Implementing A Technologist Peer Review Program: Methods and Lessons Learned

Authors: Jean Nash, Ravi Menezes, Paul Cornacchione, Harinder Grewal, Tanya Spiegelberg
Joint Department of Medical Imaging
Toronto, Canada
University Health Network | Sinai Health Systems | Women’s College Hospital

Background & Objectives:

Objectives:
• To reduce variability in image quality
• Create a formalized quality assurance program for technologists
• Promote a culture of reflective practice reinforced through Quality Rounds

Materials & Methods:

Program Design:
• Standard quality improvement project principles were applied to establish governance, roles and workflow, education, policy development, training and communication
• Collaborative interprofessional governance structure was set up to guide decision making

Program Roles and Workflows (Figure 2):
Technologists:
• Perform one peer review per working day with a workload of less than 5 minutes
• Acknowledgement of part time, after hours and extended shift workers

Technologist Quality Leads:
• Serve as administrators in the peer review process for their respective sites
• Point of escalation for cases requiring immediate follow up
• Identify cases for review at quality rounds
• Report to departmental Quality and Safety Committee

Education and Quality Rounds:
• Pivotal to success of program allowing for peer to peer knowledge dissemination
• Quarterly meeting of technologists to present identified educational themes
• Recorded to provide access to after hours and casual/part time staff
• Student technologists encouraged to participate to share in learning

Policy Development:
• A departmental policy was scripted to establish expectations for practice
• Duties and accountabilities for all participants and leadership clearly outlined

Training and Communications for Launch:
• Key stakeholders included departmental committees with focus on academic practice, Quality and Safety committee and modality leadership
• Town hall meetings served as info sessions on the program and training to use software were held just prior to the launch with executive support
• Formal training session held for Quality Leads to orientate them to software and understand core responsibilities
• Quality Leads supported the post launch monitoring serving as mechanism for staff to report issues impacting workflow and quality of care

Results:

16,000+ cases have been reviewed to date since launch April 1, 2016

Table 1: Program Participation

**Note:** IT tool malfunction in September 2016 led to technologists not being assigned cases for review.

Key Lessons Learned From Implementation:
• Importance of enthusiastic clinical champions
• Significance of senior leadership support
• Importance of communication and post launch follow up

Sustainability Challenges:
• Sustaining engagement amongst staff
• High staff turnover in General Radiography resulting in lower participation
• Need to embed training on Peer Review tool within onboarding process identified
• Maintenance of rules for large group of staff proved time consuming for Quality Leads

Conclusions:
• Technologist peer review program established to address variable quality of general radiography x-rays produced in multisite department
• Quality rounds allows for ongoing learning, culture of quality improvement, transparency and accountability
• Sustainability of program requires continued clinical champion support and ongoing engagement of staff
• Planned next steps for the peer review program:
  o Sharing lessons learned from the general radiography pilot program with other sites
  o Expansion to other imaging modalities
  o Creating set of image critique parameters