eUnity™ Helps Sentara Healthcare More Quickly Realize its Enterprise Viewing Goals

AT A GLANCE

Client: Sentara Healthcare, a non-profit healthcare organization identified as one of the United States' top integrated healthcare systems, serving Virginia, North Carolina and beyond.

Hospital, physicians & staff: More than 100 sites of care including 12 acute care hospitals, 5 medical groups, 3,800+ provider medical staff, and 28,000 members of the team.

Solution: eUnity™ Universal Viewing and Collaboration Platform

Electronic Access

Sentara Healthcare is one of the United States top integrated healthcare systems serving Virginia and North Carolina. Like many other healthcare enterprises in the US today, Sentara has embraced the use of electronic medical records. The Sentara eCare Health Network®, introduced between 2007 and 2010 and enabled by Epic's electronic health records software, has helped Sentara transform its traditional paper charts into protected electronic medical records that allow the secure sharing of patient information amongst its hospitals, physician practices and other healthcare sites – the entire continuum of care.

CHALLENGE:

• Provide clinicians with the ability to view and collaborate on images archived across multiple PACS systems.

SOLUTION:

• An affordable, easy to use, high performing universal viewer providing enterprise image viewing and a vital "bridge" to longer term vendor neutral archive implementation.

RESULT:

• Deployment of eUnity to 1700 clinicians at Sentara In Hampton Roads.
• Supporting 5,000 views a day immediately upon implementation.
• Physician access to whole jacket – previously unavailable.
• No requirement to login to PACS – images are available via single link in Epic.
• Fast, anywhere, anytime access to diagnostic quality images – not just clinical images.

The eCare electronic health record (EHR) initiative not only changed the way patient information is recorded and moves through the Sentara Healthcare system. It also represented an opportunity for the healthcare enterprise to re-design and optimize major processes covering the entire continuum of care, resulting in an estimated cost savings to the hospital of $53M annually, derived through decreased length of stay, increased efficiencies within the hospital and other process improvements [1].

CHALLENGE:
Imaging and the EHR

One of the clinical improvements Sentara Healthcare set out to achieve within its EHR initiative was to provide one chart for patients with real-time information for all points of care (hospitals, MD offices, home care) and to provide accessible electronic charts, anytime, anywhere. This includes providing Sentara Healthcare's physicians with one link access from Epic to the 13 studies archived within Sentara's AGFA PACS systems in Hampton Roads.

"Our clinicians need speed of access to diagnostic quality images, but we have several disparate PACS systems from multiple vendors and each of these vendors has proprietary software and hardware," explains Trent Conwell, director of IT for Sentara Healthcare. "Every time another PACS system was added, we needed to create a new integration."

Conwell's ultimate enterprise imaging strategy involves the creation of a PACS agnostic approach that will include multiple image-generating specialties beyond radiology, improve clinical image data and work flows, and provide integration with the EHR. With the help of healthcare IT solution provider Ascendian Healthcare Consulting, Conwell and the IT PACS teams began to devise a comprehensive roadmap to implement a vendor neutral (VNA) solution to increase interoperability and connectivity for its current and future enterprise medical initiatives.

[1] Becker's Hospital Review "Beyond the EHR: Sentara Healthcare's IT Strategy, November, 2013

The long journey to a VNA

Sentara projects that it will save 2,600 terabytes of image storage by 2018 by adopting an enterprise imaging platform (delivered through VNA image viewer vendor Mach7 Technologies) along with information life-cycle management tools [2].

However, the migration of images to Mach7's VNA is fraught with risk and must be handled very carefully, explains Conwell. "Too many organizations try to do the move too quickly. There are multiple risks in moving images from one location to another and we have millions of studies archived, ad legislated storage requirements to which we must comply. It can, and should take a large healthcare institution multiple years to do a full VNA migration properly."

Implementation of Sentara Healthcare's enterprise imaging strategy has been underway for more than a year, and likely will continue for months if not years.

[2] Aunt Minnie, "Preparation, planning spark enterprise imaging success"

Patience is not an option in patient care

For physicians seeking to deliver the very best care for their patients, rapid access to diagnostic quality images is a must have – not a nice to have. And in an EHR scenario, clinicians expect to have universal ability to view and collaborate on images – regardless of their storage location. Asking those clinicians to be patient for months – or years – until a VNA migration is complete is simply a non-starter, says Trent Conwell.

What Sentara Healthcare needed was a strategy to provide enterprise image access from a single viewer while the VNA effort is underway, providing physicians and patients with the universal access to images they need, while giving Conwell and the IT teams the breathing room they need to thoroughly plan the migration and do it right.

SOLUTION

The search for a universal enterprise viewer

Sentara Healthcare was introduced to eUnity. Client Outlook's universal viewing and collaboration platform as part of an RFP process initiated by Ascendian to find a universal viewer offering enterprise image access.

"With Ascendian's help, we developed an extensive RFP and scoring mechanism to assess a number of vendors of enterprise viewers," says Jude Mosley, Manager IT, Sentara Healthcare. "Twelve of the questions included in the RFP spoke to a minimum set of requirements, which allowed us to shortlist. We then selected two vendors – Client Outlook was one of the two - to come on site and present a demonstration to our multi-disciplinary physician advisor group."

Client Outlook's eUnity™ comes out on top

At the end of the process, Client Outlook was the top ranked vendor with eUnity selected as Sentara Healthcare's chosen enterprise image viewer.

"During the demonstration phase, Client Outlook's eUnity was able to sell itself," says Trent Conwell. "The Client Outlook team worked with us to set up a production-like proof of concept installation at one of our hospitals. This allowed us to evaluate eUnity within our own environment, which was truly valuable to the clinical department. The process was extremely smooth. We had the POC up and running in just three weeks."

The reasons behind Sentara's decision in favor of eUnity™ were two-fold:

1. eUnity's ability to view diagnostic quality images, not just clinical images. This allowed Sentara IT to keep its promise to radiologists that they would not disrupt their workflow. eUnity's zero client download. For security reasons, people within the Sentara Healthcare enterprise do not have administrative rights to download applications or files. eUnity provided a browser based application that truly offered clinicians anywhere, anytime access to images.

2. Client Outlook's partnership mentality. Sentara was looking for a vendor who would go above and beyond in providing support during the enterprise implementation, not engage in finger pointing, and who would work closely with the IT team through the roll out to build out relevant tool sets for different specialty groups.

RESULT

5,000 studies viewed a day right out of the gate

eUnity has been received very positively by Sentara Healthcare's physician community since its implementation in December, 2014. The enterprise image viewer is now supporting 1,700 users at Sentara's Northampton location tied into Sentara's Agfa Healthcare PACS implementation. The healthcare enterprise has plans to expand eUnity to its Fujifilms Medical Systems and McKesson PACs in the near future and Blueridge user communities.

From day one, users were actively tapping into eUnity's viewing power. "Right out of the gate we were pulling 5,000 studies a day," says Jude. "Physicians are very happy. The viewer is more user friendly than what they had in the past – very similar to a full grown PACS system, and they now have access to the entire patient image jacket – something they didn't have before in the Hampton Roads area."

Anywhere, anytime access to diagnostic quality images boosts physician satisfaction and improves patient care

eUnity™ has also provided Sentara's physician's with the anywhere, anytime access to images that speed and improve delivery of care to patients. Says Jude, "Since we began using Epic back in 2008, our users have said they would prefer to never leave the application. Now, thanks to eUnity™, they don't have to log into PACS anymore. They have single system access to everything; from anywhere they can get Epic."

To find out more about the power of the eUnity™ universal viewing and collaboration platform, visit www.clientoutlook.com/eUnity™

Client Outlook is a healthcare company first, a technology company second. Driven by our own personal healthcare experiences. We challenge ourselves every day to develop and deliver practical, useful and secure clinical mobility solutions for physicians and frontline healthcare professionals – right where healthcare happens. For more information about our company and our eUnity™ product suite, visit us on the web at www.clientoutlook.com