

Safer Radiotherapy



March 2011 Issue 3

Welcome to the third issue of *Safer Radiotherapy*. The aim of the newsletter is to provide a regular update on the analysis by the Health Protection Agency of radiotherapy error (RTE) reports. These reports are submitted to the National Reporting and Learning System (NRLS) of the National Patient Safety Agency (NPSA), to promote learning and improve patient safety.

The newsletter is designed to disseminate learning from RTEs to professionals in the radiotherapy community to influence local practice and improve patient safety.

Regular features include:

- **RTE Data Analysis** – undertaken by the HPA, highlighting key messages and trends identified from a three-month period of RTE reports
- **'Error of the Month'** – will provide 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
- **HPA Patient Safety in Radiotherapy Steering Group** – updates on the work of this multidisciplinary group (IPEM, RCR, SCoR, HPA and service users).

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

Thanks to all contributors to this issue. The next issue of *Safer Radiotherapy* will be published in June 2011 and will be available at www.hpa.org.uk/radiotherapy

Kim Baldwin
Editor

HPA Patient Safety in Radiotherapy Steering Group

The *Towards Safer Radiotherapy* classification and process coding is applied to RTEs by RT departments reporting to the NRLS. This facilitates local and national learning on points in the patient pathway where RTEs occur, indicating their severity but no information on why an error occurred.

Knowledge of RTE causative factors could inform the targeting of local and national resources to prevent further RTEs and improve safety in radiotherapy.

Understanding who or what detects RTEs may also influence the safe development of processes, training and technology.

Therefore RTE causative factor and detection method taxonomies are being developed. They will be piloted in Summer and feedback received will inform the final taxonomies. A guidance document will be developed by the end of the year. In 2012 the taxonomies will be published and presented to the RT community.

INSIDE THIS ISSUE

- **RTE Data Analysis**
August–October 2010
- **Error of the Month**
On-set Imaging: Approval Process
- **Guest Editorial**
Raising the Profile of Radiotherapy
2011 the Year of Radiotherapy
Stephen Hood
- **Dates for the Diary**

The HPA Radiotherapy Team is based at CRCE Chilton



EDITORIAL HEADLINE

SCoR Annual Radiotherapy Conference 2011 *History, is it all in the past?*

At a session dedicated to patient safety in radiotherapy, Leslie Frew (Head of Radiotherapy Physics, Belfast HSCT) focused on the need to prevent the '2nd event'. He demonstrated how root cause analysis techniques provide the local and national RT community with key lessons from past events to help prevent the same error recurring.

Updates on HPA Patient Safety in Radiotherapy Steering Group activity and the HPA Clinical Site Visit (CSV) initiatives were provided. Full presentations are available at www.hpa.org.uk/radiotherapy

Julia Solano (Radiotherapy Service Manager, UCLH) reported that RT departments undertaking an HPA CSV need to be willing to be challenged across all professional groups. By identifying redundant processes a CSV led to local acceptance for the need to change. Julia felt that a follow-up visit would help maintain momentum with implementing change. She indicated that by undertaking a CSV the wider RT community is supported and that the process could ultimately benefit the patient.

RTE Data Analysis: August–October 2010

Quarterly Analysis

The full data analysis for 1 August to 31 October 2010, is available at www.hpa.org.uk/radiotherapy

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.

Classification of RTEs

Of those RTE reported to the NPSA for the period August–October 2010, 97% were classified as minor radiation incidents, near misses or other non-conformances (see Figure 1). These are all lower level incidents which would have no significant affect on the planning or delivery of individual patient treatments.

Of the 407 RTEs reported, 142 were in the near miss category. For this period, 20 near miss RTEs concerned 'pre-treatment activities/imaging', of which 50% were related to 'documentation of instructions/information'. Omission of information, incorrect information or transcriptional errors were cited most commonly. Of

RTE Reporting on the Increase

The number of RTEs submitted via the NRLS to the NPSA has increased over the period December 2009 to October 2010 (see the figure). The number of RT departments using the TSRT9 trigger code has also increased, from 22 in December 2009 to 27 in October 2010.

Only RTEs coded with the TSRT9 trigger code will be analysed by the HPA.

Is the HPA receiving your reports?

A survey* of NHS organisations in England and Wales undertaken in 2008 indicated 42 of 47 departments surveyed were reporting RTEs to the NPSA. Encouragingly, a search run by the NPSA on the NRLS in 2010 showed 53 out of 59 departments have submitted reports to the NPSA between December 2009 and April 2010.

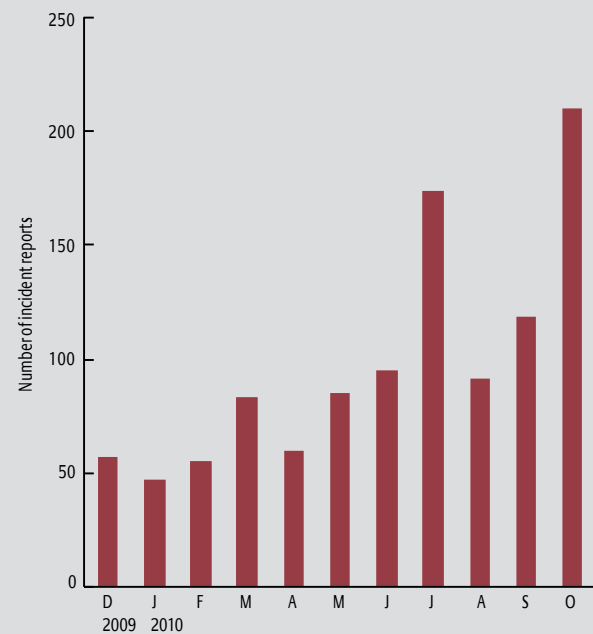
Questions this may raise:

- 1 Is the TSRT9 trigger code being used?
- 2 With what frequency are departments reporting?
- 3 Does a more positive reporting culture exist?
- 4 Are we making more errors?
- 5 Why are some departments not reporting?
- 6 Are there barriers to reporting RTEs?

To answer these questions a repeat survey will be undertaken. The resultant information will be used to inform the work programme of the HPA Patient Safety in Radiotherapy Steering Group and the HPA Clinical Site Visits to ensure further engagement of the RT community in promulgation of learning from RTEs.

* Local reporting of radiotherapy patient safety incidents: survey report. Available at www.nrls.npsa.nhs.uk/resources/clinical-specialty/radiology-and-radiotherapy/ and click on Implementing 'Towards Safer Radiotherapy'

Number of RTE reports submitted to the NPSA using the TSRT9 trigger code, December 2009 to October 2010 (1063 reports)



What can you do?

- 1 Check your RTE reports are submitted to the NRLS
- 2 Use the TSRT9 trigger code
- 3 Identify local barriers to reporting
- 4 Contact the HPA for advice at radiotherapy@hpa.org.uk

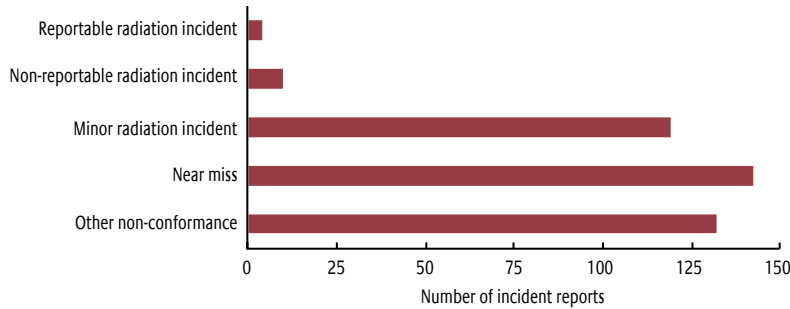
The TSRT9 trigger code will remain unchanged until further notice.

Make your RTE count

- 1 Document one RTE only for each report submitted
- 2 Report all levels of RTE

PLEASE NOTE This does not negate the requirement to report all reportable radiation incidents to the appropriate authority.

FIGURE 1 Classification breakdown of RTE reports extracted from the NRLS using the TSRT9 trigger code, August–October 2010 (407 reports)



note, 20 RTEs relating to ‘treatment unit process’ indicated the incorrect application or adherence to locally documented imaging protocols for the occurrence of errors. In the previous quarter the severity associated with this error was ‘other non-conformance’.

The fact that RTEs are now being classified as near misses highlights the importance of introducing and adhering to an appropriate image approval process. See this issue’s ‘Error of the Month’ for further information.

Primary Process Code

The main themes (points in the patient pathway where the majority of reported RTEs occurred) of this dataset are shown in Figure 2. The ‘accuracy of data entry’ remains a leading error as reported in

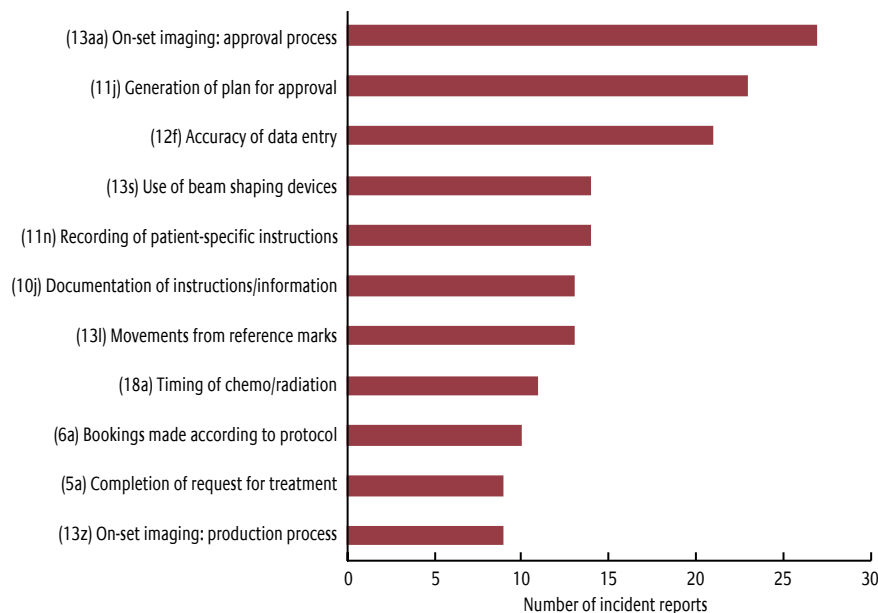
Safer Radiotherapy, Issue 2, where further advice can be found in the ‘Error of the Month’ section.

Secondary Process Code

Additional coding was supplied with 43% (173 out of 407) of RTE reports submitted during the period August–October 2010. Of these, 36% indicated ‘end of process checks’. Nearly 50% of these were recorded at the ‘pre-treatment activities/ imaging’ process point in the pathway. This is consistent with previously analysed data. Consideration should be given to the adoption of minimum criteria for end of process checks to produce the required standard from pre-treatment activities.

Advice on ‘end of process checks’ will be featured in a future issue of *Safer Radiotherapy*.

FIGURE 2 RTE Main Theme (164 out of 407 reports), for August–October 2010 (with process code indicated)



The data analysed is submitted by the RT community, therefore your comments and suggestions regarding the RTE analysis are welcomed. For further information or enquiries please contact the HPA Radiotherapy Team, Úna O’Doherty and Kim Baldwin, radiotherapy@hpa.org.uk

ERROR OF THE MONTH

On-set Imaging: Approval Process

TSRT Process Code:

Treatment unit process (13)

On-set imaging: approval process (aa)

The image approval process has been highlighted as a point in the patient pathway where RTEs commonly occur. In the dataset analysed here (August–October 2010) nearly 56% of the ‘on-set imaging: approval process’ RTEs occurred due to the late approval of images.

How can we minimise the risk of this RTE occurring?

Points to consider

- 1 Establish an MDT agreed image approval process using an appropriate skills mix [TSRT pages 26 and 27]
- 2 Ensure procedures are robust, clearly identifying tasks and action levels, indicating how each exposure is justified, optimised and clinically evaluated [IR(ME)R Regs 4 and 7(8)]
- 3 Identify individuals entitled to act as a referrer, practitioner and operator [IR(ME)R Schedule 1(b)]
- 4 Ensure entitled individuals comply with written procedures and are adequately trained to perform tasks defined in their scope of practice [IR(ME)R Regs 4(1a), 4(4b) and 5(1)]
- 5 Ensure training records indicate competence to undertake tasks [IR(ME)R Reg 11(4)]
- 6 Create an appropriate environment with minimal distractions for staff [TSRT pages 5, 10 and 35]
- 7 Review working practice for redundant processes, unnecessary transcription and repetition of data to improve process efficiency
- 8 Use locally available systems such as the Oncology Management System (protocol drivers/ prompts/messages) to ensure image approval is recorded and undertaken in a timely fashion
- 9 Audit to inform regular review and updating of procedures [IR(ME)R Reg 8].



GUEST EDITORIAL

Raising the Profile of Radiotherapy *2011 the Year of Radiotherapy*

Stephen Hood

Lay Member, National Radiotherapy Implementation Group

The National Radiotherapy Awareness Initiative (NRAI) has been set up to develop and lead the implementation of a strategy for raising and maintaining the profile and awareness of radiotherapy across the UK.

Over 250,000 people in this country are diagnosed with cancer each year and some 100,000 of these are treated with radiotherapy. Radiotherapy forms part of the treatment of about 40% of patients who are cured and is the only treatment received by some 14% of cancer patients who are cured. Although professionals

'Being told that you have cancer is scary. Being told that you should be treated with radiotherapy when you know very little about radiotherapy except what you might have read in the press when things go wrong, makes this even scarier. I felt safe in the hands of my oncology team when I was treated with radiotherapy ten years ago and was so impressed with them that I successfully put them forward for an excellence award. As a lay member of NRI, I want to ensure that today's patients get the same high service, with the advantage of new developments which have taken place since my treatment, and have no fears about presenting themselves for treatment.'

Stephen Hood

within the radiotherapy community are likely to be aware of this, the general public is not and so, on the basis of what they might have read, may have a perception that radiotherapy is something to be feared.

In order to improve this perception, the NRAI has designated 2011 as the Year of Radiotherapy, to commemorate the centenary of Marie Curie being awarded her second Nobel Prize. An awareness-raising campaign was launched on 27 January 2011, targeting the general public. The campaign is also aimed at commissioners, health service managers, clinicians and MPs, to ensure that their understanding of radiotherapy and its issues are improved.

As this country lags behind others in the uptake of radiotherapy as a cancer treatment, the objective is to ensure that there is equitable access to high quality, safe, timely, protocol-driven, quality controlled services focused around patient needs. This requires resources, both equipment and workforce, each

of which must be better than just fit for purpose, and services which are designed to provide a world class radiotherapy service.

By targeting the above people in the awareness campaign it is expected that they will become clear as to their role in bringing this about and ensure that they play their part. As for the general public, the aim is to ensure not only that they are much more knowledgeable and comfortable about the use of radiotherapy as a treatment but also that they will expect the highest level of treatment to be available and will exert pressure to ensure that it is.

As professionals providing radiotherapy services, you too need to play your part, by following evidence based protocols, including the recommendations in *Towards Safer Radiotherapy*. Make sure that your service does not give cause for concern or attract undue attention from the media and instead matches the expectations outlined above, giving the media good news stories to report.

DATES FOR THE DIARY

9 March	IPEM Stereotactic Radiotherapy – New Equipment, Novel Techniques, London
22 March	HPA 3rd Site Visit Stakeholder Meeting, Oxford
13–14 April	UKRO 2011, Manchester
8–12 May	ESTRO Anniversary, London
June	<i>Safer Radiotherapy</i> , Issue 4