

# Capturing—and Maximizing—the Promise of Interoperability

## *How one healthcare system is doing it with help from McKesson*

By Mary Beth Massat

**I**nteroperability: It's the Holy Grail of healthcare. Everyone wants to obtain it, but it still remains elusive, particularly in cross-department and cross-enterprise patient data sharing.

The adoption of the electronic medical record (EMR) has been a game-changer in terms of presenting the clinician with a more complete patient record. According to Don Dennison, president/principal, Don K. Dennison Solutions, Inc., and Director-at-large on the Board of Directors for the Society of Imaging Informatics in Medicine (SIIM), the growing prevalence of EMRs has led to the deconstruction of PACS. This means that certain PACS responsibilities are shifting to other applications, such as image storage to vendor neutral archives (VNA), and clinical image viewing to EMR enterprise viewers.

"With the rapid adoption of EMR systems, the need to incorporate images into the medical record is even more of a priority," Dennison says. "It also means integrating more EMR data—multiple patient identities or encounter information, for example—into the imaging record. A VNA and enterprise viewer shared enterprise-wide are often more effective than integrating each PACS on the enterprise. EMR users want a single, easy-to-use viewer that is able to present the complete patient imaging record—from radiology, cardiology, nuclear medicine, and other exams—from all sites across the health system."

Consolidation of organizations—hospitals, clinics and even medical practices—is

also driving demand for interoperability. Each facility has its own PACS and configuration, making it difficult for most organizations to share clinical data, workload and archiving solutions.

"Organizations need to develop a strategy for a consolidated enterprise. This includes looking at systems that can manage multiple patient identity domains, and also providing access to imaging records with an enterprise viewer in the EMR and even possibly through a Health Information Exchange or personal health record. It also requires sharing the DICOM objects," Dennison explains.

Multiple benefits can be derived from consolidation, Dennison says. From a cost standpoint, one VNA reduces the burden of maintaining and updating several different archive silos. It can also reduce the associated costs of IT training and staffing. From a clinical standpoint, clinicians can query one system for a complete view of the patient, rather than trying to pull information together from disparate solutions. From a consumer/patient standpoint, consolidation can lead to a more effective and positive clinical encounter when the physician has access to all relevant tests, imaging studies and history for explaining procedures and discussing next steps.

Desiree van Haren, product manager, workflow and infrastructure solutions at McKesson, agrees. "The providers I speak with feel quite strongly that having images alongside the record, and having that access on a single platform, is critical," she



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Today, nearly all of van Haren's customer conversations are centered on achieving interoperability. With a wide range of technologies and varying strategies at the department level, she says, it is critical to develop a unified approach that enables clinicians to collaborate effectively across the care continuum.

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Todd Holling, Assistant Director for Clinical and Business Systems, Unity Point Health

In a multi-silo environment, sharing patient data is difficult, and that lack of accessibility can have an impact on patient care. It can also delay interpretation, especially in rural health systems where a specialist may have to travel from hospital to hospital. By making the patient's longitudinal record available to all authorized users, anywhere and at any time, boundaries can be eliminated. And that improves care, van Haren says.

"There are federal mandates to share patient data, such as Meaningful Use Stage 3, but that doesn't simply translate to increased interoperability—they are not synonymous," van Haren says. In fact, many of the HIEs in the US are primarily focused on document sharing."

Yet, the technology exists to image-enable HIEs, van Haren explains, and while it is not mandated by Meaningful Use, sharing patient imaging data can enhance patient care. "That is what Conserus™ Clinical Data Exchange is intended to provide," she adds. "As a company, we see it as imperative to move in that direction clinically and operationally."

One health system that is moving in this direction with assistance from McKesson is UnityPoint Health (West Des Moines, Iowa). As the fourth-largest nondenominational integrated healthcare delivery system in the US, Unity Point has a very distributed and growing footprint, says Todd Holling, assistant director for clinical systems and business systems at Unity Point Health. "Our motto is to provide the best outcome for every patient, every time," he adds.

Every clinician, clinic and hospital—and even patients—wants access to images and data quickly and efficiently, in real time when possible, he says. Regardless of the acquisition device, the patient data should

be part of the EMR. At Unity Point, Holling is helping to deliver this level of interoperability even with nontraditional patient data and imaging.

"The healthcare landscape today is very challenging," Holling says. "We are continually seeking to meet these patient information needs in a timely and stable manner, with a very portable format."

In addition to the tools and infrastructure, he also needs the support and development behind these technologies. That's where McKesson's Clinical Reference Viewer (CRV) has made a difference. "Our clinicians want a way to view images and data on the devices they already have—laptops, smartphones, iPads and Kindles. And they want it in a format they can easily see and use it seamlessly and on-the-fly," Holling says.

CRV is accessible through Unity Point's EMR and provides links to patient imaging exams. In the past, these embedded viewers have not been seamless across the myriad devices that doctors are increasingly using, Holling explains. "Now with CRV, we have a zero footprint, so there are no downloads, enabling anywhere and anytime access. That's very important in the emergency room, or as a surgeon heads into the operating room. It leads to better patient care when decisions can happen in real time."

With 1.2 million studies in the Unity Point Health system, it's easy to imagine that the sheer volume of studies could be taxing on the system. Yet, that's not the case, says Holling, as there have not been any performance issues. He attributes this partially to the virtualized radiology space in the McKesson solution that enables scalability outward, not just upward.

"We want to be in a position to handle any future growth in real time," Holling



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Desiree van Haren,  
Workflow and  
Infrastructure Solutions,  
McKesson

says. "We can't look into a crystal ball to see where healthcare is going, what the landscape will be like. That's critical in our environment, where we have hundreds of clinics and physicians spread across three states. We don't want them frustrated with lack of performance or stability... They need to remain focused on patient care."

Finding the Holy Grail of interoperability is half the battle. Being able to leverage it to the maximum is the other half. Holling says, "With McKesson we really benefit from a good cadence, being able to share our vision, and stay on top of all these technological changes. And that is mutually beneficial for our organizations and our patients."