## Avoiding Common Pitfalls of EHR Implementation

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BOSTON — To successfully implement an electronic health record system, set clear and specific goals and involve your clinical and administrative staff in all of the planning, Jerome H. Carter, M.D., said at a congress sponsored by the American Medical Informatics Association.

"You have to plan," said Dr. Carter, chief executive officer of NT&M Informatics, Inc., Atlanta, and the editor of "Electronic Medical Records: A Guide for Clinicians and Administrators," published by the American College of Physicians.

As many as half of complex software implementations fail, Dr. Carter said, and usually for the same reasons: vague objectives, bad planning and estimation, poor project management, insufficient involvement by senior staff, and poor vendor performance.

"This is not the time to experiment with the latest gadgets," he said.

Implementation doesn't start when the organization purchases the EHR products, but, rather, as soon as the group accepts the idea of moving from paper to an electronic system, Dr. Carter said.

The first step is to understand the current problems within the practice, to figure out how the practice should function, and identify what keeps the practice and its cur-

rent system from working in an ideal way. Potential EHR buyers should spend at least 3-4 weeks canvassing everyone in the practice to find out the problems and goals and to create a statement to capture those ideas, he said.

The next step is a systems and process analysis to be conducted by clinicians and executive management. This is a chance to figure out if an EHR will help to solve current problems, he said.

The executive management should also assess everyone's job functions. Adding an EHR to a practice will change job functions, and it's important to make sure that

all the important duties are still covered, Dr. Carter said. Once this backgrounding has been done, a request for proposals based on practice needs can be created.

When reviewing products, it's important to have a designated project manager whose only job is to shepherd the project through each stage. In addition, senior executive support—both administrative and clinical—is key since that group will make the final decision on a system.

And staff input is essential since these are the people who really know what goes on in your practice, Dr. Carter said.

Spend time figuring out what resources will be needed in terms of new personnel, technical support, security, and equipment. "Without that level of estimation and

planning, it's very likely you'll be in a situation where you need a critical person and that person is not there," he said.

Consider hardware issues. For example, it's important to consider the types of input devices that will be used,

such as tablets, desktop computers, or personal digital assistants (PDAs). Tablet computers are popular but people also tend to drop them and spill coffee on them, he said.

Don't forget to factor in security issues, Dr. Carter advised. For example, practices should be sure that any system they buy is compatible with the Health Insurance Portability and Accountability Act of 1996.

When the time comes, there are a variety of ways to roll out a system, Dr. Carter said. For example, a practice can test all the features at once through a pilot at one site in the practice. Another option is to phase in implementation of the most important features first across the entire organization.

Or a practice could opt to try a "big bang" rollout where all features are implemented across the organization at once. This approach is generally more successful in smaller practices with only two sites and fewer than 10 physicians, Dr. Carter said.

Regardless of the type of rollout, ongoing staff training is critical. It is not a one-time event.

## Massachusetts Coalition Launches EHR Pilot Project

BOSTON — Three Massachusetts communities will soon be wired for electronic health record systems as part of a \$50 million pilot project.

The idea, being undertaken by the Massachusetts eHealth Collaborative, is to test out the implementation of interoperable EHRs within communities before attempting to connect physicians across the entire state.

"We're completely focused on practical solutions so we can get these things into physicians' hands and health care professionals' hands and keep them there," Micky Tripathi, CEO of the Massachusetts eHealth Collaborative said at a congress sponsored by the American Medical Informatics Association.

The collaborative is a not-for-profit group founded by 34 health care institutions seeking to create a statewide health information network.

The collaborative was launched last fall and requested applications for its pilot project last December. They received 35 applications from communities across the state and chose three—greater Brockton, greater Newburyport, and Northern Berkshire. The pilot is being funded through a grant from Blue Cross Blue Shield of Massachusetts.

Each community chosen was a relatively self-contained medical referral market, had strong local health care professional leadership, and demonstrated an openness to information technology (IT) innovation, Mr. Tripathi said.

The final selections were based in part on location, patient diversity, and IT maturity, he said. Members of the collaborative also wanted to choose communities at different points of the IT adoption curve in order to see the different types of benefits.

The three communities cover nearly 600 physicians treating roughly 500,000 patients. Overall, there are 182 primary care physicians and 410 specialists. The pilots will include almost 200 office sites, most of which have one to five physicians, Mr.Tripathi said.

The pilot projects will include the purchase and installation of EHRs at all clinical care points, as well as connecting them to other systems within the community.

This pilot is a chance to see what will happen in a larger, community-wide roll-

The pilot will be aimed at determining the barriers to adoption, identifying the costs—both direct and indirect—of adoption, and analyzing the benefits. Officials at the collaborative will also be seeking to figure out how the costs and benefits are distributed across stakeholders.

Finally, they will be looking for the best ways to provide incentives and how that could be replicated going forward. "This transition can't be done to physicians," he said. "It's got to be an idea that we sell to them."

The collaborative was planning to have selected EHR vendors by the end of May and to be under contract by the end of the summer. The pilot timeline calls for implementing systems in a clinical care setting before the end of the year. At the beginning of 2006, the collaborative expects to implement interoperability capabilities for the systems. The pilot projects are slated to end in mid-2008.

## Group Plans to Begin Certification Of EHR Products Later This Year

BOSTON — A coalition of private sector informatics groups plans to launch a process for certifying electronic health record products late this year.

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Certification will bring some predictability into the market for physicians, vendors, and payers, Mark Leavitt, M.D., chair of the Certification Commission for Healthcare Information Technology, said at a congress sponsored by the American Medical Informatics Association.

The commission's initial scope is to certify electronic health record (EHR) products for physician offices and other ambulatory settings. They plan to begin beta testing products as part of a pilot project in September.

By the end of the year, the commission is slated to publish certification requirements and to outline a roadmap for vendors for requirements for the next 1-2 years, Dr. Leavitt said.

The roadmap is a key part of the commission's work because the cycle for getting new features, interfaces, and interoperability functions into a product can be 6-18 months or more. "We need to signal to the industry as to where we are going next, so it has time to respond," he said.

The commission was founded last year by the American Health Information Management Association, the Healthcare Information and Management Systems Society (HIMSS), and the National Alliance for Health Information Technology.

The three groups have provided seed funding and have loaned staff members to the effort. As the process moves forward, the commission will charge fees to the vendors to cover the cost of testing the products. They also plan to seek sustain-

ing grants from other organizations to maintain their operations, said Dr. Leavitt, who is also the medical director at HIMSS

Under the voluntary certification process, products will either be certified or not certified. "We are not trying to create a competitive rating system," Dr. Leavitt said. The idea is that the commission will be setting a baseline standard, leaving space for competition and innovation above that standard. And the standard needs to be based on reality to get participation from vendors.

Dr. Leavitt said he expects that as the standards become more rigorous in the years to come, the marketplace will evolve to follow the certification process.

Currently, adoption is progressing slowly because the market lacks order and predictability. For example, physicians won't buy EHR systems until costs are lower, their own risk is lower, and the incentives are higher. However, it's hard for vendors to bring down prices when the sales volumes are so low and the sales cycle is so costly.

Payers have expressed interest in offering incentives for the use of EHRs, but many are concerned that if they start to offer incentives, an industry of minimal systems will spring up to capture that money, Dr. Leavitt said.

Certification is a way to take some of the risk out of the process for all the players, Dr. Leavitt said. Another challenge is to make sure that there isn't a wave of adoption of products that aren't interoperable.

For more information on the certification timeline, visit www.cchit.org.