Major Academic Medical System Advances Image Management With Sectra Enterprise Imaging

University Hospitals in Cleveland made do for years with separate PACS for radiology, cardiology and other image-intensive clinical departments. Now the 18-hospital, 15-county, 40-clinic integrated health network is half of the way through implementing a true enterprise image- management solution—a.k.a. VNA (vendor neutral archive)—and one key insider sees the advance as "a huge goldmine for patient care."

"You hear a lot about EMRs and their benefit of providing 'one-patient, one-record'," says Beverly Rosipko, UH's manager of PACS and radiology support services. "Once we integrate our recently added hospitals into this system, we really will have a 'one patient, one record' system for all images."

Rosipko adds that, as a patient, she will take great comfort knowing that a UH physician looking at her medical records can click her name just once and see an all-inclusive list of images and related data, including diagnostic audio and video content, from all her exams.

And that's not only from radiology and cardiology but also from non-DICOM departments such as wound care, ophthalmology, and dermatology.

 "Regardless of where a patient goes for care within UH, all that information is available to our clinicians, giving them a truly patient-centric view of that patient and their image records to understand the patient's all inclusive history," says Rosipko. "To me that's very innovative, very cutting-edge."

UH has deployed Sectra's Enterprise Image Management (EIM) solution including the Sectra VNA.

Sectra EIM has proven an unequivocal success at providing UH with a secure, cost-effective means of anytime/anyplace capturing, storing, accessing and sharing complete patient histories, Rosipko reports. She spoke with imagingBiz about her experiences helping UH select, launch and make the most of the built-in benefits of the system.

Benefits galore

Rosipko speaks for her colleagues and co-workers when she summarizes UH's vision for how far the Sectra VNA can take University Hospitals down the "one patient, one record" road for the imaging records. In a nutshell, the goal point is no image left behind. "We want to have all imaging in this system, which provides a single viewer that ties into our other systems," she says. "We don't want the end users having to log into multiple systems."

UH began closing in on this vision when staff started looking into ways to image-enable EMRs, physician portals and, now in the works, patient portals. They already knew well that imaging equipment is constantly cranking out diagnostic images in multitudinous units in various departments, not to mention in their numerous radiology and cardiology departments. But now they considered that reality in light of the data portability afforded them by their own personal mobile devices.

Rosipko refers to Sectra VNA as "a virtual meeting room for images," as it's a single database that's available to anyone with permission via vendor-independent access through DICOM, HL7, XDS-I and IHE support.

The UH team also likes that the solution facilitates reductions in radiation dose by its inherent ability to ward off duplicate exams.

Asked what separated Sectra VNA from other avenues UH explored, Rosipko says her team closely reviewed products from six vendors. "We decided we weren't ready to go to a cloud model yet, but we wanted a vendor that could potentially support that if needed," she recalls, adding that a zero-footprint viewer capable of displaying any image format became a must-have feature to provide quick access to the images.

"One of the big benefits was the development and road map of their product, through which they made different functionalities available, including pre-fetching and routing," says Rosipko. "They gave us the tools we'll need to do our own data migrations as UH expands. There were other vendors that didn't train you or empower you in this way."

The UH team also rallied around Sectra EIM's workflow and disaster-recovery support.

These were among the 20-plus benefits of enterprise image management that made it into a presentation Rosipko and a colleague gave on the subject. Among the other high points they touched on were the system's ability to help UH:

- Reduce service contracts and resources to manage multiple image archives;
- Allow each department to set up its own rules/ configuration based on workflow needs;
- Offer reporting ability with data mining;
- Set up a virtualized server environment; and
- Give staff life cycle management tools

Once the acquisition decision was made, it took the team only six months to reach the go-live date with radiology and cardiology. That was December 1, 2015, now they're working toward bringing up ophthalmology, dermatology and wound care.

Rosipko points to an unexpected plus to come from the interdepartmental effort: getting to know one another's territory better than ever before.

"We met with each department to put together proposed workflows, so we were able to get a lot of stakeholders involved," she says. "It's very interesting because you learn about areas and workflows that you don't have expertise in."

Centralized simplicity

Drilling down to what she likes best in the technical capabilities of Sectra VNA, Rosipko singles out the system's ability to process HL7 Admission/Discharge/Transfer (ADT), Orders as well as Results into a central connectivity hub. This utilizes custom logic to link together various pieces of data resulting in a complete snapshot of the patient at time of admission, registration and other entry/exit points. The connectivity hub is genius and cutting edge, enabling a patient centric image record even with disparate medical record numbers across multiple facilities.

Despite the high-tech firepower under the hood, she's most delighted by the simplicity in the driver's seat as UH pushes further ahead with Sectra VNA which enables them to develop their Enterprise Image Management System.

"This system enables us to be able to share any type of image with any other location, being connected via whichever vendor we select for our image-sharing platform," says Rosipko.

"A lot of our departments are still using CDs," she adds. "They've got to go through medical records to get CDs made or images put on jump drives. There are lots of different, disparate processes. This solution will really centralize the process for us, making it easy to share images and release them."

Not so long ago, she recalls, UH physicians could only view images if they had access to a particular system at a particular UH site.

"By putting all images into our enterprise image-management system, we're able to avoid having to migrate image date when replacing or consolidating [department-specific] applications," she says with unmistakable excitement in her voice. "Because we don't have to do a migration from one system into a replacement system, we now have the power to realize significant cost savings.

"Seeing all these different systems through a single interface compared with what we used to have -I just think it's the best thing since sliced bread."

By Mary Tierney & Dave Pearson.

Featured in imagingBiz February 2016 issue.

Published on : Wed, 6 Apr 2016