

Unified PACS, unified vision

UCHealth consolidates PACS, projected for \$11.1 million costs savings and enhanced patient care

Who

UCHealth

Challenge

Consolidating radiology and cardiology PACS to facilitate workflow, save money, and enhance patient care

Solution

Philips IntelliSpace PACS for radiology and Xcelera for cardiology, which provide a unified archive of images for a projected five year savings of 11.1 million USD In 2012, University of Colorado Hospital merged with Poudre Valley Health System and began a lease with Memorial Health System, creating UCHealth, an Integrated Delivery Network that includes five hospitals across three regions (northern Colorado, metro Denver, and southern Colorado) and more than 100 ambulatory locations across Colorado, southern Wyoming, and western Nebraska.





Cost savings, workflow efficiencies, and improving patient care

This rapid growth resulted in a dizzying array of legacy PACS systems; the new UCHealth system had three radiology PACS and four cardiology PACS. Realizing that IT integration could result in cost-savings and workflow efficiencies and improve patient care, UCHealth sought to consolidate and standardize its EHR, voice recognition system, and PACS. It chose Philips IntelliSpace PACS for radiology and Philips Xcelera for cardiology, with plans to migrate to IntelliSpace Cardiovascular in the future.

As a result of the migration to Philips IntelliSpace PACS and Xcelera, UCHealth projects a five-year savings of 11.1 million USD, as well as improved workflow, ready access to images for enhanced patient care, and a flexible and nimble structure that is poised to adapt to new acquisitions.

PACS key to integrated patient experience

One goal of the PACS project was for patients to experience UCHealth as a single entity, rather than a collection of disparate parts.

Peter Sachs, MD, Associate Professor of Radiology, University of Colorado School of Medicine, Section Chief of Cardiothoracic Imaging and Vice Chair of Informatics, Department of Radiology, and Radiology Physician Informaticist, UCHealth, explains that image accessibility, regardless of location, is one of the ways that patients experience a unified health system.

"From a health system perspective, any patient should be able to get identical, high quality, standardized care any place in the system — and PACS is part of that," he says. "Standardizing imaging protocols, workflow, and the structure and content of reports is essential, as is making sure clinicians can see prior studies and historical records."

Now that six million radiology images and 30,000 cardiology studies have migrated to Philips IntelliSpace PACS and Xcelera, radiologists and cardiologists can view a patient's prior images as well as new studies on a single patient timeline, regardless of where those images were acquired in the health system.

Epic connection

UCHealth's IT strategy also included standardizing on Epic EHR. Steve Hess, UCHealth CIO, says that in addition to functionality and workflow, connection with Epic was one reason for choosing Philips.

"Interfacing the Philips PACS with the EHR enables one-click access between the systems," he says. "Radiologists and cardiologists have access to the full patient history contained in the EHR plus clinical tools, and clinicians have the opportunity to review images acquired anywhere in the health system using the EHR online environment."

Significant cost savings

A primary driver for UCHealth's PACS consolidation was cost. Hess notes that the former PACS required a one-time licensing fee, plus annual maintenance and storage fees. When the hospitals expanded, new contracts were required.

The Philips IntelliSpace PACS operate on a tiered fee-per-study basis, allowing the PACS to grow as UCHealth does. In addition, virtual servers help control costs. In total — as a result of consolidating PACS with a single vendor, reducing software and the associated maintenance costs, choosing an efficient system, and using a fee-per-study model — UCHealth estimates a savings of \$6.5 million in the first five years in radiology, and \$4.6 million in cardiology.

Matt Riley, systems architect, points out that consolidation on Philips IntelliSpace PACS and Xcelera also reduces the burden on the IT department.

"Very soon we will have two platforms and two servers — one for radiology and one for cardiology" he says.

"We've also standardized application configurations and processes. Now we're able to adapt to new growth without adding staff."

More than a vendor

The active collaboration between Philips and UCHealth contributed to the successful transition. In frequent meetings, representatives from both organizations worked together to define everything from hardware and software to hanging protocols and a change management program.

"Viewing our relationship with Philips as partnership rather than seller to buyer is key to what we've done," Sachs says. "We take the stance that when events occur, it is an opportunity to see what we can do better and what we need to do next. The ability to mesh visions was important."

UCHealth is now well-positioned for future expansion. Plans for the future are for inclusion of visible light images in the IntelliSpace PACS, mobility initiatives, and advanced visualization via IntelliSpace Portal.

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