

A Little Faith GOES A LONG WAY

A small community hospital pushes the limit on an EHR implementation and manages to get the job done. By Greg Gillespie

pring and summer were filled with restless nights for Jim Sinek. The president and CEO at Faith Regional Health Services was losing a lot of sleep over the huge gamble the 166-bed community hospital was taking: implementing an electronic health record in less than six months, though it had little experience with enterprisewide I.T. implementations. And, unlike many decisions, this decision couldn't be undone or slowed down.

Sinek and his management team already had drunk the Kool-Aid by having Faith Regional's new bed tower designed in a way that made it hostile to paper charts by decentralizing nursing units and limiting printing capabilities. When the lights went on in that tower, the EHR simply had to be in place at the Norfolk, Neb.-based provider, which sits in a largely rural region in the Northeast corner of the state.

But Sinek had faith, pun intended, in both the project leaders and the management structure devised to execute the implementation and the subsequent changes in workflow and care processes.

The community hospital took calculated risks at every step of the project; implementing a complex EHR—Soarian Clinicals, from Siemens Healthcare, Malvern, Pa.—developed for large hospitals; focusing first on computerized physician order entry, politically and technologically the most fearsome of technologies; taking a multi-year implementation

timeline and trimming it down to less than six months; and simultaneously doing a staff reorganization that initially spread fear through the nursing staff.

Sinek was taking Faith Regional across a landscape littered with broken dreams and financial heartbreak. Hospitals large and small have poured money into EHRs for years. But according to second quarter 2010 statistics from the HIMSS Analytics Adoption Model, less than 1 percent have a fully implemented EHR In place. The majority of hospitals are struggling to get to Stage 4 in the seven stage HIMSS adoption model (Stage 4 calls for use of CPOE and clinical decision support.)

Sinek and other leaders knew that the project's success—indeed, the success of any and all EHR projects in this era of meaningful use—is measured by how deeply and meaningfully CPOE is adopted by the physician staff. And he knew enough about CPOE to be scared. "I've heard first-hand from CEOs I know about the absolute horrors of CPOE. I've read about open revolt by medical staffs and millions of dollars wasted. Introducing it is not considered a great career move for CEOs."

But still he and other project leaders forged ahead. Ask why, and Sinek will tell you that the Health Information Technology for Economic and Clinical Health (HITECH) legislation—which established financial incentives for EHR adoption—was Faith Regional's tipping point. The hospital knew it had to catch up quickly in terms of automation if it

was going to fulfill its mission to be a clinical leader for the 11 critical access hospitals in its area. HITECH galvanized them into action, for reasons both clinical and financial.

"ARRA and HITECH change the dialogue because they tell everyone in the industry that you simply don't have a choice anymore," Sinek says. "The story no longer can be that hospitals are deciding to implement EHRs and they're forcing physicians to use it. Whatever your political orientation is, you'd have to agree that the federal government has been clear on that message.

"From a clinical perspective, having the decision support and data collection and all the other benefits to clinical quality and patient safety were required to take us to the next level," he explains. "From a business perspective, it's quite simple for me. Based on our Medicare discharges we estimate we will be in line for more than \$4 million in incentive payments. If we can get \$4 million by hitting a target, we're going to get it. It's that simple."

Everyone on board

That was part of the equation Sinek brought to Faith Regional's board of directors when seeking the green light for EHR funding. Hospitals often struggle to justify the business case for EHRs because of a dearth of rock-solid research supporting the clinical and financial efficacy of the technology. But Sinek says the board did not need a lot of convincing.

"It was easy for our board to understand how paper can lead to medical errors, or the advantages of being able to send lab results and images electronically," he notes. "Most of our board members are from other industries, and they scratch their heads and wonder why it's taken this industry so long to automate."

Count board member Jeff Eisenmenger among the head scratchers. Eisenmenger's day job is vice president of the Norfolk marketplace for the Farm Credit Services of America, a cooperative lending institution that's part of the nationwide Farm Credit System. "It really does shock me how technologically far behind health care is at this stage," Eisenmenger says. "From the outside looking in, the benefits of an electronic environment are so obvious I'm not sure why anyone in health care would doubt them."

Suddenly, it's go-time

On June 20 the bed tower opened its door and the EHR went live. Once that happened, 100 percent of all orders were being entered electronically, with 69 percent of those orders entered directly by physicians. The EHR had been pre-loaded with visit histories, a master patient index, historical to current visit results and transcribed reports, allergies and order catalogues, among other information.

Within six months of the project's kick-off, the organization's effort, known internally as Electronic Data to Gain Excellence (EDGE), had transitioned Faith Regional from a paper environment to a digital one with electronically driven care processes. There was no hybrid paper/electronic way-station for Faith Regional: it decided to go electronic, and it did it.

The decision to skip that interim stage was a critical piece of the project "narrative," says Dean French, M.D., Faith Regional's vice president of medical affairs. While the medical staff was well aware of ARRA and HITECH, selling the project on the merits of federal legislation didn't

really resonate with physicians. What did resonate were the benefits of an electronic environment—being able to access data from home, getting test and lab results immediately, etc.—as well as the dangers of operating in a hybrid environment.

"ARRA and HITECH weren't very powerful topics, and hospitals in this situation really have to think about the story they're telling," he says. "We showed our physicians how we couldn't have electronic systems and paper charts in place together, because it was too dangerous for patients. To tell the truth, we simply didn't provide them an 'out.' They were using the electronic systems, and that was the only option."

With Soarian up and running, Faith Regional is working on Phase 2 of the project—linking the emergency department, and embedding analytics and working clinical decision support into the workflow, among other tasks. It's also focusing on meaningful use requirements in the areas of closing the loop on hometo-discharge medication reconciliation, reporting quality measures and generating Continuity of Care (CCD) reports for data exchange.

Executive and clinical project leaders agree that Faith Regional's accomplishments were driven less by technology innovation and more by project management innovation. Yes, the Soarian implementation was a bear for the small I.T. staff to coordinate; the commitment to automation did sow fear among staff members, some who were fearful of technology and others fearful that technology would supplant them.

Faith Regional did a gut-check and felt it had strong leadership across the board, Sinek says. But what it didn't have was a wealth of clinical I.T. expertise. The hospital a few years back had automated nursing documentation using Siemens Healthcare's MedSeries4 nursing module. But beyond that, it relied on paper.

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Helping hand

So it decided to bring in Orlando, Fla.based Quammen Healthcare Consultants to be the project manager and set up the governance infrastructure for its rapid, big-bang implementation.

Becky Quammen, CEO, has worked EHR projects across the spectrum of provider sites—academic medical centers, integrated delivery networks, and community hospitals and rural facilities. Those experiences convinced her that Faith Regional's plan was doable. While many aspects of the plan—using a very complex EHR in a small facility, and tackling CPOE from day one—go against conventional industry wisdom, that wisdom is suspect to begin with, she says.

"First off, the idea that community hospitals have different I.T. needs than larger facilities is a fallacy, and you don't need to look any farther than HITECH itself," Quammen says. "The meaningful use criteria make no distinction between large and small hospitals—everyone is held to the same standards—they all have the same I.T. functionality and reporting requirements.

"The other piece of wisdom is that community hospitals can't handle all the 'bells and whistles' that you see in electronic rec-ords designed for large providers. But I'd argue the exact opposite—because community hospitals don't have the in-house resources and staff that large hospitals do, they can't continuously upgrade and tweak EHRs. They need most of the functionality automated—so they need complex systems that automate all those functions."

Sinek, the CEO, notes that a major factor in going with Soarian was that quality and other core measure reporting was automated within the software, while in other products it was not.



A nurse keeps tabs on patient cardiac rhythms at one of Faith Regional's cardiac monitoring stations, which are located throughtout the facility.

Faith Regional isn't the only small facility opting for Soarian, says Luis Castillo, senior vice president of health services at Siemens Healthcare. There are "seven or eight" other small facilities that are planning to install the EHR, he says.

"There's a new generation of technically-savvy physicians coming up that understand system architectures and like the workflow capabilities and other aspects of the Soarian platform, and we're seeing them exert pressure on the purchasing decision," he says. "But every EHR implementation is a unique proposition, and it really depends on the capabilities and requirements of each facility."

Siemens Healthcare, like its competitors, has to have a lot of conversations about capabilities and requirements right now with potential clients, Castillo says. Many hospitals are trying to jump on the EHR bandwagon quickly to get 2011 incentive checks, and their expectations of what they need, and can accomplish in a short timeframe, are sometimes unrealistic.

"As we get closer to meaningful use deadlines we're having more hospitals come to us and say they want to buy an EHR now, and they want a guarantee that they will achieve meaningful use by a specific deadline—by a specific day, in some cases," Castillo says. "We tell customers that our system can get you there but it can't get you there tomorrow if you're buying today."

Personality test

Quammen also takes issue with the belief that EHR implementations have to be long, drawn-out affairs. Every provider facility has its own "personality"—likes, dislikes, strengths and weaknesses. Applying cookie-cutter implementation methodologies and timelines is as misguided as applying the same treatment to every patient who walks in the door, she says.

For the Faith Regional project, Quammen and her team used a development methodology that modeled the hospital's patient record protocols and matched that to an electronic environment. Translation: The planning focused on the necessary outcomes from the EHR instead of focusing solely on system configuration.

French, the vice president of medical affairs, initially felt time—the lack thereof, more to the point—was the biggest enemy when he put together a team of 40 physicians to tackle the CPOE implementation.

"The traditional approach is a very deep dive with the medical staff to get very specific order sets for each specialty and those specialist practice patterns, and that wasn't going to happen with our timelines. We didn't have the luxury of having years to put their sets together and gradually get physician buy-in," he says. "But the more I thought about it, the more convinced I was that it would have unhinged the implementation anyway."

A shift in thinking

One reason for the shift in thinking was that his first look at CPOE technology made him realize Faith Regional was going to have to overturn the apple cart if it had any chance of success. "EHRs weren't built with physician order entry in mind," French says. "The first CPOE systems were really nurse order entry systems—when I looked at the workflow within CPOE software packages we reviewed, I realized that no physician would think like that."

So French's team decided to focus on designing an order entry flow that mimicked the intuitive process of physicians—the mnemonic approach they take to doing their clinical "check-offs" and then creating an order. All physicians, French days, use mnemonic tricks to move through an order, and it goes like this:

- · Admit
- · Diagnosis
- · Condition
- Vital signs
- Allergies
- Activity
- Nursing
- Diet
- IV fluids
- Medications
- Labs/procedures

Faith Regional designed its CPOE system to follow that intuitive process. Once the physician team had the structure in a master order set, it created more generalized pick lists so physicians can place their orders in the same way they think and if necessary customize the order for each diagnosis. They then went to each specialty and determined the most common order sets for those groups. So instead of creating extremely granular sets for radiology, the radiology order set had common orders on top. In all, only 58 order sets were built into the EHR when it went live, compared with the hundreds typically embedded in CPOE systems.

"In my mind that really was the game changer," French says. "When we ran this by the entire physician staff we realized that they were comfortable with the format and to take this live they weren't going to ask for every radiology or every pediatrics order set be available. The focus in getting something in place was to understand the methods physicians use for creating orders."

After that, they moved on to developing nursing protocols for specific diagnoses. "For instance, we have four physicians who do hip replacements, and they have different ways they want to order as well as how they want nurses to proceed in each case. So we built a standard nursing protocol for hip replacements and let those be customized."

French says that the EHR project met very little resistance from physicians, and he sounds surprised when he says it. But not overwhelming the CPOE development team—and the rest of the medical staff—with endless rounds of meetings probably helped, he speculates. As did the fact that most Faith Regional physicians didn't know what they were getting into. "I think that there was very little resistance because the majority of the physicians didn't know what we were talking about," French laughs.

"Most of our physicians have been

working at community hospitals for their entire careers and didn't have any experience with CPOE. But they did know two things: First, they realized we were behind the times and if we wanted to advance our practice of medicine, we needed to catch up. And second, they knew it would be extremely hard to use paper charts in the new bed tower, since we didn't have central nursing stations or room for paper charts."

The Faith Regional nursing staff had a less steep learning curve than the physicians for transitioning to the electronic record, notes Linda Miller, R.N., chief nursing officer.

But going fully electronic was still difficult, compounded by the fear of many nurses and staff in the health information management department that they would lose their jobs thanks to the new technology.

"The unit clerks' primary job was to transcribe all those paper orders, so they didn't see where they fit in the new environment," Miller says. "Same went for staff in the HIM department, which obviously would have less to do if they didn't have paper charts. So there was real concern there."

But project leaders felt there was a role those staff members could play. Faith Regional, like its community hospital peers, is staffed lean. While paper records were disappearing, expertise on how to keep information flowing was still needed even though physicians were responsible for entering orders themselves.

So Faith Regional combined the functions of unit clerks and HIM clerical staff into new positions, electronic records/CPOE support specialists. The staff moved into those new positions went through additional training to become super-users who could provide handson help to the medical staff and trouble-shoot any workflow or technological is-

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sues that popped up.

That extra layer of support helped during the transition, Miller says, as did the focus on the human side of the new system. It's configured to display clinical documentation screens on the television monitors in patient rooms. "The real challenge for nurses is how to do documentation right there at the bedside: How do we really engage the patient and not turn our back?" Miller says. "We did a lot of training on how to ensure that we weren't stressing the patient and trying to figure out how to communicate and interact with the patient.

"The best way we found is that while we're on the PC we tell the patient exactly what we're doing and talk them through our documentation. We also show them on the TV what we're doing. And physicians are excited because they can use the TV to show patients their lab work and X-rays."

Next steps

Sinek already is thinking beyond the walls of Faith Regional and into the corridors of the hospitals that send patients to its facilities. He's formulating plans for a local health information exchange that could potentially "share" the EHR with those smaller facilities and enable data to flow in before patients arrive at Faith Regional. "When you think about the business we're in, every moment can count, and now we have the technology within our grasp that can eliminate the delays associated with getting the information to save someone's life."