IR(ME)R annual report 2022/23

CQC's enforcement of the Ionising Radiation (Medical Exposure) Regulations 2017

Notifications received in 2022/23

From 1 April 2022 to 31 March 2023, we received 727 statutory notifications of significant accidental and unintended exposures (SAUE notifications) across all modalities. This compares with 611 received in 2021/22, an increase of 19%.

- 380 (52%) were from diagnostic imaging departments
- 77 (11%) were from nuclear medicine departments
- 270 (37%) were from radiotherapy departments

This is broadly comparable to 2021/22, where 60% of notifications received and investigated were from diagnostic imaging departments, 10% from nuclear medicine departments and 30% from Radiotherapy departments.

Diagnostic imaging notifications: Of the 380 notifications received, the most common type of error still involved carrying out an examination on the wrong patient (25% of all diagnostic imaging notifications). This reflects a similar trend to last year.

Of these notifications, 60 of the 380 (16%) received were where the wrong patient had been referred for a diagnostic examination. A further 35 (9%) notifications were where the wrong patient was exposed because of an operator identification (ID) error. Overall, 13% of the total number of notifications received (95/727) were for the wrong patient being imaged in diagnostic imaging.

As was the case last year, operator errors accounted for the highest origin of incidents reported to us (45%).

Within diagnostic imaging, the majority of notifications were from computed tomography (CT) (62%) followed by plain film x-ray (23%). This is similar to the previous year.

Nuclear medicine notifications: The majority of notifications related to PET-CT and PET-MR imaging (53%). Operator errors involving preparation and administration are still the primary source of notifications: the number of errors relating to incorrect administration of a radiopharmaceutical doubled from 5 to 10 in 2022/23. There has also been year-on-year increase in notifications relating to hardware failure and referrers failing to cancel requested examinations.

Radiotherapy notifications: There has been an increase in the number of notifications in radiotherapy from the previous year, which reflects that more treatment was being provided. Notifications were almost entirely in planning and verification imaging, which increased from 110 to 146 notifications. These related to a continued increase in the use of short course fractionation regimes, for example five fraction breast treatments, and incorrect patient set-up that resulted in the need for additional imaging, which triggers the notification threshold.

Inspections

In 2022/23, we inspected:

- 14 diagnostic imaging departments
- 6 nuclear medicine services

- 11 radiotherapy departments.

Key trends and concerns

- As in previous years, a key source of errors continued to be when the wrong patient received an examination that was meant for another patient. Inadequate checks about the patient's identity by both the referring clinician and the operator were common causes of errors.
- There was a need to ensure that procedures, protocols and guidance for staff are up-to-date and effective. Internal processes to audit and improve compliance and processes when investigating incidents also needed to improve.
- Many of our regulatory recommendations involved the need to improve the quality and availability of training records for staff.