



Welcome to the thirteenth issue of *Safer Radiotherapy*. The aim of the newsletter is to provide a regular update on the analysis by PHE of radiotherapy error (RTE) reports. These anonymised reports are submitted voluntarily to the National Reporting and Learning System (NRLS) of NHS England or directly to PHE, to promote learning and minimise recurrence of these events.

*Safer RT* is designed to disseminate learning from RTEs to professionals in the radiotherapy (RT) community to positively influence local practice and improve patient safety.

Regular features include:

**RTE Data Analysis** – undertaken by PHE, highlighting key messages and trends identified from a three-month period of RTE reports

**Error of the Month** – provides advice on preventing recurring errors in the patient pathway

**Guest Editorials** – are invited from those wishing to contribute to issues surrounding patient safety issues in radiotherapy

**Patient Safety in Radiotherapy Steering Group** – updates on the work of this multidisciplinary group

Any comments and suggestions for inclusion in the newsletter would be gratefully received. They should be sent to [radiotherapy@phe.gov.uk](mailto:radiotherapy@phe.gov.uk).

Thanks to all contributors to this issue. The next issue of *Safer RT* will be published in October 2014.

**Please note that Safer Radiotherapy will now be available at [www.gov.uk/phe](http://www.gov.uk/phe).**

**Helen Best**  
Editor

## Patient Safety in Radiotherapy Steering Group (PSRT)

The UK radiotherapy community continues to demonstrate its commitment to improving patient safety. For the first time we can report 100% of current NHS RT providers from across the UK have contributed to the national voluntary reporting and learning system.

This is entirely consistent with the Department of Health's drive for a more open and honest patient safety culture across the NHS and enacts recommendations from the Francis Report on openness, transparency and candour.

While the NHS is currently internationally recognised as being a leader in patient safety, the achievement of 100% reporting reflects the continued dedication of the RT community to making RT safer still for all patients.

## INSIDE THIS ISSUE

RTE Data Analysis  
March–May 2014

Frequency of Reporting

Error of the Month  
Communication of intent

Guest Editorial  
*Sharing Experience*

*Ethna Glean*

Dates for the Diary

## The Radiotherapy Team is based at PHE CRCE Chilton



## EDITORIAL HEADLINE

### Third Two-year Report on Radiotherapy Errors and Near Misses

The third two-year report, covering December 2011 to November 2013, on data submitted for analysis under the national voluntary reporting and learning scheme will be published by PHE in the autumn. For the first time this report will present data from each part of the UK, reflecting a national approach to reporting and learning from radiotherapy errors.

A total of 7655 RTE reports from UK NHS RT providers are presented. Inclusion of data from across the UK demonstrates consistent themes in the occurrence of these events. The report highlights a decrease in reportable radiation incidents and an increase in non-conformance reports over the past six years. In addition, this report enables benchmarking exercises and facilitates comparison of local analysis with the national picture.

It should be noted that the vast majority of these reports are lower level incidents having little or no significant effect on the planning or delivery of individual patient treatments. Uptake of this initiative by NHS RT providers demonstrates a mature patient safety culture and a continued commitment to improving patient safety.

# RTE Data Analysis: March–May 2014

## Quarterly Analysis

Submissions from 49 NHS UK RT departments contributed to this issue's full data analysis, for 1 March to 31 May 2014, which is available at [www.gov.uk/phe](http://www.gov.uk/phe).

The analysis includes data on primary process coding and severity classification of the RTEs. A breakdown of primary process by classification levels is also included.

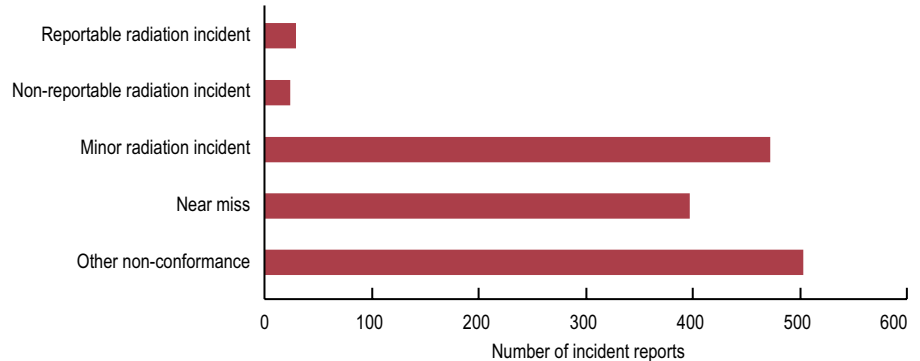
## Classification of RTEs

Of the RTEs reported for the period March–May 2014, 1369 out of 1418 reports (96.5%) were classified as minor radiation incidents, near misses or other non-conformances (see Figure 1). This is consistent with previous analyses. These are lower level incidents which would have no significant effect on the planning or delivery of individual patient treatments. However, over the past four issues there has been a steady increase in the number of minor radiation incidents reported, from 25.3% in Issue 9 to 33.2% in this issue. This may be due to the increase in imaging associated reports.

Reportable radiation incidents (Level 1) made up 27 (1.9%) of all reports. 'On-set imaging production process' comprised 6 of these (22.2%), while 'movements from reference marks' and 'use of on-set imaging' each comprised 4 (14.8%) of all Level 1 RTEs reported for this time period. Non-reportable radiation incident reports (Level 2) made up 22 of all reports (1.6%).

Of the 471 minor radiation incidents (Level 3) reported, 124 (26.3%) of this subset were related to the 'use of on-set imaging', making it the most frequently occurring code in this classification. The second most frequently occurring incident at 57 (12.1%) was 'on-set imaging production process'. On-treatment imaging is discussed further in Issue 12 of *Safer RT*.

**Figure 1 Classification breakdown of RTE reports using the TSRT9 trigger code, March–May 2014 (1418 reports)**



The most commonly occurring RTE process code in the near-miss (Level 4) classification was 'use of on-set imaging', with 30 reports (7.6%).

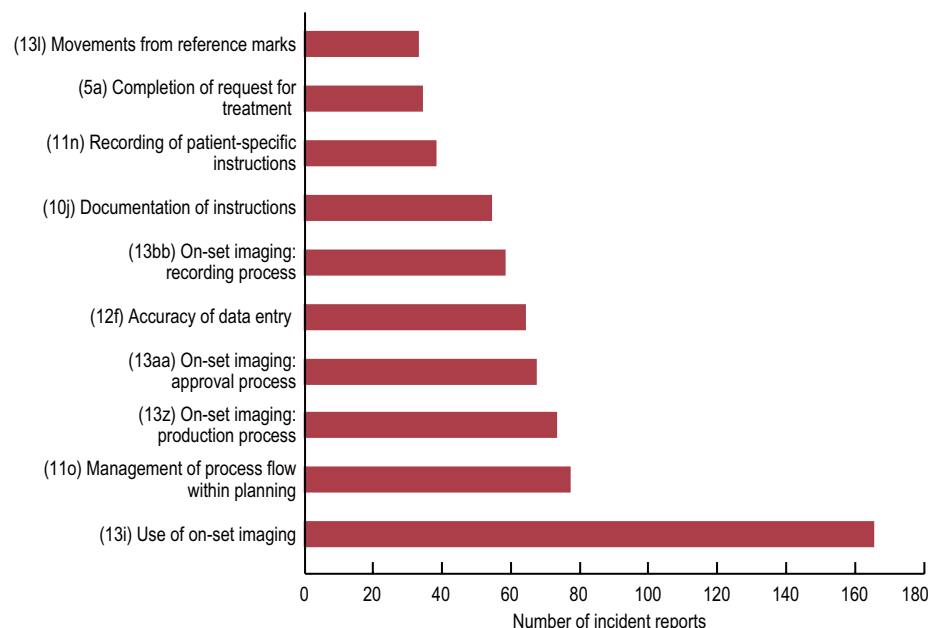
Within the non-conformance (Level 5) classification 'management of process flow within planning' had 76 reports (15.2%), making it the most frequently occurring RTE in this classification.

## Primary Process Code

The main themes (points in the patient pathway where the majority of reported

RTEs occurred) for this dataset are shown in Figure 2. Imaging process codes contributed to 363 of the reports in the main themes (54.8%), making up 25.5% of all reports for this reporting period. Imaging associated RTEs are discussed in the panel in Issue 12 of *Safer RT*. Of note, 'completion of request for treatment' contributed to 34 of the reports in the main themes (5.1%) – this is the first time this process code has been represented in the main themes and is discussed further in the *Error of the Month*.

**Figure 2 RTE main themes (663 out of 1418 reports), for March–May 2014 (with process code indicated)**



The data analysed is submitted by the RT community. If you have any suggestions on how the process coding can be refined, please email the Radiotherapy Team at [radiotherapy@phe.gov.uk](mailto:radiotherapy@phe.gov.uk).

## Frequency of Reporting

This reporting period marks the first time we can report that 100% of NHS providers across the UK have contributed to the national reporting and learning system. Since December 2011 the number of RT departments reporting through this voluntary system has gradually increased (see Figure 1). This reflects the strong reporting culture that has developed in the RT community over the last decade.

To ensure timely feedback and suitable national learning, errors should be reported on a regular basis. Although all 59 departments have responded to this patient safety initiative, there is variation in the frequency of reporting. Figure 2 shows that the number of departments reporting in each month ranged from 34 in December 2013 up to 43 in April 2014.

There is also wide variance between the date of an incident and the date on which it is submitted to the reporting scheme. This time lag ranges from a minimum of 1 day to a maximum of 296 days, with a mean of 58 days.

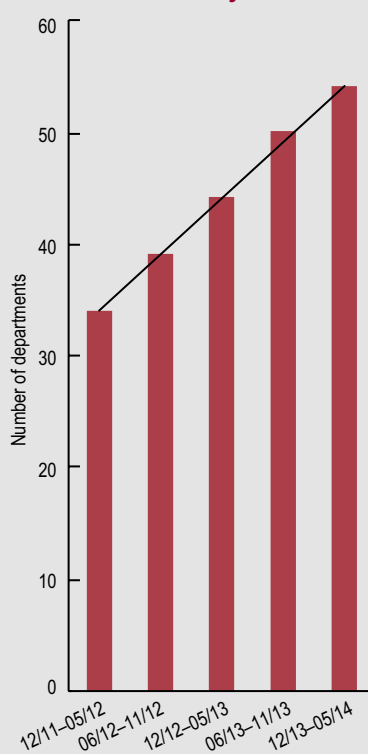
To ensure that timely learning from RTEs continues to be shared nationally, please make sure your RTEs are TSRT9 coded and submitted as soon as possible. If any departments require support please contact the Radiotherapy Team at [radiotherapy@phe.gov.uk](mailto:radiotherapy@phe.gov.uk).

The third reporting and learning survey was launched by PHE with the principal aim of improving understanding of local reporting culture and identifying any potential barriers to frequent reporting.

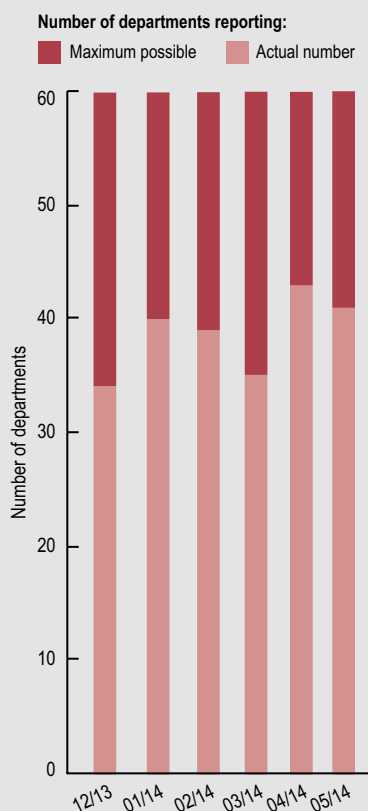
**We would like to thank everyone who completed the survey, the results of which will be used to improve both the current reporting system and learning opportunities from the national analysis.**

In addition to the survey, contributions are now invited for the development of learning from RTE reports. The PSRT is working on the establishment of a causative factor and detection method taxonomy to be used in conjunction with the TSRT process coding and classification system. Comments and suggestions from you as users of the reporting and learning system are welcomed.

**Figure 1** Number of departments reporting in each 6-month period, December 2011 – May 2014



**Figure 2** Number of departments reporting each month as a proportion of the total number of departments, December 2013 – May 2014



## ERROR OF THE MONTH

### Communication of intent

#### TSRT Process Code: Completion of request for treatment (5a)

This code accounted for 34 (2.4%) RTEs reported from March–May 2014. This was one of the top ten most commonly occurring RTEs. Of note, only one of these errors was a reportable incident, 32 (94.1%) were classified as near misses or non-conformances.

This RTE is associated with the completion of the request for treatment. The main themes highlighted within these reports included the use of inappropriate referral protocols and incorrect completion of forms, including laterality and areas of omission, including boost details and signatures.

#### How can we minimise the risk of this RTE occurring?

##### Points to consider

- 1 Have in place recommendations concerning referral criteria. They should be clearly documented in site procedures and protocols
- 2 Clearly identify individuals entitled to act as a referrer and practitioner [IR(ME)R Schedule 1(b)] on patient referral forms
- 3 Ensure that referrers provide sufficient clinical data so that the exposure can be justified
- 4 Ensure all requests for treatment are justified and authorised by an appropriately entitled individual
- 5 Ensure appropriate site protocols are in place for all routine treatments. They should be clearly defined and regularly reviewed
- 6 Review requests ensuring safety-critical elements are mandatory and checked against primary source data
- 7 Ensure all mandatory fields are completed, including phase two treatments, boosts and appropriate signatures are in place before initiating an exposure
- 8 Monitor locally reported RTEs to identify further preventive action
- 9 Audit staff compliance with written procedures and protocols



## GUEST EDITORIAL

# Sharing Experience

**Ethna Glean MBA MSc**

**UKAS Accreditation Manager  
Imaging Services Accreditation Scheme and  
Improving Quality in Physiological Services**

Radiotherapy is perceived by many patients as 'risky' and to be 'feared'. Health professionals, managers and commissioners of these services may wish to consider how accreditation of relevant activities such as dosimetry planning, radiation dose measurements and equipment calibration could support radiotherapy services to demonstrate that risks are being managed for over 100,000 patients who receive and benefit annually from this major cancer treatment.

A key objective for radiotherapy providers is to drive up the quality of care and improve outcomes for patients, while delivering safe, timely, protocol-driven services focused around patient needs. Services must also demonstrate that they are value for money, and that there is effective quality control. In this context, accreditation by the United Kingdom Accreditation Services (UKAS) is a tool that can support both the delivery and the commissioning of services.

UKAS is the only body recognised by government, to assess and declare the competence of testing and evaluation organisations against internationally recognised standards. Under European regulations (EC 765/2008), UKAS has been formally appointed as the national accreditation body, providing a legal basis for accreditation.

UKAS already accredit:

- the majority of UK clinical laboratories under the Clinical Pathology Accreditation Scheme

- point of care testing
- providers of all eight diagnostic physiology specialisms
- diagnostic radiology services under the Imaging Services Accreditation Scheme standard, owned jointly by the Royal College of Radiologists and the Society and College of Radiographers

UKAS accreditation is a status that can only be conferred on a service which meets quality standards as demonstrated by an independent review process. According to Dr Ian Barnes, Chair of the Pathology Quality Assurance Review, 'Despite its non-mandatory status, accreditation is widely used, including by CQC, as a marker for the quality of services'.

UKAS accreditation is not a 'one-off' stamp, but an ongoing business process to establish that:

- a service's performance meets the required standard
- clinical and administrative practices are delivered professionally
- the resources, facilities and workforce are appropriate

- service delivery is safe and patient focused
- a standard of performance can be sustained

As the profile of the independent sector in delivering NHS commissioned services increases, accreditation can also contribute to increased transparency about the quality of both NHS and independent sector provision.

Professor Sir Mike Richards, Chief Inspector of Hospitals at the Care Quality Commission (CQC), has recently acknowledged that UKAS accreditation and peer review processes, such as cancer peer review, already play an important role in stimulating and supporting quality improvements. He would like accreditation and peer review of quality to play key roles as sources of information for the programme of hospital inspections, as CQC cannot go into every corner of a hospital.

### **PHE Comments**

*Quality and patient safety go hand in hand across healthcare as a whole. A number of approaches are employed to improve patient safety across healthcare modalities, one of which is the use of the accreditation process in radiology. This editorial from UKAS examines what we can learn from this experience in radiotherapy.*

### **DATES FOR THE DIARY**

8–10 September	RCR, Annual Scientific Meeting, London
29 September	BIR, IR(ME)R Update, London
7 November	IPEM, Maintaining Safety in Modern Radiotherapy, Manchester
October 2014	<i>Safer Radiotherapy</i> , Issue 14