

Success and the EMR: Facilities Show How It's Done

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By Beth Walsh



Less than 20 percent of physicians in the United States and Canada are using electronic records and the failure rate of EMR system implementation hovers around 50 percent. Preparation and communication go a long way to boosting the potential for success, but where there's a will, there's a way. Health Imaging & IT talks to several organizations that are successfully using electronic records about how they got there.

Race against time

Installing an electronic records system is challenging under the best of circumstances. Drew Nietert, interim IT director of Manhattan Physicians Group in New York City, had to quickly implement an EMR when the group split from another practice. Agreeing to tight deadlines was part of the arrangement involving a smoother transfer of records. And, the group needed a new EMR in place before its contract with its previous vendor expired.

The group hired NetGenIT (now known as ITelagen) to help upgrade the practice's computer infrastructure and support system. The company loads software that proactively and usually remotely monitors the equipment, including virus protection, CPU temperature and fan feed.

The next step was assessing the equipment's capabilities which Nietert calls "pathetic." The six-year-old system was not capable of running the new EMR selected and a lot of the printers were dot matrix. Overall, more than 500 computers and printers needed to be replaced. Once the new equipment was in place, an EMR implementation team started converting the old database to the new WAN infrastructure. Because the group's nine locations had hours from 7 am to 10 pm, "we needed redundancy and 24/7 operations," he says. Because the practice relies on the EMR so heavily, "we need backup for our backup for our backup."

Then Nietert focused on setting up a support process for the EMR implementation. Ideally, that would be set up 14 to 30 days before the go-live date. Due to the short timeframe and lack of space, Nietert decided to outsource the task. Although he would have liked more time to train, he says three locations, followed by three more locations two weeks later, successfully went live.

NetGenIT was the best value, Nietert says. "It's one of the few companies that has the infrastructure here and now." Being local to New York City helped. And, the company didn't have to build anything—a big plus when every second counts. "They were already up and

running. We didn't have time for a build and it would have cost more." When Neitert needed support people within 30 days, the company had people ready within two weeks. Other companies would have needed two months, he says, and would have outsourced the work to relatively untested people in the New York area.

The day would come

Although Mount Kisco Medical Group in New York originally went live with an electronic records system in February of 1998, the practice has been a Misys shop since late 2001. Back in the 1990s, EMR systems weren't as sophisticated as they are now but internist Abe Levy, MD, said that the practice leadership recognized "great value in electronically storing patient information. We knew there would come a day when it would have greater value than a paper chart."

Levy's philosophy regarding return on investment for an EMR is improving physician efficiency rather than simply paying for the system through savings on transcription costs. "The return on investment is in making doctors so efficient that they spend less time chasing paper charts and more time seeing more patients. I would argue that seeing more patients is a better ROI than saving money on transcription."

After implementing the Misys EMR in 2001, Mount Kisco became paperless in about six years. None of the 110 physicians now prints notes on paper, Levy says. After struggling with thick paper charts, Levy didn't have to convince any of his colleagues of the value of the EMR. "They could see in five seconds that they had everything they needed." With the ability to order lab tests and prescriptions electronically, and scan documents, Mount Kisco could abandon paper records. Scanned documents from outside the group made the electronic record a complete record.

Levy cites the "banishing of human handwriting" as the greatest feature of the EMR. "Early on, I developed a distaste for human handwriting in medical records." He sometimes couldn't read his own notes so he recognized that "storing medical information as human handwriting was not fulfilling our responsibility to our patients."

With some patients coming to Mount Kisco for 50 years, the volume of paper is too much. Levy heard a lecture by Laurence Weed, MD, known as the "father of the problem-oriented medical record (POMR)," back in 1970. "He talked about how the unwieldiness of paper charts literally prevented good medical care. He made one aware of the inadequacy of paper records before there were solutions."

Meanwhile, two of the three hospitals with which Mount Kisco is affiliated do not have an EMR. The group hopes to have an HL7 interface in place in 2007 but since implementing the Misys EMR, all hospital transcription has been transferred to the practice's EMR via FTP. "The expenditure to achieve that was not more than a few hundred dollars on either side. That's an example of interoperability on the cheap." The HL7 interface, however, will make lab data interoperable.

A unique partnership

Silver Cross Hospital in Joliet, Ill., has an innovative plan underway, working with affiliated physicians to implement an electronic records system. During a vendor day last June, the physicians tried out various systems. Evaluation forms helped them qualify the different vendors and they chose Misys. Because the physicians are paying for the system, the hospital did not get to vote on which system it would use, says Matt Ebaugh, vice president of information technology. The physicians were drawn to the prebuilt templates, data interface and e-prescribing the Misys system offered, he says.

“Silver Cross is going through service-oriented architecture, allowing us to make integration occur that is not occurring within other healthcare providers.” All of the physicians will have shared clinical information — something that makes this different than most EMR plans, says Ebaugh. For example, if a patient who has never been in a Silver Cross facility presents to the ED but has a physician participating in this agreement, the caregiver can call up the medical history. “It’s a safer and more complete medical environment,” says Ebaugh. But because there are no standards to do this, the facility also partnered with Misys on MisysConnect which provides basic IHE standards that makes data interoperable.

Silver Cross will host the EMR, taking on the hardware burden. “Physicians aren’t IT hobbyists,” he says. “Why complicate matters?” Through this ASP model, physicians will have access to both hospital information and their own data through a unified portal.

Most affiliated physicians are in practices of between three and eight practitioners. More than 75 doctors have signed a letter of intent to use this program and the first 25 will go live in April. Currently, an implementation team from Misys is leading physicians through workflow redesign. “This is not plug and play,” Ebaugh says. “Misys really takes the time to do appropriate workflow changes.” Currently, offices are preparing for automation. Since each operates a little differently, Misys is using the Six Sigma quality methodology to analyze practices and their workflows.

Silver Cross has made its McKesson Horizon PACS part of the system. Through a single portal and single sign-on, physicians can be in a record and see images, too. By launching the PACS icon, they can see the image and the report that they ordered. The portal pulls all applications to one user screen and integration to make it easier for physicians, Ebaugh explains.

Overall, “the physicians who recognize that, like it or not, electronic records are happening during their clinical career, are on board and pushing us,” he says. The hospital administration “knew what needed to be done in terms of connecting physicians.” They also appreciate the ability to provide better care that is part and parcel of the effort, Ebaugh says. And, after one PowerPoint presentation, the nursing staff was on board and excited, he reports.

True integration

Memorial Health System in Colorado Springs, Colo., worked with IBM to integrate its clinical information with its EMR. With new construction in the works, including a new emergency department and children's hospital, integration and implementation had to happen on a rigid schedule. PhysicianLink, a portal built in house about five years ago, was another element that had to be factored in, says John Cherry, manager of programming and database administrator.

Memorial went live with its new EMR in April 2006, after a 10-month implementation schedule. The system worked with IBM to implement a content management solution that could capture clinical information such as lab and clinical reports and make it available to clinicians at any location, as well as integrate with back office applications. Memorial's new system built on IBM Content Manager captures data electronically and serves as a truly integrated clinical information system.

IBM also is providing consolidation services to merge data collected from an IBM Content Manager system with an existing Cerner PowerChart system. This enables Memorial to allow data developed on niche software, such as a cardiology-specific software application, to be captured electronically in the Content Manager system and then made available for the first time through the PowerChart application, providing clinicians with instant access to the cardiology study.

This effort made the information silos of information and departments that existed very evident, says MaryLee Newman, MS, RN, project manager for IS. "Everybody had their own systems that didn't communicate. With an integrated delivery system and EMR, we all have to work together. One decision impacts another."

Cherry and Newman say they were keenly aware of the high failure rate of EMR implementations. But, they went into it with their eyes wide open, Cherry says. "We knew what we were facing." But, "if we hadn't had the cooperation of everyone in the hospital and IBM willing to step up to the plate, we would have failed."

Now, the organization is working toward implementing barcoding at the point of care and CPOE later this year. With patient lives on the line, "you're going to have to have some sort of electronic record within the next few years to succeed and stay in business," Cherry says.