CASE STUDY



PACSHealth™ ushers Seattle Hospital Toward maximum PACS efficiency

orthwest Hospital & Medical Center is clearly on the move. Not only did the 281-bed facility recently affiliate with the University of Washington, but it has added a variety of significant improvements in recent years, converting its Seattle Breast Center to an all-digital facility and implementing a comprehensive Picture Archiving & Communications System (PACS).

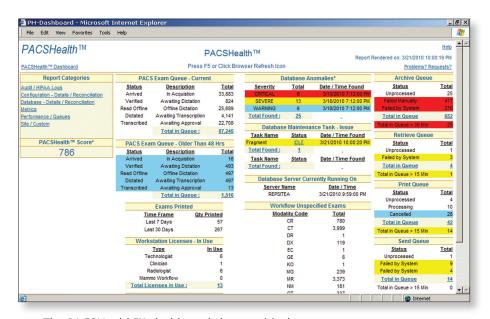
Still, Northwest Hospital did not stand pat. In fact, Alan Rowberg, M.D., RIS/PACS manager, was working to ensure maximum PACS efficiency even before a planned upgrade was in place. The effort—installation of PACSHealth™, an innovative

software application that uses advanced monitoring and reporting tools to improve workflow and throughput—began paying dividends immediately.

Not only are the hospital's 130,000 annual imaging studies more easily manageable, but Dr. Rowberg believes overall RIS/PACS efficiency is maximized. What's more, the system is rapidly paying for itself.

"There are four of us in the RIS/PACS support group, and we all use PACSHealth many times per day," Dr. Rowberg said. "It's been a huge help."

Established in 1960, Northwest Hospital is staffed by more than 1,900 employees and offers some of the most innovative and technologically advanced medical care available. Major clinical programs include cardiac and cancer care; neurosciences; stroke, breast and geropsychiatric centers; and all-digital advanced diagnostic imaging.



The PACSHealth™ dashboard shows critical system status, exam status, database anomalies, current users and hyperlinks to 83+ additional reports including system configuration, PACS-RIS comparisons and a full-disclosure HIPAA/Audit Log engine.

The RIS and PACS were installed in 2005 to replace a basic archive capability and now support all modalities, including digital mammography and an all-digital radiography system with wireless image transfer.

"We have modern imaging equipment at every turn," Dr. Rowberg said.

Because its original RIS/PACS failed to meet the facility's needs, the hospital eventually upgraded to a more reliable and integrated product in 2009. To ensure optimal efficiency while minimizing liability, it also added PACSHealth.

"We knew that our PACS manufacturer was doing the logging required for HIPAA, but we didn't have access to the logs," Dr. Rowberg said. "The big seller with PACSHealth was the ability to access HIPAA logs and show that we were compliant in an easy, straightforward way." Indeed, PACSHealth dubs itself the solution for PACS monitoring, database-driven reporting...and HIPAA/audit log management. It provides a customizable centralized dashboard with real-time monitoring of system and database status; immediately isolates and notifies of database inconsistencies and errors before workflow is inhibited; offers a unique GUI to query transactional audit logs, thus ensuring compliance with HIPAA/ JCAHO regulations; and delivers system reports and data quickly and accurately, reducing turnaround time and unnecessary oversight while increasing data integrity.

Dr. Rowberg discovered PACSHealth somewhat by accident. He viewed a presentation by the company's lone user at that time, liked what he heard, but decided to wait until the installed base grew before pursuing it further. Meanwhile, he spoke with an executive of the Scottsdale, AZ-based company, researched the product, talked with users as they were added, and 18 months later signed on. Installation was easy, straightforward and professional—in fact, "Our IT staff were blown away. They had never before seen a vendor that did everything in such a professional way."

"Our primary goal was to become fully compliant with HIPAA," Dr. Rowberg said. "The HIPAA logging has huge value, and we also wanted to have better control over both RIS and PACS."

He hasn't been disappointed.

"I was really sold by PACSHealth's ability to present HIPAA logs in a usable fashion, and by the various reports the product provided that could help us," he said. "We did an upgrade to our PACS database servers and PACSHealth revealed a 20% increase in throughput and a 25% drop in average query time. We were able to document that increase to all of our users."

Northwest Hospital has seen other benefits. PACSHealth:

- Provides a status overview of 14 different PACS activities on one screen via the dashboard.
- Allows a single-click drill-down from any exam status display, showing the history of that exam in PACS. This display is not available anywhere in the PACS itself.
- Identifies exam status anomalies, including those identified as "incomplete" due to partial failure during retrieval from long-term storage; those incorrectly indicated as "archived" or "not archived"; and image transmissions in "failed" status.
- Lists exams that are verified but have not been dictated or reported by the radiologist. Also lists exams that are not verified, and those that have been transcribed but not signed by the radiologist.

- Enables listing of the entire exam history, including the nature of an access or status change, along with identification of the workstation and user.
- Provides full HIPAA-compliant access lists for any exam or user.
- Monitors film printing to help control costs and shows at a glance the films that failed to print and why.

Not to be overlooked is PACSHealth's RIS functionality. According to Dr. Rowberg, the most important RIS capability involves correlation of exams that are in RIS but not in PACS.

"It's an optimizer, and the name 'PACSHealth' doesn't really describe it completely because it does so many other things," Dr. Rowberg said. "It allows us to adjust the way we manage our system in response to our growing needs."

Should staff ever need assistance, PACSHealth service and support also are excellent. It's all part of a package that has heightened efficiency while resulting in a solid return on investment.

"We save hours per day in staff time," Dr. Rowberg said. "Over the course of a year we may save \$40,000. That's substantial."

Lori Van Amberg, a PACS consultant, has an even longer history with PACSHealth. She first learned about it at a national conference during its development. "I knew I wanted it, I knew I had to have it," she said.

"I liked the dashboard, its overall functionality, its ability to monitor my archive queues, the hyperlinks that let me see everything at a glance, and the login to multiple applications," she said, adding, "It provides PACS administrators with the broad range of information that enables them to keep their overall PACS data in check."

So pleased was Van Amberg that she had PACSHealth installed at the City of Hope, an elite cancer hospital near Los Angeles where she serves as PACS administrator. At every opportunity she encourages colleagues at other facilities to do the same.

High functionality. Ease of use. Overall efficiency. Quality service. Expert support. PACSHealth has it all.

"We've been very pleased," Dr. Rowberg said.
"PACSHealth has been everything we had hoped for and much more. Put simply, it takes the guesswork out of managing a PACS. And, when the guesswork is eliminated, everything runs much smoother."