Parkland Case Study

Automating Resident Over Read Workflow: Creating Real-Time Curriculum Feedback

Site & Department Background

Parkland Hospital

- 814-bed academic county hospital located in Dallas, TX
- Affiliation - University of Texas Southwestern Medical Center
- Provides indigent care
- Level I Trauma Center

The Radiology Department

- Approximately 180 radiologists: 100 faculty, about 60 residents, and 20 radiology fellows
- Over 100 radiographic technologists
- Provides 24/7 coverage
- Radiology residents perform all preliminary reads in the Emergency Department (ED)
- Performs 400,000 exams per year.

Automating Other Workflows with peerVue

- Peer Review – To satisfy ACR Requirements
- Technologist Quality Improvement (Tech QI) - Enables radiologists to give feedback on areas including collimation, positioning, imaging, demographic errors, etc.
- Plans to implement Utilization Management – Allows management to evaluate appropriateness, medical need, and efficiency of healthcare services delivered by the radiology department.

Manual Workflows

Staff data analysts were overwhelmed with the manual data gathering and reporting workflows necessary to review the 50-60 residents in the Radiology Department. Resident exams accounted for nearly 10% of the annual total, or about 3,000 per month and included plain films, MRI, CT, ultrasound, and nuclear medicine.

The sub-specialist in the relevant field conducted each over read and graded it. The data analyst then entered the grades and comments into a spreadsheet, a time-consuming task. In addition, data analysts were tasked with preparing peer review and technologist quality improvement reports.

peerVue Streamlines Parkland's Resident Review Process

The department obtained the peerVue solution with the objective of streamlining the resident over read workflow. peerVue automates key quality and communications challenges "out of the box" using best practice "Solution Space" configurations. To create their custom workflow, the staff started with peerVue's solution space for managing Emergency Department discrepancies (the ED Over Read space). With just a minor adaptation, the staff easily edited the scoring system in the standard ED over read space from a 4-point scoring system to a 5-point resident over read scoring system.

The new "Resident Over Read Solution Space" includes the following scoring options: 1 = Superb Job, 2 = All correct, 2T = Teaching point only, 3 = Minor disagreement, and 4 = Major disagreement. To conduct an over read, the sub-specialist simply clicks to open the peerVue Resident Over Read space directly within PACS. After reviewing the exam, the radiologist clicks on the appropriate checkbox to enter a score and adds any comments.

The peerVue database captures the data and makes it available for easy reporting. After logging into PACS, an individual resident can click to "My Performance" in peerVue to review the scores and comments from the reviewing radiologist.

Resident Over Read Data Guides Adaptive Learning

According to Julie Champine, M.D., Chief of Radiology for Parkland Hospital and also Professor of Radiology at UT Southwestern Medical Center, the new resident review solution empowers and informs the resident training curriculum.

Dr. Champine said, "With resident reports from peerVue, I can adjust lecture and training schedules to address both group and individual requirements. It may also result in

Julie Champine, MD, Chief of Radiology

"At any time, I can enter peerVue and see how the resident cohort is performing, as a group and individually. I monitor trends and note outliers. Since we launched the system in the fall of 2009, we've conducted more than 16,000 resident reviews."

focused lectures to reinforce the resident cohort's training." Dr. Champine also likes the unlimited flexibility of peerVue and plans to create another solution "space" to address Utilization Management.

peerVue

Improving Quality & Communication in Healthcare