ROYAL COLLEGE OF PHYSICIANS OF IRELAND

National Radiology Quality Improvement Programme

Key Quality Indicators Explained

National Specialty Quality Improvement Programmes

ROYAL COLLEGE OF PHYSICIANS OF IRELAND

Details on the Key Quality Indicators

Peer Review

A peer review takes place when radiologist seeks a second opinion from another radiologist. They may do this if they have any doubt regarding a diagnosis they are reporting on. This will be carried out before they complete their report on the patient's case. The programme reports on three types of peer review and asks radiologists to record when they have completed one of these reviews in the local information systems.

Prospective Review: This is when the radiologist asks another radiologist for their opinion when they are reviewing a patient's image. This is before they complete the report for that patient's diagnosis.

Retrospective Review: Sometimes when a radiologist is reviewing a patient's image, it can be helpful to look back at previous images in order to do a comparison.

Assigned Review: This is a quality improvement activity, where each radiologist is asked, once a week to review five reports from the last seven days. These reports are randomly chosen by the software and can be a useful way for radiologists to work together checking each other's work.

Outcomes: In this report, this term is used to describe one of three results recorded by a radiologist after carrying out either a retrospective or assigned peer review.

1. Agreement with the interpretation: This means that the radiologist now looking at the patient's images, agrees with the diagnosis of the first radiologist.

2. Minor discrepancy – no further action required: This means that there is a slight difference of opinion or interpretation on the patient's images, however the radiologist is happy that this will not impact the diagnosis the patient is given.

3. Consider for discussion at the RQI meeting: When a patient's case is considered a good learning opportunity for other radiologists it should be brought to this meeting. This is after the patient's care has been managed by the radiologist as a priority.

Radiology Alerts

When a radiologist is reporting on a patient's image, they may discover information that should be shared as a priority with the patient's doctor. A radiology alert is raised in the radiology system, which will explain how urgent it is for the result to be shared.

Radiology alerts are divided into three categories based on the urgency of the results. Each type of alert has a specific timeframe for the radiologist to communicate it to the patient's doctor or one of their team and for them to indicate that they have received the information.

A **critical alert** means that the radiologist has discovered information in the patient's images regarding their diagnosis that should be shared with the patient's doctor within 60 minutes.

An **urgent alert** is when the radiologist has reviewed the patient's images and has discovered information relating to the patient's diagnosis that should be shared with the referring doctor within 24 hours.

An **unexpected-clinically significant alert** means that the radiologist has discovered information in relation to the patient's diagnosis that was not expected, based on the referring doctors request for the scan, and should be shared with that referring doctor within six days.

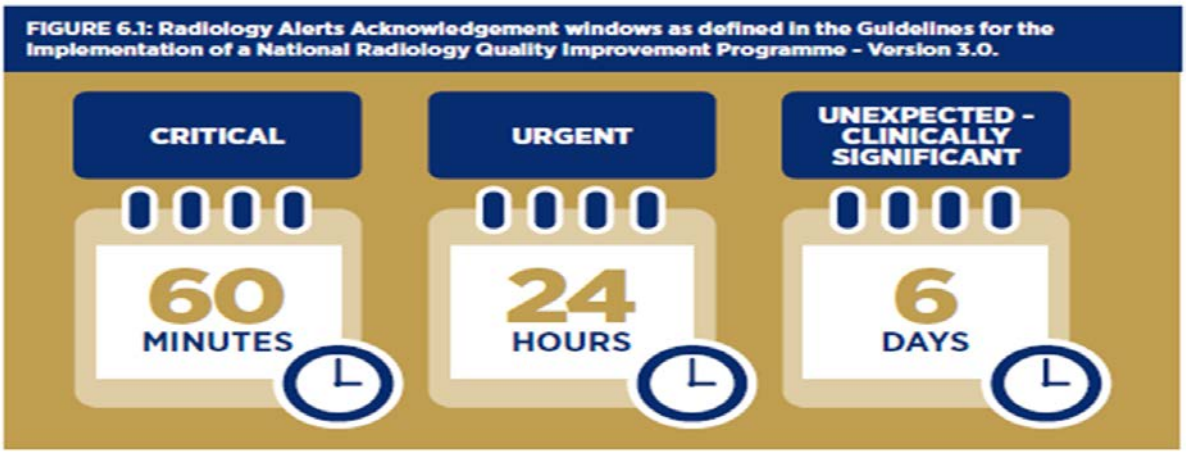

FIGURE 6.1: Radiology Alerts Acknowledgement windows as defined in the Guidelines for the Implementation of a National Radiology Quality Improvement Programme - Version 3.0.

Radiology Quality Improvement (RQI) Meetings

These meetings take place in each radiology department on a routine basis. The purpose of these meetings is to make sure radiologists have an opportunity to share information from recent cases, and to review and discuss patient cases as a group.

The programme collects information on the percentage of radiologists that attend these meetings, how many cases were reviewed there on a national level, the number of cases that were sent for discussion to the RQI meetings as a result of peer review or a multidisciplinary meeting or other reason and lastly the number of cases that were discussed at the meetings and assigned a particular outcome after the discussion.

Turnaround Time (TAT)

The National Radiology Quality Improvement (NRQI) Programme collects information on the number of patient's images for CT, MRI, Ultrasound and X-ray that were reported on, by a radiologist within certain timeframes. These timeframes refer to the time taken from when the images are available for the radiologist to review, until the time the report is finally complete and available to be shared with the doctor who made the referral for the patient.

TAT is looked at in terms of the four referral sources and four imaging types (CT, MRI, Ultrasound and X-ray).

The timeframes that reports should be completed in are outlined below, in terms of the type of image that took place and from where the referral was made for the patient. In practice, results are often made available to the referring doctor earlier than the final written report, especially in urgent emergency department and inpatient scans. This is not recorded in the data presented here.

Referral Source	CT	MRI	US	X-ray
Emergency Department	12 hours			48 hours
Inpatient	24 hours			
Outpatient	10 days			
GP	10 days			

The NRQI Programme has set a recommended target for TAT of 90% reports to be completed within the time frames outlined above for the different referral sources and types of imaging.