

# Automating Anomaly Reporting Results in 20% Annual Reduction

## Albert Einstein Case Study

### Site & Department Background

#### Albert Einstein Medical Center

- Location: Philadelphia, PA (serving North Philadelphia and Montgomery County, PA)
- 1200-bed integrated non-profit delivery network. Largest independent academic medical center in the Delaware Valley.
- Delivers services through multiple additional sites.
- Academic Affiliation: Thomas Jefferson Medical College
- In 2010, won the Premier Award for Quality for the second consecutive year.

#### The Radiology Department

- 28 Radiologists
- 100 Radiologic Technologists
- 24 Residents
- Perform 330,000 exams annually

#### Automating Other Workflows with peerVue

- Resident Over Reads – Auto-directed to correct radiologist by sub-specialty.
- Radiologist/Resident Chat – Added a chat field in peer review and resident over read workflows.
- Summary Window – For any exam, identifies all related activities including technologist review, anomalies, peer review, etc.

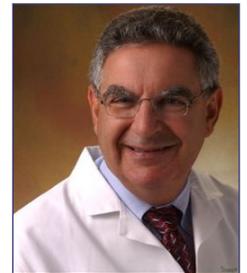
Albert Einstein Medical Center's radiology department formerly used handwritten forms to report anomalies and radiologic technologist quality improvement (QI). When an anomaly (an error during image production) was discovered, the radiological technologist, supervisor, or radiologist hand wrote the report. After submitting the anomaly, the document was forwarded to the department administrator for evaluation and corrective action.

Scott McMoran, Senior Radiology Systems Analyst, guided the implementation of the web-based peerVue quality and communications solution. peerVue includes four "out of the box" best practices, all fully integrated in PACS. McMoran says, "We installed peerVue at all three of our sites. After we began using several of the solution spaces, we learned the power of peerVue's flexibility to create new 'spaces.' Even though I'm not a programmer, the intuitive interface in peerVue allows me to develop and automate new communications workflows."

*Dr. Matalon comments, "peerVue allows us to do much more with much less work. As a result, we've been able to build a culture of quality proven by the 20% annual reduction in anomalies each of the last two years."*

McMoran initially created a Quality Improvement (QI) Committee space that closed the loop on peerVue's ACR-compliant automated peer review. The QI Committee "space" transmits all Class 3 and 4 reviews to the QI Committee worklist. Whether the QI committee concurs or not with the review, peerVue automatically populates the worklist of both the reviewer and reviewee to append and re-enter peer reviews accordingly. McMoran says, "This solution provided a full closed loop workflow to our peer review system."

Using the Technologist QI space in peerVue, the radiologists report feedback on technologist performance including both positive and corrective actions. Dr. Terence Matalon, Chairman, Department of Radiology, says, "We learned the custom capabilities of peerVue and have developed multiple 'spaces' that provide us with tremendous value. Because peerVue is web-based, it allowed our radiologists to provide immediate feedback with just one or two clicks. Automating the technologist QI workflow lowered the threshold for our radiologists to initiate action. In short, peerVue made it easy for our radiologists to communicate." peerVue automatically routes every technologist QI entry to the supervisor's worklist. The supervisor then enters feedback directly into peerVue."



Terence Matalon, MD,  
Chairman, Department  
of Radiology

With demonstrated success in the initial solution spaces, McMoran developed the anomaly reporting "space" in peerVue. Now, the technologist, supervisor, or radiologist clicks to the anomaly "space" directly in PACS to report the anomaly. peerVue transmits the anomaly to the system administrator who reviews the case, identifies any corrective action, and resolves the case. McMoran produces a monthly report to the QI committee that notes the number of anomalies by modality, percent of anomalies by modality, etc.

