DCB0147

Amd 89/2016

NHS England

National Cancer Waiting Times Monitoring Data Set v2.0: Specification

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Description	This specification defines the National Cancer Waiting Times Monitoring Data Set v2.0 and highlights the effect of the current developments as set out in DCB0147 Amd 89/2016. This supports the implementation of these changes, which come into effect from the 1st April 2018.
Cross Reference	N/A
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Action Required	Implementation of 14 additional data items, 16 data item changes and 2 data item removals; submission to new Cancer Waiting Times system, according to DCB0147 Amd 89/2016
Timing / Deadlines (if applicable)	**By 01 April 2018**
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Document Status

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National Cancer Waiting Times Monitoring Data Set v2.0: Specification

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1.0	17 August 2017	FINAL Version

Reviewers:

This document must be reviewed by the following:

Name	Signature	Title / Responsibility	Date	Version
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Equality and Health Inequalities Statement

Promoting equality and addressing health inequalities are at the heart of NHS England's values. Throughout the development of the policies and processes cited in this document, we have:

- Given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic (as cited under the Equality Act 2010) and those who do not share it; and
- Given regard to the need to reduce inequalities between patients in access to, and outcomes from healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities

Data Coordination Board

This information standard (DCB0147) has been approved for publication by the Department of Health 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 Coordination Board (DCB), a sub-group of the Digital Delivery Board.

This information standard comprises the following documents:

- Requirements Specification
- Implementation Guidance
- Change Specification.

An Information Standards Notice (DCB0147 Amd 89/2016) has been issued as a notification of use and implementation timescales. Please read this alongside the documents for the standard.

The controlled versions 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.

Date of publication: 5 October 2017

Contents

1 Executive Summary

1.1 Background

This specification defines the National Cancer Waiting Times Monitoring Data Set (NCWTMDS) v2.0 and highlights the effects of the current developments as set out in DCB0147 Amd 89/2016.

The NCWTMDS supports the management and monitoring of breach allocation, as well as the following cancer waiting times standards:

- Two week wait (TWW) from referral to date first seen
- 31-day wait from decision to treat to treatment start date
- 31-day wait from referral to treatment for child and rare cancers
- 62-day wait from referral or consultant upgrade to first treatment
- 28-day wait from referral to the date on which the patient is told whether cancer is diagnosed or ruled out (new)

1.2 Specification

The NCWTMDS v2.0 has been updated to include new items for the management and monitoring of the 28 day Faster Diagnosis Standard (28d FDS) and updated breach allocation policy. It has also been aligned with the data collection for the Cancer Outcomes and Services Dataset (COSD) and undergone changes to conform to the NHS Data Dictionary.

The dataset gathers details on patient pathways, outpatient services, activities of multi-disciplinary teams, the status and diagnosis of a patient, and any treatment delivered (see Section 3.1.1). The NCWTMDS applies to the different national requirements for cancer waiting times in slightly different forms depending on the business requirements for managing, monitoring and commissioning services that meet the specified maximum waiting time (see Section 3.1.2).

The full dataset applies to all patients with a primary diagnosis of cancer within the range of ICD10-C00 to ICD10-C97 or ICD10-D05, or a secondary diagnosis linked to the original primary within this range. Patients diagnosed with Basal Cell Carcinoma are excluded from the dataset as they are not covered by the cancer waiting times standards (see Section 3.1.3). Data items relevant for monitoring of the TWW standard and 28d FDS additionally apply to patients referred urgently who are not, ultimately, diagnosed with cancer.

Patient records are submitted to the Cancer Waiting Times Database (CWT system) hosted by NHS Digital in either XML, CSV or TXT format (see Section 3.1.6). In order to conform to the new Information Standard DCB0147 Amd 89/2016 (see Section 3.1.7):

- Local system suppliers must enable the extract of data items as per the new CWT Information Standard from local cancer patient management systems in a format suitable for upload to NCWTMDS v2.0 from 1 July 2018

- Healthcare Organisations must submit CWT activity occurring in the financial year 2018/19 to the replacement Cancer Waiting Times System NCWTMDS v2.0 via the new CWT portal
- Healthcare Organisations must submit against the new Information Standard, incorporating all data item name changes, any format and field length changes for existing data items and deletions of data items from the data set by 1 July 2018
- Healthcare Organisations must start submitting data items relating to Inter-provider transfers to NCWTMDS v2.0 via the new platform after 1 July 2018 to meet the advertised submission deadline for July 2018 activity
- Healthcare Organisations must start submitting data items relating to the new 28 Faster Diagnosis Standard to NCWTMDS v2.0 via the new platform after 1 April 2019 to meet the advertised submission deadline for April 2019 activity

1.3 Concept of Operation

The transition from the existing Open Exeter system to the new CWT system should be done in such a way that all activity taking place in 2017/18 (i.e. up to and including 31 March 2018) is uploaded to the existing Open Exeter system to allow Quarter 4 reports to be generated within Open Exeter. All activity occurring on or after 1 April 2018 should be uploaded to the new CWT system. The new system will reject records with activity dates prior to 1 April 2018 (see Section 4.1.3).

Data intended for the NCWTMDS v2.0 is transmitted, validated, stored and analysed within the replacement CWT database. All access to NCWTMDS v2.0 data held within the new system is strictly managed by a role based permissions model (see Section 4.1.6). Only those users defined in the NHS Digital Direction approval for the use of this dataset have the access rights enabling them to view patient identifiers (NHS Number); all other users see either aggregate data or a pseudonymised identifier.

Data quality is based around data validation by the submitter, both locally prior to upload to the system, as well as during and after upload via a set of tools provided by NHS Digital to support a full data quality analysis of the submitted records (see Section 4.3). Additionally, the system will undertake thorough data quality and integrity checks on the data submitted.

2 Overview

The Cancer Reform Strategy in 2007 introduced new and changed commitments in terms of national requirements for cancer waiting times. A *Review of Cancer Waiting Times Standards* was carried out by the Department of Health and published alongside *Improving Outcomes: A Strategy for Cancer* (2011). Following this review it was confirmed that:

> "*Overall, cancer waiting time standards should be retained. Shorter waiting times can help to ease patient anxiety and, at best, can lead to earlier diagnosis, quicker treatment, a lower risk of complications, an enhanced patient experience and improved cancer outcomes. The current cancer waiting times standards will therefore be retained.*"

In addition, the Independent Cancer Taskforce, set up as part of the NHS's Five Year Forward View to examine how to improve cancer care and survival, proposed the introduction of a new standard in *Achieving World-Class Cancer Outcomes: A Strategy for England 2015-2020*. The Taskforce recommended that:

> *"Patients referred for testing by a GP, because of symptoms or clinical judgement, should either be definitively diagnosed with cancer or cancer excluded and this result should be communicated to the patient within four weeks."*

Following this recommendation, the development of a new 28 day Faster Diagnosis Standard commenced, as reported in *Achieving World-Class Cancer Outcomes: A Strategy for England 2015-2020 – One Year On*. Implementation of the standard required changes and additions to the existing National Cancer Waiting Times Monitoring Data Set (NCWTMDS) and collection system.

Furthermore, in 2016, new *National Cancer Breach Allocation Guidance* was published to inform a more refined system of cancer breach allocation between referring and treating trusts across England, recommending collaborative relationships between referring and treating organisations and development of local breach allocation polices.

2.1 National Cancer Waiting Times Monitoring Data Set v2.0

Version 2.0 of the National Cancer Waiting Times Monitoring Data Set (NCWTMDS) is detailed in this specification document and supports the management and monitoring of breach allocation, as well as the following cancer waiting times standards:

- A maximum **two week wait** from an urgent GP referral for suspected cancer to DATE FIRST SEEN by a specialist for all suspected cancers;
- A maximum **two week wait** from referral for breast symptoms (where cancer is not initially suspected) to DATE FIRST SEEN;

- A maximum **31-day wait** from urgent GP referral for suspected cancer to first definitive treatment for children's and testicular cancers and acute leukaemia;
- A maximum **31-day wait** from decision to treat (CANCER TREATMENT PERIOD START DATE) to first definitive treatment for all cancers;
- A maximum **31-day wait** for all subsequent treatments for new cases of primary and recurrent cancer where an anti-cancer drug regimen, surgery or radiotherapy is the chosen CANCER TREATMENT MODALITY;
- A maximum **62-day wait** from urgent GP referral for suspected cancer to first definitive treatment for all cancers;
- A maximum **62-day wait** from referral from a cancer Screening Programme to first treatment for all cancers;
- A maximum **62-day wait** from a CONSULTANTS decision to upgrade the urgency of a PATIENT they suspect to have cancer to first treatment for all cancers;
- A maximum **28-day wait** from a urgent GP referral for suspected cancer to CANCER FASTER DIAGNOSIS PATHWAY END DATE (The date on which the patient is told whether cancer is diagnosed or ruled out) or DECISION TO TREAT DATE, whichever comes first, for all suspected cancers;*
- A maximum **28-day wait** from referral for breast symptoms (where cancer is not initially suspected) to CANCER FASTER DIAGNOSIS PATHWAY END DATE (The date on which the patient is told whether cancer is diagnosed or ruled out), or DECISION TO TREAT DATE, whichever comes first, for all suspected cancers;*
- A maximum **28-day wait** from a referral to an Assessment Clinic following the identification of an abnormality by an NHS Cancer Screening Service to CANCER FASTER DIAGNOSIS PATHWAY END DATE (The date on which the patient is told whether cancer is diagnosed or ruled out), or DECISION TO TREAT DATE, whichever comes first, for all suspected cancers.*

*Details of how removals from the waiting list are managed for this standard are captured in the National Cancer Waiting Times Monitoring Data Set: A Guide.

2.2 Summary

The table below contains a summary of the information standard.

Standard	
Standard Number	DCB0147
Title	National Cancer Waiting Times Monitoring Data Set
Description	The National Cancer Waiting Times Monitoring Data Set (NCWTMDS) is used by the NHS and Department of Health to: Monitor timed pathways of care for cancer patients; Manage pathways of care for cancer patients; Performance manage elective services for cancer patients; Report against the requirements of the NHS Operating Framework for cancer waiting times; Support the right to access cancer services within the NHS Constitution (The Two Week Wait); Produce national, official and local statistics for cancer patients; and Support investment planning for cancer services. The data set is also used by: Cancer Alliances and Clinical Commissioning Groups (CCGs) to monitor and manage timed pathways of care for cancer patients locally and regionally, and to inform commissioning decisions and priorities Public Health England in the National Cancer Registration Database (NCRAS)
Applies to	All Providers (Acute Trusts (both foundation and non-foundation), Care Trusts and contracted independent sector providers) delivering cancer outpatient, cancer screening or cancer treatment services.
Release	
Release Number	Amd 89/2016
Title	National Cancer Waiting Times Monitoring Data Set v 2.0
Description	The new Cancer Waiting Times System is being developed and rolled out by NHS Digital within the Digital Delivery Centre. The NCWTMDS collects and monitors data related to the operational standards set for cancer care in the Handbook to the NHS Constitution (pages 31 to 34). The data is collected directly from English NHS providers on a monthly basis. NCWTMDS v2.0 includes items to monitor compliance with a new policy that patients should receive a diagnosis or ruling out of cancer within 28 days of an initial GP referral for suspicion of cancer, referral for breast symptoms where cancer is not initially suspected, or a screening referral. This release also introduces new data items in NCWTMDS to enable the implementation of updated breach allocation methodology within the system, resulting in one single national approach to breach allocation and remove the need for local implementation of the policy published in 2016.
Implementation Start Date	01-April-2018 (submission via new CWT system from 03-May-2018)
Implementation	01-July-2018

Completion Date	(Note that Trusts will not be performance managed against the new 28 day Faster Diagnosis Standard until 2020)

2.3 Benefits of Cancer Waiting Times standards

Shorter cancer waiting times can help to ease patient anxiety and worry, and may ultimately result in earlier diagnosis, quicker treatment, a lower risk of complications, as well as enhanced patient experience and improved cancer outcomes.

Overall, cancer waiting times standards have helped to drive service improvement and have been beneficial to patients.[1]

Policy development benefits of the NCWTMDS v2.0:

- Introduction of data items to implement a new national breach allocation policy that will allow more accurate and fair allocation of responsibility in cases where a standard is breached (full breach allocation guidance available at: https://www.england.nhs.uk/cancer/resources/)
- Introduction of data items to monitor the new 28 day Faster Diagnosis Standard which is a patient-centred standard to ensure timely communication of a cancer diagnosis / ruling out of a cancer diagnosis to patients
- Ensure compliance where necessary with patient opt-out policies

Alignment of the NCWTMDS v2.0 with other datasets and information standards to improve consistency, coherence, quality, security and reduce burden:

1. Cancer Outcomes and Services Dataset, Radiotherapy Dataset, SACT Dataset: Data items have been either retired from NCWTMDS which are in these datasets, or updated to be fully aligned
2. SCCI0090 Health and Social Care Organisation Reference Data: The NCWTMDS and system have been updated to conform to this standard
3. In line with Information Governance best practice, an enhanced role based access model has been introduced that will prevent users from viewing and editing records if they are not involved in that patient's care
4. The new system includes an improved collaborative working approach to ensure providers are made aware of updates and changes to records where they are also involved in that patient's care.

[1] Department of Health '*Standards Improving Outcomes: A Strategy for Cancer*' published alongside *Improving Outcomes: A Strategy for Cancer* (2011)

2.4 Controlled Documents

Available at: www.content.digital.nhs.uk/isce/publication/dcb0147

Document Reference	Document Name
NCWTMDS v2.0 – Change Specification	National Cancer Waiting Times Monitoring Data Set Change Specification
NCWTMDS v2.0 – Implementation Guidance	National Cancer Waiting Times Monitoring Data Set Implementation Guidance
CR1589	NHS Data Model and Dictionary Change Request: Changes to the National Cancer Waiting Times Monitoring Data Set
DCB0147 Amd 89/2016	Information Standards Notice

2.5 Guidance

The main communications for the on-going implementation and business as usual running of the cancer waiting times database are through the NHS Digital Cancer Waiting Times – Useful Documentation and Links website:

https://digital.nhs.uk/cancer-waiting-times

The data items are described in the National Cancer Waiting Times Monitoring Data Set – A Guide.

Document Reference	Name
NCWTMDS v2.0 – A Guide	National Cancer Waiting Times Monitoring Data Set – A Guide

2.6 Related Standards

Reference	Title
SCCI0111	Radiotherapy Data Set
DCB1521	Cancer Outcomes and Services Dataset
SCCI0021	International Classification of Diseases
ISB 0112	Inter-Provider Transfer Administrative Minimum Data Set
ISB 0095	Referral to Treatment Waiting Times

3 Specification

3.1 Information Specification

3.1.1 Overview of Data Item Requirements

The NCWTMDS has been updated to include new items for the management and monitoring of the 28 day Faster Diagnosis Standard and updated breach allocation policy. The following groups of Mandatory (M), Required (R) and Optional (O) data elements are returns to the CWT system[2] as applicable:

Patient and Pathway Identification

This grouping within the NCWTMDS provides patient and pathway details. In the NCWTMDS XML message schema only one occurrence of this group is required.

M	NHS NUMBER
M	NHS NUMBER STATUS INDICATOR CODE
R	PATIENT PATHWAY IDENTIFIER
R	ORGANISATION IDENTIFIER (PATIENT PATHWAY IDENTIFIER ISSUER)

Outpatient Services

This grouping within the NCWTMDS covers outpatient service details.
In the NCWTMDS XML message schema only one occurrence of this group is required if applicable to the scenario being used (see 2.1.2).

R	SOURCE OF REFERRAL FOR OUT-PATIENTS
R	PRIORITY TYPE CODE
R	DECISION TO REFER DATE (CANCER OR BREAST SYMPTOMS)
R	CANCER REFERRAL TO TREATMENT PERIOD START DATE
R	TWO WEEK WAIT CANCER OR SYMPTOMATIC BREAST REFERRAL TYPE
R	CONSULTANT UPGRADE DATE
R	ORGANISATION SITE IDENTIFIER (OF PROVIDER CONSULTANT UPGRADE)
R	DATE FIRST SEEN
R	ORGANISATION SITE IDENTIFIER (PROVIDER FIRST SEEN)
R	WAITING TIME ADJUSTMENT (FIRST SEEN)
R	WAITING TIME ADJUSTMENT REASON (FIRST SEEN)
R	CANCER CARE SPELL DELAY REASON (FIRST SEEN)
O	CANCER CARE SPELL DELAY REASON COMMENT (FIRST SEEN)

[2] NHS Digital maintained CWT system (the replacement for the Open Exeter System)

Multi-Disciplinary Team Activity

This grouping within the NCWTMDS covers the activities of Multi-disciplinary Teams. In the NCWTMDS XML message schema only one occurrence of this group is required if applicable to the scenario being used (see 2.1.2).

R	MULTIDISCIPLINARY TEAM CANCER CARE PLAN DISCUSSED INDICATOR
R	MULTIDISCIPLINARY TEAM DISCUSSION DATE (CANCER)

Patient Status and Diagnosis

This grouping within the NCWTMDS provides details on the status and diagnosis of a patient, including information on referrals, transfers and faster diagnosis standard-relevant items. In the NCWTMDS XML message schema only one occurrence of this group is required. Note – not all data items in this group are expected to be submitted by the same provider of care, please refer to the scenarios described in section 2.1.2 to understand which groups of data items should be submitted particularly when submitting information about inter provider transfers.

M	CANCER OR SYMPTOMATIC BREAST REFERRAL PATIENT STATUS
R	PRIMARY DIAGNOSIS (ICD)
R	TUMOUR LATERALITY
R	CANCER TREATMENT PERIOD START DATE
R	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER DECISION TO TREAT)
R	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)
R	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)
R	ORGANISATION IDENTIFIER (REFERRING)
R	ORGANISATION IDENTIFIER (RECEIVING)
R	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER TRANSFER)
R	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)
R	CANCER FASTER DIAGNOSIS PATHWAY END REASON
R	PRIMARY CANCER SITE (CANCER FASTER DIAGNOSIS PATHWAY)
R	CANCER FASTER DIAGNOSIS PATHWAY END DATE
R	CANCER CARE SPELL DELAY REASON (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
O	CANCER CARE SPELL DELAY REASON COMMENT (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
R	CANCER FASTER DIAGNOSIS PATHWAY EXCLUSION REASON
O	CARE PROFESSIONAL TYPE CODE (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
O	METHOD OF COMMUNICATION (END OF CANCER FASTER DIAGNOSIS PATHWAY)
R	ORGANISATION SITE IDENTIFIER (OF CANCER FASTER DIAGNOSIS END)

Treatment Events

This grouping within the NCWTMDS provides details on any treatment delivered. In the NCWTMDS XML message schema only one occurrence of this group is required if applicable to the scenario being used (see 2.1.2).

R	TREATMENT START DATE (CANCER)
R	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER TREATMENT START DATE)
R	CANCER TREATMENT EVENT TYPE
R	CANCER TREATMENT MODALITY
R	CLINICAL TRIAL INDICATOR
R	CANCER CARE SETTING (TREATMENT)
R	RADIOTHERAPY PRIORITY
R	CANCER CARE SPELL DELAY REASON (DECISION TO TREATMENT)
O	CANCER CARE SPELL DELAY REASON COMMENT (DECISION TO TREATMENT)
R	WAITING TIME ADJUSTMENT (TREATMENT)
R	WAITING TIME ADJUSTMENT REASON (TREATMENT)
R	CANCER CARE SPELL DELAY REASON (REFERRAL TO TREATMENT)
O	CANCER CARE SPELL DELAY REASON COMMENT (REFERRAL TO TREATMENT)
R	CANCER CARE SPELL DELAY REASON (CONSULTANT UPGRADE)
O	CANCER CARE SPELL DELAY REASON COMMENT (CONSULTANT UPGRADE)

3.1.2 Application of the NCWTMDS

The NCWTMDS applies to the different national requirements for cancer waiting times in slightly different forms depending on the business requirements for managing, monitoring and commissioning services that meet the specified maximum waiting time. The application of the NCWTMDS is defined by a range of scenarios which cover all or part of the patient pathway within the waiting times periods (two week, 28 day, 31 day and 62 day). The columns in the tables from page 16 show which data items are required for this range of healthcare scenarios:

Scenario 1a:

The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has not had a decision to treat, has not had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 1b:

The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has not had a decision to treat, has had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 1c:
The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has had the decision to treat, and has not had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 1d:
The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has had the decision to treat, has had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 1e:
The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has not had a decision to treat, has not had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. The Health Care Provider sends the patient to another Health Care Provider, that is, makes an inter provider transfer.

Scenario 1f:
The Health Care Provider receiving an inter provider transfer of a patient, where the patient is first seen at a different Health Care Provider, and where the patient has not had a decision to treat, has not had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. The Health Care Provider then subsequently sends the patient to another Health Care Provider, that is, makes a further inter provider transfer.

Scenario 1g:
The Health Care Provider where the patient is first seen following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has not had a decision to treat, has not had the diagnosis outcome communicated, and the patient has been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 2a:
The Health Care Provider where the patient receives First Definitive Treatment for cancer following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme, and where the patient has had the decision to treat, has had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway. No inter provider transfers are in progress.

Scenario 2b:
The Health Care Provider where the patient receives First Definitive Treatment for cancer following a inter provider transfer, and where the patient has had the decision to treat, and has had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway.

Scenario 2c:
The Health Care Provider where the patient receives First Definitive Treatment for cancer following a inter provider transfer, and where the patient has had the decision to treat, and has not had the diagnosis outcome communicated, and the patient has not been excluded from the cancer faster diagnosis pathway.

Scenario 3:
The Health Care Provider where the patient receives second or subsequent treatment for cancer following a referral request with priority type 'Two Week Wait', or where an urgent referral is from a NHS cancer screening programme. No inter provider transfers are in progress.

Scenario 4:
The Health Care Provider where the patient receives First Definitive Treatment for cancer following a consultant upgrade onto a 62 day patient pathway. No inter provider transfers are in progress.

Scenario 5:
The Health Care Provider where the patient receives second or subsequent treatment for cancer following a consultant upgrade onto a 62 day patient pathway. No inter provider transfers are in progress.

Scenario 6:
The Health Care Provider where the patient receives First Definitive Treatment for cancer following a referral request from another SOURCE OF REFERRAL FOR OUT-PATIENTS or a different priority type. No inter provider transfers are in progress.

Scenario 7:
The Health Care Provider where the patient receives second or subsequent treatment for cancer following a referral request from another SOURCE OF REFERRAL FOR OUT-PATIENTS or a different priority type. No inter provider transfers are in progress.

Whether a specific data item is required in the specific scenario is illustrated by the following codes within the Table 1 and 2 (from page 17):

M = Mandatory	The Reporting Requirements in Schedule 6A of the Particulars requires NHS provider ORGANISATIONS to submit this information on a monthly basis. NHS England requires the data to be submitted as advertised on NHS Digital website
M* = Mandatory if applicable	The Reporting Requirements in Schedule 6A of the Particulars requires NHS provider ORGANISATIONS to submit this information on a monthly basis, where collection of the item is applicable to them. NHS England requires the data to be submitted as advertised on NHS Digital website
O = Optional	The data item is optional
O* = Optional if applicable	These optional fields are only populated if they relate to the PATIENT PATHWAY identified in scenarios 1 to 7 and the conditions required for their use are met
N/A = Not Applicable	The data item does not apply in this instance

Table 1: Scenario 1a to 1g

		Scenario 1a	Scenario 1b	Scenario 1c	Scenario 1d	Scenario 1e	Scenario 1f	Scenario 1g
CWTID	**Patient Information**							
CWT001	NHS NUMBER	M	M	M	M	M	M	M
CWT002	NHS NUMBER STATUS INDICATOR CODE	M	M	M	M	M	M	M
CWT003	PATIENT PATHWAY IDENTIFIER	M	M	M	M	M	M	M
	Provider Information							
CWT004	ORGANISATION IDENTIFIER (PATIENT PATHWAY IDENTIFIER ISSUER)	M	M	M	M	M	M	M
CWT011	ORGANISATION SITE IDENTIFIER (OF PROVIDER CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT013	ORGANISATION SITE IDENTIFIER (OF PROVIDER FIRST SEEN)	M	M	M	M	M	n/a	M
CWT024	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER DECISION TO TREAT)	n/a	n/a	M	M	n/a	n/a	n/a
CWT027	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER TREATMENT START DATE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Dates							
CWT008	CANCER REFERRAL TO TREATMENT PERIOD START DATE	M	M	M	M	M	n/a	M
CWT010	CONSULTANT UPGRADE DATE	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT012	DATE FIRST SEEN	M	M	M	M	M	n/a	M
CWT023	CANCER TREATMENT PERIOD START DATE	n/a	n/a	M	M	n/a	n/a	n/a
CWT026	TREATMENT START DATE (CANCER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Cancer Information							
CWT009	TWO WEEK WAIT CANCER OR SYMPTOMATIC BREAST REFERRAL TYPE	M	M	M	M	M	n/a	M

CWT021	PRIMARY DIAGNOSIS (ICD)	n/a	M*	M*	M*	n/a	n/a	n/a
CWT022	TUMOUR LATERALITY	n/a	M*	M*	M*	n/a	n/a	n/a
	Treatment Information							
CWT029	CANCER TREATMENT MODALITY	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT031	CANCER CARE SETTING (TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT030	CLINICAL TRIAL INDICATOR	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT032	RADIOTHERAPY PRIORITY	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT005	SOURCE OF REFERRAL FOR OUT-PATIENTS	M	M	M	M	M	n/a	M
CWT006	PRIORITY TYPE CODE	M	M	M	M	M	n/a	M
CWT020	CANCER OR SYMPTOMATIC BREAST REFERRAL PATIENT STATUS	M	M	M	M	M	M	M
CWT028	CANCER TREATMENT EVENT TYPE	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT007	DECISION TO REFER DATE (CANCER OR BREAST SYMPTOMS)	M*	M*	M*	M*	M*	n/a	M*
	Adjustment Information							
CWT014	WAITING TIME ADJUSTMENT (FIRST SEEN)	M*	M*	M*	M*	M*	n/a	M*
CWT015	WAITING TIME ADJUSTMENT REASON (FIRST SEEN)	M*	M*	M*	M*	M*	n/a	M*
CWT035	WAITING TIME ADJUSTMENT (TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT036	WAITING TIME ADJUSTMENT REASON (TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Breach Information							
CWT016	CANCER CARE SPELL DELAY REASON (FIRST SEEN)	M*	M*	M*	M*	M*	n/a	M*
CWT017	CANCER CARE SPELL DELAY REASON COMMENT (FIRST SEEN)	O*	O*	O*	O*	O*	n/a	O*
CWT033	CANCER CARE SPELL DELAY REASON (DECISION TO TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT034	CANCER CARE SPELL DELAY REASON COMMENT (DECISION TO TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT037	CANCER CARE SPELL DELAY REASON (REFERRAL TO TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a

CWT038	CANCER CARE SPELL DELAY REASON COMMENT (REFERRAL TO TREATMENT)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT039	CANCER CARE SPELL DELAY REASON (CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT040	CANCER CARE SPELL DELAY REASON COMMENT (CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Other Information							
CWT018	MULTIDISCIPLINARY TEAM CANCER CARE PLAN DISCUSSED INDICATOR	M*	M*	M*	M*	M*	M*	M*
CWT019	MULTIDISCIPLINARY TEAM DISCUSSION DATE (CANCER)	M*	M*	M*	M*	M*	M*	M*
	Faster Diagnosis Information							
CWT101	CANCER FASTER DIAGNOSIS PATHWAY END REASON	n/a	M	n/a	M	n/a	n/a	M
CWT102	PRIMARY CANCER SITE (CANCER FASTER DIAGNOSIS PATHWAY)	n/a	M	n/a	M	n/a	n/a	n/a
CWT103	CANCER FASTER DIAGNOSIS PATHWAY END DATE	n/a	M	n/a	M	n/a	n/a	M
CWT104	CANCER CARE SPELL DELAY REASON (OUTCOME COMMUNICATION FASTER DIAGNOSIS PATHWAY)	n/a	M*	n/a	M*	n/a	n/a	n/a
CWT105	CANCER CARE SPELL DELAY REASON COMMENT (OUTCOME COMMUNICATION FASTER DIAGNOSIS PATHWAY)	n/a	O*	n/a	O*	n/a	n/a	n/a
CWT106	CANCER FASTER DIAGNOSIS PATHWAY EXCLUSION REASON	n/a	n/a	n/a	n/a	n/a	n/a	M
CWT107	CARE PROFESSIONAL TYPE CODE (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)	n/a	O*	n/a	O*	n/a	n/a	n/a
CWT108	METHOD OF COMMUNICATION (END OF CANCER FASTER DIAGNOSIS PATHWAY)	n/a	O*	n/a	O*	n/a	n/a	n/a
CWT109	ORGANISATION SITE IDENTIFIER (OF CANCER FASTER DIAGNOSIS END)	n/a	M	n/a	M	n/a	n/a	M
	Inter Provider Transfer Information							
	First transfer involving the Health Care Provider							

CWT201	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	M	n/a	n/a
CWT025	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	M	n/a
CWT203	ORGANISATION IDENTIFIER (REFERRING)	n/a	n/a	n/a	n/a	M	M	n/a
CWT204	ORGANISATION IDENTIFIER (RECEIVING)	n/a	n/a	n/a	n/a	M	M	n/a
CWT205	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	M	n/a	n/a
CWT206	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	M	n/a
	Second transfer involving the Health Care Provider							
CWT201	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	M	n/a
CWT025	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT203	ORGANISATION IDENTIFIER (REFERRING)	n/a	n/a	n/a	n/a	n/a	M	n/a
CWT204	ORGANISATION IDENTIFIER (RECEIVING)	n/a	n/a	n/a	n/a	n/a	M	n/a
CWT205	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	M	n/a
CWT206	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 2: Scenario 2a to 7

		Scenario 2a	Scenario 2b	Scenario 2c	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7
CWTID	**Patient Information**								
CWT001	NHS NUMBER	M	M	M	M	M	M	M	M
CWT002	NHS NUMBER STATUS INDICATOR CODE	M	M	M	M	M	M	M	M
CWT003	PATIENT PATHWAY IDENTIFIER	M*	M*	M*	M*	M*	M*	M*	M*
	Provider Information								
CWT004	ORGANISATION IDENTIFIER (PATIENT PATHWAY IDENTIFIER ISSUER)	M*	M*	M*	M*	M*	M*	M*	M*
CWT011	ORGANISATION SITE IDENTIFIER (OF PROVIDER CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	M	n/a	O	n/a
CWT013	ORGANISATION SITE IDENTIFIER (OF PROVIDER FIRST SEEN)	n/a	n/a	n/a	n/a	M	n/a	n/a	n/a
CWT024	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER DECISION TO TREAT)	M	M	M	M	M	M	M	M
CWT027	ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER TREATMENT START DATE)	M	M	M	M	M	M	M	M
	Dates								
CWT008	CANCER REFERRAL TO TREATMENT PERIOD START DATE	M	n/a	n/a	n/a	O	n/a	O	n/a
CWT010	CONSULTANT UPGRADE DATE	n/a	n/a	n/a	n/a	M	n/a	O	n/a
CWT012	DATE FIRST SEEN	n/a	n/a	n/a	n/a	M	n/a	O	n/a
CWT023	CANCER TREATMENT PERIOD START DATE	M	M	M	M	M	M	M	M
CWT026	TREATMENT START DATE (CANCER)	M	M	M	M	M	M	M	M
	Cancer Information								
CWT009	TWO WEEK WAIT CANCER OR SYMPTOMATIC BREAST REFERRAL TYPE	n/a	n/a	n/a	n/a	n/a	n/a	O	n/a

CWT021	PRIMARY DIAGNOSIS (ICD)	M	M	M	M	M	M	M	M
CWT022	TUMOUR LATERALITY	M	M	M	M	M	M	M	M
	Treatment Information								
CWT029	CANCER TREATMENT MODALITY	M	M	M	M	M	M	M	M
CWT031	CANCER CARE SETTING (TREATMENT)	M	M	M	M	M	M	M	M
CWT030	CLINICAL TRIAL INDICATOR	M	M	M	M	M	M	M	M
CWT032	RADIOTHERAPY PRIORITY	M*	M*	M*	M*	M*	M*	M*	M*
CWT005	SOURCE OF REFERRAL FOR OUT-PATIENTS	n/a	n/a	n/a	n/a	M	n/a	O	n/a
CWT006	PRIORITY TYPE CODE	n/a	n/a	n/a	n/a	M	n/a	O	n/a
CWT020	CANCER OR SYMPTOMATIC BREAST REFERRAL PATIENT STATUS	M	M	M	M	M	M	M	M
CWT028	CANCER TREATMENT EVENT TYPE	M	M	M	M	M	M	M	M
CWT007	DECISION TO REFER DATE (CANCER OR BREAST SYMPTOMS)	n/a	n/a	n/a	n/a	n/a	n/a	O	n/a
	Adjustment Information								
CWT014	WAITING TIME ADJUSTMENT (FIRST SEEN)	n/a	n/a	n/a	n/a	O*	n/a	n/a	n/a
CWT015	WAITING TIME ADJUSTMENT REASON (FIRST SEEN)	n/a	n/a	n/a	n/a	O*	n/a	n/a	n/a
CWT035	WAITING TIME ADJUSTMENT (TREATMENT)	M*	M*	M*	M*	M*	M*	M*	M*
CWT036	WAITING TIME ADJUSTMENT REASON (TREATMENT)	M*	M*	M*	M*	M*	M*	M*	M*
	Breach Information								
CWT016	CANCER CARE SPELL DELAY REASON (FIRST SEEN)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT017	CANCER CARE SPELL DELAY REASON COMMENT (FIRST SEEN)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT033	CANCER CARE SPELL DELAY REASON (DECISION TO TREATMENT)	M*	M*	M*	M*	M*	M*	M*	M*
CWT034	CANCER CARE SPELL DELAY REASON COMMENT (DECISION TO TREATMENT)	O*	O*	O*	O*	O*	O*	O*	O*
CWT037	CANCER CARE SPELL DELAY REASON (REFERRAL TO TREATMENT)	M*	M*	M*	n/a	M*	n/a	O*	n/a

CWT038	CANCER CARE SPELL DELAY REASON COMMENT (REFERRAL TO TREATMENT)	O*	O*	O*	n/a	O*	O*	O*	n/a
CWT039	CANCER CARE SPELL DELAY REASON (CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	M*	n/a	O*	n/a
CWT040	CANCER CARE SPELL DELAY REASON COMMENT (CONSULTANT UPGRADE)	n/a	n/a	n/a	n/a	O*	n/a	O*	n/a
	Other Information								
CWT018	MULTIDISCIPLINARY TEAM CANCER CARE PLAN DISCUSSED INDICATOR	M*	M*	M*	M*	M*	M*	M*	M*
CWT019	MULTIDISCIPLINARY TEAM DISCUSSION DATE (CANCER)	M*	M*	M*	M*	M*	M*	M*	M*
	Faster Diagnosis Information								
CWT101	CANCER FASTER DIAGNOSIS PATHWAY END REASON	M	M	n/a	M*	n/a	n/a	n/a	n/a
CWT102	PRIMARY CANCER SITE (CANCER FASTER DIAGNOSIS PATHWAY)	M	M	n/a	n/a	n/a	n/a	n/a	n/a
CWT103	CANCER FASTER DIAGNOSIS PATHWAY END DATE	M	M	n/a	M*	n/a	n/a	n/a	n/a
CWT104	CANCER CARE SPELL DELAY REASON (OUTCOME COMMUNICATION FASTER DIAGNOSIS PATHWAY)	M*	M*	n/a	n/a	n/a	n/a	n/a	n/a
CWT105	CANCER CARE SPELL DELAY REASON COMMENT (OUTCOME COMMUNICATION FASTER DIAGNOSIS PATHWAY)	O*	O*	n/a	n/a	n/a	n/a	n/a	n/a
CWT106	CANCER FASTER DIAGNOSIS PATHWAY EXCLUSION REASON	n/a	n/a	n/a	M*	n/a	n/a	n/a	n/a
CWT107	CARE PROFESSIONAL TYPE CODE (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)	O*	O*	n/a	n/a	n/a	n/a	n/a	n/a
CWT108	METHOD OF COMMUNICATION (END OF CANCER FASTER DIAGNOSIS PATHWAY)	O*	O*	n/a	n/a	n/a	n/a	n/a	n/a
CWT109	ORGANISATION SITE IDENTIFIER (OF CANCER FASTER DIAGNOSIS END)	M	M	n/a	M*	n/a	n/a	n/a	n/a
	Inter Provider Transfer Information								
	First transfer involving the Health Care Provider								

CWT201	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT025	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)	n/a	M	M	n/a	n/a	n/a	n/a	n/a
CWT203	ORGANISATION IDENTIFIER (REFERRING)	n/a	M	M	n/a	n/a	n/a	n/a	n/a
CWT204	ORGANISATION IDENTIFIER (RECEIVING)	n/a	M	M	n/a	n/a	n/a	n/a	n/a
CWT205	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT206	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)	n/a	M	M	n/a	n/a	n/a	n/a	n/a
	Second transfer involving the Health Care Provider								
CWT201	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT025	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT203	ORGANISATION IDENTIFIER (REFERRING)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT204	ORGANISATION IDENTIFIER (RECEIVING)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT205	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CWT206	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

3.1.3 Patient Cohort/Scope

The scenarios listed above are used to manage the collection of data for all patients with suspected cancer. Cancer for the purpose of this data collection exercise is defined using the International Classification of Diseases 10th Revision (ICD-10).

Data are collected and transmitted as specified for all patients with a PRIMARY DIAGNOSIS within the range C00 to C97 or D05, or a secondary diagnosis linked to the original primary within this range. A full list of the ICD-10 diagnosis codes the Cancer Waiting Times Database will accept is available at: Cancer Waiting Times - Useful Documentation and Links

When entering data for patients with a diagnosis coded within ICD-10 C44.0 to C44.9 it is important that patients diagnosed with Basal Cell Carcinoma are excluded from the data set as they are not covered by the cancer waiting times standards. Cancer types that are not to be entered onto the system are defined by the morphology code of the particular neoplasm type as ICD-10 section C44 is classified by affected body area, e.g. C44.1 Skin of Eyelid.

The table below specifies cancer types/sites to be excluded from the data set:

Specified Neoplasm	ICD-10 Classification	Morphology Code
Basal Cell Carcinoma	C44	M8090/3
Multicentric Basal Cell Carcinoma	C44	M8091/3
Basal Cell Carcinoma, Morphoea	C44	M8092/3
Basal Cell Carcinoma, Fibroepithelial	C44	M8093/3
Basosquamous Carcinoma	C44	M8094/3
Metatypical Carcinoma	C44	M8095/3
Pilomatrix Carcinoma	C44	M8110/3

If there is any problem removing a single neoplasm type from your data set based upon the above information please consult the Basal Cell Neoplasm's section of ICD-10, which can be found under morphology codes M809-M811. No information for any patient diagnosed with a neoplasm that is contained within this section should be entered onto the system.

3.1.4 Submission Deadline

Patient records are submitted to the Cancer Waiting Times Database (CWT system). The CWT system is an open system, with no specification of when an NHS provider might enter these data onto that system. However, NHS providers returning these data must ensure that all records, as defined in sections 2.1.1 and 2.1.2, are present, complete and validated by advertised deadlines. The submission timetable for NCWTMDS v2.0 is anticipated to continue with the formulation for the previous CWT system. Forthcoming deadline dates are set by NHS England and made available for

CWT system users on the NHS Digital website here: https://digital.nhs.uk/cancer-waiting-times

Users are advised to enter these data to the CWT system in advance of the deadline date to allow for the investigation of validation failures and to provide adequate time to fully validate these data. Standardised data quality tools are available within the secure CWT system environment to support this.

3.1.5 Data Items

Detailed information on all data items that form part of the NCWTMDS v2.0 is available in the Dataset File (Appendix 1 of the Change Specification).

Available at: http://content.digital.nhs.uk/isce/publication/DCB0147

3.1.6 Data Transmission

Data is transmitted to the new CWT system in either XML, CSV or TXT format. XML is the preferred format for transmission of data to CWT but it is recognised that not all healthcare providers are able to achieve this and some are currently uploading data via CSV or TXT files.

XML uploads should conform to the CWT XML schema v2.0. This schema has data type and field length validation removed as these types of validation will be handled within the system through a validation service. Therefore the purpose of the schema is to allow the structure of the data being uploaded to be verified and the records broken down into individual records for further validation (refer to section 3.3 for an overview of validations to be carried out).

The XML schema is available to system suppliers and healthcare providers via this link: https://isd.hscic.gov.uk/trud3/user/authenticated/group/101/pack/36 (login required)

CSV or TXT uploads must contain all data items and have the columns in the correct order as shown below. The data must be also be in the correct format which is detailed in the Dataset spreadsheet. The data formats required conform to NHS Data Dictionary standards. Care must be taken if the CSV files are opened in excel prior to upload, to ensure that the field formats are still correct.

CSV and TXT MUST NOT contain a header row.

Note that while the column order for a CSV/TXT upload has been preserved where possible from the existing system, two data items have been removed from the collection. These are Metastatic Site which was in column 21 and Radiotherapy Treatment Intent which was column 31. So the ordering of existing columns has changed after column 20. Data item names highlighted in bold text indicate where the data item name has changed but the data to be collected remains the same. Information about these changes is provided in more detail in the CWT Change Specification which can be found here:

http://content.digital.nhs.uk/isce/publication/DCB0147

CSV Column Order	
Column #	Data Item Name
1	NHS NUMBER
2	PATIENT PATHWAY IDENTIFIER
3	**ORGANISATION IDENTIFIER (PATIENT PATHWAY IDENTIFIER ISSUER)**
4	SOURCE OF REFERRAL FOR OUT-PATIENTS
5	PRIORITY TYPE CODE
6	DECISION TO REFER DATE (CANCER OR BREAST SYMPTOMS)
7	CANCER REFERRAL TO TREATMENT PERIOD START DATE
8	**TWO WEEK WAIT CANCER OR SYMPTOMATIC BREAST REFERRAL TYPE**
9	CONSULTANT UPGRADE DATE
10	**ORGANISATION SITE IDENTIFIER (OF PROVIDER CONSULTANT UPGRADE)**
11	DATE FIRST SEEN
12	**ORGANISATION SITE IDENTIFIER (PROVIDER FIRST SEEN)**
13	WAITING TIME ADJUSTMENT (FIRST SEEN)
14	WAITING TIME ADJUSTMENT REASON (FIRST SEEN)
15	**CANCER CARE SPELL DELAY REASON COMMENT (FIRST SEEN)**
16	**CANCER CARE SPELL DELAY REASON (FIRST SEEN)**
17	MULTIDISCIPLINARY TEAM CANCER CARE PLAN DISCUSSED INDICATOR
18	MULTIDISCIPLINARY TEAM DISCUSSION DATE (CANCER)
19	CANCER OR SYMPTOMATIC BREAST REFERRAL PATIENT STATUS
20	PRIMARY DIAGNOSIS (ICD)
21	TUMOUR LATERALITY
22	CANCER TREATMENT EVENT TYPE
23	**ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER DECISION TO TREAT)**
24	CANCER TREATMENT PERIOD START DATE
25	TREATMENT START DATE (CANCER)
26	CANCER TREATMENT MODALITY
27	CLINICAL TRIAL INDICATOR
28	CANCER CARE SETTING (TREATMENT)
29	**ORGANISATION SITE IDENTIFIER (OF PROVIDER CANCER TREATMENT START DATE)**
30	RADIOTHERAPY PRIORITY
31	**CANCER CARE SPELL DELAY REASON COMMENT (DECISION TO TREATMENT)**
32	**CANCER CARE SPELL DELAY REASON (DECISION TO TREATMENT)**
33	WAITING TIME ADJUSTMENT (TREATMENT)
34	WAITING TIME ADJUSTMENT REASON (TREATMENT)
35	**CANCER CARE SPELL DELAY REASON COMMENT (REFERRAL TO TREATMENT)**
36	**CANCER CARE SPELL DELAY REASON (REFERRAL TO TREATMENT)**
37	**CANCER CARE SPELL DELAY REASON COMMENT (CONSULTANT UPGRADE)**
38	**CANCER CARE SPELL DELAY REASON (CONSULTANT UPGRADE)**
39	REFERRAL REQUEST RECEIVED DATE (INTER-PROVIDER TRANSFER)
40	NHS NUMBER STATUS INDICATOR CODE
41	SERVICE REQUESTED DATE (INTER-PROVIDER TRANSFER)
42	ORGANISATION IDENTIFIER (REFERRING)
43	ORGANISATION IDENTIFIER (RECEIVING)
44	CANCER TRANSFER REFERRING REASON (INTER-PROVIDER

	TRANSFER)
45	CANCER TRANSFER RECEIVING REASON (INTER-PROVIDER TRANSFER)
46	CANCER FASTER DIAGNOSIS PATHWAY END REASON
47	PRIMARY CANCER SITE (CANCER FASTER DIAGNOSIS PATHWAY)
48	CANCER FASTER DIAGNOSIS PATHWAY END DATE
49	CANCER CARE SPELL DELAY REASON (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
50	CANCER CARE SPELL DELAY REASON COMMENT (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
51	CANCER FASTER DIAGNOSIS PATHWAY EXCLUSION REASON
52	CARE PROFESSIONAL TYPE CODE (OUTCOME COMMUNICATION CANCER FASTER DIAGNOSIS PATHWAY)
53	METHOD OF COMMUNICATION (END OF CANCER FASTER DIAGNOSIS PATHWAY)
54	ORGANISATION SITE IDENTIFIER (OF CANCER FASTER DIAGNOSIS END)

3.1.7 Summary of Requirements and Conformance Criteria

This section describes the tests that can be measured to indicate that the information standard is being used correctly by a provider organisation (conformance criteria).

Conformance Criteria for NHS Digital
A Minimum Viable Product replacement system for the current National Cancer Waiting Times system ***MUST*** be available by 1 April 2018.
The replacement system ***MUST*** support collection of all data items currently included in the National Cancer Waiting Times data set, as well as the additional data items related to breach reallocation and the new 28 Day Faster Diagnosis Standard from 1 April 2018 as specified in the Information Standard.
The replacement system ***MUST*** comply with current Patient Opt-Out legislation and policies where applicable by 1 April 2018.

Conformance Criteria for Local System suppliers
Local system suppliers **SHOULD** allow the capture of data items as per the new CWT Information Standard in local Cancer patient management systems by 1 April 2018
Local system suppliers **SHOULD** enable the extract of data items as per the new CWT Information Standard from local Cancer patient management systems in a format suitable for upload to NCWTMDS v2.0 from 1 April 2018
Local system suppliers **MUST** allow the capture of data items as per the new CWT Information Standard in local Cancer patient management systems by 1 July 2018
Local system suppliers **MUST** enable the extract of data items as per the new CWT Information Standard from local Cancer patient management systems in a format suitable for upload to NCWTMDS v2.0 from 1 July 2018

Conformance Criteria for Healthcare organisations
Healthcare Organisations **MUST** submit CWT activity occurring in the financial year 2017/18 to the Open Exeter NCWTMDS
Healthcare Organisations **MUST** create submitter accounts on the new CWT portal during Public Beta phase and prior to 1 April 2018
Healthcare Organisations **MUST** test connectivity and file upload on the new CWT portal during Public Beta phase and prior to 1 April 2018
Healthcare Organisations **MUST** submit CWT activity occurring in the financial year 2018/19 to the replacement Cancer Waiting Times System NCWTMDS v2.0 via the new CWT portal
Healthcare Organisations **SHOULD** collect the required data items relating to Inter-provider transfers within local systems from 1 April 2018
Healthcare Organisations **SHOULD** collect data items relating to the new 28 Faster Diagnosis Standard within local systems from 1 April 2018
Healthcare Organisations **SHOULD** submit against the new Information Standard, incorporating all data item name changes, any format and field length changes for existing data items and deletions of data items from the data set from 1 April 2018 to meet the advertised submission deadline for April 2018 activity
Healthcare Organisations **SHOULD** start submitting data items relating to the Inter-provider transfers Standard to NCWTMDS v2.0 via the new platform after 1 April 2018 to meet the advertised submission deadline for April 2018 activity
Healthcare Organisations **SHOULD** start submitting data items relating to the new 28 Faster Diagnosis Standard where required to NCWTMDS v2.0 via the new platform after 1 April 2018 to meet the advertised submission deadline for April 2018 activity
Healthcare Organisations **MUST** collect the required data items relating to Inter-provider transfers within local systems from 1 July 2018
Healthcare Organisations **MUST** collect data items relating to the new 28 Faster Diagnosis Standard within local systems by 1 April 2019
Healthcare Organisations **MUST** submit against the new Information Standard, incorporating all data item name changes, any format and field length changes for existing data items and deletions of data items from the data set by 1 July 2018
Healthcare Organisations **MUST** start submitting data items relating to the Inter-provider transfers Standard to NCWTMDS v2.0 via the new platform after 1 July 2018 to meet the advertised submission deadline for July 2018 activity
Healthcare Organisations **MUST** start submitting data items relating to the new 28 Faster Diagnosis Standard to NCWTMDS v2.0 via the new platform after 1 April 2019 to meet the advertised submission deadline for April 2019 activity

4 Concept of Operation

This section describes how the NCWTMDS is used by a provider of cancer services.

4.1 Working Practices

4.1.1 Guidance Documentation

Complete guidance on how this information standard should be applied locally in managing patients against the cancer waiting times standards is available to the NHS in published guidance.

Document Name	Description
National Cancer Waiting Times Monitoring Data Set: A Guide	This is the main behavioural guidance document to support the use of the data set locally. The content of this document is based around specific patient scenarios, and how the policies on waiting times for cancer patients within the NHS relate to these scenarios, determining how the activity should be recorded using this data set.
National Cancer Waiting Times Replacement System User Manual	This document is managed by NHS Digital and deals with the technical upload. This is updated as part of the work completed by NHS Digital during beta testing in 2017/18.

All guidance documentation, along with complete documentation for the CWT system and a complete set of PRIMARY DIAGNOSIS codes in ICD-10 format covered by (or excluded from) this data set is available to users in electronic format at: https://digital.nhs.uk/cancer-waiting-times

4.1.2 Guidance for all Stakeholders

Full guidance on the NCWTMDS will be available to stakeholders in the documents detailed in section 3.1.1 above.

The main changes implemented in this release pertain to:

- Introduction of data items to implement a new national breach allocation policy
- Introduction of data items to monitor the new 28 day Faster Diagnosis Standard
- Alignment of the dataset with other datasets and information standards

Further details can be found in the Change Specification published alongside the ISN.

The URL for the CWT system is: nww.cancerwaitingtimes.sdcs.digital.nhs.uk.

4.1.3 Guidance for Healthcare Organisations (Data submitters)

The transition from the existing Open Exeter system to the new CWT platform should be done in such a way that all activity taking place in 2017/18 (i.e. up to and including

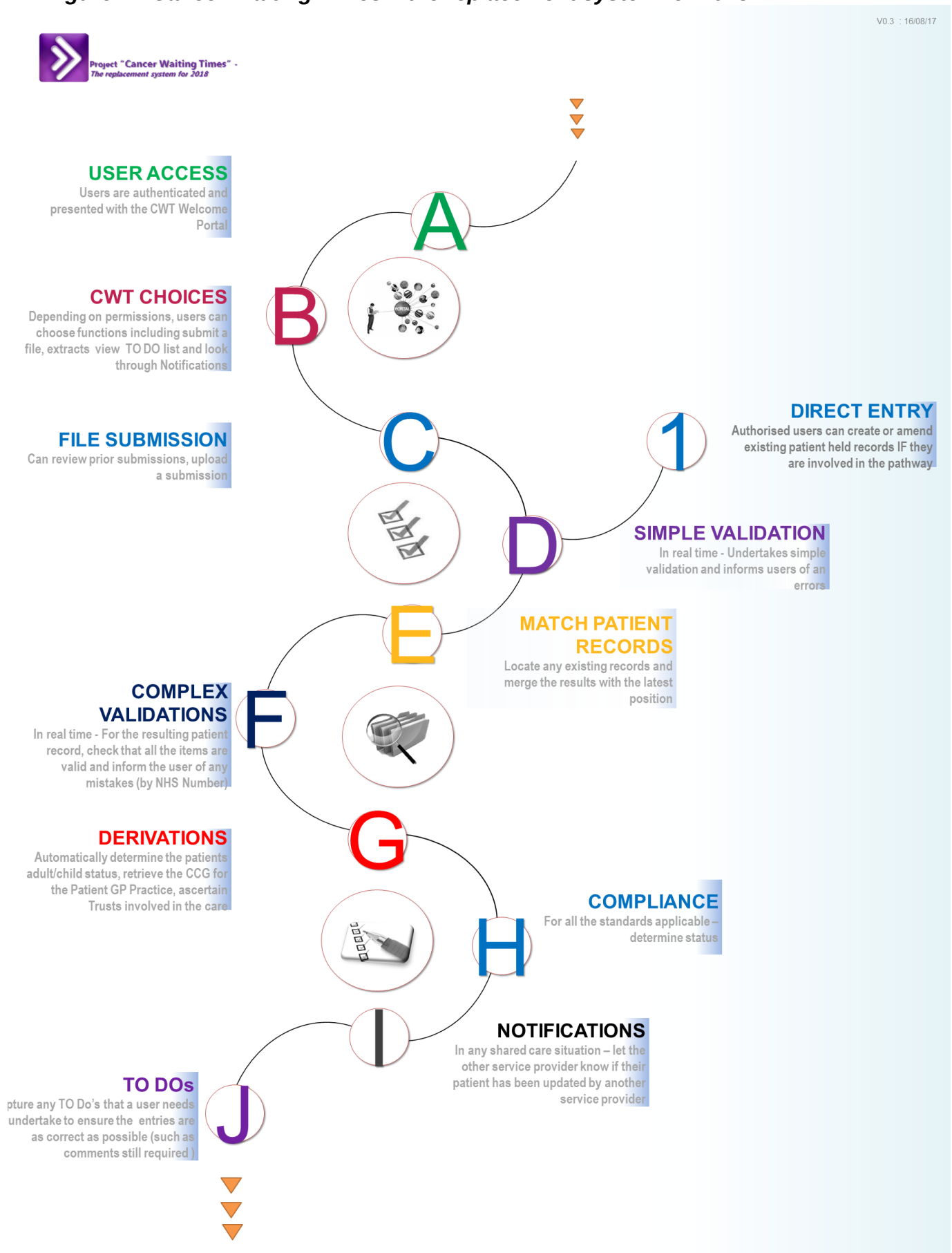
31 March 2018) is uploaded to the existing Open Exeter system to allow Quarter 4 reports to be generated within Open Exeter.

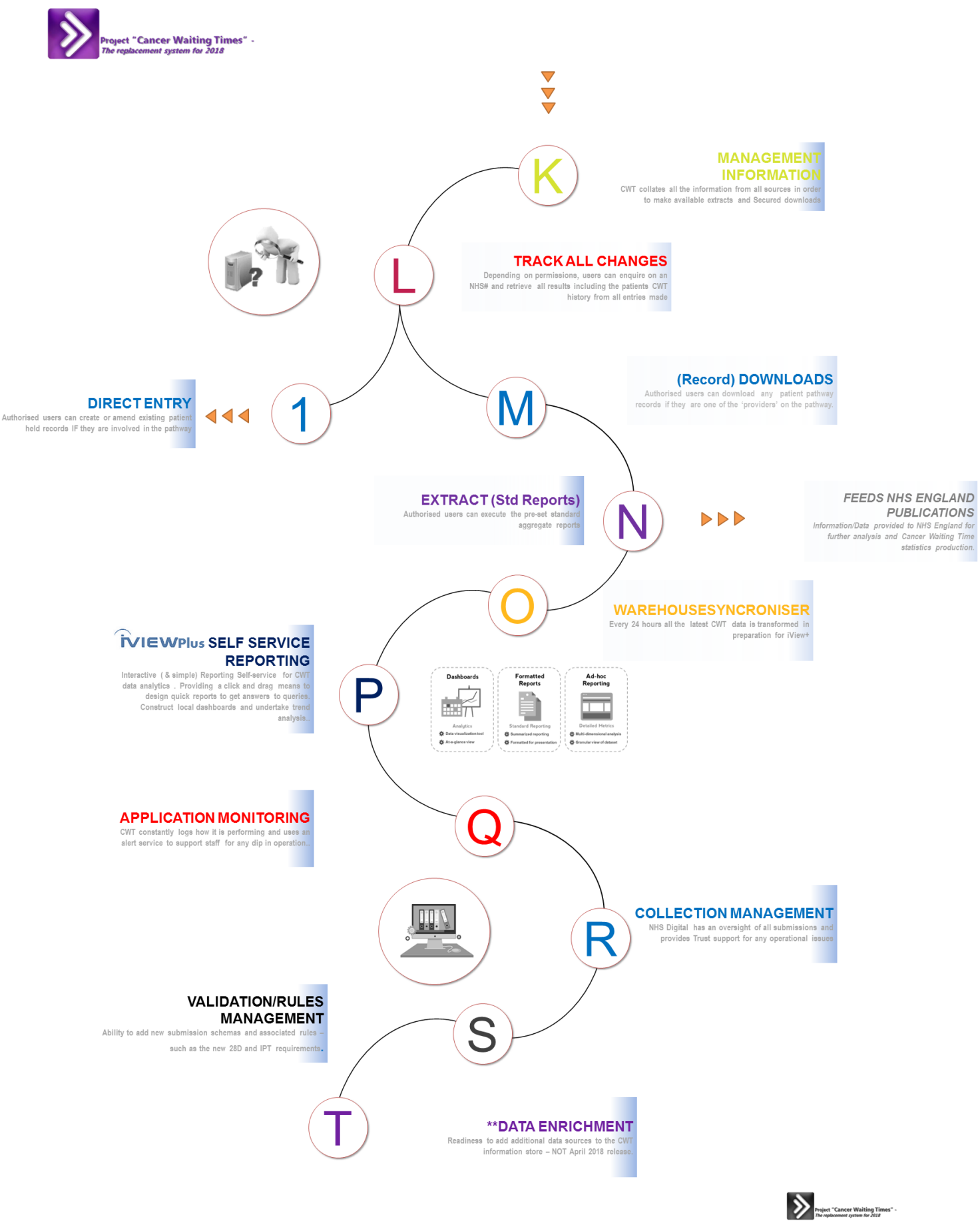
All activity occurring on or after 1 April 2018 should be uploaded to the new CWT system. The new system will reject records with activity dates prior to 1 April 2018.

Healthcare organisations SHOULD aim to submit data against the new Information Standard for activity occurring from 1 April 2018. However NHS England and NHS Digital recognise that some system suppliers may need longer than six months to implement and roll out the necessary changes to local systems enabling capture of the new data items. Therefore there will be an option within the new system to submit against the existing Information Standard and existing validation rules until the conformance date. At which point all healthcare organisations submitting to CWT should be submitting against the new Information Standard and this functionality will be switched off.

The new CWT service will follow the application flow as indicated in the diagrams below. Further detailed descriptions of each step is accessible through the CWT help documentation located at: https://digital.nhs.uk/cancer-waiting-times

Figure 1 - Cancer Waiting Times – the replacement system for 2018




Project "Cancer Waiting Times" -
The replacement system for 2018
K
MANAGEMENT INFORMATION
CWT collates all the information from all sources in order to make available extracts and Secured downloads
L
TRACK ALL CHANGES
Depending on permissions, users can enquire on an NHS# and retrieve all results including the patients CWT history from all entries made
1
DIRECT ENTRY
Authorised users can create or amend existing patient held records IF they are involved in the pathway
M
(Record) DOWNLOADS
Authorised users can download any patient pathway records if they are one of the 'providers' on the pathway.
N
EXTRACT (Std Reports)
Authorised users can execute the pre-set standard aggregate reports
FEEDS NHS ENGLAND PUBLICATIONS
Information/Data provided to NHS England for further analysis and Cancer Waiting Time statistics production.
O
WAREHOUSESYNCRONISER
Every 24 hours all the latest CWT data is transformed in preparation for iView+
P
iVIEWPlus SELF SERVICE REPORTING
Interactive (& simple) Reporting Self-service for CWT data analytics . Providing a click and drag means to design quick reports to get answers to queries. Construct local dashboards and undertake trend analysis..
Dashboards
Formatted Reports
Ad-hoc Reporting
Q
APPLICATION MONITORING
CWT constantly logs how it is performing and uses an alert service to support staff for any dip in operation..
R
COLLECTION MANAGEMENT
NHS Digital has an oversight of all submissions and provides Trust support for any operational issues
S
VALIDATION/RULES MANAGEMENT
Ability to add new submission schemas and associated rules – such as the new 28D and IPT requirements.
T
**DATA ENRICHMENT
Readiness to add additional data sources to the CWT information store – NOT April 2018 release.

4.1.4 Information Governance

NHS Digital has received permission directly from the Secretary of State referencing the collections for the National Cancer Registry which Cancer Waiting Times is part of, and this is available at;

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/517522/type2objections.pdf

Trusts are also mandated to submit this data to NHS Digital using section 259 of the Health and Social Care Act 2012.

A Direction exists from NHS England as Data Controller to NHS Digital as Data Processor dated December 2016 which instructs NHS Digital to collect this information under 254(3) of the Health and Social Care Act 2012 and this was approved in the December 2016 DCB0147 uplift.

A Privacy Impact Assessment has been undertaken, and the risks and actions required from this have been identified.

4.1.5 Cancer Waiting Times Database Hosting

Data intended for the NCWTMDS v2.0 is transmitted, validated, stored and analysed within the replacement CWT database. The system is accessed through a series of secure web-enabled interfaces that allow users to upload data in XML or CSV formats or via direct entry screens. The data submitted to the system is stored in a secure data centre making full use of the existing security policies in place in those data centres. At some point in the future the database may be moved to a crown hosted data centre.

4.1.6 Access to NCWTMDS Data within the CWT system

All access to NCWTMDS v2.0 data held within the new system is strictly managed by a role based permissions model.
All users have to be authenticated through use of individual user accounts and passwords to gain access to the system. Smart card access will be utilised where appropriate and possible. Those responsible for submitting data to NCWTMDS v2.0 will require a completed Data User Certificate. Each user will be associated with a role when they are set up on the system. These user roles will have a set of pre-defined permissions that will determine which functionality is available to users based on their role for CWT (e.g. submitter, viewer, national user, administrator, technical support etc.).

The different RBAC levels can be summarised as follows:

- Technical support – This will be restricted to users internal to NHS Digital and can access all parts of the system and the data stored in it in order to: assess and resolve support issues; undertake database maintenance functions; perform job scheduling

- Collection administrators within NHS Digital – can access the Administration functions of the system in order to undertake the activities of registration and password maintenance, and assist submitters with file or validation issues.
- Submitters – can access the functions that deal with data set creation and amendment. This includes access to file upload functionality, on screen record creation and/or record editing. In addition, these users are granted access to the data extraction function in order to undertake data quality activities and can access person identifiable data where appropriate (e.g. in shared care scenarios) which will be in line with business need and comply with information Governance requirements. Submitters can also download aggregate reports on performance and compliance for dissemination within their organisations.
- Clinical Commissioning Group users will come under the 'Viewer' role - they can access anonymised downloads of patient level information and aggregate (version controlled) reports on performance and compliance for both their managed population and any provider they have performance management responsibilities for based on the patient's registered GP practice derived from Personal Demographics Service (PDS).
- Regions and Strategic Clinical Network users will come under the 'Viewer' role – they can access anonymised downloads of patient level information and aggregate (version controlled) reports on performance and compliance for both their managed population and any provider they have performance management responsibilities for based on geographies and the organisational relationships published by the Organisation Data Service (ODS).
- NHS England staff will come under the 'National User' role – they can access anonymised and aggregate data sets in order to publish Official and National Statistics to support public and parliamentary accountability; and
- The National Cancer Registration and Analysis Service (NCRAS) will come under a 'Cancer Registry User' role – have access to identifiable data for the purposes of cancer registration.
- Directors of Commissioning Operations (DCOs), Cancer Alliances and Sustainability and transformation partnerships (STPs) will come under the 'Viewer' role – Their specific requirements and roles are still to be defined (at the time of publishing the ISN)[3]
- NHS Improvement will have access to data from the system. Their requirements and roles are still to be defined (at the time of publishing the ISN)[3]
- The Department of Health will have access to data from the system. Their requirements and roles are still to be defined (at the time of publishing the ISN)[3]

These access controls are kept under review, when any additional functionality is added to the system the permissions model will be reviewed and updated to include role based permissions for the new functionality.

[3] access will be in line with business need and comply with Information Governance Requirements

4.1.7 Anonymisation

Within the RBAC structure described above, only those users defined in the NHS Digital Direction approval for the use of this data set have the access rights enabling them to view patient identifiers (NHS NUMBER). All other users see either aggregate data or a pseudonymised identifier.

Rather than pseudonymisation of the NHS NUMBER using an algorithm a system was incorporated into the CWT system on Open Exeter which assigns an anonymous nine-digit (an9) identifier to each unique NHS NUMBER entered into the system. This identifier, along with the record number (the internal primary key of the CWT system), is used in all anonymised outputs. This anonymous identifier was given a nine digit format to differentiate it from the NHS NUMBER. These identifiers are assigned sequentially as patient records are created on the system. This assigning of anonymised identifiers and the primary key for new records will persist in the new system and steps have been taken to ensure there are no overlaps in the sequencing in the old system and the replacement system. These identifiers will continue to be in the same format in the replacement system to allow for user continuity.

These anonymised identifiers are available to both commissioner and provider users and give a common frame of reference, supporting discussions on performance and Service Level Agreements (SLA) that do not include patient identifiers.

4.1.8 Permissions and Governance

The NCWTMDS v2.0 is transmitted to and stored on the CWT system and is intended for use as a secondary data source, supporting the local management of patient pathways of care. These data are collected on instruction from NHS England, as set out in the Direction issued under section 254 of the Health and Social Care Act 2012, accompanied by the section 259 notice issued by NHS Digital.

The data set collected retains all of the security and anonymisation practices previously agreed with the Confidentiality Advisory Group (CAG). Therefore no change has been created that will have an impact on the approval status of the ongoing data collection.

This revised data set has made free text fields to analyse reasons for delays optional, providing more scope to use code structures within data items. In the replacement system submitters will be notified when a free text field is expected but not completed, but records will not be rejected and completion of the free text field will not be enforced. It is anticipated that over time local use of the NCWTMDS will adapt to this more accurate coding structure, reducing the free text detail within the data fields such as DELAY REASON COMMENT, thus lowering the chance of disclosure through free text description.

4.2 Clinical Governance

The NCWTMDS is not directly used for patient care and is only used for management purposes and/or secondary uses, such as cancer registration and the production of national and official statistics.

4.3 Data Quality

Data quality is based around data validation by the submitter, both locally prior to upload to the system, and both during and after upload via a set of tools provided by NHS Digital to support a full data quality analysis of the submitted records. It is appropriate for a phase of data quality analysis to happen after submission as the CWT system will merge patient level data from multiple providers to create a complete record relating to an entire patient pathway. Each time new information is added to an existing pathway record the latest version of the record will be revalidated. This validation is supported by a set of validation rules and record matching algorithms that are automated within the system processes.

Data Quality assurance of the patient records conforming to the NCWTMDS v2.0 can be broken down into three distinct phases: initial local validation, automated validation and post upload validation.

4.3.1 Initial Local Validation

Irrespective of the implementation of these changes to NCWTMDS, including the introduction of a new submission platform and CWT system, these data will continue to be drawn from local systems where this data set (or data sets that contribute to the NCWTMDS) are used to manage patient care. The use of this data set within the system and for commissioning and management purposes remains a secondary use of these data. Although there is evidence to suggest that some processes within some trusts used to manage patient pathways include the daily use of the data held within NCWTMDS, especially in shared care scenarios where the data that forms the entire pathway data are stored on local systems in different trusts.

As these data are extracted from or derived from data sets on local management systems the basic validation will have already been undertaken to enable these data to be used locally. This local validation includes tracing the patient against the Personal Demographics Service (PDS) to ensure the correct NHS NUMBER is transmitted to the CWT system within the NCWTMDS v2.0.

4.3.2 Automated Validation – Single Field Checks (Stage 1)

When a user submits a record to the CWT system the first automated step taken is an initial validation check on the records in the upload file. This checks the file is structured correctly and can be broken down into records for further validation. Single field validation checks designed to ensure that codes included in fields are valid, e.g. NHS Number must be a valid 10 digit NHS number, are carried out at this point in the process. If any errors are found the CWT system displays these to the user who

must correct the records at source, re-create and re-upload the file. This first stage of validation includes the more complex validations below:

> The NHS NUMBER must be in the correct format and all instances must be valid numbers that exist within PDS (the Personal Demographics Service), which is the master patient index for this system.
>
> All instances of ORGANISATION CODE within the submitted data must relate to valid registered organisations (at the time of the activity taking place) within the ODS organisation lists (including central organisation codes for national systems and private providers where applicable).

Following this first, simple, single field validation the record is accepted into the system in order to undergo further processing

Records that fail this first phase of validation are rejected and the user is informed as part of the upload process (or if accessing at a later time, via onscreen notification) of the records that have failed validation checks at this stage.

The records which pass the first phase validation are then presented to the match and merge process. The outcome of this process is either a new record or a merged record. These new or merged records are then processed through a more complex cross field validation process and will be rejected if they do not pass this phase of validation.

4.3.3 Automated Validation – Cross Field Checks (Stage 2)

After records have completed the merge and match process cross field validation is carried out based on the scenarios in Tables 1 and 2. Date logic rules are also applied, such as the examples below:

> If PRIORITY TYPE CODE is ‘3’ (Two Week Wait) then CANCER REFERRAL TO TREATMENT PERIOD START DATE must not be blank;
>
> If present, DECISION TO REFER (CANCER AND BREAST SYMPTOMS) cannot be after CANCER REFERRAL TO TREATMENT PERIOD START DATE; and
>
> CANCER REFERRAL TO TREATMENT PERIOD START DATE cannot be after CONSULTANT UPGRADE DATE.

At this stage other complex cross field validations are carried out which looks at the data content of fields and enforces restrictions on what can and cannot be in the record. An example of this type of complex cross field validation is below:

> If SOURCE OF REFERRAL FOR OUT-PATIENTS is equal to ‘17’ (Referral from a National Screening Programme) and PRIORITY TYPE CODE is equal to ’2’ (urgent) or ‘3’ (two week wait) then CONSULTANT UPGRADE DATE must be left blank;

All the validation rules applied in the system will be made available to users via the NHS Digital website in a detailed user guidance document. They are not documented here so that they can be amended based on stakeholder feedback and data set maintenance feedback. This will allow NHS Digital and NHS England to improve the rules over time without having to go through the entire DCB process and issue a new Information Standard. Examples of the rule improvements envisaged would be:

> Starting with a data item being 'Required' until conformance date and then making the data item 'Mandatory' (in a given scenario) post conformance date
>
> Or where a rule is found to be over prescriptive and causes data to be held differently in local systems but amended to pass CWT validations for no valuable business or clinical reason.

The user guidance will also contain a flow diagram. This will explain how new records are identified and how records that relate to different segments of the same pathway, such as the first outpatient appointment (needed to monitor the two week wait standard; the communication of diagnosis outcome (needed to monitor the faster diagnosis standard); or the first treatment event, will be merged together into one single CWT record.

If a merged record fails this phase 2 validation, the merged record will be rejected and the validation issues will be returned the relevant submitter(s) via notifications onscreen. The original (valid) record that this record was being merged into will be retained by the system.

If a new record fails this phase 2 validation it will be rejected and the validation issues will be returned to the submitter via notifications onscreen.

4.3.4 Post Upload Validation

After uploading the complete NCWTMDS to the CWT system but before the cut-off date after the end of the reporting month or quarter, local NHS users will have completed the validation of their data. In this they are expected to ensure it has been both correctly entered into the central system and that the record matching process described in section 3.3.3 has functioned as expected. To enable local users to carry out this task several tools are available: to allow users to download record level data relating to their patients to enable reconciliation with data held in local systems; view draft performance reports prior to publication; a 'to do list' service which identifies instances of unmatched records, duplicated records; and records with missing data items where further action is required by the deadline date to ensure the accuracy of the data.

4.3.5 Data Migration Assurance

Data migration from the Open Exeter CWT system to the new CWT system will be assured by the Solution Assurance Test Data Team within NHS Digital. The

approach to data migration assurance is dependent upon a number of factors including the size of the dataset and the pre and post data store technologies as well as the level of risk involved if the migration was to cause data loss or corruption. In brief data migration assurance will likely include:

- Functional testing/assurance using migrated test data. Repeated on Live data during transition rehearsals and live transition
- High level row count comparison between pre and post data sets (this can be made more complicated when the post data store is not relational therefore a way will be found to compare the counts between the two). Repeated on Live data during transition rehearsals and live transition
- Field by field comparisons between pre and post data sets to confirm no data corruption or data loss has occurred. Repeated on Live data during transition rehearsals and live transition (dependent upon speed of tests and the risk of not doing this during transition)
- Hash checks on the data copy to confirm the copy of the Live data store has not been corrupted in transit
- Assurance of logging during the migration (as required)
- Assurance of transition including timings and re-startability.

A full migration plan for CWT will be produced during the Private Beta period and will be tested and executed in readiness for live operation of the new system. All records migrated from Open Exeter will be tagged as being migrated in their meta-data and this will be taken into account if the record needs re-validating following a merge of new information uploaded via the new system.

There may be some pathway records that started in the Open Exeter system and finish in the new system, which will be accepted as a merged record in the new system, but may have failed validation if uploaded in their entirety in the new system. This scenario will only occur for a period post implementation of the new system. Given that the existing Open Exeter system has robust validation and the validation rules to be implemented are largely the same in both systems the number of records that may fall into this category is expected to be low.

4.3.6 Audit

To support local assurance of the centrally held dataset the CWT system provides an interactive audit function, this allows users to identify every change to the records for a specific individual. This is accessed within the secure CWT system environment by users in NHS providers and supplies both detailed field by field notes of revisions and an overview of when revisions are taking place.

5 Supporting Information

5.1 Technical Architecture

The replacement Cancer Waiting Times System built by NHS Digital was designed using some of the latest technology which includes:

- EventStore v4
- Microsoft SQLServer 2016
- Microsoft Analysis Services 2016
- .NET 461.

The system architecture can be described as being built using Event Sourcing / Command Query Responsibility Segregation (CQRS) principles which allow:

- The system to be horizontally scaled at bottlenecks due to the use of micro-services (should performance need to be increased);
- All state changes to be recorded in an immutable data store, so point in time snapshots of data can be recreated, subject to data retention policies and as the system evolves, allow for other reporting use cases;
- Multiple specialised query databases/cubes, which are built to target the specific queries needed for the system use cases.

The system is being built to the highest development standards with unit, integration and acceptance testing all part of the standard continuous integration process and further manual end to end testing from internal testers, verified by NHS Digital's Solution Assurance team. Additional external user testing, including penetration testing, will also be undertaken.

The system is being built to support IE7 and equivalent browsers and above. Non-critical enhancement functionality which reduces the burden on submitters will be only available on IE11 and above browsers.

The system will operate out of a designated secure data centred used by NHS Digital and is likely to have a Disaster Recovery (DR) site in a separate secure NHS /digital data centre. All patient sensitive data will be hosted in an internal domain for increased security.

6 Glossary of Terms

These are the acronyms and common terms used within this specification document:

Term	Acronym	Definition
Department of Health	DH	
Confidentiality Advisory Group	CAG	
Comma Separated Value	CSV	The comma-separated value (CSV) format is a file format used to store tabular data in which numbers and text are stored in plain-text form. This is the current format for the transmission of this data set to the CWT system
Cancer Waiting Times System	CWT system	The method of transmitting, storing, aggregating and controlling access to this data set.
Cancer Outcomes and Services Dataset	COSD	The COSD is the national standard for reporting cancer in the NHS in England.
Command Query Responsibility Segregation	CQRS	
Directors of Commissioning Operations	DCOs	
Disaster Recovery	DR	Disaster recovery enables the recovery or continuation of vital technology infrastructure and systems following a natural or human-induced disaster
Information Governance	IG	Information governance is a framework or umbrella term. It informs the NHS and its partner organizations of the processes and procedures that it must have to ensure: patient confidentiality is respected; patient records are held in secure conditions; and information about patients is recorded clearly and accurately, so that it can be easily read and relied upon by providers of care.

Term	Acronym	Definition
National Cancer Waiting Times Monitoring Data Set	NCWTMDS	The data set used to manage and monitor cancer waiting times, the subject of this change request.
Sustainability and transformation partnerships	STP	Partnerships in 44 areas covering all of England, to improve health and care
Extensible Markup Language	XML	Extensible Markup Language (XML) is a set of rules for encoding documents in machine-readable form. It is proposed as the new format to be introduced for the transmission of this data set to the CWT system.