

Background & Objectives

Results

Problem Statement:

- Variable quality of general radiography x-rays produced
- Differences in knowledge base and experience of technologists
- Possibility for additional radiation exposure from repeated imaging

Accepted Solution:

- Establishment of peer review program over 8 months in a multisite department with 80+ rotating general radiography technologists
- Non-punitive education based peer to peer program to monitor image quality
- Coral Review® software enabled
 - Random assignment of images
 - Anonymity of performing technologists and reviewer comments

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

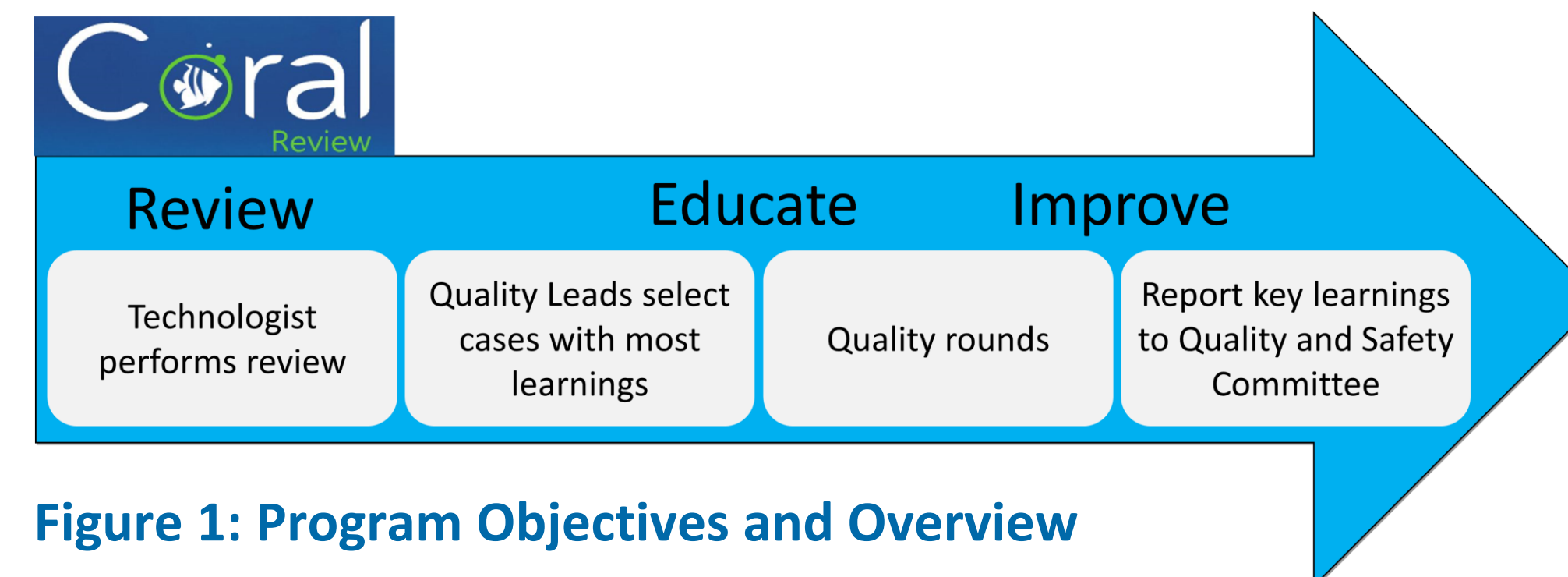
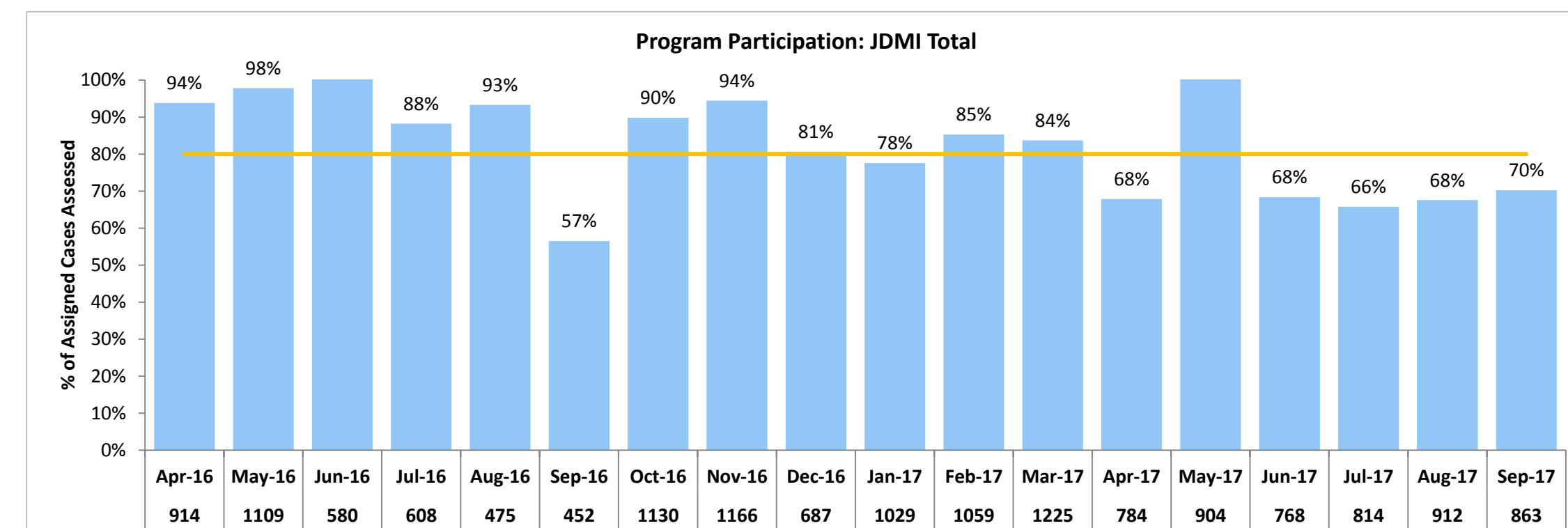


Figure 1: Program Objectives and Overview

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

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

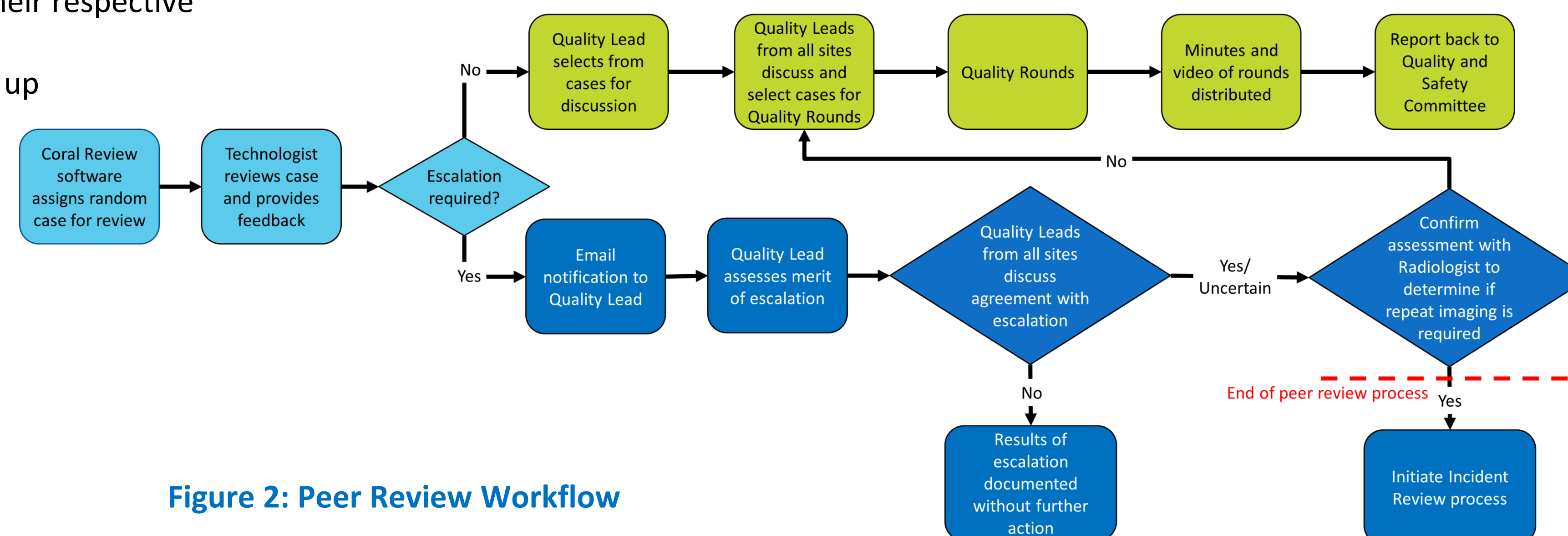


Figure 2: Peer Review Workflow

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:
 - Sharing lessons learned from the general radiography pilot program with other sites
 - Expansion to other imaging modalities
 - Creating set of image critique parameters