

# CASE STUDY: University Hospitals

From the *Healthcare IT News* report, "Driving Value Across Your Enterprise. Document Management: A Core IT System"



## Tying Clinical Document Management to EMRs

One of the country's leading healthcare systems, University Hospitals (UH) provides quality medical care throughout the Northeastern Ohio region. The system comprises a major academic medical center, community hospitals, outpatient health centers, outpatient surgery centers, urgent care centers, cancer centers, rehabilitation facilities, pediatric specialty centers and mental health facilities, as well as joint venture and partnership hospitals and health centers. University Hospitals Case Medical Center serves as UH's flagship medical center and the primary teaching affiliate of Case Western Reserve University School of Medicine.

### Improving the clinician experience

UH expects to open its Ahuja Medical Center, located outside of Cleveland, OH, in December 2010. As the newest hospital in Northeast Ohio in several years, UH Ahuja Medical Center was designed to incorporate as much healthcare information technology (IT) as feasible, according to Dan Clark, Division CIO.

The state-of-the-art facility, which will grow to 600 beds upon its three-phased completion, will be connected to UH's core IT systems. UH has been using electronic order entry systems since the early 1990s and is in the process of rolling out its inpatient electronic medical record (EMR) system by Eclipsys at UH Case Medical Center and UH Ahuja Medical Center. Its other core IT systems include financial and scheduling, picture archiving and communications, and cardiovascular laboratory. UH Ahuja Medical Center will also debut Hyland Software's enterprise document management (EDM) system, OnBase. "The document management system is part and parcel to how we will augment the electronic workflow of our EMR," said Clark.

UH is in initial deployment of its EDM system in two pilots — UH Case Medical Center's emergency department and operating room — with a July 2010 completion date. The academic center is serving as the laboratory for the clinical documentation management projects, which will enable the healthcare system to work through any issues before the EDM system is rolled out at UH Ahuja Medical Center, Clark said.

The clinical document management initiative

comprises three phases in a span of three to four years. The first phase, which includes the two pilot projects, will culminate with the opening of UH Ahuja Medical Center in December. Phase two, which is expected to take 12 to 18 months to complete, will consist of a roll out of the EDM system to UH's other acute-care facilities and its new cancer hospital. Phase three will likely focus on the incorporation of the EDM system into UH's physician organization.

The IT department's role is to help improve the clinician experience, and EDM is one of the tools that will accomplish that task, Clark said. The healthcare system acknowledges that some paper will exist in its environment. The challenge that UH faced was how to incorporate technology to digitalize paper within the enterprise. "The strategy was taking the paper, digitalizing it and incorporating it into our EMR so that the data could be another image that's viewed in our EMR," he said.

### Best practices from selection to implementation

UH's search for the right EDM vendor to serve its needs revolved around its guiding principle of transparency for both vendors and staff, Clark said. UH's initial vendor list comprised top EDM vendors from KLAS reports and existing strategic relationships. In its Request for Proposal round, the healthcare system required competing EDM vendors to be able to integrate with its Eclipsys EMR. Five companies were invited to conduct on-site demonstrations until one was chosen in a three-round process of elimination.

Approximately 30 internal stakeholders, comprising physicians, staff nurses, administrators and managers of various departments such as supply chain, formed the selection committee. A survey tool was used to solicit the committee members' responses after each demonstration. "The committee drove the selection process," he said. The culture of transparency and honesty created greater participation and excitement, which contributed to the adoption of the new technology, he said.

Buy-in aside, UH anticipated the challenge of not having paper in hand anymore. UH spent a great deal of time with physicians and nurses to determine which pieces of paper being generated in the new



medical center they would want immediately and which documents can be accessed digitally within 24 hours. The Health Information Management department created a workflow process in which documents were collected overnight and scanned according to priority. High-priority images, such as a cardiology consult, would be available in the morning by clicking a tab within the EMR system. UH's EMR leadership and team were involved in the implementation and testing of its EDM system since the scanned images would be viewed within the EMR system. The EDM system is pivotal to the whole EMR project, rather than a separate project, because the goal is to enable physicians and other clinicians to seamlessly access scanned images via the EMR system, Clark said.

### Laying the foundation for future deployments

UH is in the middle of its EDM deployment, but the healthcare system expects benefits down the road. "Over time, we hope to cut down on the physical space that houses our documents," he said. Clinical benefits include being able to route images to different departments more efficiently. For example, once a physician gets the consult notes, the physician can send them electronically to the external billing vendor. "We are automating the workflow process as opposed to making a copy or fax," Clark said.

UH has its hands full with three phases of installing the infrastructure within four years. Still, the healthcare



system anticipates a phase four down the road. "We've got a pretty good platform here," he said, of the EDM system. "We need to take advantage of it. We are laying the groundwork for other administrative functions such as HR and legal." At some point, the EDM system will be an enterprise-wide solution, supporting other departments and organizations.

UH will try to measure the qualitative and quantitative benefits of the technology, he said. "At the end of each phase, we'll look at financial improvements and process efficiency as a result of the implementation," With the industry moving in the direction of process and financial efficiency, clinical document management stands on its own financial merit, he said.

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