2024

National Radiology Quality Improvement (NRQI) Programme

SUMMARY REPORT

What is the NRQI Programme?

The NRQI Programme was established in 2009 in response to cancer misdiagnosis reports to enhance quality improvements in local hospitals and nationally within radiology.

Reporting Timeline

1st January - 31st December **2024**

Key Quality Indicators

CLICK HERE FOR DETAILED DESCRIPTIONS AND TARGETS

- Peer Reviews
- Radiology Alerts
- Radiology Quality Improvement (RQI) Meetings
- Report Turnaround Time (TAT)

48/51 Public and Voluntary Hospitals participated

68 Clinicians Involved in the NRQI Programme

How is information collected and used by the Programme?

CLICK HERE FOR DETAILS

Words and Phrases to Help You Understand Report Findings

Radiologist	Radiology
Emergency Department	GP Referral
Inpatient Referral	Outpatient Referral
Outcomes (Peer Review)	Key Quality Indicator
Target	Recommendation

FACULTY of RADIOLOGISTS and RADIATION ONCOLOGISTS

RCSI

HSE

ROYAL COLLEGE OF PHYSICIANS OF IRELAND

National Radiology
Quality Improvement Programme
SUMMARY REPORT 2024

Report Turnaround Time (TAT)

Referral Source	CT	MRI	US	XR
Emergency Department	12 hours			48 hours
Inpatient	24 hours			72 hours
Outpatient	10 days			
General Practitioner	10 days			

Among radiology departments, some smaller sites will upload their data under larger radiology sites. This is why you will see 41 accounts in the report findings, of these, 25 out of 41 NQAIS sites met or exceeded the recommended target.

GP REFERRALS
The national average of computed tomography (CT), magnetic resonance imaging (MRI), ultrasound (US) and X-ray cases met or exceeded their TAT targets in 2024.

INPATIENT REFERRALS
TAT for CT, MRI, and US exceeded the recommended target of 90% of reports authorised within 24 hours.

X-ray cases saw TAT improvement of 3.6% from 2023 but remained below target.

EMERGENCY DEPARTMENT
The national aggregate TAT for both CT and US remained above target in 2024. Like last year, MRI and X-ray missed targets but rose by 1.7% and 5.9% respectively.

OUTPATIENTS REFERRALS
The national average of CT, MRI and US cases met their targets in 2024.

While remaining below target, the percentage of X-ray reports meeting TAT target increased by 2.5%.

WHAT DOES THIS MEAN FOR PATIENTS?

Delays in report turnaround times may lead to longer waiting times for diagnosis or results for patients. The growing demands associated with increasing case complexity and volume, coupled with ongoing limitations in staffing and resources, continue to exert significant pressure on radiology departments.

Peer Review

Peer review was recorded for less than 1% of all completed exams in 2024. The below percentages are representative of this subset.

PROSPECTIVE PEER REVIEW
MRI cases accounted for 63.8% of all recorded prospective reviews in 2024. This was the highest among all modalities, decreasing 15.2% from 2023.

The percentage of these reviews carried out on CT cases was 24.7%, an increase from 15.2% in 2023.

The proportion of X-Ray and nuclear medicine (NM) reviews noted an increase in 2024 at 3.7% and 7% respectively.

RETROSPECTIVE PEER REVIEW
The largest share of these reviews was for X-Ray, at 48.8% of the total, a 10.5% increase from 2023. In contrast, CT accounted for 39.8% of reviewed cases, a 5.6% decrease from the previous year. This was followed by MRI and US, recorded at 7.2% and 3.7% respectively.

ASSIGNED PEER REVIEW
In 2024, 92.6% of cases reviewed through the assigned peer review process agreed with the initial diagnosis, representing a 2.5% decrease from 2023.

WHAT DOES THIS MEAN FOR PATIENTS?

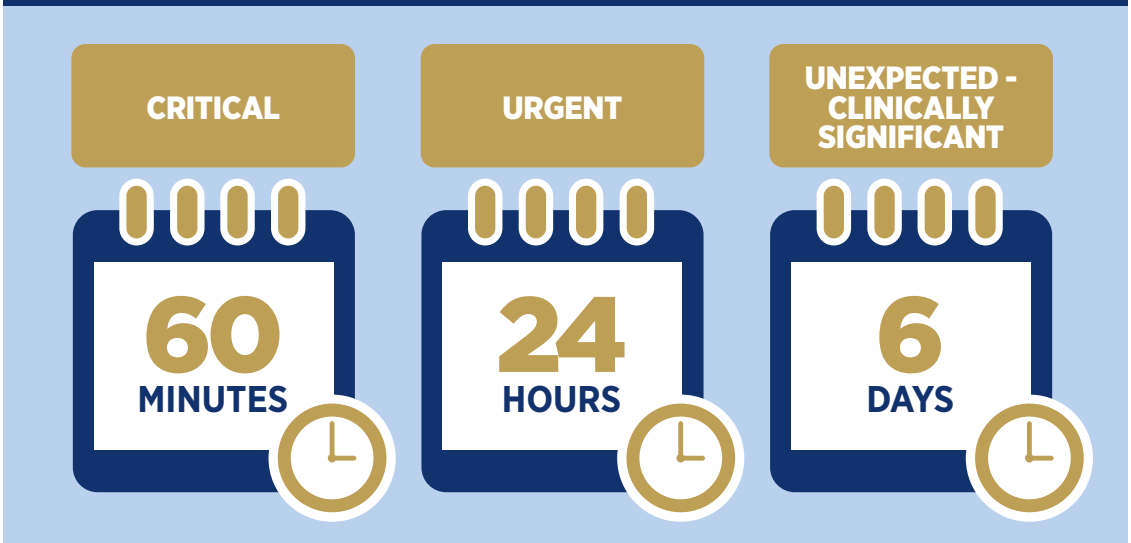
The NRQI Programme promotes the process of peer review to support safe and high-quality patient care. Radiologists are encouraged to look for second opinions, which ensures greater accuracy in the reporting of patient cases.

National Radiology
Quality Improvement Programme
SUMMARY REPORT 2024

Radiology Alerts

Participating hospitals use multiple systems, and some radiology alerts may not be recorded in a format compatible with the programme's data collection. As a result, the findings presented in this report do not present all alerts raised in hospitals.

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



The data show the number of alerts recorded in 2024 for critical and urgent findings remain comparable to 2023. The highest proportion of alerts classified as critical was activated against ED cases at 1.4%, while externally referred cases represented the highest proportion of urgent alerts raised at 8.1%.

The highest proportion of radiology alerts recorded was for the unexpected-clinically significant category, increasing by 15.6% from 2023. Of those alerts, outpatient referrals accounted for the highest percentage at 96.7%.

WHAT DOES THIS MEAN FOR PATIENTS?

When a radiologist finds an urgent or critical finding on a patient's images, their priority is to inform the healthcare professional who referred them for the diagnostic imaging. This is most often done verbally as it is the quickest and safest way to share this important information. The programme is aware that a radiologist's first priority will not be to record the action on their computer but rather to get the information out as quickly as possible. As a result, timely patient care is prioritised over digital records in the local information system.

Radiology Quality Improvement (RQI) Meetings

Not all departments are recording attendance and therefore accurate measurement and reporting on this key quality indicator is difficult. This year's summary data for RQI meetings was recorded by 13 NQAIS sites, which was two less than in 2023.

WHAT DOES THIS MEAN FOR PATIENTS?

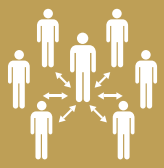
RQI meetings are a crucial component in driving quality improvement within radiology departments. This shared learning and expertise, contributes towards both enhancing the quality and safety of patient care and professional development.

National Radiology
Quality Improvement Programme
SUMMARY REPORT 2024

KEY RECOMMENDATIONS

→ The NRQI Programme continues to recommend that priority is given to appropriate staffing and equipment requirements, to meet the increasing demand in radiology departments. The responsibility for implementing this recommendation lies with the Regional Executive Officers who should provide the necessary support to the accountable management in participating public and voluntary hospitals.

→ The NRQI Programme continues to recommend that radiologists record the completion of prospective, retrospective and assigned peer reviews in their local information systems. The positive impact of this essential activity on patient care, as well as time required to perform and record it, should be recognised by accountable management in participating public and voluntary hospitals. The responsibility for implementing this recommendation lies with the Regional Executive Officers.



→ The NRQI Programme recommends that the review of the process used for recording radiology alerts data should be continued with a focus on identifying new opportunities to enhance data capture methods. Improvement of data quality for this key quality indicator will allow for a more meaningful metric, benefiting patient care and decision making within the service. The responsibility for this recommendation lies with the NRQI working group and the programme management.

MESSAGE FROM OUR PPI REPRESENTATIVE

Ashling O'Leary | **Patient and Public interest Representative, NSQI Steering Committee Vice Chair, Patients for Patient Safety Ireland**

As a PPI representative in this team, I have seen the importance of clinical audit in increasing awareness and understanding on how radiology departments work. It is not just collecting data, but to show how a radiology department works with a defined set of standards, and measures current patient care against expected criteria. In this way, we can see what is working, and what needs to be reviewed to improve patient care. This ensures results are delivered back to referring healthcare professionals in an appropriate time frame. It can also help provide patients with relevant information and confidence when receiving results, and how all radiologists are kept to a same standard of care for reporting images. Thus, supporting best practice criteria, and ensuring that patients are receiving the best quality of care.

Ashling O'Leary

Royal College of Physicians of Ireland
Frederick House, South Frederick St.,
Dublin 2, D02 X266.

Phone: +353 1 863 9700
Email: SQIProgrammes@rcpi.ie
www.rcpi.ie

National Radiology Quality Improvement Programme
6th National Data Report

CLICK HERE TO VIEW