



Public Health
England

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Radiotherapy Data Set (RTDS)

Change Request

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Data Alliance Partnership Board

Acting on behalf of the Data Alliance Partnership Board (DAPB), which holds delegated authority from the Secretary of State for Health and Social Care, the Data Alliance Partnership Sub Board (DAPSB) has approved a change to an existing information standard for publication under [section 250 of the Health and Social Care Act 2012](#).

Assurance that this information standard meets the requirements of the Act and is appropriate for the use specified in the specification document has been provided by the Data Standards Assurance Service (DSAS) and approved by the Data Alliance Partnership Board (DAPB).

This information standard comprises the following documents:

- Specification
- Implementation Guide
- Change Request.

An Information Standards Notice (DCB0111 Amd 84/2020) has been issued as a notification of use and implementation timescales. Please read this alongside the documents for the standard.

The controlled copies of these documents can be found on the [NHS Digital website](#). Any copies held outside of that area, in whatever format (e.g. paper, email attachment), are considered to have passed out of control and should be checked for currency and validity.

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Title	PHE document		
DAPB Reference	DAPB0111 Amd 84/2020		
Sponsor	Dr Brian Rous – Director of Tumour Classification	Status	Draft
Senior Responsible Officer	Sarah Stevens – Deputy Director	Versions	RTDS v6.0
Lead Developer	Andrew Murphy – Head of Cancer Datasets		
Author(s)	Andrew Murphy – Head of Cancer Datasets Catherine Roe – RTDS Project Lead Michael Sharpe – RTDS Project Manager	Version Date	20 July 2021

Related Documents:

Ref #	Doc Reference	Title	Version	Date
1	RTDS Specification	RTDS Specification	RTDS v6.0	20 July 2021

Amendment History:

Version(s)	Date	Amendment History	Editors
6.0 Final	14 June 2021	Final version for publication	Andrew Murphy

Executive summary

The purpose of this document is to provide guidance intended to support all NHS Acute Trust providers of radiotherapy services in England, private facilities where delivery is funded by the NHS or IT software developers (both in-house and commercial system suppliers), to prepare for the implementation of the RTDS v6.0 from April 2022.

This change request document outlines these changes across the data set, highlighting what are new data items as well as those that have been amended, moved or deleted.

This is an update to an existing information standard SCCI0111 Amd 13/2015 and is required to ensure that the data still meets the business objectives, scope and content of the standard and continues to be clinically accurate and relevant.

In order to maintain clinical accuracy, it is important to regularly review RTDS with clinical experts from across the NHS, including analysts and NHS England and NHS Improvement.

It is important to also use the data set and user guide when reviewing this document, as they will provide additional context and help understand the structure and flow of the data items requested.

Where a word or name is **highlighted**, this indicates that there is an embedded link that will take you to a webpage outside of this document for more information. Please use this facility throughout the change request, as this improves the accessibility for users with visual impairment or those using screen readers.

Introduction

Background

The RTDS standard (DAPB0111) is the national standard for reporting radiotherapy for the NHS in England or private facilities where delivery is funded by the NHS. The National Disease Registration Service (NDRS) are responsible for the ongoing maintenance, development and implementation of the data set.

The data set relates to all patients both adult and paediatric, in acute inpatient and outpatient settings, but does not include primary care or private patients where the treatment is not funded by the NHS.

The RTDS is a compiled data set, which provides the standard for secondary uses. The standard consists of:

- a set of individual data items, with their definitions
- the assemblage of these data items into a discrete data set
- the means of flowing the data items
- compilation of the data items into a reconciled and verified data set

Over time clinical practice, treating techniques or machines delivering radiotherapy may have changed, which may directly affect the reporting of data items within the data set. These changes must be acknowledged, and amendments made.

The developers have worked together with NHS Digital (NHSD), NHS England and NHS Improvement (NHSE&I) and with key teams across Public Health England (PHE), to align the data set with other information standards to reduce wherever possible the burden of data collection.

This is also in line with a letter from the Secretary of State for Health and Social Care (25 September 2020), which outlines his ambition to reduce the burden on the frontline and more effectively share data across health and social care.

Summary of changes

New data items have been added after an extensive consultation process. Full details of this process, including those who were part of the consultation itself can be found in the 'Consultation Summary Report', and is available upon request from the rtds helpdesk @ rtds.helpdesk@nhs.net.

This revision allowed the data set to be clinically reviewed, validated and updated by experts in all fields of radiotherapy and provides a clinically sound set of data to be collected from April 2022 onwards.

The following is the key to help understand what has changed between versions:

- new or amended text is marked in **green highlight**
- text that has been deleted is *marked with a strikethrough*
- where a **yellow highlight** is used, this denotes that the data item has been moved to a new group from RTDS v5.0 to v6.0

Amendments were required to ensure that where changes to data items controlled by another body have been updated, these changes have been accurately reflected within RTDS at the point of review.

The changes to be made in this release are:

- the ability to structure the data requested into the pathways expected of a radiotherapy patient, including specific sections for:
 - an episode
 - a prescription
 - a plan
 - an exposure
 - an attendance
- this has allowed the data set to be futureproofed, with the addition of:
 - SNOMED CT
 - unique radiotherapy coding (not currently found within SNOMED CT or OPCS)
 - the accurate recording of radiotherapy treatment type
 - the measurement type to support the prescribed and the actual absorbed radiation dose
- careful consideration was also made to improve the recording of:
 - proton therapy (within RTDS), which is now being delivered in Manchester and will become operational in London at the University College London Hospital (UCLH) in the summer of 2021
 - clinical trials that have a component of radiotherapy delivery included
 - treatment intent (in more granular detail)
 - route of admission
 - specialist radiotherapy treatments
- the addition of choices enables clearer decision making and improves data quality
- 47 new data items enable the data set to continue to meet the changing demand of radiotherapy treatment and outcome data

- certain data were realigned or moved within the data set, this ensures that data nests correctly within the new structure and will help with data collection, quality and ascertainment
- 4 data items were deleted, but by incorporating only those data from the commissioning data set (CDS) that are required for the management and accurate processing of radiotherapy data, we have reduced the overall size and local burden of data collection by 48% (compared with the current compiled RTDS v5.0 data set)

Implementation start and full conformance timeline

The following timeframe will be used to support the implementation, data collection and full conformance:

- implementation will be between 20 July 2021 and 31 March 2022 (8 months)
- data collection will start from 1 April 2022 (with a 3-month roll-out period between 1 April 2022 and 30 June 2022)
- full conformance from 1 July 2022

Supporting documents

All the documents referred to in this change request document were submitted to the Data Standards Assurance Service (DSAS) for review under DAPB0111 Amd 84/2020.

Following acceptance by the Data Alliance Partnership Sub Board (DAPSB) and confirmation of authority to publish by the Department of Health and Social Care, the official Information Standards Notice (ISN) and related documents were published on the 20 July 2021.

This document should be read in conjunction with the following documents, available at the designated website:

www.digital.nhs.uk/isce/publication/dapb0111:

- Specification
- Implementation Guide
- Information Standard Notice

http://www.ncin.org.uk/collecting_and_using_data/data_collection/rtds:

- RTDS v6.0 Data Set
- RTDS v6.0 User Guide
- RTDS v6.0 Technical Guide

<https://nww.api.encore.nhs.uk/>:

- RTDS v6.0 Portal User Guide

Due to a change in the scope of this version of the data set, XML will no longer be a requirement or aspiration for data delivery. Instead all data files will be using a fully formatted (double quote, comma separated) CSV file or spreadsheet, details of these can be found in the technical guide document.

Please note that there is currently a new National Disease Registration Service (NDRS) website under construction and all RTDS publications will be accessible from there. Details of this launch and URL will be published in due course, RTDS will have a permanent section within this new website.

Related standards

The following standards should also be read in conjunction with this information standard:

- DCB0084 OPCS Classification of Interventions and Procedures
- DCB1521 Cancer Outcome and Services Data Set
- DCB1533 Systemic Anti-Cancer Therapy Data Set
- SCCI0021 International Classification of Diseases
- SCCI0034 SNOMED CT

Change specification

This is a complex data set covering external beam radiation, brachytherapy, proton therapy, radioisotopes/molecular radiotherapy, and it is therefore expected that regular changes will be required. The current new data items reflect this and are introduced to align with current business needs and clinical practice, and to support data quality.

New data items have been added after extensive consultation was conducted and details of the consultation process were provided as supporting evidence to the Data Alliance Partnership Board (DAPB) in the Consultation Summary Report document.

In addition, there are new data to help identify and analyse:

- new treatments
- ongoing management of existing patients, where treatments change
- the use of SNOMED CT, to more accurately collect clinical terminology in a more structured and machine readable way
- a new way of recording consultant information, enforced by NHS Digital's Data Model and Dictionary Service across all new or changed data sets
- the introduction of 'Choices' have been added to improve data quality and reduce misinterpretation and burden

Many data items have been realigned across the data set into the correct higher level groupings, improving the structure, collection and reportability of data. This in turn enforces the addition of mandatory data items, improving data quality.

The data set can now be easily maintained within each Trust, and has a user friendly [api portal](#), which helps validate data upon submission. This is expected to reduce the burden of data collection for the radiotherapy services teams within Trusts and independent NHS funded providers.

New data items

Full details of all the new items (listed below) are provided in the RTDS v6.0 Data Set and RTDS v6.0 User Guide.

Linkage Group: Patient Identity Details

- NHS Number:
 - data item required to improve linkage and ascertainment for all records submitted. Where available this **must** be provided
- Local Patient Identifier:
 - data item required to allow for records to be submitted where there is no NHS Number
- NHS Number Status Indicator Code:
 - data item required to identify if a records NHS Number has been traced prior to submission
- Person Birth Date:
 - data item required to support additional patient identification/matching and tracing if required
- Organisation Identifier (Code Of Provider):
 - data item required to identify the organisation submitting the data

Linkage Group: Diagnostic Details

- Radiotherapy Diagnosis (SNOMED CT):
 - allows for a SNOMED CT diagnosis code (if known) to be recorded, required to comply with Information Standard SCCI0034
- Tumour Laterality:
 - data item required to support additional patient identification/matching

Patient Group: Demographic Details

- Person Family Name:
 - data item required to allow for better patient matching and analysis
- Person Given Name:
 - data item required to allow for better patient matching and analysis
- Postcode Of Usual Address:
 - data item required to allow for better patient matching and analysis
- Person Stated Gender Code:
 - data item required to allow for better patient matching and analysis
- Administrative Category Code (Radiotherapy):

- data item to identify the patient's administrative pathway
- Trust Internal System Patient ID:
 - data item accessible from all systems, identifying the patient's system assigned ID
- General Medical Practitioner (Specified):
 - data item required to allow for better patient matching and analysis
- General Medical Practice Code (Patient Registration):
 - data item required to allow for better patient matching and analysis

Data Group: Radiotherapy Episode

- Referral Date:
 - data item required to understand when the patient was referred to the radiotherapy department

Data Group: Radiotherapy Prescription

- Professional Registration Issuer Code - Radiotherapy Prescribed Authorising Clinician:
 - this is an enforced change throughout all new data sets by NHS Digital's NHS Data Model and Dictionary Service – a subset of this is used for RTDS
- Professional Registration Entry Identifier - Radiotherapy Prescribed Authorising Clinician:
 - this is an enforced change throughout all new data sets by NHS Digital's NHS Data Model and Dictionary Service
- Radiotherapy Laterality (Anatomical Treatment Site):
 - data item required to identify the laterality of the side of the body relating to the treatment site
- Royal College Of Radiologists (RCR) Category:
 - data item to help understand the category of the patient, as defined by the RCR 'Timely delivery of radical radiotherapy: guidelines for the management of unscheduled treatment interruptions, fourth edition' document
- Radiotherapy Routes And Methods Of Administration:
 - data item required to record the administration route and method for the treatment delivered, as defined within a new SNOMED CT reference set # **51971000001109**
- Practitioner Licence Holder:
 - data item required to record the Identification number for the practitioner licence holder who justified this therapy
- Organisation Identifier (Code Of Organisation Commissioned To Provide Activity):
 - data item required to record the organisation commissioned to provide the activity

- Radiotherapy Intent Of Treatment:
 - data item which better outlines the intent of treatment for radiotherapy being delivered
- Prescribed Radiotherapy Clinical Trial:
 - data item required to record whether this prescription is part of a trial that has a component of radiotherapy delivery included

Data Group: Radiotherapy Plan

- Radiotherapy Plan Identifier:
 - data item which specifies the unique identifier for each radiotherapy plan
- Type Of Plan:
 - data item which specifies the type of plan to be recorded
- Date Of Planning Appointment:
 - data item identifying the date of the first planning appointment in the radiotherapy department attended by the patient
- Plan Name:
 - data item allowing the name given to the plan to be recorded
- Specialist Radiotherapy Treatments:
 - data item required to identify a specialist type of radiotherapy being delivered
- Other Specialist Radiotherapy Treatments:
 - data item to record any other external beam specialist radiotherapy treatment, which is not listed in either radiotherapy treatment modality or specialist radiotherapy treatments
- Radiotherapy Plan Procedure (OPCS):
 - data item to record the procedure(s) carried out using OPCS. This maybe recorded in addition to radiotherapy plan procedure (SNOMED CT)
- Radiotherapy Plan Procedure (SNOMED CT):
 - data item to record the procedure(s) carried out using SNOMED CT. This maybe recorded in addition to radiotherapy plan procedure (OPCS)
- Radiotherapy Plan Procedure (Code Capture Additional Procedures):
 - data item allowing the use of codes for procedures not clearly defined in the OPCS or SNOMED CT
- Other Radiotherapy Plan Procedure (Code Capture Additional Procedures):
 - data item allowing the use of codes for procedures not clearly defined in radiotherapy plan procedure (code capture additional procedures)
- Radiotherapy Prescribed Dose Unit Of Measurement (SNOMED CT, DM+D):
 - data item to record the total prescribed radiation dose measurement, as defined within a new SNOMED CT® reference set # **3149100001101**, which is used to identify the unit of measurement concept ID from the NHS Dictionary of Medicines and Devices (DM+D)

- Radiotherapy Actual Dose Unit Of Measurement (SNOMED CT, DM+D):
 - data item to record the total prescribed radiation dose measurement, as defined within a new SNOMED CT reference set # **31491000001101**

Data Group: Radiotherapy Exposure

- Radiotherapy Beam Energy Unit Of Measurement (SNOMED CT, DM+D):
 - data item required to accurately record the total actual beam energy radiation dose measurement, as defined within a new SNOMED CT reference set # **31491000001101**
- Radiopharmaceutical Procedure (SNOMED CT):
 - this is a new data item to capture radiopharmaceutical procedures using SNOMED CT
 - a reference set will be created before launch to support the accurate collection of data

Data Group: Radiotherapy Attendance

- Radiotherapy Attendance Identifier:
 - data item accessible from all systems, identifying the patients assigned attendance ID
- Admitted Patient Attendance Indicator:
 - data item to record whether the Radiotherapy treatment was delivered while the patient was also an Inpatient at either the Treating or another Trust
- Radiotherapy Attendance Date And Time:
 - data item allowing the date and time to be recorded when the patient arrived for their radiotherapy attendance appointment
- Radiotherapy Attendance Procedure (OPCS):
 - data item to record the procedure(s) carried out using OPCS. This may be recorded in addition to radiotherapy attendance procedure (SNOMED CT)
- Radiotherapy Attendance Procedure (SNOMED CT):
 - data item to record the procedure(s) carried out using SNOMED CT. This may be recorded in addition to radiotherapy attendance procedure (OPCS)
- Radiotherapy Attendance Procedure (Code Capture Additional Procedures):
 - data item allowing the use of codes for procedures not clearly defined in the OPCS or SNOMED CT
- Other Radiotherapy Attendance Procedure (Code Capture Additional Procedures):
 - data item allowing the use of codes for procedures not clearly defined in radiotherapy attendance procedure (code capture additional procedures)
- Local Version Number (Attendance):
 - data item to record the local version number of the format of the extract containing this attendance

Deletions

The following data items are deleted for the reasons stated against each item. More detail is available within the change control log of the data set and should be used in conjunction with this document. Where data item codes are used, please refer to data set change control log.

Data Group: Radiotherapy Episode

- Treatment Start Date (Radiotherapy Treatment Episode):
 - no longer required for RTDS
- Radiotherapy Intent:
 - replaced with radiotherapy intent of treatment

Data Group: Radiotherapy Prescription

- Number Of Teletherapy Fields:
 - no longer required for RTDS
- Actual Fractions:
 - no longer required for RTDS

Although there are only 4 data items deleted, there was a complete review of the additional 99 Commissioning Data Set (CDS) data items currently requested as supporting data for RTDS v5.0. The review concluded that many of these were no longer required, as they could be ascertained by linking to other high quality data sets or were duplicated. As such the content of RTDS will only include those items required to allow the accurate processing and patient matching of radiotherapy treatments. This has reduced the overall data set by 60 data items (48%), compared with the complied data set of RTDS v5.0.