can identify the doctor, read medications and distinguish between 'hyper' versus 'hypo,'" one employee said. "The electronic record is safer."

Moreover, the employee added, "You don't lose the chart. The phone doesn't ring all the time for record requests, and you don't need to sign out records to doctors.

That is because doctors now are able to review information electronically from their offices, Laughlin noted. Since fewer parts of a record must be printed and faxed, the cost of paper and ink has been reduced.

But when asked how the EHR impacted the coding process, one coder said it was not the time saver she anticipated. "As we became more computerized, the demand for information increased and it took us longer to code from the EHR."

Not only was there more information to find, but it was harder to find in the record. "The (former) color coded paper records made it easy to flip through and find information," the coder noted. "Now we have to click down in (computer screen) layers to find the same thing. What you are looking for may be on page 16 so you have to go through 16 pages to find it."

In addition, a coder may have to look in several places to obtain all pertinent information. For example, administration of medications can be in the electronic health record, nursing documents in the outpatient department, the care activity area template or in a free-hand nursing note. Orders alsocan be in three different places. "Until everything is standardized, that is an issue," the coder said.

Such difficulties made at least one in-house coder long to return to the days of the paper record when there was "standard documentation and you knew where to find everything." However, Von Behren noted that another coder working from home probably would not share those feelings.

Speech recognition software now used in Radiology, certain clinics and by individual physicians is a plus for coders. A computer functionality that identifies the need for signatures and co-signatures in History and Physical (H&P) documents also assists coders. Co-signatures then can be scanned to complete the digital record. Nevertheless, signing deficiencies are noted in the record, and reprimand letters may be sent to those involved.

HIM IMPACT ON OTHER HOSPITAL DEPARTMENTS

Managing change through interaction

The coders' attention to data integrity in H&P reports and other documents is greatly appreciated by Sharon Trimborn, Manager of Quality and Patient Safety. During her four years at Watertown, Trimborn said she has come to rely on the HIM Department not only to follow up on patient satisfaction questionnaires but to "find anybody in the system. If I can't find something, HIM can."

This cooperation between HIM and Care Management is just one example of interdepartmental relationships that flourished during EHR development. Tasks such as maintenance of the Master Patient Index (MPI) and Release of Information (ROI) also have been enhanced.

On a patient's entry into Watertown, Registration assembles the master index. HIM does the maintenance and any necessary editing or merging.

Requests for patient information are the shared concern of Von Behren as head of Health Information Management; Laughlin as CIO and Privacy Officer; and an ROI vendor who comes on site part time.

HIM coders field requests from doctors, insurance companies and patients. Laughlin, through a vigorous education effort, makes sure any release of information is in compliance with patient privacy laws and with HIPAA, the federal legislation assuring patients access to their own records.

As patients become more aware of their rights under HIPAA, HIM is handling more walk-in requests for paper printouts of records or CDs for radiology reports. For requests originating outside the hospital, HIM personnel scan records and send them to the University of Wisconsin's Greenbay office for mailing. Records for in-house patient transfers can be printed out on hospital floors.

At least one HIM coder finds it is not always easy to locate the data needed because information may be in the electronic record, on microfilm, or archived within the hospital or an off-site location.

Because HIM was microfilming well into 2008, Von Behren said a clear "from this point forward date" is lacking for the transition to EHR. Due to the cost of microfilm, some paper records were simply put in storage. Laughlin anticipates hard copy files eventually will be scanned into the electronic record primarily through a new scanning and archiving contract with Meditech.

Such records are especially important to Trimborn, the head of Quality and Safety. Trimborn said HIM Department coding quality is "excellent" and that her staff of three FTEs relies on that accuracy to complete core measures and statistical reports for state and national registries and data bases. A self-described "hands-on person," Trimborn writes the reports and uses the statistics in her work with such Watertown committees as nursing and hospital quality and physician peer review.

The cancer registry has been outsourced and now is completed in conjunction with the University of Wisconsin. However, core measures are completed in house. One departmental employee works three days per week on these measurements, reading every record and comparing nursing and MD documentation to make certain they are the same.

"We build pathways and standing orders that are sometimes difficult for physicians to agree upon," Trimborn said, "and the computer assist is wonderful. Being able to pull the data out from these data bases and the Medical Information System or buying software programs that we could put on top of Meditech is like a gift from heaven."

FACING THE NEXT SET OF CHALLENGES

Eleven years into the EHR process, Watertown is not 100 percent rolled out in all areas, Laughlin said.

Templates can be a hurdle for those still uncomfortable with the technology, noted Gerth, but most physicians can utilize a template, read it word for word, and fill in the gaps.

Exchanging information with other organizations is also a challenge. Although it was not in place at the time of the CARE team's Watertown visit, connectivity has been completed to most doctors' offices. Connection to the University of Wisconsin Clinic is pending.

"The problem is that the exchange was not formatted from the start," Gerth said. "Now there is a cost to build the bridge." Laughlin anticipates a joint Watertown/University grant application will enable the two facilities to begin exchanging information by the end of 2010 or beginning of 2011.

"Everything revolves around IT and the building of interfaces to make sure our strategic plan works," Laughlin said. An analysis to be performed by Meditech will help Watertown develop a future network plan and fill positions accordingly, she added. "We want to leverage the technology we have."

BEYOND RESULTS

The changes in technology and EHR development have had a positive impact on safety, confidentiality and patient satisfaction, Laughlin said.

"The EHR is automatically annotated with 'X looked at this record,'" Trimborn explained, "So you know about any breach of confidentiality."

"We have an audit policy, and it is considered a breach of privacy even if someone is looking at the wrong part of the system," Laughlin said. A coder does random checks and even indications of staff gossip can trigger the running of an audit trail. "We do not tolerate such breaches, and employees are terminated."

Patients appreciate the assurance of confidentiality and the new electronic accessibility to their own health records. Laughlin noted Watertown patient satisfaction surveys now elicit an 82 percent favorable response.

LESSONS LEARNED –AND SHARED

Asked whether there was something they would do differently if they could start over now, Watertown executives had some advice for hospitals transitioning to EHR.

"Part of me says 'Wait,'" Laughlin said, "Wait for a more sophisticated product; wait until software is developed. But then," Laughlin reconsidered, " I would say, 'That is not good advice.' We had to start. If we had waited, we wouldn't be as far along as we are."

Gerth would have liked more money invested in education and wished there had been "one day that we did not have to see patients while we were training."

Better communication also would have helped, suggested an HIM coder "When one area went electronic, coders were the last to know. We were looking for information that was now electronic, not a paper record.

Finally, Watertown executives offered these survival tips for those transitioning to EHR:

- "Create a strong Medical Information System Department with enough staff";
- "Listen to ideas";
- "Breathe!"

Who's Who at Watertown

John Kosanovich, Watertown's Chief Executive Officer, credited with seeing the need for Electronic Record keeping and assembling a leadership team to put it in place.

Jennifer Laughlin, Chief Information Officer and Privacy Officer, for the past five years. Hired to serve under the Information Technology Director as Watertown's Medical Records Coordinator, Laughlin assumed the CIO position on its creation in 2005. She now reports directly to the Chief Executive Officer. As part of the hospital reorganization, the IT Department now reports to her.

Sharon Trimborn, Director of the Care Management Department (Quality and Patient Safety) for the past four years, has a background in nursing, education and administration. After retiring as Vice President of Human Resources at University of Wisconsin Hospital, she became Chief Executive Officer of a small community hospital in Arizona. After fighting off an unwelcome take over, she obtained re-accreditation and enlargement of her facility and enjoyed the "excitement of turning a hospital around."

Suzanne Von Behren, Director of Health Information Management for the past two years. A former student at Watertown, Von Behren returned to the hospital 15 years later after working in nursing, cardiac data analysis and clinical documentation.

Gail Gerth, Clinical Systems Manager with a background in nursing, is described by co-workers as Watertown's Information Technology "guru."

Dr. Jeff Meade, private practice pediatrician and early Watertown medical staff advocate for EHR.

Dr. John McGuinness, practicing obstetrics/gynecologist and Watertown Physician IT Advisor since 2005.