



Welcome to the 17th 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 on a voluntary basis through 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 community to positively influence local practice and improve patient safety.

Published three times a year, *Safer RT* will contain key messages and trends from the preceding four-month period of RTE reports.

Any comments and suggestions for inclusion in the newsletter would be gratefully received. They should be sent to radiotherapy@phe.gov.uk.

Thanks to all contributors to this issue. The next issue of *Safer RT* will be published in January 2016 and will be available at www.gov.uk/government/collections/medical-radiation-uses-dose-measurements-and-safety-advice.

Una Findlay
Editor

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Patient Safety in Radiotherapy Steering Group (PSRT)

The PSRT work outlined in previous issues of *Safer Radiotherapy*, on the development of learning from RTEs and their analysis, is well under way.

This includes the development of a causative factor and contributory factor taxonomy, introduction of safety barriers and the refinement of the pathway coding. This work has been agreed by the PSRT and piloted across 12 clinical sites. We would like to thank all those who have shared comments from across the radiotherapy community, the participants from the pilot sites and colleagues at the NRLS.

A guidance document has been developed and will be shared with the professional bodies for approval. This

will then be launched at an appropriate event and made available for use across the radiotherapy community to support trends analysis.



The Radiotherapy Team is based at PHE CRCE Chilton

EDITORIAL HEADLINE

General Guidelines on Risk Management on External Beam Radiotherapy Published

These guidelines are the main outcome of EC project ENER/D4/160-2011, "Guidelines on a risk analysis of accidental and unintended exposures in radiotherapy (ACCIRAD)". Further information on the ACCIRAD project can be found in issue 9 of *Safer RT*.

The document is based on a thorough review of available international and national publications, recommendations and guidelines, the results of two questionnaires to radiotherapy practitioners in EU member states, critical review by several international organisations, and various discussions and considerations in the context of the EC project, including an international workshop.

This document provides basic information and recommendations for overall risk management in radiotherapy, with a focus on proactive risk assessment and reactive analysis of events. Furthermore, systems for reporting of events, with the related terminology and classification systems, are covered. Other preventive measures are also briefly discussed in order to assure that all aspects of risk management are covered.

The document is available for free download at

<https://ec.europa.eu/energy/sites/ener/files/documents/RP181.pdf>.

RTE Data Analysis: April to July 2015

Data Analysis

Submissions from 55 NHS UK RT providers contributed to this issue's full data analysis, for 1 April to 31 July 2015, which is available at www.gov.uk/government/collections/medical-radiation-uses-dose-measurements-and-safety-advice. This is similar to the previous analysis when 56 providers submitted data, reflecting the strong reporting culture that continues in the UK RT community.

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

New NHS radiotherapy providers are welcome to contact radiotherapy@phe.gov.uk for advice on how to submit data.

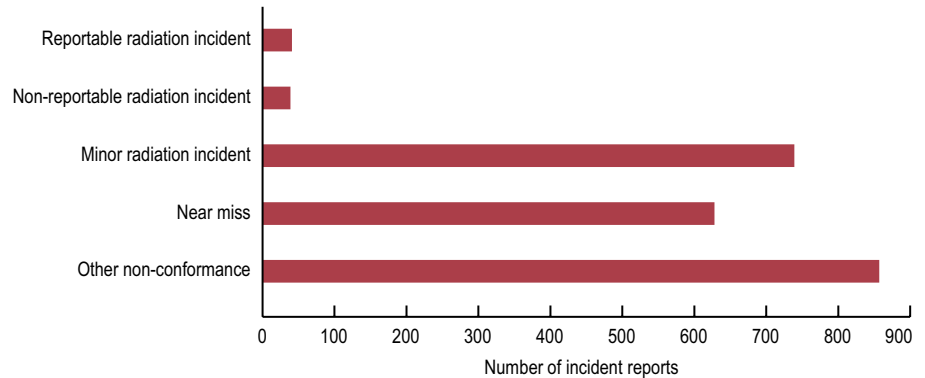
Classification of RTEs

Of those RTEs reported for the period April to July 2015, 2224 out of 2304 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.

Reportable radiation incidents (level 1) made up 41 (1.8%) of all reports. 'Movements from reference' comprised 5 (12.2%) of all level 1 RTEs reported for this time period. Non-reportable radiation incident reports (level 2) made up 39 of all reports (1.7%). 'On-set imaging: approval process' comprised 5 (12.8%) of all level 2 RTEs.

Of the 739 minor radiation incidents (level 3) reported, 175 (23.7%) of this subset were related to the 'on-set imaging: production process', making it the most frequently occurring code in this classification. Of note, the three most frequently occurring

Figure 1 Classification breakdown of RTE reports using the TSRT9 trigger code, April to July 2015 (2304 reports)



events within this subset of data were on-set imaging associated errors. On-treatment imaging is discussed further in issues 12 and 16 of *Safer RT*.

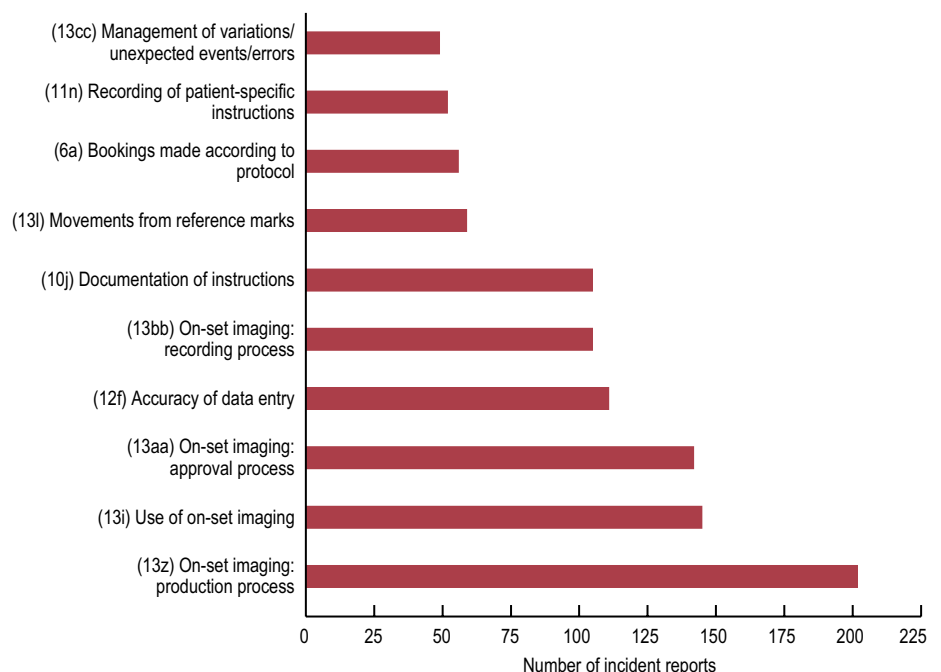
The most commonly occurring RTE process code in the near-miss (level 4) classification was 'accuracy of data entry', with 54 reports (8.6%).

Within the non-conformance (level 5) classification 'management of process flow within planning' had 46 reports (5.4%), making this 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 594 of the reports in the main themes (57.9%), making up 25.8% of all reports for this reporting period. Of note, 'on-set imaging: production process' contributed to 202 of the reports in the main themes (19.9%) – this is discussed further in issue 16 of *Safer RT*.

Figure 2 RTE main themes (1026 out of 2304 reports), for April to July 2015 (with process code indicated)



The data analysed is submitted by the RT community. If you have any suggestions on how the analysis can be improved, please email the Radiotherapy Team at radiotherapy@phe.gov.uk.

RTE Main Themes Review

Within the RTE data analysis Figure 2 indicates the RTE main themes for April to July 2015. Similar RTE main themes have featured in previous issues of *Safer RT*.

The table below shows where these highlighted themes have been reported in the current issue and the previous three issues (14 months of data). The proportion of the total number of RTEs in each issue is given for each pathway code. Two items given in italic text did not feature in the main themes for that issue. The table also indicates the issues of *Safer RT* that offer guidance on how to minimise these events. On-set imaging associated errors have been the most common RTE across the set of newsletters. 'Bookings made according to protocol' (6a) is considered in this issue's *Error of the Month*.

Pathway code		<i>Safer RT</i> issue (number of RTEs)				<i>Safer RT</i> issue number with guidance on RTEs
		14 (1484)	15 (1692)	16 (1851)	17 (2304)	
	% of total					
(13z)	On-set imaging: production process	5.9	8.9	7.7	8.8	16
(13i)	Use of on-set imaging	5.4	7.4	6.5	6.2	7
(13aa)	On-set imaging: approval process	4.5	4.6	6.4	6.3	3
(12f)	Accuracy of data entry	4.3	3.4	4.3	4.8	2
(13bb)	On-set imaging: recording process	2.7	3.0	4.2	4.6	7
(10j)	Documentation of instructions	3.4	3.9	4.5	4.6	8
(13l)	Movements from reference marks	2.0	2.4	2.4	2.6	1
(6a)	Bookings made according to protocol	1.5	3.6	3.1	2.4	17
(11n)	Recording of patient-specific instructions	2.4	3.3	2.8	2.2	10
(11o)	Management of process flow within planning	4.5	2.3	2.2	2.1	5

Good practice in reporting RTEs

To ensure learning from RTEs is shared nationally, each report should contain sufficient information to code, classify and review the causes and detection methods. *Implementing Towards Safer Radiotherapy** recommends the following should be included in the first open text field:

- trigger code/classification/coding (eg TSRT9 / Level 3 / 13u / 13hh)
- anatomical site involved in the RTE
- prescribed fractionation
- if appropriate, dose administered or almost administered with an indication of the percentage error
- if appropriate, magnitude of geographical misplacement
- random or systematic error
- a brief description of the circumstances surrounding the incident, which could include any significant contributory factors leading to the RTE, how the error was detected, implications for the patient and any corrective/preventive action taken

* Available at www.nrls.npsa.nhs.uk/resources/?EntryId45=75033.

See also www.gov.uk/government/publications/radiotherapy-good-practice-in-error-reporting for further guidance and examples.

ERROR OF THE MONTH

Appointment bookings

TSRT Process Code:

Bookings made according to protocol (6a)

This RTE is associated with bookings not being made according to protocol. The main themes highlighted within these reports concern incorrect scheduling of a patient's treatment, which includes incorrect machine allocation and incorrect fractionation scheduled on the oncology management system (OMS).

This RTE may also be associated with incorrect scheduling of associated tasks. These errors can lead to delays in, or omission of, treatment.

How can we minimise the risk of this RTE occurring?

Points to consider

- 1 Have clear protocols and process in place
- 2 Identify the task, ensure it is clear who is responsible for the task and how its completion is annotated
- 3 Investigate the use of the oncology management system to allow efficient appointment bookings to be made
- 4 Check appointments against referral
- 5 Ensure information within the booking system is accurate to minimise patients waiting for a long time
- 6 Check the patients receive accurate appointments prior to the start date
- 7 When required, ensure transport and appointments match
- 8 If there are other interventions ensure cross-departmental communication
- 9 Ensure clear processes are in place for the communication and action of changes to bookings as required

GUEST EDITORIAL

Duty of Candour in Radiotherapy

The Francis inquiry¹ report into the events at Mid Staffordshire NHS Trust between 2005 and 2009 called for the establishment of a statutory duty of candour. Regulation 20 fulfils² the duty of candour requirement of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014.

Duty of candour is a legal requirement to inform and apologise to patients if there have been mistakes in their care that have led to significant harm. This means being open and transparent with the patient when errors are made, including apologising and supporting the patient. This editorial will share the expectations of a patient and a professional in discharging this duty.

A Professional's Perspective

Tom Roques

The public understand that radiation is potentially very dangerous and that the stakes of cancer treatment are often high. So when rare errors occur there is considerable fear and anxiety for the patient (as well as for staff involved).



We can mitigate much of this distress by careful explanation at the time and – most importantly – by saying sorry.

The joint guidance from the General Medical Council and the Nursing and Midwifery Council on professional duty of candour³ is an extremely useful guide for all healthcare professionals, clearly setting out how and when we should explain errors and near misses to patients. At its core is the need to behave openly and with integrity – to apologise, to explain what happened and how it might be rectified, and to clarify what steps can be taken to avoid the error happening again to someone else.

Radiotherapy has an enviable safety record and incident reporting culture compared to many areas of medicine, but we will all make mistakes and some of these will have potentially serious consequences for our patients. An honest apology is nothing less than what we would expect to receive if we were the patient.

A Patient's Perspective

Tony Murphy

Everybody makes mistakes. When things go wrong, people with cancer treated with radiotherapy and/or their relatives deserve a speedy explanation, a heart-felt apology and reassurance that others will not suffer the same fate.



Many patients and relatives would be angrier about a cover-up than they are about the original mistake. We understand that as professionals your work practice is about you – and your chosen profession and your employer. But the patient must come first.

We also expect that you (and your team) must learn from mistakes and share that learning, otherwise others may make the same mistake that could be avoided with your openness.

Having attended many meetings about patient safety, I feel confident that the professionals involved in radiotherapy treatment will apply their duty of candour when serious harm occurs or could have occurred.

**“ To err is human, to cover up is unforgiveable,
to fail to learn is inexcusable. ”**

Sir Liam Donaldson, 2004

References

- 1 Francis R (2013). Report of the Mid Staffordshire NHS Foundation Trust public enquiry. HMSO, London. Available at www.gov.uk/government/publications/report-of-the-mid-staffordshire-nhs-foundation-trust-public-inquiry
- 2 The Health and Social Care Act 2008 (Regulated Activities) Regulations 2014. Regulation 20. Available at www.legislation.gov.uk/ukxi/2014/2936/contents/made
- 3 GMC/NWC (2015). Openness and honesty when things go wrong: the professional duty of candour. Available at www.gmc-uk.org/DoC_guidance_engsih.pdf_61618688.pdf.

DATES FOR THE DIARY

28 September 2015	BIR, IR(ME)R Update
23 October 2015	BIR, RTE Study Day
26th November 2015	SCoR, IR(ME)R Compliance in Contemporary RT Practice
January 2016	<i>Safer Radiotherapy</i> , Issue 18