

Rhode Island Streamlines With Electronic Health Records

By Joseph R. Marocco and Pauline M. Marcussen

With more than 18,000 inmate-patient admissions annually, the Rhode Island Department of Corrections (RIDOC) wanted to adopt electronic health record (EHR) technology for its seven correctional facilities. It hoped to improve efficiency and quality of care, while reducing paper and costs. Because corrections patients are often transferred from one facility to another, the burden of locating and moving paper charts — often touched by seven or eight people daily — was cumbersome, time-consuming and costly. These hand-offs also increased the risk that vital patient information would be unavailable at the point of care.

RIDOC's management recognized the value of the EHR as a vital health care component that streamlines communication among clinicians (medical, behavioral health and dental) and as a key to maintaining an accurate chronology of all admissions, diagnostic tests and patient care. RIDOC also realized implementing an EHR is not something to be approached casually or without forethought.

Step One: Identifying Essential Capabilities

Knowing that internal staff could not take on the additional work necessary to choose an EHR system without assistance, RIDOC hired an experienced consultant to lead the process. He was selected based on a recommendation from the American Health Information Management Association (AHIMA), as well as for his independent status and detailed knowledge of medical records and health care.

The consultant began the effort by visiting each facility within RIDOC and interviewing clinicians to determine the needs of each department. He then met with each group to discuss his observations and determine the EHR requirements.

RIDOC's top EHR priorities included:

- Current Certification Commission for Health Information Technology (CCHIT) verification;
- Simultaneous availability of documents from multiple facilities;
- Clarity of notes;
- Streamlined filing process;
- Ease of locating and accessing charts; and
- Integration with dental and business departments.

Based on these priorities, the consultant helped draft the request for proposal (RFP) with the specified criteria. In addition to the basic requirements expected of any EHR, he also included criteria exclusive to RIDOC: suicide risk assessment, medical administrative components and a link to inmate tracking.

The consultant graded each of the six proposals received based on where they met RIDOC's needs and where they fell short. At this point the funding that had been appropriated two years earlier was delayed and the project was put on hold. When the funds did come through, a second RFP was submitted. In this round, three additional bids were received, and four vendors from the first round re-submitted.

The seven companies bidding for the projects provided product demonstrations, presentations and references, a key requirement in the RFP. Members of the selection team —

comprised of the associate director of finance, associate director of information systems, associate director of health care services, clinical director for behavioral health, director of nurses, and interdepartmental project manager, as well as an IT representative from the department of administration and the Eleanor Slater Hospital — spoke with the references and solicited word-of-mouth comments while attending conferences and visiting vendor booths. The EHR providers offered services that ranged in quality and affordability, and RIDOC focused on getting the best available product within its budget.

In the final analysis, NextGen Healthcare was selected. The company stated that it could meet 99 percent of the 160 identified criteria. Also, RIDOC recognized its bonus value, since NextGen could run on the Microsoft SQL server already in use in the department. RIDOC leadership recognized that it is cost-effective to leverage existing technology, especially when it requires very little IT maintenance. RIDOC signed the final contract in March 2009.

Step Two: Establishing Goals and Expectations

To effectively solve existing challenges, RIDOC set expectations and measurable goals for the enterprise-wide EHR system, shared by medical, behavioral health and dental departments. Rather than be intimidated by new technology and extra work in the initial stages, the staff at each facility were eager for the new time-saving technology.

This welcoming attitude was due, in part, to the fact that RIDOC implemented electronic prescription order entry nine years earlier. That transition, by

contrast, met with strong initial resistance. Fortunately, it was quickly overcome as users experienced the efficiency and simplicity of the electronic system. RIDOC clinicians and administrators subsequently embraced the system for making their lives easier, as well as easing the burden on physicians and nurses.

As part of the EHR implementation process, the team identified specific expectations. Primarily, EHR was to function as an efficient management tool to track in real time how many patients were at a clinic, the volume and cost, as well as to monitor simple activities in specific categories. For example, the system will accurately track the number of patients with a sore throat on any given day, replacing the former unreliable “guesstimate” method. Another anticipated benefit of the EHR was a tremendous reduction in costs for not having to re-test patients at multiple locations. The system would also support claims with accurate documentation and was expected to help avert lawsuits.

Step Three: Aggressive Implementation Planning

The timeline for implementation was aggressive: the dental division was scheduled to be up and running in July 2009, just four months after the contract was signed. The medical and mental health divisions were set to go live together, to avoid disruptive dual systems, in September 2009.

Before implementation could occur, the team had to build the RIDOC-specific documents and augment the template library, expanding the EHR’s already robust offerings. At the same time, decisions were made to determine who would have access to the system, with initial focus on classifying user groups, access levels and pick lists.

The new EHR needed to be populated with patient data. The volume of existing records was too massive for back-scanning to be viable, so a core group consisting of nurses, behavioral health staff, medical record clerks and dental assistants was assigned to abstract certain elements into the NextGen EHR system: allergies,

diagnoses, and significant behavioral health issues. Current patient records received via fax were scanned into the system.

At the same time, user training and coaching were under way. NextGen Healthcare conducted comprehensive classroom training tailored to the specific needs of the corrections industry for all users. While RIDOC enjoyed the advantage of enthusiastic staff and active vendor support, implementation could be successful only if users were well-trained.

An additional strategy was to customize training according to division and user groups. By focusing on teaching only relevant responsibilities, the learning curve is improved and time is not wasted on explaining nonessential functions. Also, a group of “super-users” was identified in each specialty — nursing, behavioral health, dental, IT, administration and physicians — as an additional resource to all users.

It was also helpful to learn from outside sources fully operational with an EHR. The dental group got its training prior to going live from the Blackstone Valley Community Health Center, also based in Rhode Island. Having successfully implemented NextGen EHR technology, the experienced Blackstone team was a great resource for the dental division. Blackstone’s meticulous approach to implementation was a valuable source of knowledge and inspiration for the RIDOC implementation team.

Step Four: Going Live and Reviewing the Results

Successfully completing the implementation process took a great deal of cooperation and dedication from management, staff, physicians, the outside consultants and the NextGen Healthcare team. Furthermore, the Rhode Island state decision-makers and personnel deserve much credit for approving the project, as well as for their focus and planning that kept all parties on task throughout the process.

While the RIDOC staff had to take on additional work for a short while, the results have proved to be worth

the effort. By not having to perform duplicate tests, search for records or manually move paper, a significant savings in time and increased productivity has resulted in immediate cost savings. RIDOC expects its return on investment to offset the cost of the EHR within two years.

The success of the RIDOC’s EHR implementation stands testament that other correctional facilities can also enjoy the same benefits with limited disruption to operations. This has not always been the case and not every correctional facility has had a positive EHR experience or great results. The attrition rate with EHRs has historically been high, so a careful, diligent approach — from selecting the vendor to training the users — is the best way to ensure success. In addition to considering an independent professional to guide the process, the example at RIDOC shows how important it is to identify in advance all of the basic and unique functionality that an EHR must have to properly serve all users and unique industry needs.

The goals of increasing quality of care and efficiency, while reducing costs, can be achieved with an EHR, but it requires a systematic process that necessitates patience, attention to detail and dedication to doing it right the first time.

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