IMPLEMENTING Electronic Medical Records: Advice from the Trenches

by DEBRA GORDON, MS | *illustration by* BRUCE MACPHERSON

THE NEWS released in late December from the Centers for Disease Control and Prevention that more than half of the nation's physicians are now using electronic medical records (EMR)—double the adoption rate of just five years ago—is surely worth celebrating. Until, that is, you take a look and realize that just a fourth of office-based physicians have access to a "basic" EMR system including patient history, demographics, problem lists, clinical notes, and computerized physician order entry (CPOE), while just one in 10 have a "fully functional" system, which also includes the communication system required for meaningful use, such as the ability to send tests and prescriptions electronically.

But the floodgates are about to open. In January, the Centers for Medicare & Medicaid Services (CMS) began registering physicians and hospitals in 11 states for the EMR incentive program announced in 2009 as part of the federal stimulus package. Registration for California began in February, and the rest of the country should be up and running by the end of the year. Physicians could be eligible for up to $44,000 in bonuses over five years through Medicare and up to $63,750 over six years through Medicaid.

Add to that the informational muscle CMS is putting into efforts to digitalize medical records throughout the country, including 62 regional extension centers to help physicians get those bonuses, and it's a pretty good bet that 2011 could be the year of the EMR.

So we spoke to several healthcare industry executives who have already sweated blood and tears implementing EMR, as well as several consultants, about what "newbies" need to know. Where are the minefields? What do they wish they'd done differently? What advice would they like to convey? Here's what they told us.

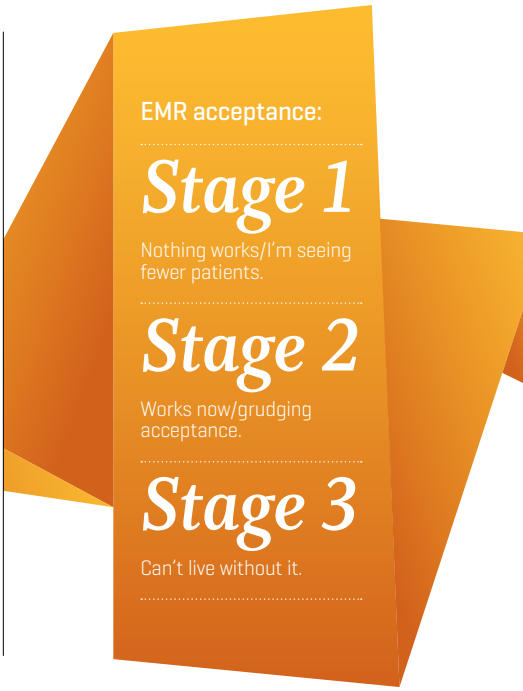
PLAN, PLAN, PLAN.

Don't expect to begin the process in January and implement in December. Implementing EMR is an extremely complicated—not to mention often frustrating—process, says Chris Rivera, director of healthcare services for the Virginia Beach, Va.,-based consulting firm EDI Med-Tech. Rivera, who leads EMR teams for large practices of 20 to 100 doctors, advises that managers talk to as many of their colleagues who have implemented EMR as possible.

"Learn from them. Most can recite the nightmares they've gone through so you can avoid them." Even with that, he warns, "You'll still have your own unique problems to overcome."

And remember that implementing EMR is a multi-step process. "Start with research into the practice goals and which software product can best meet them. Then get a thorough analysis of the capabilities of your existing hardware and what new hardware you'll need to meet medical standards. After installing and testing the hardware, then install and test the software. Then comes training and post support. It's a continuum—you have to do it one step at a time. It can take months to do it right."

Or, depending on the size of the organization and its goals, years. Consultant Patricia A. Dodgen, chief executive officer of Tampa, Fla.,-based Hielix, an EMR consulting company, has worked with one large hospital system for 12 years to meet its goal of being nearly paper-free. She stresses the need to communicate about the process early and to set expectations on the front end. "Acknowledge the need to have information coming back and forth; don't just push it out and down into the organization."



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VET THE VENDOR.

Choosing the right system and vendor for your EMR can be overwhelming. Rivera recommends the following:

- Get references and referrals. "Has the vendor proven itself? Can others vouch for them?"
- Make sure the vendor has real-life, hands-on experience in a medical setting.
- Make sure the vendor is known to be reputable with a consistent history of success in medical information technology.
- Ensure the software has CCHIT (Certification Commission for Health Information Technology) certification so it meets meaningful use criteria and helps the practice qualify for available incentives.

SPEND THE MONEY.

This is not the time to go discount, says Rivera. "Buy the best possible infrastructure that is fast, scalable, and under warranty; software and training that best meets the practice goals now and into the future; and post-installation support that keeps the system up and running. In my experience, when you cheap out you'll have added problems and end up spending a lot more in the long run."

EXPECT RESISTANCE.

Rivera puts it succinctly when he describes the three stages of EMR acceptance:

Stage 1. Nothing works/I'm seeing fewer patients.

Stage 2. Works now/grudging acceptance.

Stage 3. Can't live without it.

Which brings us to the next bit of advice . . .

GET PHYSICIAN CHAMPIONS EARLY.

"One of the key pieces [to successful EMR implementation] is getting physician buy-in," says Steven Bernstein, international head of the Health Industry Practice Group at the Boston offices of McDermott, Will & Emery law firm. Bernstein has helped implement EMR for dozens of health systems, physician practices, and vendors. In his view, almost all successful implementations have one or more physician champions.

"They can be hospital administrative staff or private medical staff physicians," he says, "but the goal is getting them to understand how the system can improve care and reduce costs."

These champions also have to be willing to dedicate themselves to bettering the overall enterprise and talking to and training their colleagues. Don't send them out alone to complete that task; when hospitals hire anthropologist Paul Draper to prepare staff for the change involved in EMR, he identifies early adopters and provides public speaking and speech writing training to improve their communication skills. (See page 23 for more on Draper.)

At Gundersen Lutheran Health System, a large, integrated healthcare network based in La Crosse, Wis., management put out a call for doctors to get involved with the EMR project long before it put out any requests for proposals (RFPs). The health system, which includes one of the country's largest multi-specialty physician groups, nearly 6,000 employees, and more than 400 physicians, created a task force of interested clinicians and chose a well-respected internist to lead the group. It also provided additional administrative time for physicians and other clinicians who served on the committee or, in some cases, additional pay, says Deb Rislow, RN, Gundersen Lutheran's vice president and chief information officer.

When Mercy Behavioral Health, part of the Pittsburgh Mercy Health System, implemented EMR for its 19 locations, it started with a "champion psychiatrist" and piloted the entire program with her. "We stood behind her in hands-on sessions to help her navigate the system" so she could begin spreading the word, recalls Craig Douglass, who helped create and implement the system introduced in 2003. Management also purchased 19-inch flat-screen monitors that could display several windows simultaneously, enabling physicians to toggle back and forth between the various windows quickly and efficiently.

GET IT RIGHT.

One reason doctors may be so skittish about EMR, says Carla Smith, HIMSS executive vice president, is because they've been burned before. "There is a long history within the healthcare technology field of promising physicians far higher usability and efficacy than they delivered," she says. So don't promise what you can't deliver.

REMEMBER THE REST OF THE STAFF.

Physicians aren't the only ones using the system, however. "Make sure you also involve nurses [not just the chief nursing administrator], billing, and finance in the process early on," says Dodgen. "Make sure you integrate all the moving parts so there is an awareness and sense of 'buy-in' in the overall process." This is even more important in small organizations, she adds.

At Beth Abraham Health Services, which owns four long-term care facilities throughout the New York City area, the EMR task force was composed of administration, nursing, and information technology (IT) representatives from each nursing home (physicians have very little day-to-day involvement in patient care). The task force developed a set of prioritized requirements and an RFP, says Steven Polinsky, corporate vice president of IT, received

live and web vendor demonstrations, made site visits, and had "many heated debates followed by months of analysis and negotiation." Last year, three facilities went live, with the fourth slated for full implementation early this year. Beth Abraham also identified peer mentors to work with staff during implementation and beyond.

At Mercy Health, where mental health professionals move between offices, implementation involved standardizing processes so that every office operated similarly. They did this by putting the support staff for the offices under a single director who could ensure consistency, explains Douglass.

DON'T FORGET THE PATIENTS.

There is no way to keep the implementation of an EMR a secret from your patients, says Rislow, nor should you. In the weeks before her hospital went live, administration shared information with the community. As launch day approached, staff informed patients and thanked them ahead of time for their patience. "Many commented about how well everyone did and that they were proud of the hospital for doing this," Rislow recalls.

TRAIN ON THE BASICS.

At Beth Abraham, managers learned that they couldn't begin training on the new system until they first trained some of their employees on how to use a computer, including the function of a mouse, says Dannick Boutin, the network clinical lead for Beth Abraham's EMR project. In addition to offering free basic computer literacy courses, his Queens, NY-based nursing home made computers available for its employees to "play" with so they could get comfortable with the hardware and software. Many employees who had previously been afraid of technology wound up purchasing their own home computers, he says.

Managing Change *with Magic*

Sometimes it takes a little magic to get people to accept the tremendous changes that come with any electronic medical record (EMR)system. That's where Paul Draper comes in. Draper, who lives in Las Vegas, trained as an anthropologist, which makes him highly suited for assessing cultural responses to change. But he's also a magician and actor. Combine the three and you can understand why hospitals hire him to help implement EMR systems.

Draper focuses on middle managers, helping them understand why people are afraid of change. "In a lot of hospitals most people would rather do things the old way they know, even if it takes longer and costs more money than the new way they don't know. This is the human element." Put simply: after about age 30, we are neurologically hard-wired to distrust change, he says.

In addition, he says, everyone has his or her own way of dealing with change. Thus, understanding how each employee views change is critical to overcoming resistance. Draper identifies five approaches:

1. **Avoidance**—"If I ignore the change it will go away."
2. **Force**—"I won't change unless you force me to by threatening my job."
3. **Accommodation**—"I don't want to change, but I will accommodate you because you are such a great manager."
4. **Collaboration**—"I will change if I can be a part of the change."
5. **Compromise**—"I will change if you give me _____."

So, trying to get a collaborator to accept change by threatening her job is not the best approach; instead, she should be put on a committee or otherwise involved in the process.

And the magic? When he first meets with employees, he performs a magic trick, then asks audience members if they think they can learn how to do it. Invariably, they say no. So he teaches them how to do it. Once they understand that they can learn something they were certain they couldn't, the technology of EMR seems just a bit less intimidating.

SUPPORT, SUPPORT, SUPPORT.

One of the biggest unexpected hurdles during Beth Abraham's EMR implementation was the lack of wireless access throughout an older facility in Queens, says Boutin. However, because the nursing home made sure it had IT support 24/7 for several days after the implementation, they were able to quickly resolve the problem.

Meanwhile, at Gundersen Lutheran, in addition to technical IT support, a group of peer supporters remained on site 24/7 for two weeks, says Rislow. A single phone call brought someone running. Plus, doctors were available to help doctors; nurses to help nurses.

For small physician practices, Bernstein advises, figure out a way to provide a virtual help desk and budget money for such support.

Sometimes support comes in unexpected forms. "We have a policy that for as long as the transition is ongoing, we come in with doughnuts and chocolate, we cheer [the doctors and staff] on, we track their progress," Dodgen says. That means reminding physicians that while they may have only been able to complete four encounters a day electronically in the first few weeks, by month three they can complete 15 encounters a day. The extra effort is worth it, she says. "Once they pop through on the other side and develop some of that proficiency and can interact with all the tools, they tell you that they would never go back to paper because the benefits are so huge."

WATCH YOUR Ps AND Qs.

Or, more specifically, Health Insurance Portability and Accountability Act (HIPAA) and Health Information Technology for Economic and Clinical Health (HITECH) Act requirements. That means good privacy and security policies, everything from the filters to block computer screens from

patient view and automatic logoffs after a few minutes of inactivity to written policies and procedures for protecting patient privacy, says Bernstein.

It's also important to consider how patient privacy will be protected when data is in transit, i.e., moving from one office or clinician to another. And don't forget training about these policies and procedures for all staff.

"Healthcare organizations that fail to demonstrate compliance with these regulations are not only at risk of suffering data breaches, but they are also susceptible to penalties such as fines, withdrawal of government funding, criminal charges, or even incarceration," says Kurt Johnson, vice president of strategy and corporate development at Westborough, Mass.,-based Courion Corporation, which provides risk management and compliance management services for healthcare organizations. Among the safeguards Johnson recommends:

- Create and manage roles so physicians, nurses, and other members of the medical staff have the minimum level of access required for them to perform their jobs successfully.
- End access as soon as an employee is terminated or transferred to prevent access creep and "zombie" accounts. This is extremely important in the healthcare industry where there are high levels of contract work and staff turnover.
- Review user access on an ongoing basis to determine who has access to sensitive data; verify that this access is appropriate and in compliance with corporate and industry regulations and remediate access when it is not.
- Finally, he says, healthcare organizations must constantly monitor user activity to prevent the misuse of health information records by authorized users. Access may be appropriate, but if employees aren't using their access in the proper ways, it puts confidential patient data at risk.

STAFF UP FOR IMPLEMENTATION.

Gundersen Lutheran, for instance, increased staffing levels for two weeks prior to going live. It also hired temporary nurses for 13 weeks—six weeks before the implementation while staff was being trained and seven weeks as the nursing staff adjusted to the system. An added bonus: most of the temporary nurses were already familiar with the EMR system Gunderson implemented, so they served as advocates and provided support.

> **"Don't just assume that everyone is comfortable or using it in the correct way."** —DEB RISLOW, RN

PLAN FOR STAFF REDUCTIONS.

One expected benefit of an EMR system is greater efficiency, which typically translates into less work for some employees, particularly in medical records, transcription, and pharmacy. Laying people off could taint the entire implementation process, says Rislow, so Gundersen Lutheran committed up front to finding new positions for those people.

CONTINUE TO IMPROVE.

No matter how smooth the implementation, problems crop up. At Mercy Behavioral, that meant figuring out how to get multiple signatures on patient care plans—electronically. The solution: working with the vendor to design a workaround process.

One EMR installation Rivera worked on resulted in long queues of more than 50 faxes that took hours to clear. The solution: separate modems for sending and receiving cut the time in half.

That's why it's important to create a simple feedback system for employees to report problems or suggest new features, says Rislow. Her company provides a single e-mail address for individuals to use when sending suggestions.

At Mercy Behavioral, key staffers from each nursing home meet regularly to provide tips and share stories about what works and what doesn't work, says Douglass. It is also important to monitor how people use the system so bad habits don't become entrenched. "Don't just assume that everyone is comfortable or using it in the correct way," says Rislow. For instance, at Beth Abraham, employees were still searching individual records, albeit on the computer, to schedule monthly physician visits instead of simply running a report to flag those patients the doctor needed to examine.

MOVE BEYOND AN ELECTRONIC MEDICAL RECORD.

At Denver Health, which invested more than $380 million in health IT over the past 13 years and which is recognized as one of the nation's most wired hospitals, officials want to turn the data into analytics to improve quality of care. One goal is to create a kind of "red light/green light" dashboard so clinicians can quickly see the patient's status, says chief information officer Gregg Veltri. They are also designing workflow programs based on clinical data to predict patients who are at risk of problems and automatically send alerts for intervention.

As time goes on, predicts consultant Rivera, EMR implementation will only become easier. "EMR software providers will merge, go out of business, and we'll be left with a few large vendors. This will eventually help different solutions communicate easily with each other. . . perhaps similar to the Microsoft/Apple scenario where more programs are now cross-platform compatible." This, along with younger doctors taking over practices, will eliminate the atmosphere of resistance sometimes seen today, he says. ●