# Notifications from radiotherapy

- 182 notifications received (135 notifications received in 2020/21)

- represents 30% of all notifications received

- 96% of notifications were from NHS acute trusts

- planning and verification imaging accounted for 60% of all radiotherapy notifications received.

Data from the [National Cancer Registration and Analysis Service relating to the Radiotherapy Dataset](#) showed there were over 134,000 episodes of radiotherapy treatment in England between April 2021 and March 2022, an increase of 8% on the previous year.  **Note:** the completeness of radiotherapy activity data varies by trust, and trusts may submit historical data at a later date. Therefore, it is possible that some data may still be missing and that there may be changes to overall figures as the RTDS is updated over time.

## Figure 6: Notifications from radiotherapy by sub-modality, 1 April 2021 to 31 March 2022

| Sub-modality | Number of notifications | Percentage of notifications |
|---|---|---|
| Planning and verification imaging | 110 | 60% |

| Sub-modality | Number of notifications | Percentage of notifications |
| --- | --- | --- |
| External beam therapy | 67 | 37% |
| Brachytherapy | 5 | 3% |
| **Total** | **182** | **100%** |

## Types of error

There has been a marked increase in the number of notifications in radiotherapy from the previous year. This was almost entirely in planning and verification imaging, which increased from 69 to 110 notifications. This was due to an increase in the use of short course fractionation regimes, for example five fraction breast treatments. When carrying out these regimes, if any additional image is taken because of equipment or procedural failure, it triggers the notification threshold.

## Figure 7: Notifications from radiotherapy by detailed error type, 1 April 2021 to 31 March 2022

Tier 1: Operator (84 notifications)

**Tier 2: Treatment (61 notifications)**

Tier 3:

- Verification protocol error (20 notifications)

- Geographical miss – shift error (11 notifications)

- Geographical miss – verification image online (11 notifications)

- Incorrect immobilisation (9 notifications)

- Geographical miss – no verification image (5 notifications)

- Geographical miss – verification image offline (2 notifications)

- Skin app treatment (2 notifications)

- Total body irradiation or total skin electron therapy (1 notification)

**Tier 2: Planning (13 notifications)**

Tier 3:

- Incorrect data transfer or input (10 notifications)

- Inappropriate plan generated (3 Notifications)

**Tier 2: Pre-treatment (10 notifications)**

Tier 3

- Wrong scan protocol selected (5 notifications)

- Patient positioning error (3 notifications)

- Immobilisation or marking error (2 notifications)

Tier 1: Equipment (58 notifications)

**Tier 2: Equipment related (58 notifications)**

- Hardware (37 notifications)

- Software (18 notifications)

- Ancillary failure (2 notifications)

- IT failure (1 notification)

## Tier 1: Referrer (21 notifications)

**Tier 2: Incorrect referral (17 notifications)**

Tier 3:

- Not in accordance with guidelines (9 notifications)

- Referral premature (4 notifications)

- Wrong treatment protocol, dose or fractionation (4 notifications)

**Tier 2: Incorrect information (4 notifications**

Tier 3:

- Failure to cancel (3 notifications)

- Failure to check relevant history (1 notification)

## Tier 1: Practitioner (9 notifications)

**Tier 2: Justification (9 notifications)**

Tier 3:

- Target volume or outlining error (5 notifications)
- Wrong plan or protocol authorised (3 notifications)
- Failure to cancel (1 notification)

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## Tier 1: Other (10 notifications)

**Tier 2: Made in error or withdrawn (5 notifications)**

Tier 3:

- Below threshold (5 notifications)

**Tier 2: Patient related (3 notifications)**

Tier 3:

- Unknown pregnancy (2 notifications)
- Patient issue (1 notification)

**Tier 2: Administrative staff error (1 notification)**

Tier 3:

- Other admin error (1 notification)

**Tier 2: Other (1 notification)**

Tier 3:

- Not listed (1 notification)

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**Total: 182 notifications**

Source: CQC SAUE notifications, 2021/22