hiso Health Information Standards Organisation
PAEREWA PĀRONGO HAUORA

National Cancer Core Data Definitions Interim Standard

HISO 10038.3
v1.1

To be used in conjunction with

HISO 10038.1 National Cancer Core Data Interim Business Process Standard and

HISO 10038.2 National Cancer Core Data Interim Messaging Standard and Implementation Guide

Copyright Information

This document has been approved as an Interim Standard for the New Zealand health and disability sector by the Health Information Standards Organisation.

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National Cancer Core Data Working Group

The National Cancer Core Data Working Group was responsible for providing technical advice for this draft document. Representatives from Auckland DHB, Capital & Coast DHB, Canterbury DHB, Hutt Valley DHB, Waikato DHB, University of Otago and the Ministry of Health were involved in the Working Group.

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Programme representation

The Ministry of Health Cancer Programme team members who were responsible for assisting the working group with the preparation of this interim standard were:

Name	Role
Steve Creed	Project Leader
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1 INTRODUCTION

The cancer core data definitions standard is intended to ensure that minimum agreed cancer data is collected and stored in a consistent manner wherever it is collected and stored. The associated business process and messaging standards are intended to ensure the safe, secure and accurate exchange of cancer information between systems in New Zealand.

The data work group that developed these standards considered a superset of possible cancer data items. The group was asked to sort those items into categories based on their **relevance** (requirement and utility), **availability** (is it recorded and can it be collected) and **reliability** (accuracy and consistency with definition). The data items that scored highly for relevance, availability and reliability were considered '**core'** and are the basis for these documents.

The standard should be reviewed on a regular basis to ensure it remains relevant and fit for purpose. This standard will initially be implemented as an 'interim standard'. The initial review will be undertaken at the end of the first year of implementation. After any agreed changes, the standard will then published as a 'full' standard, after which a review should be scheduled every two years.

It is recommended that people in both technical and non-technical roles read the Business Process document first. It should be read in conjunction with this document and the Messaging Standard. The Messaging Standard is a technical document generally intended for use by those implementing messaging solutions.

This standard defines the elements of cancer data that will be collected, stored and exchanged, providing an overview of each grouping of data items (e.g. name items), as well as:

(a) a definition of each data item

(b) attributes of each item, such as the maximum length of the field, the type of data it holds, the data domain (free text, code table, etc) and layout

(c) information about the source of the defined element attributes

(d) information such as guides for use, rules for verification

(e) the following structure has been used in this document to record the attributes of each data item.

Definition:	A brief description of the data item.		
Source standards:	The source standards from which the data item was sourced or derived.		
Data type:	Alphanumeric Alphabetic Numeric Date Boolean	**Representational class:**	Text Number Date Y/N Code
Field size:	The maximum number of characters available.	**Representational layout:**	The way in which the contents of the field should be displayed. For example while the Data type might be "Alphanumeric" and the Field size might be "4", the Representational layout could be "ANN.N" where the "." is not saved as data.
Obligation:	Mandatory, Conditional, Optional		
Data domain:	The source of the values that should be available for the data item.		
Guide for use:	A guide to the way in which this data item should be used.		
Verification rules:	A list of the rules governing collection and entry of values for the data item. This attribute should also record prerequisite conditions.		

The standard will provide the bulk of the content that will be transported in accordance to the associated messaging standard.

The project used a high level business transaction process and information lifecycle model (Refer Figure 1, 10038.1 National Cancer Core Data Business Process) to identify likely people, organisations, activities and data collection points involved in the cancer care pathway.
As a result of this process, there are nine principal entities and the relationships between those entities are shown in the diagram below.

- For each Patient there may be one or more Episode of Care.
- For each Patient there may be one or more Diagnoses.
- For each Diagnosis there may be one or more Episodes of Care.
- For each Episode of Care there will be one or more Surgery and/or Radiation Therapy and/or Chemotherapy and/or Targeted Therapy and/or Other Therapy and/or Non-intervention Management.

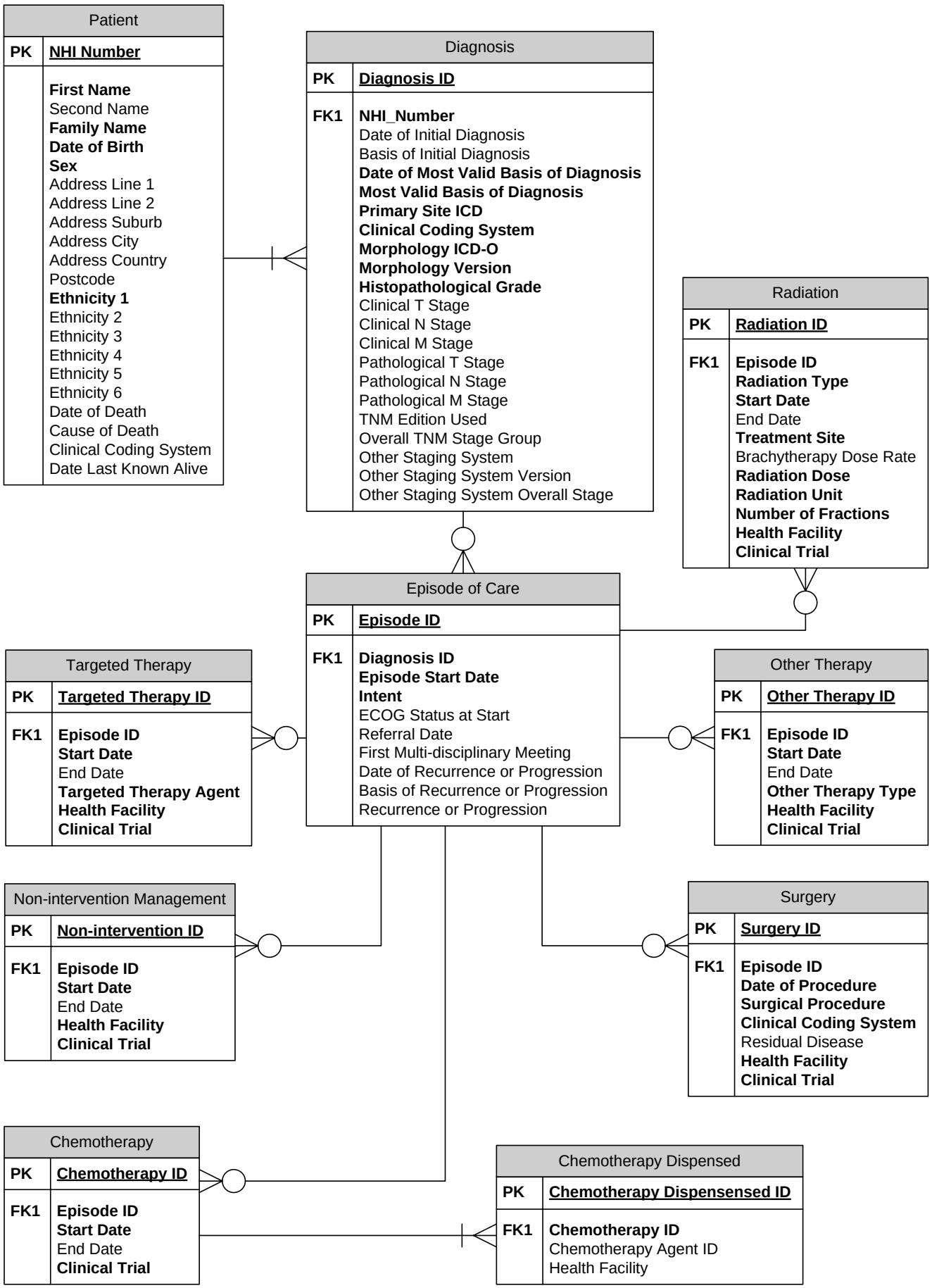

Figure 1: Core Cancer Care Entities

2 PATIENT

The Patient entity contains details of each person receiving cancer care services following a diagnosis of cancer.

The data elements for 'Patient' are:

1. NHI Number
2. First Name
3. Second Name
4. Family Name
5. Date of Birth
6. Sex
7. Address Line 1
8. Address Line 2
9. Address Suburb
10. Address City/Town
11. Address Country/Region
12. Postcode
13. Ethnicity 1
14. Ethnicity 2
15. Ethnicity 3
16. Ethnicity 4
17. Ethnicity 5
18. Ethnicity 6
19. Date of Death
20. Cause of Death
21. Clinical Coding System
22. Date Last Known to be Alive

2.1 NHI Number

Definition:	Unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database.		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	7	**Representational layout:**	AAANNNN
Obligation:	Mandatory		
Data domain:	Valid NHI number		
Guide for use:	Primary key for this record, foreign key to related record(s) in the Diagnosis entity		
Verification rules:			

2.2 First Name

Definition:	The first given name of a healthcare user.		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphabetic	**Representational class:**	Text
Field size:	20	**Representational layout:**	A(20)
Obligation:	Mandatory		
Data domain:			
Guide for use:			
Verification rules:			

2.3 Second Name

Definition:	The second name of a healthcare user.		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphabetic	**Representational class:**	Text
Field size:	20	**Representational layout:**	A(20)
Obligation:	Optional		
Data domain:			
Guide for use:			
Verification rules:			

2.4 Family Name

Definition:	The family name (surname) of a healthcare user.		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphabetic	**Representational class:**	Text
Field size:	25	**Representational layout:**	A(25)
Obligation:	Mandatory		
Data domain:			
Guide for use:			
Verification rules:			

2.5 Date of Birth

Definition:	The date on which the person was born		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).		
Verification rules:			

2.6 Sex

Definition:	The person's biological sex		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphabetic	**Representational class:**	Code
Field size:	1	**Representational layout:**	A
Obligation:	Mandatory		
Data domain:	**Value** / **Meaning** F – Female I – Indeterminate M – Male U – Unknown		
Guide for use:			
Verification rules:			

2.7 Address Line 1

Definition:	The first line of the address at which a healthcare user has been, or plans to be, living at for 3 months or more. (Statistics NZ definition of 'usually resident'.)		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	35	**Representational layout:**	A(35)
Obligation:	Conditional. Mandatory if Address Line 2 is blank – otherwise optional		
Data domain:	Free text		
Guide for use:			
Verification rules:	Address Line 1 and Address Line 2 can not both be blank		

2.8 Address Line 2

Definition:	The second line of the address at which a healthcare user has been, or plans to be, living at for 3 months or more. (Statistics NZ definition of 'usually resident'.)		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	30	**Representational layout:**	A(30)
Obligation:	Conditional. Mandatory if Address Line 1 is blank – otherwise optional		
Data domain:	Free text		
Guide for use:			
Verification rules:	Address Line 1 and Address Line 2 can not both be blank		

2.9 Address Suburb

Definition:	The third line of the address representing the suburb		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	30	**Representational layout:**	A(30)
Obligation:	Conditional. Mandatory if Address City/Town is blank – otherwise optional		
Data domain:	Free text		
Guide for use:			
Verification rules:	Address suburb and City/town cannot both be blank		

2.10 Address City/Town

Definition:	The fourth line of the address, representing the city, town or region. Either the third or the fourth line of the address is mandatory		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	30	**Representational layout:**	A(30)
Obligation:	Conditional. Mandatory if Address Suburb is blank – otherwise optional		
Data domain:	Free text		
Guide for use:			
Verification rules:	Address suburb and City/town cannot both be blank		

2.11 Address Country/Region

Definition:	The fifth line of the address, representing the external region or country		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	30	**Representational layout:**	A(30)
Obligation:	Optional		
Data domain:	Free text		
Guide for use:			
Verification rules:			

2.12 Postcode

Definition:	The descriptor for a postal delivery area aligned with the locality, suburb or place for this address.		
Source standards:	NZ Post		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	12	**Representational layout:**	AN(12)
Obligation:	Optional		
Data domain:	NZ Post postcode file International postcodes should be recorded as provided		
Guide for use:			
Verification rules:	Data for New Zealand postcodes should be verified against the NZ Post postcode file.		

2.13 Ethnicity 1

<table>
<tr><td>Definition:</td><td colspan="3">Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group.
An ethnic group is made up of people who have some or all of the following characteristics:
• a common proper name
• one or more elements of common culture that need not be specified, but may include
• religion, customs, or language
• unique community of interests, feelings and actions
• a shared sense of common origins or ancestry, and
• a common geographic origin. Māori in this report refers to the Māori ethnic group.</td></tr>
<tr><td>Source standards:</td><td colspan="3">Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>5</td><td>Representational layout:</td><td>N(5)</td></tr>
<tr><td>Obligation:</td><td colspan="3">Conditional. Record if offered by patient. If the patient does not offer an ethnicity, record one of the following.
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>94444</td><td>Don't Know</td></tr>
<tr><td>99999</td><td>Not Stated</td></tr>
<tr><td>95555</td><td>Refused to Answer</td></tr>
<tr><td>97777</td><td>Response Unidentifiable</td></tr>
</table></td></tr>
<tr><td>Data domain:</td><td colspan="3">Refer Appendix A – Level 4 Ethnicity</td></tr>
<tr><td>Guide for use:</td><td colspan="3">Ethnicity 1 should record the patient’s first stated ethnicity. It is important to note that “first” does not refer to “preferred” – simply the first ethnicity offered by the patient.
Refer to Ethnicity Data Protocols for the Health and Disability Sector, Ministry of Health, 2004 for more guides to use.</td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

2.14 Ethnicity 2

Definition:	Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group. An ethnic group is made up of people who have some or all of the following characteristics: • a common proper name • one or more elements of common culture that need not be specified, but may include • religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin. Māori in this report refers to the Māori ethnic group.		
Source standards:	Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005		
Data type:	Numeric	**Representational class:**	Code
Field size:	5	**Representational layout:**	N(5)
Obligation:	Conditional. Record if second ethnicity offered by patient.		
Data domain:	Refer Appendix A – Level 4 Ethnicity		
Guide for use:	Ethnicity 2 should record the patient's second stated ethnicity - the second ethnicity offered by the patient. Refer to *Ethnicity Data Protocols for the Health and Disability Sector*, Ministry of Health, 2004 for more guides to use.		
Verification rules:			

2.15 Ethnicity 3

Definition:	Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group. An ethnic group is made up of people who have some or all of the following characteristics: • a common proper name • one or more elements of common culture that need not be specified, but may include • religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin. Māori in this report refers to the Māori ethnic group.		
Source standards:	Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005		
Data type:	Numeric	**Representational class:**	Code
Field size:	5	**Representational layout:**	N(5)
Obligation:	Conditional. Record if third ethnicity offered by patient.		
Data domain:	Refer Appendix A – Level 4 Ethnicity		
Guide for use:	Ethnicity 3 should record the patient's third stated ethnicity - the third ethnicity offered by the patient. Refer to *Ethnicity Data Protocols for the Health and Disability Sector*, Ministry of Health, 2004 for more guides to use.		
Verification rules:			

2.16 Ethnicity 4

Definition:	Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group. An ethnic group is made up of people who have some or all of the following characteristics: • a common proper name • one or more elements of common culture that need not be specified, but may include • religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin. Māori in this report refers to the Māori ethnic group.		
Source standards:	Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005		
Data type:	Numeric	**Representational class:**	Code
Field size:	5	**Representational layout:**	N(5)
Obligation:	Conditional. Record if fourth ethnicity offered by patient.		
Data domain:	Refer Appendix A – Level 4 Ethnicity		
Guide for use:	Ethnicity 4 should record the patient's fourth stated ethnicity - the fourth ethnicity offered by the patient. Refer to *Ethnicity Data Protocols for the Health and Disability Sector*, Ministry of Health, 2004 for more guides to use.		
Verification rules:			

2.17 Ethnicity 5

Definition:	Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group. An ethnic group is made up of people who have some or all of the following characteristics: • a common proper name • one or more elements of common culture that need not be specified, but may include • religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin. Māori in this report refers to the Māori ethnic group.		
Source standards:	Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005		
Data type:	Numeric	**Representational class:**	Code
Field size:	5	**Representational layout:**	N(5)
Obligation:	Conditional. Record if fifth ethnicity offered by patient.		
Data domain:	Refer Appendix A – Level 4 Ethnicity		
Guide for use:	Ethnicity 5 should record the patient's fifth stated ethnicity - the fifth ethnicity offered by the patient. Refer to *Ethnicity Data Protocols for the Health and Disability Sector*, Ministry of Health, 2004 for more guides to use.		
Verification rules:			

2.18 Ethnicity 6

Definition:	Ethnicity is the ethnic group or groups that people identify with or feel they belong to. Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group. An ethnic group is made up of people who have some or all of the following characteristics: • a common proper name • one or more elements of common culture that need not be specified, but may include • religion, customs, or language • unique community of interests, feelings and actions • a shared sense of common origins or ancestry, and • a common geographic origin. Māori in this report refers to the Māori ethnic group.		
Source standards:	Ethnicity New Zealand Standard Classification 2005, ETHNIC05 V1.0, 01/06/2005		
Data type:	Numeric	**Representational class:**	Code
Field size:	5	**Representational layout:**	N(5)
Obligation:	Conditional. Record if sixth ethnicity offered by patient.		
Data domain:	Refer Appendix A – Level 4 Ethnicity		
Guide for use:	Ethnicity 6 should record the patient's sixth stated ethnicity - the sixth ethnicity offered by the patient. Refer to *Ethnicity Data Protocols for the Health and Disability Sector*, Ministry of Health, 2004 for more guides to use.		
Verification rules:			

2.19 Date of Death

Definition:	The date on which the person died. Sourced from Births, Deaths and Marriages.		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Conditional. Record if the patient is known to be dead and the date of death is known.		
Data domain:	Valid date		
Guide for use:	Must be on or after the Date of Birth, and before the current date. If diagnosed post mortem, the Date of Death is the Diagnosis Date. The CCYY component of the date is mandatory (if known). MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).		
Verification rules:			

2.20 Cause of Death

Definition:	The underlying cause of death		
Source standards:	(NZ Mortality Data Dictionary, March 2009)		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	4	**Representational layout:**	ANN.N
Obligation:	Optional		
Data domain:	The International Statistical Classification of Diseases and Related Health Problems (Currently: Tenth Revision, Australian Modification (ICD-10-AM) – Sixth Edition)		
Guide for use:			
Verification rules:			

2.21 Clinical Coding System

Definition:	The version number of clinical coding system used to record the underlying cause of death		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Conditional. Mandatory if Cause of death populated – otherwise optional.		
Data domain:	Valid suffix to the International Statistical Classification of Diseases and Related Health Problems.		
Guide for use:			
Verification rules:			

Value	Meaning
1	ICD 9-CMA-II
2	ICD 10-AM 1.0
3	ICD 10-AM 2.0
4	ICD 10-AM 3.0
5	ICD 10-AM 6.0

2.22 Date Last Known to be Alive

Definition:	The date on which the patient was last known to be alive		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).		
Verification rules:			

3 DIAGNOSIS

Contains details of each diagnosis recorded.

A note on staging: Cancer staging can be divided into a clinical stage and a pathologic stage. In the Tumour, Node, Metastasis (TNM) system, clinical stage and pathologic stage are denoted by a small "c" or "p" before the stage (e.g., cT3N1M0 or pT2N0).

- Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy.
- Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.

Because they use different information, clinical stage and pathologic stage are often different. Pathologic staging is usually considered the "better" or "truer" stage because it allows direct examination of the tumour and its spread, contrasted with clinical staging which is limited by the fact that the information is obtained by making indirect observations at a tumour which is still in the body. However, clinical staging and pathologic staging should complement each other. Not every tumour is treated surgically, so sometimes pathologic staging is not available. Also, sometimes surgery is preceded by other treatments such as chemotherapy and radiation therapy which shrink the tumour, so the pathologic stage may underestimate the true stage.

Cancer prognosis and survival can be related to the extent of the disease at diagnosis. Survival rates are generally higher if the disease is localised to the organ of origin compared with cases in which the tumour has spread beyond the primary site.

Staging systems seek to classify patients having a similar prognosis into groups or stages. TNM staging is an internationally agreed staging classification system based on the anatomical site of the primary tumour and its extent of spread. The T component refers to the size of the tumour and whether or not it has spread to surrounding tissues. The N component describes the presence or absence of tumour in regional lymph nodes. The M component refers to the presence or absence of tumour at sites distant from the primary site.

TNM staging applies to solid tumours excluding brain tumours.

The data elements for ‘Diagnosis’ are:

1. Diagnosis ID
2. NHI Number
3. Date of Initial Diagnosis
4. Basis of Initial Diagnosis
5. Date of Most Valid Basis of Diagnosis
6. Most Valid Basis of Diagnosis
7. Primary Site ICD
8. Clinical Coding System
9. Morphology ICD-0
10. Morphology Version Number
11. Histopathological Grade
12. Clinical T Stage
13. Clinical N Stage
14. Clinical M Stage
15. Pathological T Stage
16. Pathological N Stage
17. Pathological M Stage
18. TNM Edition Used
19. Overall TNM Stage Group

20. Other Staging System
21. Other Staging System Overall Stage Group
22. Other Staging System Value

3.1 Diagnosis ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

3.2 NHI Number

Definition:	Unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database.		
Source standards:	(National Health Index Data Dictionary, v5.3, July 2009)		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	7	**Representational layout:**	AAANNNN
Obligation:	Mandatory		
Data domain:	Valid NHI number		
Guide for use:	Foreign key to related record in the Patient entity		
Verification rules:			

3.3 Date of Initial Diagnosis

Definition:	The date of initial suspected diagnosis of cancer.		
Source standards:	N/A		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Conditional		
Data domain:	Valid date		

Guide for use:	Date of first suspected diagnosis as stated by a recognised medical practitioner or dentist. Note: This date may be found attached to a letter of referral or a patient's medical record from an institution or hospital. The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).
Verification rules:	>= Patient:Date of Birth <= Patient:Date of Death

3.4 Basis of Initial Diagnosis[1]

Definition:	Knowledge of the basis of a diagnosis underlying a cancer code is one of the most important aids in assessing the reliability of cancer statistics.		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Conditional. Required if Date of Initial Diagnosis is populated otherwise not required.		

Data domain:

Value	Meaning
0	Death certificate only: Information provided is from a death certificate
1	Clinical: Diagnosis made before death, but without any of the following (codes 2-7)
2	Clinical investigation: All diagnostic techniques, including x-ray, endoscopy, imaging, ultrasound, exploratory surgery (e.g. laparotomy), and autopsy, without a tissue diagnosis
3	Exploratory surgery / autopsy. NZ codes a small number of diagnoses to this value where the autopsy indicates cancer but there is no histology.
4	Specific tumour markers: Including biochemical and/or immunological markers that are specific for a tumour site
5	Cytology: Examination of cells from a primary or secondary site, including fluids aspirated by endoscopy or needle; also includes the microscopic examination of peripheral blood and bone marrow aspirates
6	Histology of metastasis: Histological examination of tissue from a metastasis, including autopsy specimens
7	Histology of a primary tumour: Histological examination of tissue from primary tumour, however obtained, including all cutting techniques and bone marrow biopsies; also includes autopsy specimens of primary tumour
8	Histology: either unknown whether of primary or metastatic site, or not otherwise specified
9	Unknown

Guide for use:	
Verification rules:	

[1] Selected Australian definition of NZCR definition

3.5 Date of Most Valid Basis of Diagnosis

Definition:	The date on which the patient was definitively diagnosed with a particular condition or disease.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Conditional		
Data domain:	Valid date		
Guide for use:	The date of diagnosis is the date of the pathology report, if any, that first confirmed the diagnosis of cancer. This date may be found attached to a letter of referral or a patient's medical record from another institution or hospital. If this date is unavailable, or if no pathological test was done, then the date may be determined from one of the sources listed in the following sequence: 1) Date of the consultation at, or admission to, the hospital, clinic or institution when the cancer was first diagnosed. Note: DO NOT use the admission date of the current admission if the patient had a prior diagnosis of this cancer. 2) Date of first diagnosis as stated by a recognised medical practitioner or dentist. Note: This date may be found attached to a letter of referral or a patient's medical record from an institution or hospital. 3) Date the patient states they were first diagnosed with cancer. Note: This may be the only date available in a few cases (for example, patient was first diagnosed in a foreign country). The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).Diagnosis of cancer after death: If the patient is first diagnosed with the cancer in an autopsy report the date of diagnosis is the date of death as stated on the patient's death certificate. Incidental diagnosis of cancer: If a patient is admitted for another condition (for example a broken leg or pregnancy), and a cancer is diagnosed incidentally then the date of diagnosis is the date the cancer was diagnostically determined, not the admission date.		
Verification rules:	>= Patient:Date of Birth <= Patient:Date of Death		

3.6 Most Valid Basis of Diagnosis[2]

Definition:	The basis of diagnosis of a cancer is the microscopic or non-microscopic or death certificate source of the diagnosis. The most valid basis of diagnosis is that accepted by the cancer registry as the most reliable diagnostic source of the death certificate, non-microscopic, and microscopic sources available. Knowledge of the basis of a diagnosis underlying a cancer code is one of the most important aids in assessing the reliability of cancer statistics.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Mandatory		

Data domain:

Value	Meaning
0	Death certificate only: Information provided is from a death certificate
1	Clinical: Diagnosis made before death, but without any of the following (codes 2-7)
2	Clinical investigation: All diagnostic techniques, including x-ray, endoscopy, imaging, ultrasound, exploratory surgery (e.g. laparotomy), and autopsy, without a tissue diagnosis
3	Exploratory surgery / autopsy. NZ codes a small number of diagnoses to this value where the autopsy indicates cancer but there is no histology.
4	Specific tumour markers: Including biochemical and/or immunological markers that are specific for a tumour site
5	Cytology: Examination of cells from a primary or secondary site, including fluids aspirated by endoscopy or needle; also includes the microscopic examination of peripheral blood and bone marrow aspirates
6	Histology of metastasis: Histological examination of tissue from a metastasis, including autopsy specimens
7	Histology of a primary tumour: Histological examination of tissue from primary tumour, however obtained, including all cutting techniques and bone marrow biopsies; also includes autopsy specimens of primary tumour
8	Histology: either unknown whether of primary or metastatic site, or not otherwise specified
9	Unknown

[2] Selected Australian definition of NZCR definition

Guide for use:	CODES 1 - 4 Non-microscopic. CODES 5 - 8 Microscopic. CODE 9 Other. In a hospital setting this metadata item should be collected on the most valid basis of diagnosis at this admission. If more than one diagnosis technique is used during an admission, select the most definitive technique. The most valid basis of diagnosis may be the initial histological examination of the primary site, or it may be the post-mortem examination (sometimes corrected even at this point when histological results become available). In a cancer registry setting, this metadata item should be revised if later information allows its upgrading. When considering the most valid basis of diagnosis, the minimum requirement of a cancer registry is differentiation between neoplasms that are verified microscopically and those that are not. To exclude the latter group means losing valuable information; the making of a morphological (histological) diagnosis is dependent upon a variety of factors, such as age, accessibility of the tumour, availability of medical services, and, last but not least, upon the beliefs of the patient. A biopsy of the primary tumour should be distinguished from a biopsy of a metastasis, e.g., at laparotomy; a biopsy of cancer of the head of the pancreas versus a biopsy of a metastasis in the mesentery. However, when insufficient information is available, Code 8 should be used for any histological diagnosis. Cytological and histological diagnoses should be distinguished. Morphological confirmation of the clinical diagnosis of malignancy depends on the successful removal of a piece of tissue that is cancerous. Especially when using endoscopic procedures (bronchoscopy, gastroscopy, laparoscopy, etc.), the clinician may miss the tumour with the biopsy forceps. These cases must be registered on the basis of endoscopic diagnosis and not excluded through lack of a morphological diagnosis. Care must be taken in the interpretation and subsequent coding of autopsy findings, which may vary as follows: a) the post-mortem report includes the post-mortem histological diagnosis (in which case, one of the Histology codes should be recorded instead); b) the autopsy is macroscopic only, histological investigations having been carried out only during life (in which case, one of the Histology codes should be recorded instead); c) the autopsy findings are not supported by any histological diagnosis.
Verification rules:	

3.7 Primary Site ICD

Definition:	The primary site is the site of origin of the tumour, as opposed to the secondary or metastatic sites. It is described by reporting the anatomical position (topography) of the tumour. Where the primary site is unknown, the site should be coded as C80 - Malignant neoplasm without specification of site. This information is collected for the purpose of: • classifying tumours into clinically-relevant groupings on the basis of both their site of origin and their histological type • monitoring the number of new cases of cancer for planning treatment services • epidemiological studies		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	4	**Representational layout:**	ANN.N Where A is 'C' or 'D'
Obligation:	Mandatory (check as per questions in Definition)		
Data domain:	The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) – Sixth Edition The National Centre for Classification in Health classification for diseases and related health problems		
Guide for use:	Report the primary site of cancer, if known, for patients who have been diagnosed with a cancer. In ICD-10-AM (6th edition), primary site is identified using a single 4 digit code Cxx.x or Dxx.x. Where the primary site is unknown, the site should be coded as C80 - Malignant neoplasm without specification of site. In a hospital setting, primary site of cancer should be recorded on the patient's medical record by the patient's attending clinician or medical practitioner, and coded by the hospital's medical records department. In hospital reporting, the diagnosis code for each separate primary site cancer will be reported as a Principal diagnosis or an Additional diagnosis as defined in the current edition of the Australian Coding Standards. In death reporting, the Australian Bureau of Statistics uses ICD-10. Some ICD-10-AM (5th edition) diagnosis codes e.g. mesothelioma and Kaposi's sarcoma, are based on morphology and not site alone, and include tumours of these types even where the primary site is unknown. Expert group recommends that element should not be specific to ICD version and a separate element for recorded version should form part of the implementation detail.		
Verification rules:	Valid codes must start with C or D.		

3.8 Clinical Coding System

<table>
<tr><td>Definition:</td><td colspan="3">The version number of clinical coding system used to record the primary site of the malignancy</td></tr>
<tr><td>Source standards:</td><td colspan="3">N/A</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>2</td><td>Representational layout:</td><td>NN</td></tr>
<tr><td>Obligation:</td><td colspan="3">Mandatory</td></tr>
<tr><td>Data domain:</td><td colspan="3">Valid suffix to the International Statistical Classification of Diseases and Related Health Problems.
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>1</td><td>ICD 9-CMA-II</td></tr>
<tr><td>2</td><td>ICD 10-AM 1.0</td></tr>
<tr><td>3</td><td>ICD 10-AM 2.0</td></tr>
<tr><td>4</td><td>ICD 10-AM 3.0</td></tr>
<tr><td>5</td><td>ICD 10-AM 6.0</td></tr>
</table></td></tr>
<tr><td>Guide for use:</td><td colspan="3"></td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

3.9 Morphology of Cancer ICD-O

Definition:	The histological classification of the cancer tissue (histopathological type)		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007) (World Health Organisation International Classification of Diseases Oncology, Third edition (ICD-O-3), 2000)		
Data type:	Numeric	**Representational class:**	Code
Field size:	4	**Representational layout:**	N(4)
Obligation:	Mandatory		
Data domain:	The ICD-O (3rd edition) code set representing the histology of the cancer tissue. Because Primary Site uses ICD-10 there is no need to additionally record the behaviour of the cancer.		
Guide for use:	In ICD-O, morphology is a 4−digit number ranging from 8000 to 9989. Record morphology codes in accordance with ICD-O coding standards. Cancer registry use: Collection of this data item should only be from notification and pathology reports relating to initial diagnosis and not for recurrent or metastatic disease. Morphology information should be obtained from a pathology report or pathology system, and recorded with/on the patient's medical record and/or the hospital's patient administration system. Additional information may also be sought from the patient's attending clinician or medical practitioner. If the morphology differs on multiple pathology reports for the same tumour, use the value from the most representative tumour specimen examined. For example, if tumour is described as ductal on core biopsy but undifferentiated carcinoma on the excision specimen the morphology would be coded as undifferentiated carcinoma (a lower code) which has a less favourable diagnosis.		
Verification rules:			

3.10 Morphology Version Number

Definition:	The major version number of ICD-O used to record the histological classification of the cancer tissue (histopathological type) and a description of the course of development that a tumour is likely to take.		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	1	**Representational layout:**	N
Obligation:	Mandatory		
Data domain:	The ICD-O code set representing the histology and behaviour of cancer tissue.		
Guide for use:	At the time of publication in New Zealand the ICD-O version number is 3		
Verification rules:			

3.11 Histopathological Grade

<table>
<tr><td>Definition:</td><td colspan="3">The histopathological grade or differentiation describes how much the tumour resembles the normal tissue from which it arose, as represented by a code.

For lymphohaematopoietic neoplasms (leukaemias and lymphomas) this data element is used to denote cell lineage.</td></tr>
<tr><td>Source standards:</td><td colspan="3">(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)

(World Health Organisation International Classification of Diseases Oncology, Third edition (ICD-O-3), 2000)

(Commission on Cancer, Standards of the Commission on Cancer Registry Operations and Data Standards (ROADS) Volume II, 1998)</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>1</td><td>Representational layout:</td><td>N</td></tr>
<tr><td>Obligation:</td><td colspan="3">Mandatory</td></tr>
<tr><td>Data domain:</td><td colspan="3"><table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Grade 1: Low grade; well differentiated</td></tr><tr><td>2</td><td>Grade 2: Intermediate grade, moderately differentiated, moderately well differentiated, intermediate differentiation</td></tr><tr><td>3</td><td>Grade 3: High grade, poorly differentiated</td></tr><tr><td>4</td><td>Grade 4: Undifferentiated, anaplastic</td></tr><tr><td>9</td><td>Grade/differentiation unknown: Grade/cell type not determined, not stated or not applicable</td></tr></table></td></tr>
<tr><td>Guide for use:</td><td colspan="3">Only one code can be recorded. Where there is any doubt, or more than one value has been obtained, record the highest numeric value. For cancers for which histopathological grade is not relevant, choose 9 – Grade/differentiation unknown.</td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

3.12 Clinical T Stage

Definition:	T stage is the coding system used to identify the presence of primary tumour. It reflects the tumour size and extent of the primary cancer at the time of first therapeutic intervention.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	5	**Representational layout:**	X(5)
Obligation:	Conditional		
Data domain:	Valid T codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “c” or “C” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Choose the lower (less advanced) T category when there is any uncertainty. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.13 Clinical N Stage

Definition:	N stage is the coding system used to denote the absence or presence of regional lymph node metastases. It classifies the extent of regional lymph node metastases at the time of first therapeutic intervention.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	5	**Representational layout:**	X(5)
Obligation:	Conditional		
Data domain:	Valid N codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “c” or “C” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Choose the lower (less advanced) N category when there is any uncertainty. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.14 Clinical M Stage

Definition:	M stage is the coding system used to record the absence or presence of distant metastases at the time of first therapeutic intervention.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	5	**Representational layout:**	X(5)
Obligation:	Conditional		
Data domain:	Valid M codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “c” or “C” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Choose the lower (less advanced) M category when there is any uncertainty. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.15 Pathological T Stage

Definition:	T stage is the coding system used to identify the presence of primary tumour. It reflects the tumour size and extent of the primary cancer following resection.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	5	**Representational layout:**	X(5)
Obligation:	Conditional		
Data domain:	Valid T codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “p” or “P” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.16 Pathological N Stage

Definition:	N stage is the coding system used to denote the absence or presence of regional lymph node metastases. It classifies the extent of regional lymph node metastases following resection.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	7	**Representational layout:**	X(7)
Obligation:	Conditional		
Data domain:	Valid N codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “p” or “P” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.17 Pathological M Stage

Definition:	M stage is the coding system used to record the absence or presence of distant metastases following resection.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	5	**Representational layout:**	X(5)
Obligation:	Conditional		
Data domain:	Valid M codes from the current edition of the UICC TNM Classification of Malignant Tumours. Supplementary value: 88 Not applicable		
Guide for use:	Do not record the first character as “p” or “P” Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification. Clinical stage is based on all of the available information obtained before a surgery to remove the tumour. Thus, it may include information about the tumour obtained by physical examination, radiologic examination, and endoscopy. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist.		
Verification rules:			

3.18 TNM Edition Used

Definition:	Edition number of staging system used. This definition is taken from the Australian dataset where it is used to capture the edition number of any staging system, not only TNM.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Number
Field size:	2	**Representational layout:**	NN
Obligation:	Conditional. Optional if none of the TNM fields is populated. Mandatory if any of the TNM fields is populated.		
Data domain:	Number, 1 - 87 88 Not applicable 99 Unknown edition		
Guide for use:	Record the edition number		
Verification rules:			

3.19 Overall TNM Stage Group

Definition:	The overall TNM score based on the UICC stage for the malignancy at the time of first therapeutic intervention. Clinical stage is based on evidence at the time of first therapeutic intervention from physical examination, imaging, endoscopy, biopsy, surgical exploration or other relevant examinations. Pathologic stage adds additional information gained by examination of the tumour microscopically by a pathologist. The anatomical extent of disease at the time of first therapeutic intervention based on the previously coded clinical and pathological T, N and M stage categories, as represented by a code.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	7	**Representational layout:**	X(7)
Obligation:	Optional		
Data domain:	Current edition of the UICC TNM Classification of Malignant Tumours Supplementary values: 8888 Not applicable 9999 Unknown, Stage X		
Guide for use:	Choose the lower (less advanced) T category when there is any uncertainty. Refer to the UICC reference manual, TNM Classification of Malignant Tumours for coding rules. Collect this data element from information provided by the treating doctor and recorded on the patient's medical record. Collection of this data element is conditional on the disease site being listed in the UICC TNM classification		
Verification rules:	Valid stage grouping codes from the current edition of the UICC TNM Classification of Malignant Tumours.		

3.20 Other Staging System

Definition:	Staging classification system other than TNM. TNM is the most prevalent staging system and is regarded as worthy of its own data item(s)		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Optional		

Data domain:

Value	Meaning
2	Durie & Salmon for multiple myeloma staging
3	FAB for leukaemia classification
4	Australian Clinico-pathological Staging (ACPS) system for colorectal cancer
6	Ann Arbor staging system for lymphomas
7	Binet Staging Classification for chronic lymphocytic leukemia
8	CML for chronic myeloid leukaemia
10	FIGO for gynaecological cancers
11	ISS for myeloma
12	Rai staging system for chronic lymphocytic leukaemia
13	Other

Supplementary values:

99	Unknown

Guide for use:

It is recommended that the TNM manual of the International Union Against Cancer (UICC) be used for all applicable tumour sites. The classifications published in the American Joint Committee on Cancer (AJCC) Cancer Staging manual are identical to the TNM classifications of the UICC.

TNM staging is not applicable to all tumour sites. Staging is of limited use in some cancers, for example haematological malignancies. In these cases use the most appropriate classification system.

The NHMRC guidelines for the prevention, early detection and management of colorectal cancer (CRC) support the use of the Australian Clinico-Pathological Staging (ACPS) System. They recommend that both TNM and ACPS staging data be recorded to enable national and international comparisons. A table of correspondences between ACPS and TNM classifications is available.

The current edition of each staging scheme should be used.

Verification rules:

3.21 Other Staging System Version

Definition:	Version number of staging classification system other than TNM.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	10	**Representational layout:**	X(10)
Obligation:	Optional		
Data domain:	Supplementary value: 88 Not applicable		
Guide for use:	Record the version number of the staging system used to stage this diagnosis of cancer.		
Verification rules:			

3.22 Other Staging System Overall Stage Group

Definition:	This item describes the anatomical extent of disease at diagnosis based on stage categories of a staging classification other than the standard TNM classification.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Alphanumeric	**Representational class:**	Text
Field size:	10	**Representational layout:**	X(10)
Obligation:	Conditional. Mandatory if “Other staging system” populated, otherwise optional.		
Data domain:	Supplementary values: 8888888888 Not applicable 9999999999 Unknown		
Guide for use:	Applies to all cancer stage groupings where a staging classification other than the standard TNM classification is used. A separate data element captures TNM stage grouping. Record valid stage grouping codes from the current edition of the appropriate staging source for the particular cancer.		
Verification rules:			

4 EPISODE OF CARE

The Episode of Care entity contains details of each Episode of Care. An Episode of Care is a period of treatment of an individual for a given malignancy where the intent remains the same. It may involve multiple modalities and multiple treatments within those modalities. The episode ends with relapse, intent change or death.

From a systems perspective, it is not possible to be certain when the last treatment for an Episode of Care has been delivered so it (last treatment) is not useful for determining episode end. Relapse and intent change trigger the start of a new Episode of Care and so the end of one Episode of Care can be determined by the start of the next Episode of Care. There is therefore no need to record the end date of an Episode of Care. Similarly, status at end of an Episode of Care can be determined by the status at the start of the next Episode of Care.

The data elements for 'Episode of Care' are:

1. Episode ID
2. Diagnosis ID
3. Episode Start Date
4. Intent
5. ECOG Status at Start of Episode
6. Referral Date
7. First Multi-disciplinary Meeting
8. Date of Recurrence or Progression
9. Basis of Diagnosis of Recurrence or Progression
10. Recurrence or progression

4.1 Episode ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

4.2 Diagnosis ID

Definition:	Unique identifier for the diagnosis to which this episode of care relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Diagnosis entity		

Verification rules:	

4.3 Episode Start Date

Definition:	The start date of the first Episode of Care for this patient with this diagnosis should be the Date of Initial Diagnosis. (The date of initial suspected diagnosis of cancer). Start dates for subsequent episodes of care for this patient with this diagnosis should be the Date of Recurrence or Progression or change of intent.		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:			
Verification rules:	Episode start date must be: >= Patient:Date of Birth <= Patient:Date of Death		

4.4 Intent

<table>
<tr><td>Definition:</td><td colspan="3">The intention of the treatment for cancer for the particular patient

This item is collected for surgical treatment, radiation therapy and systemic therapy agent treatment

It is used for correlating outcome with original intent of the treatment</td></tr>
<tr><td>Source standards:</td><td colspan="3">(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>1</td><td>Representational layout:</td><td>N</td></tr>
<tr><td>Obligation:</td><td colspan="3">Mandatory</td></tr>
<tr><td>Data domain:</td><td colspan="3"><table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Prophylactic</td></tr><tr><td>2</td><td>Curative treatment</td></tr><tr><td>3</td><td>Non-curative or palliative treatment</td></tr><tr><td>0</td><td>Did not have treatment</td></tr><tr><td>9</td><td>Not stated</td></tr></table></td></tr>
<tr><td>Guide for use:</td><td colspan="3">CODE 1 Prophylactic

This code is used when the diagnosis is a cancer precursor or incipient form of cancer e.g. carcinoma in situ (CiS)

Ductal carcinoma in situ (DCIS) of the breast is common and has a high probability of transforming into true cancer. Consequently, DCIS is treated aggressively usually with breast conserving surgery (lumpectomy) followed by radiotherapy. Hence the treatment is regarded as prophylactic because the invasive cancer has not yet developed.

CODE 2 Curative

This code is used when the intent of the treatment is to cure the disease

CODE 3 Non-curative or Palliative

This code is used when treatment is given primarily for control of the disease, prolongation of life or relief of symptoms

CODE 0 Did not have treatment

The patient did not have treatment because;
• They were under active non-intervention management
• They declined treatment
• They did not need treatment
• Treatment would be of no clinical benefit

CODE 9 Intention was not stated

Patient had treatment for cancer but the intention was not stated.</td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

4.5 ECOG Status at Start of Episode

<table>
<tr><td>Definition:</td><td colspan="3">The performance status of the patient as defined by Eastern Cooperative Oncology Group (ECOG)
This is the most recent ECOG status at the start of the episode</td></tr>
<tr><td>Source standards:</td><td colspan="3">As published in Am. J. Clin. Oncol.: Oken, M.M., Creech, R.H., Tormey, D.C., Horton, J., Davis, T.E., McFadden, E.T., Carbone, P.P.: Toxicity And Response Criteria Of The Eastern Cooperative Oncology Group. Am J Clin Oncol 5:649-655, 1982.</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>1</td><td>Representational layout:</td><td>N</td></tr>
<tr><td>Obligation:</td><td colspan="3">Optional</td></tr>
<tr><td>Data domain:</td><td colspan="3">
<table>
<tr><th>Value</th><th>Meaning</th></tr>
<tr><td>0</td><td>Fully active, able to carry on all pre-disease performance without restriction</td></tr>
<tr><td>1</td><td>Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work</td></tr>
<tr><td>2</td><td>Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours</td></tr>
<tr><td>3</td><td>Capable of only limited self-care, confined to bed or chair more than 50% of waking hours</td></tr>
<tr><td>4</td><td>Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair</td></tr>
<tr><td>5</td><td>Dead</td></tr>
</table>
* Eastern Cooperative Oncology Group, Robert Comis M.D., Group Chair
</td></tr>
<tr><td>Guide for use:</td><td colspan="3"></td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

4.6 Referral Date

<table>
<tr><td>Definition:</td><td colspan="3">The date the agency received a referral for this patient/client from another party for this episode of cancer care.</td></tr>
<tr><td>Source standards:</td><td colspan="3"></td></tr>
<tr><td>Data type:</td><td>Date</td><td>Representational class:</td><td>Full date</td></tr>
<tr><td>Field size:</td><td>8</td><td>Representational layout:</td><td>CCYYMMDD</td></tr>
<tr><td>Obligation:</td><td colspan="3">Optional</td></tr>
<tr><td>Data domain:</td><td colspan="3">Valid date</td></tr>
<tr><td>Guide for use:</td><td colspan="3"></td></tr>
<tr><td>Verification rules:</td><td colspan="3">Date of referral must be:
> Patient: Date of Birth</td></tr>
</table>

4.7 First Multi-disciplinary Meeting Date

Definition:	Date on which the patient was first discussed at a multi-disciplinary meeting.		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Conditional		
Data domain:	Valid date		
Guide for use:	The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).		
Verification rules:			

4.8 Date of Recurrence or Progression

Definition:	The date a medical practitioner confirms the diagnosis of a recurrent or metastatic cancer of the same histology.		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYY[MM[DD]]
Obligation:	Conditional		
Data domain:	Valid date		
Guide for use:	The term `recurrence' defines the return, reappearance or metastasis of cancer (of the same histology) after a disease free period. This item is collected for determining the time interval from diagnosis to recurrence, from treatment to recurrence and from recurrence to death. The CCYY component of the date is mandatory. MM is conditional (use if known). DD is conditional (use if known and MM has been recorded).		
Verification rules:			

4.9 Basis of Diagnosis of Recurrence or Progression

Definition:	Knowledge of the basis of a diagnosis underlying a cancer code is one of the most important aids in assessing the reliability of cancer statistics.		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Optional		

Data domain:

Value	Meaning
0	Death certificate only: Information provided is from a death certificate
1	Clinical: Diagnosis made before death, but without any of the following (codes 2-7)
2	Clinical investigation: All diagnostic techniques, including x-ray, endoscopy, imaging, ultrasound, exploratory surgery (e.g. laparotomy), and autopsy, without a tissue diagnosis
3	Exploratory surgery / autopsy. NZ codes a small number of diagnoses to this value where the autopsy indicates cancer but there is no histology.
4	Specific tumour markers: Including biochemical and/or immunological markers that are specific for a tumour site
5	Cytology: Examination of cells from a primary or secondary site, including fluids aspirated by endoscopy or needle; also includes the microscopic examination of peripheral blood and bone marrow aspirates
6	Histology of metastasis: Histological examination of tissue from a metastasis, including autopsy specimens
7	Histology of a primary tumour: Histological examination of tissue from primary tumour, however obtained, including all cutting techniques and bone marrow biopsies; also includes autopsy specimens of primary tumour
8	Histology: either unknown whether of primary or metastatic site, or not otherwise specified
9	Unknown

Guide for use:	
Verification rules:	

4.10 Recurrence or Progression

<table>
<tr><td>Definition:</td><td colspan="3">Extent of cancer that has recurred or progressed</td></tr>
<tr><td>Source standards:</td><td colspan="3">N/A</td></tr>
<tr><td>Data type:</td><td>Numeric</td><td>Representational class:</td><td>Code</td></tr>
<tr><td>Field size:</td><td>1</td><td>Representational layout:</td><td>N</td></tr>
<tr><td>Obligation:</td><td colspan="3">Optional</td></tr>
<tr><td>Data domain:</td><td colspan="3"><table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Loco-regional</td></tr><tr><td>2</td><td>Distant</td></tr></table></td></tr>
<tr><td>Guide for use:</td><td colspan="3"></td></tr>
<tr><td>Verification rules:</td><td colspan="3"></td></tr>
</table>

5 SURGERY

Contains details of surgical procedures performed as part of this Episode of Care.

Cancer surgery attempts to remove localised tumours completely or reduce the size of large tumours so that follow-up treatment by radiation or chemotherapy will be more effective. The surgery may be done as a diagnostic (staging) process as well as a treatment process, and these two processes may take place simultaneously. For that reason, the surgeon may remove the primary tumour, some normal tissue surrounding the tumour (to make sure that they get it all, and also to compare the cancer cells with the healthy cells to aid in diagnosis), the lymph nodes near the primary tumour (to detect and guard against the spread of individual cancer cells that may have already lodged in these lymph nodes), and any organs in the body that may already be affected by the cancer.

Sometimes the surgeon will take out not only the lymph nodes adjacent to the tumour but all the lymph nodes in the region. This may be done to check the spread of cancer or to determine whether the cancer has spread further than the clinical diagnostic tests have shown.

In addition to curative surgery, surgery may also be performed as a preventive measure (to remove precancerous conditions) and/or a palliative measure (to reduce pain and other symptoms).

The data elements for ‘Surgery’ are:

1. Surgery ID
2. Episode ID
3. Date of Procedure
4. Surgical Procedure
5. Clinical Coding System
6. Residual Disease
7. Health Facility
8. Clinical Trial

5.1 Surgery ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

5.2 Episode ID

Definition:	The identifier for the Episode of Care to which this surgical procedure relates		
Source standards:			
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		
Verification rules:			

5.3 Date of Procedure

Definition:	The date the procedure was performed		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	The start date of the treatment is recorded regardless of whether treatment is completed as intended or not. Treatment subsequent to a recurrence will be recorded within a new episode of care This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

5.4 Surgical Procedure

Definition:	The surgical procedure used in the treatment of the cancer. This item is collected for determining outcome by treatment type.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Code
Field size:	7	**Representational layout:**	NNNNN-NN
Obligation:	Mandatory		
Data domain:	The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM) – Sixth Edition The National Centre for Classification in Health classification for diseases and related health problems		
Guide for use:	Each surgical treatment procedure used in the treatment of the cancer should be recorded. Surgical procedures performed for diagnostic purposes only should not be included. Any systemic treatment which can be coded as a procedure through ICD-10-AM should be so coded (e.g., stem cell or bone marrow infusion).		
Verification rules:			

5.5 Clinical Coding System

Definition:	The version number of clinical coding system used to record the surgical procedure		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Mandatory		
Data domain:	Valid suffix to the International Statistical Classification of Diseases and Related Health Problems.		
Guide for use:			
Verification rules:			

Value	Meaning
1	ICD 9-CMA-II
2	ICD 10-AM 1.0
3	ICD 10-AM 2.0
4	ICD 10-AM 3.0
5	ICD 10-AM 6.0

5.6 Residual Disease

Definition:	Describes the disease remaining at the site on completion of the procedure		
Source standards:	(NZ Cancer Registry Data Dictionary, March 2004)		
Data type:	Numeric	**Representational class:**	Code
Field size:	1	**Representational layout:**	N
Obligation:	Optional		
Data domain:	**Value** / **Meaning** 1 – R0 – No residual 2 – R1 – Microscopic 3 – R2 - Macroscopic		
Guide for use:			
Verification rules:			

5.7 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

5.8 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y / N		
Guide for use:			
Verification rules:			

6 RADIATION

Contains details of radiation therapy performed as part of this Episode of Care.

Radiation therapy is the use of ionising radiation to kill cancer cells and shrink tumours. Radiation therapy injures or destroys cells in the area being treated by damaging their genetic material, making it impossible for these cells to continue to grow and divide. The goal of radiation therapy is to damage as many cancer cells as possible, while limiting harm to nearby healthy tissue.

About half of all cancer patients receive some type of radiation therapy. Radiation therapy may be used alone or in combination with other cancer treatments, such as chemotherapy or surgery. In some cases, a patient may receive more than one type of radiation therapy.

Radiation may come from a machine outside the body (external radiation), may be placed inside the body (internal radiation or brachytherapy), or may use unsealed radioactive materials that go throughout the body (systemic radiation therapy). The type of radiation to be given depends on the type of cancer, its location, how far into the body the radiation will need to go, the patient's general health and medical history, whether the patient will have other types of cancer treatment, and other factors.

The data elements for ‘Radiation Therapy’ are:

1. Radiation ID
2. Episode ID
3. Radiation Type
4. Start Date
5. End Date
6. Treatment Site
7. Brachytherapy Dose Rate
8. Radiation Dose
9. Radiation Unit
10. Number of Fractions
11. Health Facility
12. Clinical Trial

6.1 Radiation ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

6.2 Episode ID

Definition:	The identifier for the Episode of Care to which this radiation therapy relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		
Verification rules:			

6.3 Radiation Type

Definition:	The type of radiation therapy used in treatment of the cancer, as represented by a code. This metadata item is collected for the analysis of outcome by treatment type.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Code
Field size:	1	**Representational layout:**	N
Obligation:	Mandatory		
Data domain:	**Value** / **Meaning** 1 – External radiotherapy treatment given 2 – Brachytherapy (radioactive implants) 3 – Unsealed radioisotopes 9 – Radiotherapy was administered but method was not stated		
Guide for use:	If codes 1, 2, 3 or 9 are used, the amount of radiation received should also be collected in data item 6.8 – Radiation Dose. Most external beam radiotherapy is delivered on an outpatient basis. CODE 2 Brachytherapy (radioactive implants) This code is likely to be listed as a procedure for admitted patients.		
Verification rules:			

6.4 Start Date

Definition:	The date the treatment was started		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		

Guide for use:	The start date is for the start date of this instance of radiation therapy. Each instance of radiation therapy in a course of radiation therapy should be recorded separately and have its own start and end dates. The start date of the treatment is recorded regardless of whether treatment is completed as intended or not. Treatment subsequent to a recurrence will be recorded within a new episode of care This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.

6.5 End Date

Definition:	The date the treatment was completed		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	This item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

6.6 Radiotherapy Treatment Site

Definition:	The anatomical site or region which is the target of radiotherapy treatment		
Source standards:	Developed by Core Cancer Data Definitions Work Group, 2010		
Data type:	Numeric	**Representational class:**	Code
Field size:	3	**Representational layout:**	NNN
Obligation:	Mandatory		
Data domain:	ICD sites codes grouped into less specific sites more suited to describing the anatomical site or region which is the target of radiotherapy treatment. Refer Appendix B for values.		
Guide for use:	This information is collected for radiotherapy treatments only as specific ICD site and procedure codes are regarded as suitable for surgical interventions only.		
Verification rules:			

6.7 Brachytherapy Dose Rate

Definition:	The prescribed dose rate of a brachytherapy course		
Source standards:	NHS Health and Social Care Data Dictionary 2009		
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Conditional. Mandatory if 6.3 - Radiation type = 2 (Brachytherapy) otherwise not required.		
Data domain:			

Value	Meaning
1	Low/medium dose rate. Involves delivering radiation continuously over a prescribed extended period (days or months)
2	High dose rate in which radiation is given e.g.1-3 times per day for 5-10 minutes for 3-5 days
99	Not known or not recorded

Guide for use:	
Verification rules:	This item should be available only if 6.3 - Radiation Type = 2 (Brachytherapy)

6.8 Radiation Dose

Definition:	The dose of radiation a person receives during the course of treatment for cancer measured in Gray (Gy) or Megabecquerel (MBq)		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Number
Field size:	5	**Representational layout:**	N[NNNN]
Obligation:	Mandatory		
Data domain:	Radiation dose in Gray (Gy) or Megabecquerel (MBq) Supplementary values: 99999 Radiation therapy was administered but the dose is unknown		
Guide for use:	The International Commission on Radiation Units (ICRU) recommends recording doses at the axis point where applicable (opposed fields, four field box, wedged pairs and so on). The ICRU50 reference dose should be recorded for photon therapy if available, otherwise a description of the received dose at the centre of the planning target volume. The ICRU58 should be recorded for brachytherapy. For maximum consistency in this field the ICRU recommendations should be followed whenever possible. Multiple entries are permitted. If all radiotherapy, is given by external beam, the final highest total reference dose should be recorded. If a boost is given with a different modality, for example, brachytherapy, then the brachytherapy dose should be recorded separately to the external beam dose.		
Verification rules:			

6.9 Radiation Unit

Definition:	The unit of measurement for the Radiation Dose data item		
Source standards:			
Data type:	Numeric	**Representational class:**	Code
Field size:	1	**Representational layout:**	N
Obligation:	Mandatory		
Data domain:	**Value** / **Meaning** 1 / Gray (Gy) 2 / Megabecquerels (MBq)		
Guide for use:	Use code 2 (Megabecquerels) where the Radiation Type is “Unsealed radioisotopes” Use code 1 (Gray) for all other forms of radiation therapy		
Verification rules:			

6.10 Number of Fractions

Definition:	The total number of radiotherapy treatment sessions (fractions) administered during the course of treatment.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data type:	Numeric	**Representational class:**	Number
Field size:	2	**Representational layout:**	NN
Obligation:	Mandatory		
Data domain:	Total number of radiotherapy treatment sessions (fractions) administered Supplementary values: 99 Radiation therapy was administered but the number of fractions is unknown.		
Guide for use:	The total number of treatment sessions (fractions) is the sum of the number of fractions of radiotherapy treatment and the number of boost treatments. Record the total number of radiotherapy fractions delivered to the patient during the course of treatment for cancer. The number of fractions delivered is recorded regardless of whether treatment is completed as intended or not and regardless of the intent of treatment.		
Verification rules:	Valid values are: 1 to 99		

6.11 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

6.12 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y or N		
Guide for use:			
Verification rules:			

7 CHEMOTHERAPY

Contains details of chemotherapy performed as part of this Episode of Care.

Chemotherapy is a treatment that uses drugs designed to destroy or prevent further growth of cancer cells. Chemotherapy treatment is a systemic therapy, meaning that the drugs flow through the bloodstream to nearly every part of the body.

Often, two or more chemotherapy drugs are used in combination to enhance their effectiveness. Chemotherapy drugs can be used in combination with surgery or radiation therapy. Chemotherapy given before surgery and/or radiation is called neoadjuvant chemotherapy. Chemotherapy given with radiation or after surgery is known as adjuvant chemotherapy.

Chemotherapy drugs may be given for several reasons:

- To treat cancers that respond well to chemotherapy
- To decrease the size of tumours for easier and safer removal by surgery
- To enhance the cancer-killing effectiveness of other treatments, such as radiation therapy
- In higher dosages, to overcome the resistance of cancer cells
- To control the cancer and enhance the patient's quality of life

The data elements for ‘Chemotherapy’ are:

1. Chemotherapy ID
2. Episode ID
3. Start Date
4. End Date
5. Clinical Trial

7.1 Chemotherapy ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

7.2 Episode ID

Definition:	The identifier for the Episode of Care to which this chemotherapy relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		

Verification rules:	

7.3 Start Date

Definition:	The date the treatment was started		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	The start date of the treatment is recorded regardless of whether treatment is completed as intended or not. Treatment subsequent to a recurrence will be recorded within a new episode of care This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

7.4 End Date

Definition:	The date the treatment was completed		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	This item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

7.5 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y / N		
Guide for use:			
Verification rules:			

8 CHEMOTHERAPY DISPENSED

Contains details

The data elements for ‘Chemotherapy’ are:

1. Chemotherapy Dispensed ID
2. Chemotherapy ID
3. Chemotherapy Agent ID
4. Clinical Trial

8.1 Chemotherapy Dispensed ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

8.2 Chemotherapy ID

Definition:	The identifier for the Chemotherapy record to which this chemotherapy dispensed record relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Chemotherapy entity		
Verification rules:			

8.3 Chemotherapy Agent ID

Definition:	The identifier for the chemotherapy agent used in this session of chemotherapy.		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	New Zealand Universal List of Medicines (NZULM)		
Guide for use:	Create one record for each chemotherapy agent used in this session of chemotherapy		
Verification rules:			

8.4 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

9 TARGETED THERAPY

Contains details of targeted therapy performed as part of this Episode of Care.

Targeted therapy is a general term that refers to a medication or drug that targets a specific pathway in the growth and development of a tumour. By attacking or blocking these important targets, the therapy helps to fight the tumour itself. The targets themselves are typically various molecules in the body that are known or suspected to play a role in cancer formation.

Hormone therapy is a significant form of targeted therapy. The use of hormone therapy to treat cancer is based on the observation that receptors for specific hormones that are needed for cell growth are on the surface of some tumour cells. Hormone therapy can work by stopping the production of a certain hormone, blocking hormone receptors, or substituting chemically similar agents for the active hormone, which cannot be used by the tumour cell.

The data elements for 'Targeted therapy' are:

1. Targeted Therapy ID
2. Episode ID
3. Start Date
4. End Date
5. Targeted Therapy Agent
6. Health Facility
7. Clinical Trial

9.1 Targeted Therapy ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

9.2 Episode ID

Definition:	The identifier for the intervention to which this targeted therapy relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		
Verification rules:			

9.3 Start Date

Definition:	The date the treatment was started		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	The start date of the treatment is recorded regardless of whether treatment is completed as intended or not. Treatment subsequent to a recurrence will be recorded within a new episode of care This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

9.4 End Date

Definition:	The date the treatment was completed		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	This item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

9.5 Targeted Therapy Agent

Definition:	The name of the targeted treatment agent used during the course of treatment for cancer.		
Source standards:	(Cancer Clinical Data Set Specification, Australian Government METeOR, 2007)		
Data Type	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Mandatory		

Data domain:

Value	Agent	Class	Main Site
1	Aminoglutethimide	Adrenal Steroid Inhibitors	Breast/Prostate
2	Anastrazole	Aromatase Inhibitors	Breast
3	Bicalutamide	Anti-androgens	Breast
4	Cyproterone Acetate	Anti-androgens	Prostate
5	Degarelix	GnRH antagonist	Prostate
6	DES(diethylstilbestrol)	Estrogens	Prostate
7	Estradiol(estrace)	Estrogens	Prostate
8	Exemestane	Aromatase Inhibitors	Breast
9	Fluoxymesterone	Androgens	Breast
10	Flutamide	Anti-androgens	Prostate
11	Fulvestrant	Anti-estrogens	Breast
12	Goserelin acetate	LHRH agonists	Breast/Prostate
13	Hydroxyprogesterone caproate	Pro-gestational agent	Breast
14	Ietrozole	Aromatase Inhibitors	Breast
15	Leuprolide acetate	LHRH agonists	Breast/Prostate
16	Medroxyprogesterone acetate	Pro-gestational agent	Breast
17	Megestrol	Pro-gestational agent	Breast
18	Mitotane	Adrenal Steroid Inhibitors	Breast/Prostate
19	Nilutamide	Anti-androgens	Prostate
20	Premarin	Estrogens	Prostate
21	Progestins	Pro-gestational agent	Breast
22	Reloxifene	SERMs	Breast
23	Tamoxifen	Anti-estrogens	Breast
24	Testolactone	Androgens	Breast
25	Testosterone	Androgens	Breast
26	Toremifene	Anti-estrogens	Breast
27	Triptorelin pamoate	LHRH agonists	Breast/Prostate
99	Other		

Guide for use:	Hormone therapy is cancer treatment that achieves its antitumour effect through changes in hormonal balance. This includes the administration of hormones, agents acting via hormonal mechanisms, antihormones and steroids. Hormone therapy agent names and protocols may be derived from CiSCat or MIMS. Each hormone therapy agent used during the initial treatment of the cancer should be recorded. Systemic therapy often involves treatment with a combination of agents. These may be known by acronyms but since details of drugs and acronyms may vary it is recommended that each agent be recorded separately. The name each hormone therapy agent given as initial treatment is recorded regardless of whether treatment is completed as intended and of the intent or timing of the chemotherapy in relation to surgery. Oral hormone therapy normally given on an outpatient basis should also be included. The full, generic name of any agent should be recorded; if a generic name is not available because the drug is new and under patent protection; record the brand name. The name(s) of other systemic treatment agents are collected as separate data items. This information should be collected from the patient's medical record.
Verification rules:	

9.6 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

9.7 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y / N		
Guide for use:			
Verification rules:			

10 OTHER THERAPY

Contains details of other therapy performed as part of this Episode of Care.

Targeted therapy is a general term that refers to a medication or drug that targets a specific pathway in the growth and development of a tumour. By attacking or blocking these important targets, the therapy helps to fight the tumour itself. The targets themselves are typically various molecules in the body that are known or suspected to play a role in cancer formation.

Other therapy types include Gene Therapy which supplies cells with healthy copies of missing or altered genes. Viruses are used as vectors to introduce the genetic material to cells.

The data elements for 'Other therapy' are:

1. Other Therapy ID
2. Episode ID
3. Start Date
4. End Date
5. Other Therapy Type
6. Health Facility
7. Clinical Trial

10.1 Other Therapy ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

10.2 Episode ID

Definition:	The identifier for the Episode to which this therapy relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		
Verification rules:			

10.3 Start Date

Definition:	The date the treatment was started		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	The start date of the treatment is recorded regardless of whether treatment is completed as intended or not. Treatment subsequent to a recurrence will be recorded within a ne episode of care. This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

10.4 End Date

Definition:	The date the treatment was completed		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	This item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: >= Diagnosis:Date of Initial Diagnosis, and <= Episode of Care: Episode End Date.		

10.5 Other Therapy Type

Definition:	Cancer treatment that is not surgery, radiotherapy, chemotherapy or hormone therapy		
Source standards:			
Data type:	Numeric	**Representational class:**	Code
Field size:	2	**Representational layout:**	NN
Obligation:	Mandatory		
Data domain:			

Value	Meaning
1	Immunotherapy
2	Anti-angiogenesis molecule therapy
3	Apoptosis Inducer therapy
4	Gene therapy
5	Differentiation inducer therapy
6	Stem cell transplantation therapy

Guide for use:	
Verification rules:	

10.6 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

10.7 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y / N		
Guide for use:			
Verification rules:			

11 NON-INTERVENTION MANAGEMENT

Non-intervention Management is an expectant approach pending a change in the patient's circumstances requiring intervention. It is a period of active management rather than unmanaged non-treatment.

The data elements for 'Non-intervention Management' are:

1. Non-intervention ID
2. Episode ID
3. Start Date
4. End Date
5. Other Therapy Type
6. Health Facility
7. Clinical Trial

11.1 Non-intervention ID

Definition:	Unique identifier for this record		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	System generated primary key for this record		
Verification rules:			

11.2 Episode ID

Definition:	The identifier for the Episode to which this non-intervention management relates		
Source standards:	N/A		
Data type:	Numeric	**Representational class:**	Number
Field size:	11	**Representational layout:**	N(11)
Obligation:	Mandatory		
Data domain:	Number		
Guide for use:	Foreign key to related record in the Episode of Care entity		
Verification rules:			

11.3 Start Date

Definition:	The date the non-intervention management started		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date

Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Mandatory		
Data domain:	Valid date		
Guide for use:	This metadata item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: = Diagnosis: Date of Most Valid Basis of Diagnosis		

11.4 End Date

Definition:	The date the non-intervention management finished		
Source standards:	HL7 v2.4 DT – date		
Data type:	Date	**Representational class:**	Full date
Field size:	8	**Representational layout:**	CCYYMMDD
Obligation:	Optional		
Data domain:	Valid date		
Guide for use:	This item is collected for the analysis of outcome by treatment type. Collecting dates for treatment will allow evaluation of treatments delivered and of time intervals from diagnosis to treatment, from treatment to recurrence and from treatment to death.		
Verification rules:	This field must be: = start date of first treatment received after the start of this instance of non-intervention management or the start of the next pisode of care – whichever is the earlier.		

11.5 Health Facility

Definition:	A code that uniquely identifies a healthcare facility. A healthcare facility is a place, which may be a permanent, temporary, or mobile structure that healthcare users attend or are resident in for the primary purpose of receiving healthcare or disability support services. This definition excludes supervised hostels, halfway houses, staff residences, and rest homes where the rest home is the patient's usual place of residence.		
Source standards:	N/A		
Data type:	Alphanumeric	**Representational class:**	Code
Field size:	6	**Representational layout:**	FXXNNN
Obligation:	Mandatory		
Data domain:	See the HISO 10006 HPI Code Set Facility Code Table at http://www.ithealthboard.health.nz/hpi for a list of valid values		
Guide for use:	F is a constant prefix. X is either an alpha or a numeric. The Facility Identifier is assigned by the HPI system at the time that the facility record in the HPI is created.		
Verification rules:			

11.6 Clinical Trial

Definition:	True if patient was included in a clinical trial		
Source standards:	2004		
Data type:	Boolean	**Representational class:**	*N/A*
Field size:	1	**Representational layout:**	Y
Obligation:	Mandatory		
Data domain:	Y / N		
Guide for use:			
Verification rules:			

12 GLOSSARY

Term	Definition
AIHW	Australian Institute of Health and Welfare
AJCC	American Joint Committee on Cancer
Anti-angiogenesis molecule therapy	Systemic therapy that, unlike other chemotherapy, harms cancer cells but does not harm other cells that divide quickly
Apoptosis inducer therapy	Systemic therapy that induces cell death in cancer cells
CIS	Carcinoma in situ
DCIS	Ductal carcinoma in situ
Differentiation inducer therapy	Systemic therapy in which the malignant cells are treated so that they can resume the process of maturation and differentiation into mature cells
ECOG	Eastern Cooperative Oncology Group
Gene therapy	Therapy to supply cells with healthy copies of missing or altered genes. Viruses are used as vectors to introduce the genetic material to cells.
Gray	Unit of measurement for forms of radiation other than unsealed radioisotopes
Histopathology	The microscopic study of diseased tissue
ICD	International Classification of Diseases
ICRU	International Commission on Radiation Units
Immunotherapy	Stimulation of the patient's immune system to attack the malignant tumour cells that are responsible for the disease. This can be either through immunisation of the patient, in which case the patient's own immune system is trained to recognize tumour cells as targets to be destroyed, or through the administration of therapeutic antibodies as drugs, in which case the patient's immune system is recruited to destroy tumour cells by the therapeutic antibodies
Megabequerels	Unit of measurement for unsealed radioisotopes
METeOR	An application maintained by the Australian Institute of Health and Welfare where metadata is stored, managed and disseminated.
Morphology	Description of the structure and origin of cancer cells
NHI	National Health Index – unique identifier for NZ health care users
Recurrence	Defines the return, reappearance or metastasis of cancer (of the same histology) after a disease free period
Stage	The extent of a cancer, especially whether the disease has spread from the original site to other parts of the body
Targeted Therapy	Targeted therapy is a general term that refers to a medication or drug that targets a specific pathway in the growth and development of a tumour.
TNM	Tumour, Node, Metastasis - staging system that describes the extent of cancer
UICC	International Union Against Cancer

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APPENDIX A. – LEVEL 4 ETHNICITY

Code	Description
37111	Admiralty Islander
44411	Afghani
53116	African American
53199	African nec
53100	African nfd
12949	Afrikaner
32111	Aitutaki Islander
12911	Albanian
51111	Algerian
12943	American
43117	Anglo Indian
51112	Arab
52111	Argentinian
12912	Armenian
44499	Asian nec
40000	Asian nfd
51113	Assyrian
32112	Atiu Islander
37113	Austral Islander
12811	Australian
37112	Australian Aboriginal
12913	Austrian
37134	Banaban
44412	Bangladeshi
12914	Belgian
12916	Belorussian
43111	Bengali
37115	Bismark Archipelagoan
52112	Bolivian
12516	Bosnian
37116	Bougainvillean
52113	Brazilian
12199	British nec
12100	British nfd
12915	Bulgarian
12944	Burgher
41411	Burmese

Code	Description
12513	Macedonian
37125	Malaitian
41414	Malay
42113	Malaysian Chinese
12930	Maltese
52122	Malvinian
32113	Mangaia Islander
32114	Manihiki Islander
37126	Manus Islander
12117	Manx
21111	Māori
37127	Marianas Islander
37128	Marquesas Islander
37129	Marshall Islander
32115	Mauke Islander
61115	Mauritian
52123	Mexican
51199	Middle Eastern nec
51100	Middle Eastern nfd
32116	Mitiaro Islander
51122	Moroccan
37130	Nauruan
44413	Nepalese
37131	New Britain Islander
12947	New Caledonian
37132	New Georgian
37133	New Irelander
11111	New Zealand European
61118	New Zealander
37145	Ni Vanuatu
52124	Nicaraguan
53115	Nigerian
34111	Niuean
61113	North American Indian
12931	Norwegian
99999	Not Stated
51123	Omani

Code	Description
41211	Cambodian
42112	Cambodian Chinese
12945	Canadian
37117	Caroline Islander
12111	Celtic nfd
61111	Central American Indian
37121	Chamorro
12112	Channel Islander
52114	Chilean
42199	Chinese nec
42100	Chinese nfd
52115	Colombian
32100	Cook Islands Maori nfd
12113	Cornish
12917	Corsican
52116	Costa Rican
12511	Croatian
12918	Cypriot nfd
12919	Czech
12512	Dalmatian
12920	Danish
94444	Don't Know
12211	Dutch
37118	Easter Islander
52118	Ecuadorian
51114	Egyptian
12114	English
53120	Eritrean
12921	Estonian
53121	Ethiopian
44416	Eurasian
12999	European nec
10000	European nfd
12946	Falkland Islander
36111	Fijian
43112	Fijian Indian
41111	Filipino
12922	Finnish
12923	Flemish

Code	Description
12118	Orkney Islander
61199	Other Ethnicity nec
37199	Pacific Peoples nec
30000	Pacific Peoples nfd
44414	Pakistani
37114	Palau Islander
51124	Palestinian
32117	Palmerston Islander
52125	Panamanian
37135	Papua New Guinean
52126	Paraguayan
32118	Penrhyn Islander
52127	Peruvian
37136	Phoenix Islander
37137	Pitcairn Islander
12411	Polish
12932	Portuguese
52128	Puerto Rican
32119	Pukapuka Islander
43115	Punjabi
32120	Rakahanga Islander
32121	Rarotongan
95555	Refused to Answer
96666	Repeated Value
98888	Response Outside Scope
97777	Response Unidentifiable
12933	Romanian
37138	Rotuman
12935	Russian
31111	Samoan
37139	Santa Cruz Islander
12936	Sardinian
12119	Scottish
12514	Serbian
61116	Seychellois
12120	Shetland Islander
43116	Sikh
42114	Singaporean Chinese
44111	Sinhalese

Code	Description
12924	French
12115	Gaelic
37119	Gambier Islander
12711	German
53122	Ghanaian
12311	Greek
12925	Greenlander
37120	Guadalcanalian
52119	Guatemalan
43113	Gujarati
52120	Guyanese
12934	Gypsy
37122	Hawaiian
52121	Honduran
42111	Hong Kong Chinese
12926	Hungarian
12927	Icelandic
43199	Indian nec
43100	Indian nfd
43114	Indian Tamil
41412	Indonesian
61112	Inuit
51115	Iranian/Persian
51116	Iraqi
12116	Irish
51117	Israeli/Jewish
12611	Italian
53113	Jamaican
44211	Japanese
51118	Jordanian
37123	Kanak
53114	Kenyan
37124	Kiribati
44311	Korean
51119	Kurd
41413	Laotian
52117	Latin American Creole
52199	Latin American nec
52100	Latin American nfd

Code	Description
12937	Slavic
12938	Slovak
12515	Slovenian
37141	Solomon Islander
53119	Somali
61117	South African Coloured
12948	South African nec
61114	South American Indian
12599	South Slav nec
12500	South Slav nfd
41499	Southeast Asian nec
41000	Southeast Asian nfd
12939	Spanish
44199	Sri Lankan nec
44100	Sri Lankan nfd
44112	Sri Lankan Tamil
12940	Swedish
12941	Swiss
51125	Syrian
37140	Tahitian
42116	Taiwanese
41415	Thai
44415	Tibetan
35111	Tokelauan
33111	Tongan
37142	Torres Strait Islander
37143	Tuamotu Islander
51126	Tunisian
51127	Turkish
37144	Tuvaluan
53117	Ugandan
12942	Ukrainian
53112	United States Creole
52129	Uruguayan
52130	Venezuelan
41311	Vietnamese
42115	Vietnamese Chinese
37146	Wake Islander
37147	Wallis Islander

Code	Description
12928	Latvian
51120	Lebanese
51121	Libyan
12929	Lithuanian

Code	Description
12121	Welsh
53118	West Indian
37148	Yap Islander
51128	Yemeni
12950	Zimbabwean

APPENDIX B. – RADIATION THERAPY TREATMENT SITE

Site ID	Site Description	Mapped to ICD-10
1	ACCESSORY, SINUSES, MIDDLE & INNER EAR	C30.1, C31.0-C31.3, C31.8-C31.9
2	ADRENAL GLANDS	C74.0, C74.1, C74.9
3	ANAL CANAL & ANUS	C21.0, C21.1,C21.2, C21.8
4	APPENDIX	C18.1
5	BLOOD, BONE MARROW, & HEMATOPOIETIC SYS	C81-C96
6	BONES & JOINTS	C40.0-C40.3, C40.8-C41.4, C41.8-C41.9
7	BRAIN, & CRANIAL NERVES, & SPINAL CORD, (EXCL. VENTRICLE, CEREBELLUM)	C71.0-C71.4, C71.7-C71.9, C72.0-C72.5
8	BREAST	C50.0-C50.6, C50.8-C50.9
9	CEREBELLUM	C71.6
10	CERVIX UTERI	C53.0-C53.1,C53.8-C53.9
11	CONNECTIVE & SOFT TISSUE	C47.0-C47.6, C47.8-C47.9, C49.0-C49.6, C49.8-C49.9
12	CORPUS UTERI	C54.0-C54.3, C54.8-C54.9
13	CRANIOPHARYNGEAL DUCT	C75.2
14	EPIDIDYMIS, SPERMATIC CORD, MALE GENITAL, NOS	C63.0, C6.31, C63.7-C63.9
15	OESOPHAGUS	C15.0-C15.5,C15.8-C15.9
16	EYE, NOS	C69.9
17	EYEBALL	C69.4
18	GALLBLADDER & EXTRAHEPATIC BILE DUCTS	C23, C24, C24.0-C24.1, C24.8-C24.9
19	GUM, FLOOR OF MOUTH, & OTHER MOUTH	C03.0-C03.1, C03.9-C04.1, C04.8-C05.2, C05.8-C06.2, C06.8-C06.9
20	HEART	C38.0
21	HEMI-BODY	
22	HYPOPHARYNX	C13.0-C13.2,C13.8-C13.9
23	ILL-DEFINED	C76.0-C76.8
24	INTRAHEPATIC BILE DUCTS	C22.1
25	KIDNEY	C64
26	LARGE INTESTINE, (EXCL. APPENDIX)	C18.0, C18.2-C18.9, C19
27	LARYNX	C32.0-C32.3, C32.8-C32.9
28	LIP	C00.0-C00.6,C00.8-C00.9
29	LIVER	C22.0
30	LUNG & BRONCHUS	C34, C34.0-C34.3, C34.8-C34.9
31	LYMPH NODES	C77, C77.0-C77.5, C77.8-C77.9
32	MEDIASTINUM	C38.1-C38.3, C38.8
33	MENINGES (CEREBRAL,SPINAL)	C70.0-C70.1, C70.9
34	NASAL CAVITY (INCLUDING NASAL CARTILAGE)	C30.0
35	NASOPHARYNX	C11.0-C11.3, C11.8-C11.9

36	ORBIT & LACRIMAL GLAND, (EXCL. RETINA, EYE, NOS)	C69.0-C69.1, C69.3, C69.5-C69.8
37	OROPHARNYX	C09.0-C09.1, C09.8-C10.4, C10.8-C10.9
38	OTHER ENDOCRINE GLANDS	C75.4-C75.5, C75.8-C75.9
39	OTHER FEMALE GENITAL	C57.0-C57.4, C57.7-C57.9
40	OTHER NERVOUS SYSTEM	C72.8-C72.9
41	OTHER URINARY ORGANS	C68.0-C68.1, C68.8-C68.9
42	OVARY	C56
43	PANCREAS	C25.0-C25.4, C25.7-C25.9
44	PARATHYROID GLAND	C75.0
45	PENIS & SCROTUM	C60.0-C60.2, C60.8-C60.9, C63.2
46	PHARYNX	C14.0, C14.2, C14.8
47	PINEAL GLAND	C75.3
48	PITUITARY GLAND	C75.1
49	PLACENTA	C58
50	PLEURA	C38.4
51	PROSTATE GLAND	C61
52	RECTUM	C20
53	RENAL PELVIS, URETER	C65, C66
54	RESPIRATORY, NOS	C39.0, C39.8-C39.9
55	RETINA	C69.2
56	RETROPERITONEUM & PERITONEUM	C48.0-C48.2, C48.8
57	SALIVARY GLAND	C07, C08.0-C08.1, C08.8-C08.9
58	SKIN	C44.0-C44.9
59	SMALL INTESTINE	C17.0-C17.3, C17.8-C17.9
60	SPLEEN	C26.1
61	STOMACH	C16.0-C16.6, C16.8-C16.9
62	TESTIS	C62.0-C62.1,C62.9
63	THYMUS	C37
64	THYROID GLAND	C73
65	TONGUE	C01, C02.0-C02.4, C02.8-C02.9
66	TOTAL BODY	
67	TRACHEA	C33
68	UNKNOWN	C80.9
69	UNSPECIFIED DIGEST. ORGANS	C26.0, C26.8-C26.9
70	URINARY BLADDER	C67.0-C67.9
71	UTERUS, NOS	C55
72	VAGINA & LABIA	C51.0-C51.2, C51.8-51.9, C52
73	VENTRICLE	C71.5
74	VULVA, NOS	C51.9