Notifications from diagnostic imaging

- 366 notifications received (329 notifications received in 2020/21)

- represents 60% of all notifications received

- 89% of notifications were from NHS acute trusts

- the highest proportion of notifications from diagnostic imaging (63%) was from CT (computed tomography).

Figure 2: Notifications from diagnostic imaging received by sub-modality, 1 April 2021 to 31 March 2022

Sub-modality	Number of notifications	Percentage of notifications
CT	229	63%
Plain film X-ray	72	20%
Interventional radiology or cardiology	24	7%
Mammography	15	4%

Sub-modality	Number of notifications	Percentage of notifications
General fluoroscopy	10	3%
Dental (including CBCT)	7	2%
Theatre or mobile fluoroscopy	5	1%
DXA	4	1%
Total	**366**	**100%**

Source: CQC SAUE notifications 2021/22

Types of error

The most common type of error has continued to be where a patient received an examination meant for another patient (27% of all diagnostic imaging notifications), although this has decreased from 36% in 2020/21. We received 75 notifications where the wrong patient had been referred for diagnostic imaging examinations, and 24 where the operator failed to correctly identify a patient. Figure 3 shows the number of detailed errors where tier 1 is the causative factor, with tiers 2 and 3 the contributory factors.

In a change from last year, operator errors accounted for the highest origin of incidents reported to us (40%), rather than referrer errors. We have seen a marked increase in the number of incidents attributed to pre-exposure checks (77 up from 38 last year).

Figure 3: Notifications from diagnostic imaging by detailed error type, 1 April 2021 to 31 March 2022

Tier 1: Operator (145 notifications)

Tier 2: Pre-exposure checks (77 notifications)

Tier 3:

- Wrong patient position or set-up or protocol (44 notifications)
- Wrong use of equipment (33 notifications)

Tier 2: Patient checks (28 notifications)

Tier 3:

- Patient ID error (24 notifications)
- Failure to check pregnancy or breastfeeding (4 notifications)

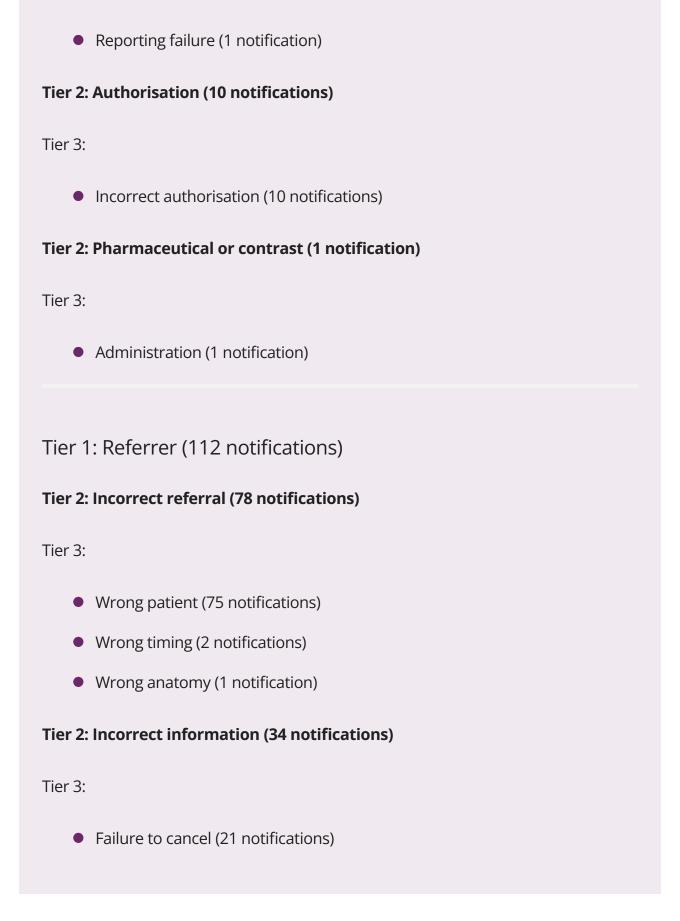**Tier 2: Clinical history (16 notifications)**

Tier 3:

- Failure to check history or details (16 notifications)

Tier 2: Post examination (13 notifications)

Tier 3:

- Failure to upload images (12 notifications)

- Reporting failure (1 notification)

Tier 2: Authorisation (10 notifications)

Tier 3:

- Incorrect authorisation (10 notifications)

Tier 2: Pharmaceutical or contrast (1 notification)

Tier 3:

- Administration (1 notification)

Tier 1: Referrer (112 notifications)

Tier 2: Incorrect referral (78 notifications)

Tier 3:

- Wrong patient (75 notifications)
- Wrong timing (2 notifications)
- Wrong anatomy (1 notification)

Tier 2: Incorrect information (34 notifications)

Tier 3:

- Failure to cancel (21 notifications)

- Duplicate or no check of previous imaging (8 notifications)

- Inaccurate clinical information (5 notifications)

Tier 1: Equipment (58 notifications)

Tier 2: Equipment related (58 notifications)

Tier 3:

- Hardware (30 notifications)

- Software (18 notifications)

- IT failure (8 notifications)

- Ancillary failure (2 notifications)

Tier 1: Practitioner (4 notifications)

Tier 2: Protocol (3 notifications)

Tier 3:

- Illegible or unclear protocol (3 notifications)

Tier 2: Justification (1 notification)

Tier 3:

- Incorrect justification (1 notification)

Tier 1: Employer (2 notifications)

Tier 2: Employer's responsibility (2 notifications)

Tier 3:

- Inadequate procedures (2 notifications)

Tier 1: Other (45 notifications)

Tier 2: DRL or Deterministic (15 notifications)

Tier 3:

- Deterministic effects (10 notifications)
- 10x DRL (5 notifications)

Tier 2: Patient related (10 notifications)

Tier 3:

- Unknown pregnancy (9 notifications)
- Patient issue (1 notification)

Tier 2: Made in error or withdrawn (7 notifications)

Tier 3:

- Duplicate notification or other error (7 notifications)

Tier 2: Other (6 notifications)

Tier 3:

- Not listed above (6 notifications)

Tier 2: Administrative staff error (5 notifications)

Tier 3:

- RIS input error (3 notifications)
- Other admin error (2 notifications)

Tier 2: Test results (2 notifications)

Tier 3:

- Request based on incorrect results (2 notifications)

Total: 366 notifications

Source: CQC SAUE notifications, 2021/22

Examples of initiatives to address increases in errors

Re-energising the PAUSED poster

As radiology services returned to normal working following a COVID spike, the radiology and physics department in one employer became aware of an increasing proportion of referrer errors for the wrong patient. These were mostly detected within radiology as 'near misses'.

There was a sense within the department that the existing PAUSED posters to remind staff about pause and check had become 'invisible' to colleagues who were meant to be aware of them.

The employer involved their own communications department to launch a campaign called 'Getting it Right'. This was to re-energise the awareness of both referring clinicians and colleagues in radiology about the importance of checking. As part of this, they updated the existing PAUSED poster and produced a new poster that embraced the principles of the existing work, while focusing on 8 key essentials in one poster aimed at both groups of staff.

The posters were launched alongside what was initially called a 'perfect IR(ME)R week' with the support from the trust's Medical Director who provided a YouTube video message to all staff to support the message. The trust also used this new poster as a screen saver for referrers using the trust's IT systems.

Dedicated PAUSED posters for head CT

Two doctors at another employer carried out a clinical audit that looked at requests for CT head scans against NICE guidelines. The evidence from the audit suggested that some patients received scans that may not have met guidelines, and some patients did not get a CT scan as there was not enough clinical information on the requests.

In response, the employer created a checklist for referrers similar to the PAUSED checks developed by the Society of Radiographers. These were tailored to the service specifically for CT head scans using criteria from NICE.