Case Study

McKESSON
Empowering Healthcare

At a Glance

Organization

The Nebraska Medical Center
Omaha, Neb.

- 689 beds
- Tertiary/quaternary academic medical center
- More than 1,000 physicians
- 26,000 annual inpatient discharges
- 500,000 outpatient encounters annually

Solution Spotlight

- Horizon Medical Imaging™

Critical Issues

- Radiologists' workflow
- Availability of images
- Third-party product integrations
- Report turnaround times
- Access to radiology information system data in the PACS
- Anytime, anywhere access

Results

- Increased radiology department productivity by 25%
- Eliminated paper orders
- Improved report turnarounds by 8%
- Created Web-based access 24x7
- Increased resident training

The Nebraska Medical Center

Streamlines Radiology Workflow with PACS from McKesson

The Nebraska Medical Center, the premier academic hospital for the University of Nebraska's medical school, replaced its aging picture archiving and communication system (PACS) with a McKesson solution. The implementation not only allowed the radiology department to eliminate paper orders but also improved work processes and image handling. Radiologists achieved a 25% increase in productivity.

Challenges

Based in Omaha, The Nebraska Medical Center performs more than 250,000 imaging procedures annually. Increasingly, complicated imaging technology placed a strain on its aging legacy system, which offered clinicians limited functionality and interoperability and delayed image availability.

Radiologists' productivity was limited by the system's cumbersome workflow and inability to load images quickly. System limitations slowed turnaround time and made it more difficult and time-consuming to manage the teaching and clinical research demanded by a busy academic hospital.

"The tools available to the radiologists weren't adequate for everything we needed to accomplish," says Craig W. Walker, M.D., radiology chair. "Clinicians were forced to repeatedly get up and move to proprietary workstations to perform certain parts of their daily function. Doing any kind of data manipulation just wasn't an option."

The legacy system's inability to coordinate interpretive activity by physicians at different locations sometimes led to duplicate work. In fact, the radiologists required a paper order to begin reading a study to ensure it wasn't already being reported by another colleague.

These shortcomings slowed the interpretation of images as staff was forced to wait to receive and process a steady stream of paper orders. Orders were batched and sent either by fax or by courier. This process was particularly burdensome during night shifts when residents provided imaging interpretation for the medical center's emergency department.

Answers

The need for a new, more capable solution led the medical center to organize a PACS steering committee to identify the market-leading vendors. This group included both staff from the IT department and physicians from the radiology department, who were intimately familiar with the needs and shortcomings of the existing system.

Case Study

"McKesson has a reputation of building a PACS, validating it in its test labs to make sure it works the way it's designed prior to shipping to a user site. That was important to us. We knew we needed a stable system out of the gate."

Chuck Lakso
Radiology Director
The Nebraska Medical Center

In addition to finding a system with improved image handling capabilities, interoperability with the medical center's hospital information system (HIS), the radiology information system and third-party vendors became a critical concern for the committee.

"We were not going to throw everything away when we brought in a new PACS," explains Chuck Lakso, radiology director. "We had significant post-processing technology on-hand that our heavy users (neurosurgeons) were accustomed to working with. We had to ensure the solution would accommodate and improve the interoperability between our HIS and our radiology system."

After a competitive evaluation, the medical center selected Horizon Medical Imaging™ from McKesson. The choice was driven by McKesson's reputation for service and the positive experiences with the solution of physicians and residents at other academic institutions.

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To ensure a smooth installation, the medical center brought in sufficient McKesson training personnel to ensure that clinicians had on-site expert assistance in working through any initial workflow issues.

Results

Deployment of Horizon Medical Imaging has enabled radiologists to optimize clinical efficiency through an enhanced workflow and improve report turnaround time by 8%. The department estimates that it has achieved a 25% increase in productivity since the solution was implemented.

Features such as adaptive image-loading that can bring up large complex studies and a three-click reporting feature have enabled the department to eliminate delays in viewing images. And since physicians are receiving reports faster, they are better able to manage patient care delivery. Plus, physician satisfaction rates have increased with the introduction of an improved Web-based portal for viewing images remotely.

"The increased efficiency gained from McKesson's PACS allows us to conduct more nonclinical activity, such as spending more time with residents, teaching both at the workstation as well as outside of the reading room," notes Charles H. Morris, M.D., radiology service chief. "The radiologists now have more time to do investigative research, and that's been a huge improvement."

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