

Monitoring IMRT Delivery in the UK

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AIM

To describe the process of using the National Radiotherapy Dataset, RTDS to report IMRT delivery.

BACKGROUND

In 2011 the Commissioning for Quality and Innovation set an incentive as part of the National Cancer Plan¹ improving cancer outcomes, to increase the uptake of IMRT. The measure reported the number of IMRT attendances delivered. Following the Radiotherapy Innovation Fund investment of £23 million, it became increasingly more important to monitor the progress of IMRT delivery in the UK across the country. Experience had shown though that the measure needed to be logical, clearly defined and easy to report. The CQUIN measure inflated by multiple attendances for breast and prostate cancer obscured the actual number of patients benefitting from IMRT. This abstract describes the evolutionary process of successfully monitoring the activity. The described method could be used to successfully report any new radiotherapy technique.

2007	NRIG Establishment of IMRT working party
2008	Mayles IMRT audit
2009	NCAT Clinical support programme for IMRT RTDS commenced
2010	Introduction of X67.1 IMRT code (OPCS v4.5)
2011	Clinical coding guidance issued for use of X67.1 CQUIN IMRT measure
2012	Mayles Reaudit Parallel – RTDS & Providers self reporting
2013	RIF £23m investment
2013	Monthly monitoring begins
2013	Measure redefined with methodology clearly described.
2015	IMRT in the UK; Current access and predictions of future access rates

METHOD

Previous one-off surveys² had given contradictory information across the individual Trusts and conflicted with what RTDS was reporting. RTDS was the logical source of information, being centrally processed to monitor the expansion of IMRT delivery.

Defining the metric:

Led by Tim Cooper, Associate Director NCAT and working with the service and members of the Radiotherapy Clinical Information Group the IMRT delivery measure is defined as:

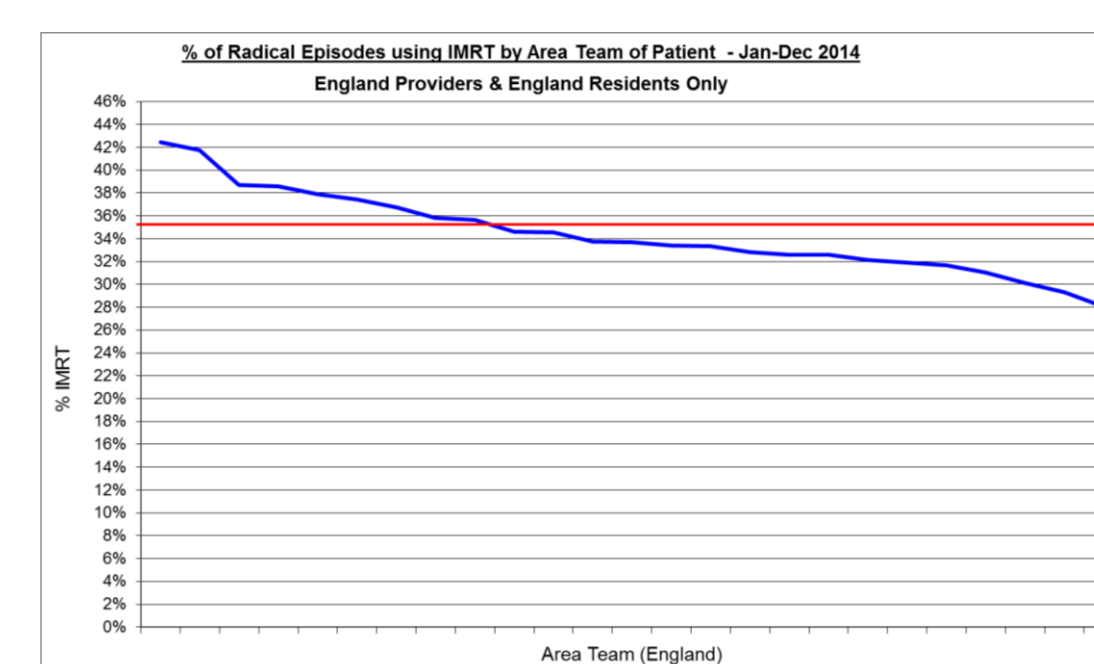
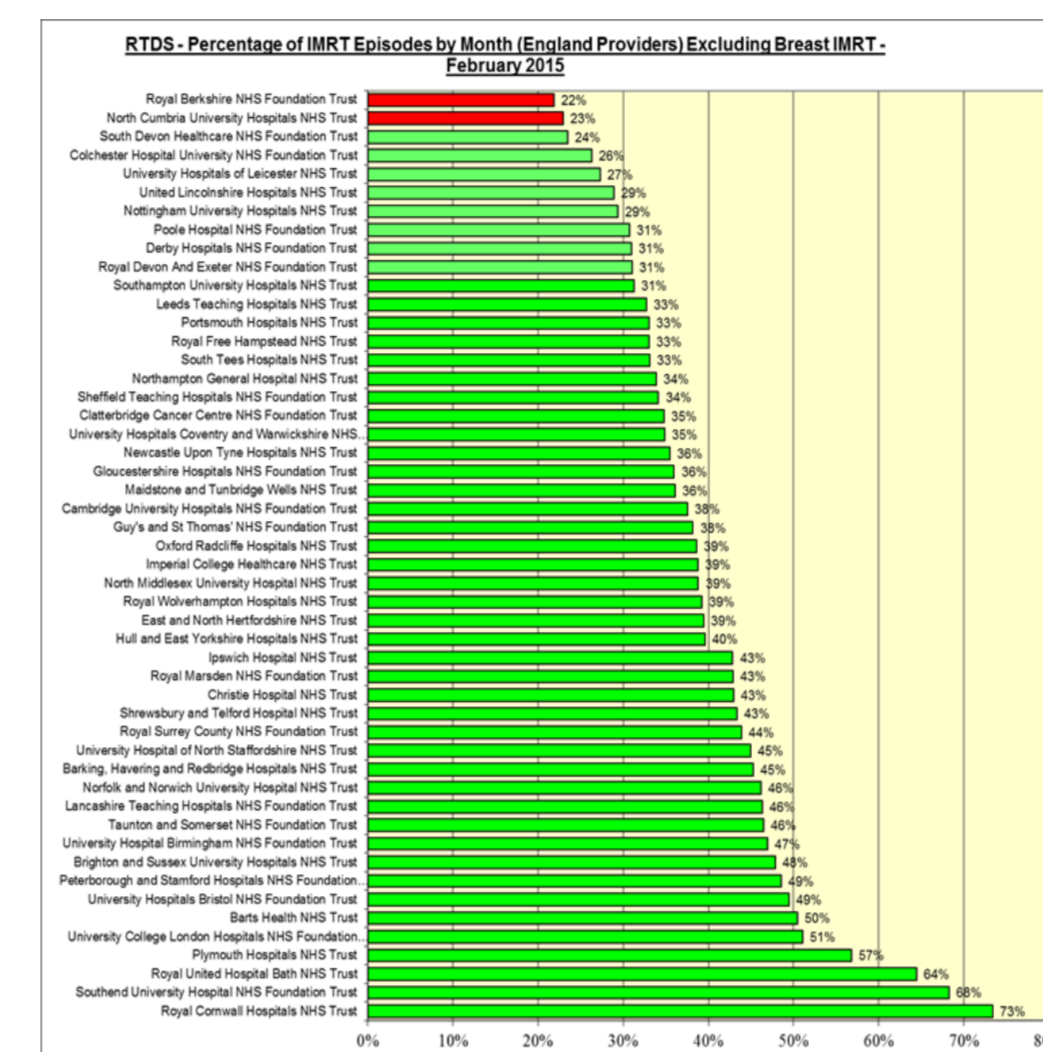
Numerator: The number of (new) unique patients starting radiotherapy with inverse planned IMRT (excluding breast radiotherapy) within the specified month.
Denominator: The number of (new) radical episodes starting radiotherapy including breast cancer (C50); excluding brachytherapy and patients with a diagnosis of non melanoma skin, (C44) within the specified month.

Using the code:

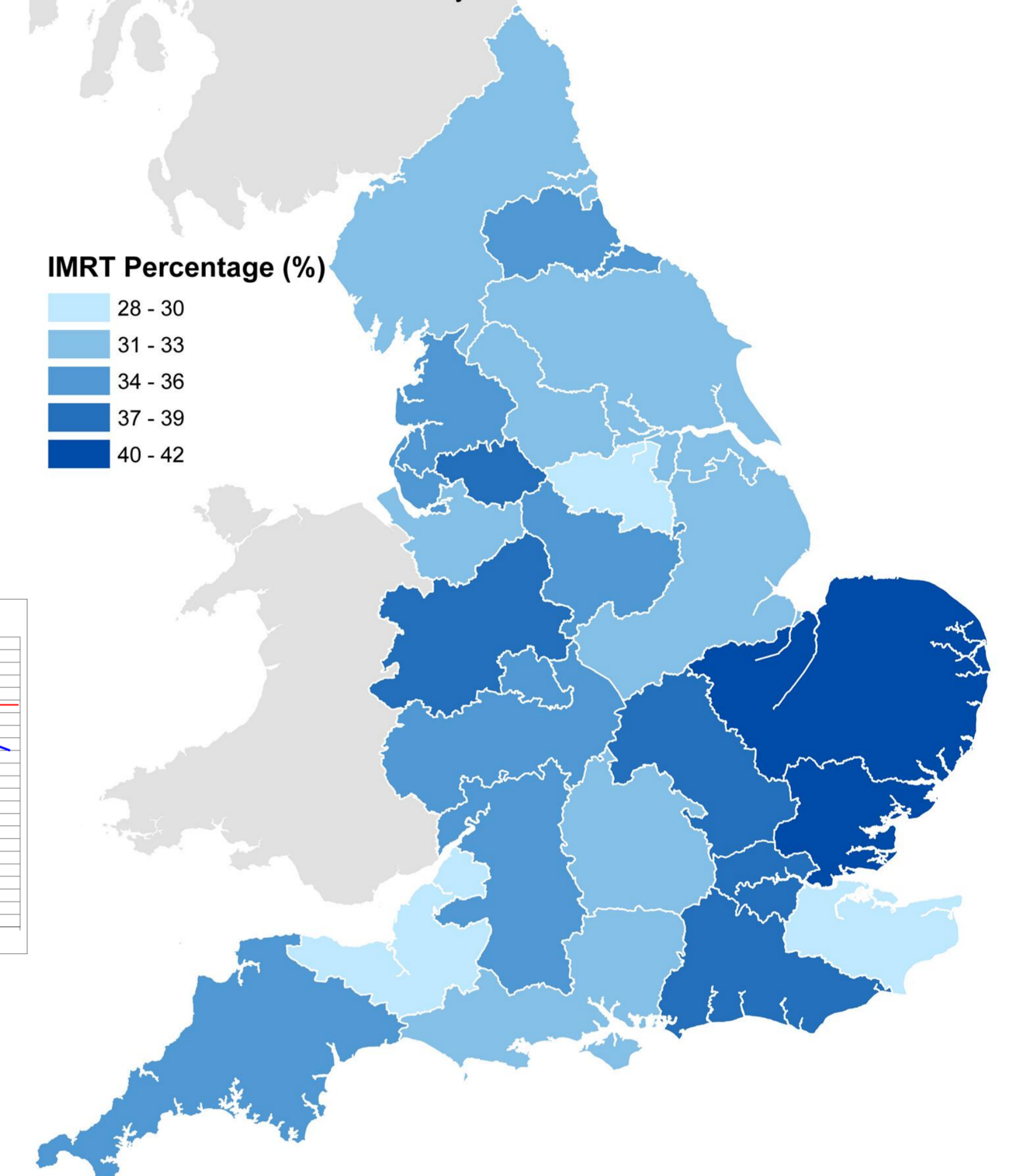
RTDS uses an "IMRT" procedure code captured during the pre treatment phase in the OMS. Although the code was clearly defined in the NHS data dictionary, further clinical guidance³ on how and when to use the code was required to avoid inconsistency.

RESULTS

IMRT Delivery by Radiotherapy Provider



Percentage of IMRT Delivery by Patient's Residence RTDS Jan-Dec 2014 England Providers & England Residents Only Shown by NHS Area Team



Processing the data:

RTDS data was processed centrally to produce a standard report which was returned to the providers for validation. Time was taken to endorse results and answer queries and concerns. Self reported and central reports were compared and where anomalies exist corrections were made. Common errors were the counting of wrong currencies e.g. number of prescription plans not patients treated, incorrect time frame or data inputting error.

Once confidence in central reporting was established, self reporting ceased. Currently IMRT delivery is reported on a monthly basis.

DISCUSSION

The radiotherapy dataset is used successfully to monitor IMRT delivery in the UK. Broken down by tumour site these reports have been used to review the current access and set targets to inverse-planned IMRT⁴.

REFERENCES

- 1 Improving Outcomes: A Strategy for Cancer DOH 2011
- 2 Survey of the availability and use of advanced radiotherapy technology in the UK Mayles WPM on behalf of the Radiotherapy Development Board. Clin Oncol (R Coll Radiol). 2010 Oct;22(8):636-642
- 3 NCAT coding guidance for radiotherapy
- 4 Intensity Modulated Radiotherapy (IMRT) in the UK – Current access and predictions of future access rates

CONTRIBUTORS

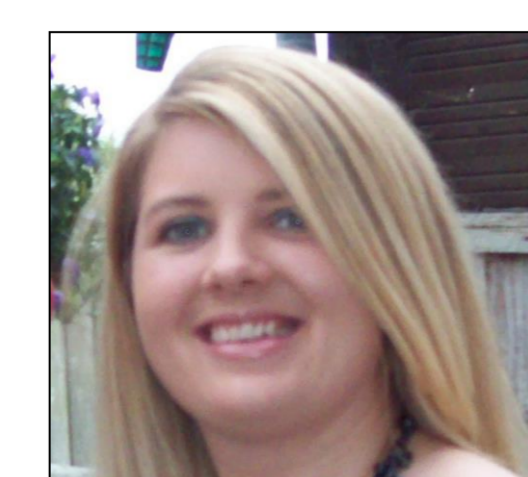
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