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Medicare Repositories
Detailed Clinical Model Specification
Version 1.3

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Approved for external use

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1.0	22 Dec 2011	Initial public release.
1.1	18 Dec 2015	This version of the specification is published to support publishing Medicare specifications.
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1.3	11 May 2017	This version of the specification is published to support the Australian Immunisation Register structured content specification.

Related Documents

Name	Version/Release Date
My Health Record Glossary	Issued 2016
Participation Data Specification	Version 3.3, Issued 30 January 2017

Included Detailed Clinical Models

This specification contains the following detailed clinical models:

- ACD Custodian Entry, version 1.2
- Australian Organ Donor Register Entry, version 1.2
- Medicare/DVA Funded Service, version 1.2
- Pharmaceutical Benefit Item, version 1.2
- Vaccine Cancellation Reason, version 1.2

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1 Introduction

1.1 Purpose and Scope

This detailed clinical model (DCM) specification forms part of a suite of data specifications that the Australian Digital Health Agency (the Agency) is developing for the Australian health informatics community. The suite comprises specifications for a range of health topics (represented as data groups), which are considered to be the most critical to support the work programme given to the Agency and to realise the benefits derived from Level 4 (semantic) interoperability[1] in the Australian healthcare setting.

We value your questions and comments about this document. Please direct your questions or feedback to help@digitalhealth.gov.au.

1.2 Intended Audience

This document is intended to be read by jurisdictional information and communication technology (ICT) managers, clinicians involved in clinical information system specifications, software architects and developers, and implementers of clinical information systems in various healthcare settings.

This is a technical document; the audience should be familiar with the language of health data specification and also have some familiarity with health information standards and specifications. Definitions and examples are provided to clarify relevant terminology, usage, and intent.

1.3 Background

One area of priority for us is the identification of digital health data to be communicated and its structure. We are addressing this through data specifications, which detail the data elements (logically grouped) and their associated value domains.

Data specifications need to be independent of messaging formats. They are concerned with providing an information framework in which to achieve semantic interoperability.

Data specifications have been developed based on priorities identified by jurisdictions and clinicians, incorporating clinical examples of use to enhance utility and adoption. These specifications are intended to:

- suit the Australian model for a shared electronic health record;
- define collections of related information, e.g. event summaries, data groups, data elements;
- be human readable (with information enhanced by the hierarchical structure);
- provide a set of clinical terminologies specific to the requirements of the Australian healthcare system; and
- allow for expansion and extension as electronic systems mature.

While the My Health Record system is referred to in these documents, implementation within the system is not dealt with here.

1.4 Terminology

Our National Clinical Terminology Service (NCTS) is defining a national approach to clinical terminology. Consistent and accurate articulation and interpretation of clinical terms is critical to the process of safe exchange.

[1] Level 4 interoperability is described in *The Value Of Health Care Information Exchange And Interoperability [WALJ2005a]*.

We recommend the SNOMED CT as the preferred clinical terminology for Australia and this has been endorsed by the Australian, state and territory governments. SNOMED CT is considered to be the most comprehensive multilingual health terminology in the world. It is owned, maintained and distributed by the International Health Terminology Standards Development Organisation (IHTSDO).

Our NCTS is the Australian National Release Centre for SNOMED CT and is also responsible for managing, developing and distributing national clinical terminologies, such as SNOMED CT Australian Release (SNOMED CT-AU), the Australian Medicines Terminology (AMT), and related tools and services.

SNOMED CT-AU provides local variations and customisation of terms relevant to the Australian healthcare community. It includes the international resources, along with all Australian-developed terminology for implementation in Australian clinical information technology systems. The AMT provides a consistent approach to the identification and naming of medicines, and supports medicines management and activity across the Australian healthcare domain. The AMT is now included within SNOMED CT-AU, with even closer integration planned for the future.

Reference sets listed as value domains within this document have been developed taking into account data element and data group definitions, as well as how they align with and complement the SNOMED CT concept model.

SNOMED CT-AU has been available for software developers to use in their Australian products since 1 July 2006. It is updated monthly and is freely available under a dual licensing arrangement – namely the SNOMED CT Affiliate License and Australian National Terminology License.

For further information regarding terminology and the development of reference sets, please visit http://-www.healthterminologies.gov.au. Email *help@digitalhealth.gov.au* with questions or feedback.

2 ACD Custodian Entry Detailed Clinical Model

This chapter describes version 1.2 of the *ACD Custodian Entry* Detailed Clinical Model.

2.1 Purpose

To record details about the custodian of the individual's advance care directive (ACD).

2.2 UML Class Diagram

The following figure represents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes; data groups are displayed as classes; their label names are represented as association role names. Association role names are only displayed if they differ from the associated class name. When a data element has a choice of data types, the data type of the attribute that represents it is an abstract interface class generalised from the individual data types. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.

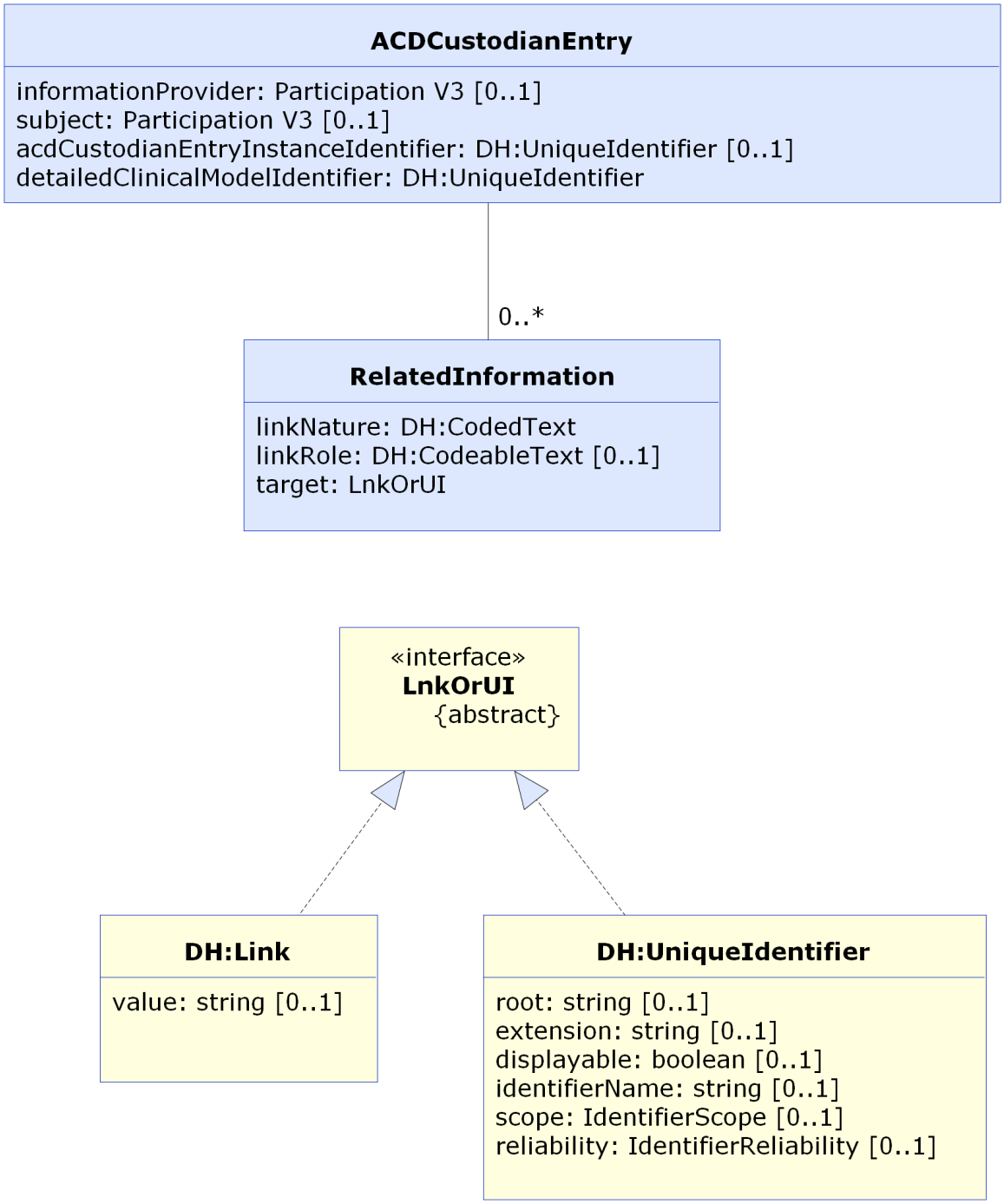

Figure 2.1. ACD Custodian Entry data hierarchy

2.3 ACD CUSTODIAN ENTRY

Identification

Label	ACD CUSTODIAN ENTRY
Metadata Type	Data Group
Identifier	DG-16690
OID	1.2.36.1.2001.1001.101.102.16690

Definition

Definition	Details pertaining to the custodian of the individual's advance care directive.
Definition Source	Australian Digital Health Agency
Synonymous Names	

Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

ACD CUSTODIAN ENTRY				
	INFORMATION PROVIDER			0..1
	SUBJECT			0..1
	ACD Custodian Entry Instance Identifier			0..1
	RELATED INFORMATION			0..*
		Link Nature		1..1
		Link Role		0..1
		Target		1..1
	Detailed Clinical Model Identifier			1..1

2.4 INFORMATION PROVIDER

Identification

Label	INFORMATION PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Source of the information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency
Notes	This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include: • an agent of a subject of care, e.g. parent, guardian; • a clinician; • a device or software; and • the subject of the DCM, when not the subject of care of the enclosing structured document.

Usage

Conditions of Use	This **SHALL NOT** be used if the source of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ACD CUSTODIAN ENTRY	0..1

2.5 SUBJECT

Identification

Label	SUBJECT
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Person or organisation legally responsible for an individual's advance care directive.
Definition Source	Australian Digital Health Agency
Synonymous Names	Subject of the ACD

Usage

Conditions of Use	This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “ACD Custodian”. • PERSON OR ORGANISATION OR DEVICE **SHALL NOT** be instantiated as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ACD CUSTODIAN ENTRY	0..1

2.6 ACD Custodian Entry Instance Identifier

Identification

Label	ACD Custodian Entry Instance Identifier
Metadata Type	Data Element
Identifier	DE-16691
OID	1.2.36.1.2001.1001.101.103.16691

Definition

Definition	Globally unique identifier for each instance of an *ACD Custodian Entry* administration entry.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ACD CUSTODIAN ENTRY	0..1

2.7 RELATED INFORMATION

Identification

Label	RELATED INFORMATION
Metadata Type	Data Group
Identifier	DG-16692
OID	1.2.36.1.2001.1001.101.102.16692

Definition

Definition	Information held elsewhere that is relevant to this instance of a data component.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Items of related information include, but are not limited to, documents, parts of documents, images and web pages. “Elsewhere” includes elsewhere in the same document. 1:1 and 1:N relationships between instances of DCMs can be expressed by using one, or more than one, respectively, links. Chains of links can be used to see problem threads or other logical groupings of items. Links are only to be used between instances of DCMs or documents, i.e. between objects representing complete domain concepts. This is because relationships between sub-elements of whole concepts are not necessarily meaningful and may be confusing. When the item of related information is a complete document (including images) or a web page (or part thereof) an appropriate specialisation of the *Related Information* `data group` should be used. The document or other data component instance containing the *Related Information* `data group` is called the *source*. The related information is called the *target*.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ACD CUSTODIAN ENTRY	0..*

Children

Data Type	Name	Occurrences
	Link Nature	1..1

Data Type	Name	Occurrences
	Link Role	0..1
	Target	1..1

2.8 Link Nature

Identification

Label	Link Nature
Metadata Type	Data Element
Identifier	DE-16698
OID	1.2.36.1.2001.1001.101.103.16698

Definition

Definition	General semantic category of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs or document. This attribute is intended to be a coarse-grained category that can be used to enable interoperability between sender and receiver.
Data Type	CodedText
Value Domain	Link Nature Values

Usage

Examples	1) is related to 2) is confirmed by or authorised by 3) is related to the same problem or health issue
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

2.9 Link Nature Values

Identification

Label	Link Nature Values
Metadata Type	Value Domain
Identifier	VD-16698
OID	1.2.36.1.2001.1001.101.104.16698
External Identifier	LINK_NATURE

Definition

Definition	Set of values for the general semantic category of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009	
Permissible Values	The permissible values are those specified in Termlist LINK_NATURE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*. The values are listed here with brief descriptions.	
	LINK-A0, is related to	The most general category of Link.
	LINK-B0, is confirmed by or authorised by	The link target contains an instance of a DCM or document that is either a legal or authoritative basis for what is documented in the source DCM instance, or is a declaration of intent to provide (or not provide) requested care.
	LINK-C0, is related to the same problem or health issue	The target instance of a DCM or document describes health or healthcare that concerns the same clinical situation as the source DCM instance.
	LINK-D0, is related to the same care plan, act or episode	The source and the target instances of DCMs or documents both describe parts of the same care plan, act or episode.
	LINK-E0, is a related documentation	The target instance of a DCM or document is an alternative documentary form of the source DCM instance. For example, a re-expression of the same clinical information or supplementary explanatory information.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Nature	1..1

2.10 Link Role

Identification

Label	Link Role
Metadata Type	Data Element
Identifier	DE-16699
OID	1.2.36.1.2001.1001.101.103.16699

Definition

Definition	Detailed semantic description of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs. This attribute provides for a specific description of the actual role played by the target in relation to the source. This attribute may be populated from any suitable terminology and therefore might support human readership better than interoperable automated processing.
Data Type	CodeableText
Value Domain	Link Role Values

Usage

Examples	1) unspecified link 2) suggests 3) endorses 4) evidence for 5) outcome 6) is documented by 7) excerpts

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	0..1

2.11 Link Role Values

Identification

Label	Link Role Values
Metadata Type	Value Domain
Identifier	VD-16699
OID	1.2.36.1.2001.1001.101.104.16699
External Identifier	LINK_ROLE

Definition

Definition	Set of values for the detailed semantic description of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Context	These values are used within the context of the value of the *Link Nature* `data element`. They provide greater specificity and may be selected more for human readership than for interoperable automated processing.
Context Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009
Permissible Values	Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a]. Values **MAY** be from any suitable terminology. Some values from Termlist LINK_ROLE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*, together with brief descriptions, are: LINK-A1, unspecified link — This can be used to say explicitly “there is no semantic information available for this Link”. LINK-B1, endorses — The source endorses (agrees with, confirms or verifies) the situation (or interpretation) described in the target. LINK-C3, evidence for — The source describes evidence for the situation (or interpretation) described in the target. LINK-D1, outcome — The source describes an outcome of the situation (or interpretation) that the target describes. LINK-E1, documented by — The source is a less formal description of the situation (or interpretation) documented by the target. LINK-E4, excerpts — The source is an extract (copy) of part or all of the information contained within the target. LINK-E5, derived from — The source contains information that has been derived (e.g. calculated) from information in the target.

Usage

Conditions of Use	Each of the values in LINK_ROLE from ISO 13606-3:2009 identifies a subcategory of a corresponding value in *Link Nature Values*. That correspondence is indicated by the first letter after the code string “LINK-”. For example, the term LINK-A1 is a subcategory of term LINK-A0. If a term in this list is used for the *Link Role* `data element`, the appropriate corresponding value **SHALL** be used for *Link Nature Values*.
Conditions of Use Source	ISO 13606-3:2009

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Role	1..1

2.12 Target

Identification

Label	Target
Metadata Type	Data Element
Identifier	DE-16700
OID	1.2.36.1.2001.1001.101.103.16700

Definition

Definition	“Linked to” or identified information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Link UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Link, and UniqueIdentifier.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

2.13 Detailed Clinical Model Identifier

Identification

Label	Detailed Clinical Model Identifier
Metadata Type	Data Element
Identifier	DE-16693
OID	1.2.36.1.2001.1001.101.103.16693

Definition

Definition	Globally unique identifier for this detailed clinical model.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Conditions of Use	The value of this item **SHALL** be either the default value or a semantically equivalent value from an appropriate code system.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Default Value	1.2.36.1.2001.1001.101.102.16690
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ACD CUSTODIAN ENTRY	1..1

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3 Australian Organ Donor Register Entry Detailed Clinical Model

This chapter describes version 1.2 of the *Australian Organ Donor Register Entry* Detailed Clinical Model.

3.1 Purpose

To record information from the Australian Organ Donor Register (AODR) about an individual's organ and tissue donation decisions.

3.2 Use

Use to display or share, in the My Health Record system and related applications, information from the AODR about an individual's organ or tissue donation decisions.

3.3 UML Class Diagram

The following figure represents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes; data groups are displayed as classes; their label names are represented as association role names. Association role names are only displayed if they differ from the associated class name. When a data element has a choice of data types, the data type of the attribute that represents it is an abstract interface class generalised from the individual data types. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.

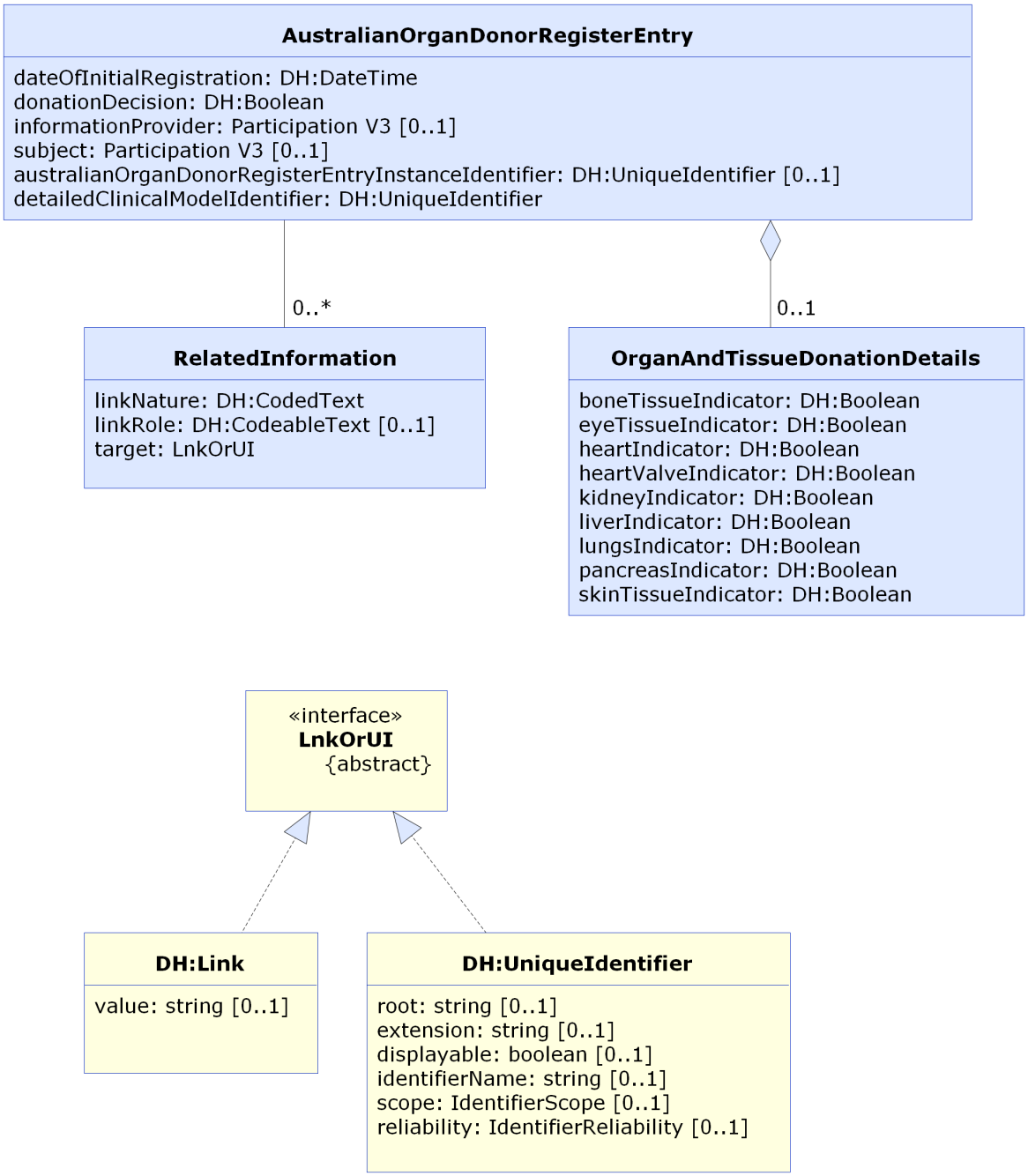

Figure 3.1. Australian Organ Donor Register data hierarchy

3.4 AUSTRALIAN ORGAN DONOR REGISTER ENTRY

Identification

Label	AUSTRALIAN ORGAN DONOR REGISTER ENTRY
Metadata Type	Data Group
Identifier	DG-16652
OID	1.2.36.1.2001.1001.101.102.16652

Definition

Definition	Information about an individual's organ and tissue donation decisions.
Definition Source	Australian Digital Health Agency
Synonymous Names	

Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

AUSTRALIAN ORGAN DONOR REGISTER ENTRY				
	Date of Initial Registration			1..1
	Donation Decision			1..1
	ORGAN AND TISSUE DONATION DETAILS			0..1
		Bone Tissue Indicator		1..1
		Eye Tissue Indicator		1..1
		Heart Indicator		1..1
		Heart Valve Indicator		1..1
		Kidney Indicator		1..1
		Liver Indicator		1..1
		Lungs Indicator		1..1

			Pancreas Indicator	1..1
			Skin Tissue Indicator	1..1
		INFORMATION PROVIDER		0..1
		SUBJECT		0..1
		Australian Organ Donor Register Entry Instance Identifier		0..1
		RELATED INFORMATION		0..*
			Link Nature	1..1
			Link Role	0..1
			Target	1..1
		Detailed Clinical Model Identifier		1..1

3.5 Date of Initial Registration

Identification

Label	Date of Initial Registration
Metadata Type	Data Element
Identifier	DE-16655
OID	1.2.36.1.2001.1001.101.103.16655

Definition

Definition	Date, and optionally time, when the individual first registered their organ or tissue donation decision in the Australian Organ Donation Register.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	DateTime

Usage

Examples	Please see DateTime in Appendix B, *Specification Guide for Use* for examples and usage information on specifying a date or time (or both).

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	1..1

3.6 Donation Decision

Identification

Label	Donation Decision
Metadata Type	Data Element
Identifier	DE-16657
OID	1.2.36.1.2001.1001.101.103.16657

Definition

Definition	Individual's decision about donation.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is set to true if the individual wishes to register a decision to donate suitable organs and tissue for transplantation. It is set to false if the individual wishes to register a decision to not donate any organs or tissue for transplantation.
Data Type	Boolean

Usage

Conditions of Use	If the value of this data element is "true", then the *ORGAN AND TISSUE DONATION DETAILS* `data group` **SHALL** be present. If the value is "false", then the *ORGAN AND TISSUE DONATION DETAILS* `data group` **SHALL NOT** be present.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	1..1

3.7 ORGAN AND TISSUE DONATION DETAILS

Identification

Label	ORGAN AND TISSUE DONATION DETAILS
Metadata Type	Data Group
Identifier	DG-16660
OID	1.2.36.1.2001.1001.101.102.16660

Definition

Definition	List of organs or tissues (or both) that the individual has consented to donate for transplantation.
Definition Source	Australian Digital Health Agency
Synonymous Names	

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	0..1

Children

Data Type	Name	Occurrences
	Bone Tissue Indicator	1..1
	Eye Tissue Indicator	1..1
	Heart Indicator	1..1
	Heart Valve Indicator	1..1
	Kidney Indicator	1..1
	Liver Indicator	1..1
	Lungs Indicator	1..1
	Pancreas Indicator	1..1

Data Type	Name	Occurrences
	Skin Tissue Indicator	1..1

3.8 Bone Tissue Indicator

Identification

Label	Bone Tissue Indicator
Metadata Type	Data Element
Identifier	DE-16661
OID	1.2.36.1.2001.1001.101.103.16661

Definition

Definition	Whether the individual has decided to be a bone tissue donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.9 Eye Tissue Indicator

Identification

Label	Eye Tissue Indicator
Metadata Type	Data Element
Identifier	DE-16662
OID	1.2.36.1.2001.1001.101.103.16662

Definition

Definition	Whether the individual has decided to be an eye tissue (cornea) donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.10 Heart Indicator

Identification

Label	Heart Indicator
Metadata Type	Data Element
Identifier	DE-16663
OID	1.2.36.1.2001.1001.101.103.16663

Definition

Definition	Whether the individual has decided to be a heart organ donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.11 Heart Valve Indicator

Identification

Label	Heart Valve Indicator
Metadata Type	Data Element
Identifier	DE-16664
OID	1.2.36.1.2001.1001.101.103.16664

Definition

Definition	Whether the individual has decided to be a heart valve donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.12 Kidney Indicator

Identification

Label	Kidney Indicator
Metadata Type	Data Element
Identifier	DE-16665
OID	1.2.36.1.2001.1001.101.103.16665

Definition

Definition	Whether the individual has decided to be a kidney organ donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.13 Liver Indicator

Identification

Label	Liver Indicator
Metadata Type	Data Element
Identifier	DE-16666
OID	1.2.36.1.2001.1001.101.103.16666

Definition

Definition	Whether the individual has decided to be a liver organ donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.14 Lungs Indicator

Identification

Label	Lungs Indicator
Metadata Type	Data Element
Identifier	DE-16667
OID	1.2.36.1.2001.1001.101.103.16667

Definition

Definition	Whether the individual has decided to be a lung organ donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.15 Pancreas Indicator

Identification

Label	Pancreas Indicator
Metadata Type	Data Element
Identifier	DE-16668
OID	1.2.36.1.2001.1001.101.103.16668

Definition

Definition	Whether the individual has decided to be a pancreas organ donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.16 Skin Tissue Indicator

Identification

Label	Skin Tissue Indicator
Metadata Type	Data Element
Identifier	DE-16669
OID	1.2.36.1.2001.1001.101.103.16669

Definition

Definition	Whether the individual has decided to be a skin tissue donor.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	ORGAN AND TISSUE DONATION DETAILS	1..1

3.17 INFORMATION PROVIDER

Identification

Label	INFORMATION PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Source of the information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency
Notes	This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include: • an agent of a subject of care, e.g. parent, guardian; • a clinician; • a device or software; and • the subject of the DCM, when not the subject of care of the enclosing structured document.

Usage

Conditions of Use	This **SHALL NOT** be used if the source of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	0..1

3.18 SUBJECT

Identification

Label	SUBJECT
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Individual about whom the organ and tissue donation decision information is being recorded.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency

Usage

Conditions of Use	This **SHALL NOT** be used if the subject of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	0..1

3.19 Australian Organ Donor Register Entry Instance Identifier

Identification

Label	Australian Organ Donor Register Entry Instance Identifier
Metadata Type	Data Element
Identifier	DE-16636
OID	1.2.36.1.2001.1001.101.103.16636

Definition

Definition	Globally unique identifier for each instance of an *Australian Organ Donor Register Entry* administration entry.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	0..1

3.20 RELATED INFORMATION

Identification

Label	RELATED INFORMATION
Metadata Type	Data Group
Identifier	DG-16692
OID	1.2.36.1.2001.1001.101.102.16692

Definition

Definition	Information held elsewhere that is relevant to this instance of a data component.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Items of related information include, but are not limited to, documents, parts of documents, images and web pages. “Elsewhere” includes elsewhere in the same document. 1:1 and 1:N relationships between instances of DCMs can be expressed by using one, or more than one, respectively, links. Chains of links can be used to see problem threads or other logical groupings of items. Links are only to be used between instances of DCMs or documents, i.e. between objects representing complete domain concepts. This is because relationships between sub-elements of whole concepts are not necessarily meaningful and may be confusing. When the item of related information is a complete document (including images) or a web page (or part thereof) an appropriate specialisation of the *Related Information* `data group` should be used. The document or other data component instance containing the *Related Information* `data group` is called the *source*. The related information is called the *target*.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	0..*

Children

Data Type	Name	Occurrences
	Link Nature	1..1

Data Type	Name	Occurrences
	Link Role	0..1
	Target	1..1

3.21 Link Nature

Identification

Label	Link Nature
Metadata Type	Data Element
Identifier	DE-16698
OID	1.2.36.1.2001.1001.101.103.16698

Definition

Definition	General semantic category of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs or document. This attribute is intended to be a coarse-grained category that can be used to enable interoperability between sender and receiver.
Data Type	CodedText
Value Domain	Link Nature Values

Usage

Examples	1) is related to 2) is confirmed by or authorised by 3) is related to the same problem or health issue
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

3.22 Link Nature Values

Identification

Label	Link Nature Values
Metadata Type	Value Domain
Identifier	VD-16698
OID	1.2.36.1.2001.1001.101.104.16698
External Identifier	LINK_NATURE

Definition

Definition	Set of values for the general semantic category of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009	
Permissible Values	The permissible values are those specified in Termlist LINK_NATURE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*. The values are listed here with brief descriptions.	
	LINK-A0, is related to	The most general category of Link.
	LINK-B0, is confirmed by or authorised by	The link target contains an instance of a DCM or document that is either a legal or authoritative basis for what is documented in the source DCM instance, or is a declaration of intent to provide (or not provide) requested care.
	LINK-C0, is related to the same problem or health issue	The target instance of a DCM or document describes health or healthcare that concerns the same clinical situation as the source DCM instance.
	LINK-D0, is related to the same care plan, act or episode	The source and the target instances of DCMs or documents both describe parts of the same care plan, act or episode.
	LINK-E0, is a related documentation	The target instance of a DCM or document is an alternative documentary form of the source DCM instance. For example, a re-expression of the same clinical information or supplementary explanatory information.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Nature	1..1

3.23 Link Role

Identification

Label	Link Role
Metadata Type	Data Element
Identifier	DE-16699
OID	1.2.36.1.2001.1001.101.103.16699

Definition

Definition	Detailed semantic description of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs. This attribute provides for a specific description of the actual role played by the target in relation to the source. This attribute may be populated from any suitable terminology and therefore might support human readership better than interoperable automated processing.
Data Type	CodeableText
Value Domain	Link Role Values

Usage

Examples	1) unspecified link 2) suggests 3) endorses 4) evidence for 5) outcome 6) is documented by 7) excerpts

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	0..1

3.24 Link Role Values

Identification

Label	Link Role Values
Metadata Type	Value Domain
Identifier	VD-16699
OID	1.2.36.1.2001.1001.101.104.16699
External Identifier	LINK_ROLE

Definition

Definition	Set of values for the detailed semantic description of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Context	These values are used within the context of the value of the *Link Nature* `data element`. They provide greater specificity and may be selected more for human readership than for interoperable automated processing.
Context Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009
Permissible Values	Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a]. Values **MAY** be from any suitable terminology. Some values from Termlist LINK_ROLE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*, together with brief descriptions, are: LINK-A1, unspecified link — This can be used to say explicitly “there is no semantic information available for this Link”. LINK-B1, endorses — The source endorses (agrees with, confirms or verifies) the situation (or interpretation) described in the target. LINK-C3, evidence for — The source describes evidence for the situation (or interpretation) described in the target. LINK-D1, outcome — The source describes an outcome of the situation (or interpretation) that the target describes. LINK-E1, documented by — The source is a less formal description of the situation (or interpretation) documented by the target. LINK-E4, excerpts — The source is an extract (copy) of part or all of the information contained within the target. LINK-E5, derived from — The source contains information that has been derived (e.g. calculated) from information in the target.

Usage

Conditions of Use	Each of the values in LINK_ROLE from ISO 13606-3:2009 identifies a subcategory of a corresponding value in *Link Nature Values*. That correspondence is indicated by the first letter after the code string “LINK-”. For example, the term LINK-A1 is a subcategory of term LINK-A0. If a term in this list is used for the *Link Role* `data element`, the appropriate corresponding value **SHALL** be used for *Link Nature Values*.
Conditions of Use Source	ISO 13606-3:2009

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Role	1..1

3.25 Target

Identification

Label	Target
Metadata Type	Data Element
Identifier	DE-16700
OID	1.2.36.1.2001.1001.101.103.16700

Definition

Definition	“Linked to” or identified information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Link UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Link, and UniqueIdentifier.

Relationships

Parents

Data Type	Name	**Occurrences** (child within parent)
	RELATED INFORMATION	1..1

3.26 Detailed Clinical Model Identifier

Identification

Label	Detailed Clinical Model Identifier
Metadata Type	Data Element
Identifier	DE-16693
OID	1.2.36.1.2001.1001.101.103.16693

Definition

Definition	Globally unique identifier for this detailed clinical model.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Conditions of Use	The value of this item **SHALL** be either the default value or a semantically equivalent value from an appropriate code system.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Default Value	1.2.36.1.2001.1001.101.102.16652
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	AUSTRALIAN ORGAN DONOR REGISTER ENTRY	1..1

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4 Medicare/DVA Funded Service Detailed Clinical Model

This chapter describes version 1.2 of the *Medicare/DVA Funded Service* Detailed Clinical Model.

4.1 Purpose

To record information from Medicare about services provided to an individual that were funded by Medicare or the Department of Veterans' Affairs (DVA).

4.2 Use

Use to display or share, in the My Health Record system and related applications, information about Medicare and DVA funded services that have been provided to an individual.

4.3 UML Class Diagram

The following figure represents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes; data groups are displayed as classes; their label names are represented as association role names. Association role names are only displayed if they differ from the associated class name. When a data element has a choice of data types, the data type of the attribute that represents it is an abstract interface class generalised from the individual data types. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.

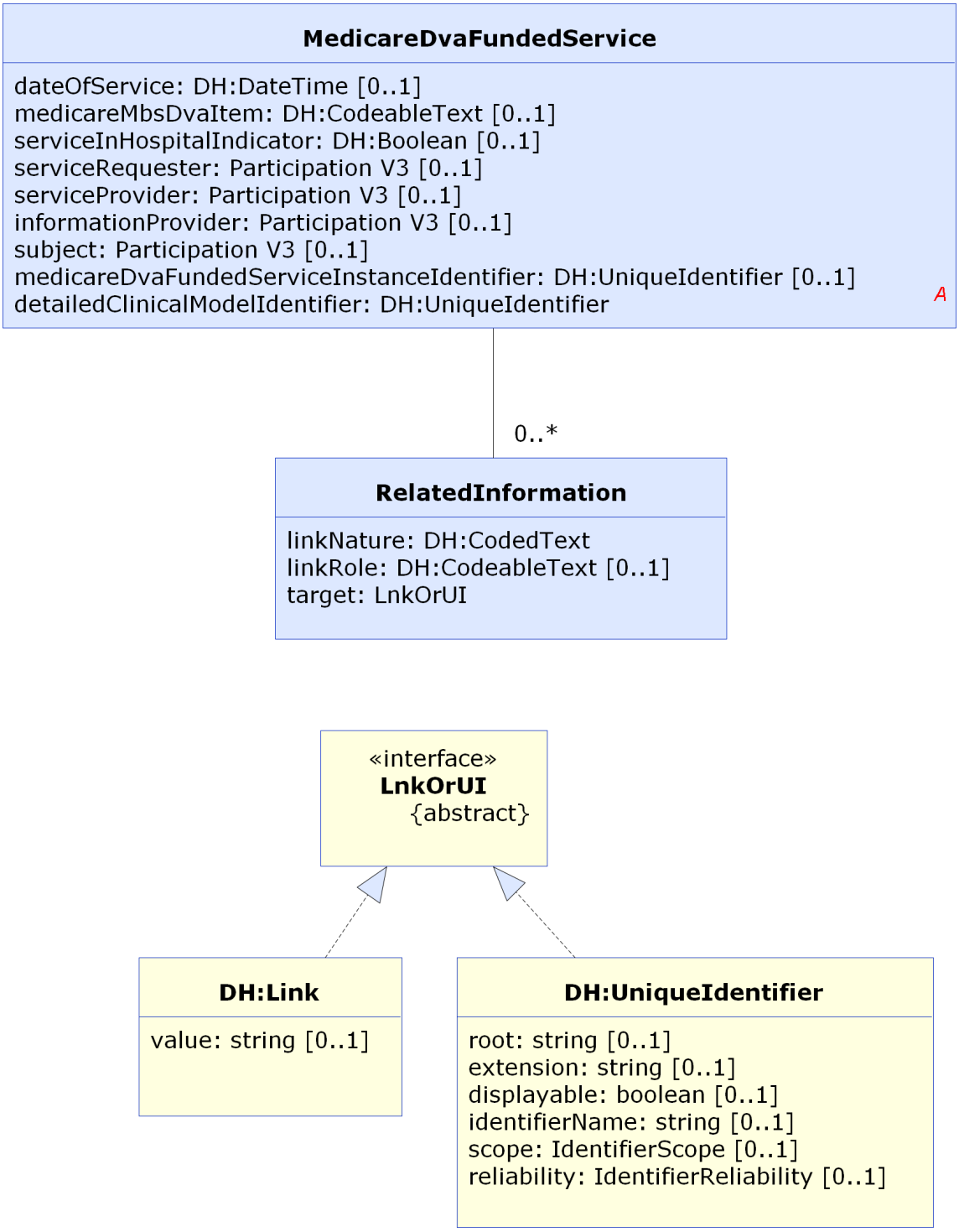

Figure 4.1. Medicare DVA Funded Services data hierarchy

4.4 MEDICARE/DVA FUNDED SERVICE

Identification

Label	MEDICARE/DVA FUNDED SERVICE
Metadata Type	Data Group
Identifier	DG-16639
OID	1.2.36.1.2001.1001.101.102.16639

Definition

Definition	Information about healthcare services provided to an individual that were partially or fully funded by Medicare or the Department of Veterans' Affairs.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is the service for which funding was claimed and not necessarily the actual service that was supplied.

Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

	MEDICARE/DVA FUNDED SERVICE		
		Date of Service	0..1
		Medicare MBS/DVA Item	0..1
		Service in Hospital Indicator	0..1
		SERVICE REQUESTER	0..1
		SERVICE PROVIDER	0..1
		INFORMATION PROVIDER	0..1
		SUBJECT	0..1
		Medicare/DVA Funded Service Instance Identifier	0..1
		RELATED INFORMATION	0..*

			Link Nature	1..1
			Link Role	0..1
			Target	1..1
		Detailed Clinical Model Identifier		1..1

4.5 Date of Service

Identification

Label	Date of Service
Metadata Type	Data Element
Identifier	DE-16640
OID	1.2.36.1.2001.1001.101.103.16640

Definition

Definition	Date, and optionally time, the service was supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	DateTime

Usage

Examples	Please see DateTime in Appendix B, *Specification Guide for Use* for examples and usage information on specifying a date or time (or both).

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.6 Medicare MBS/DVA Item

Identification

Label	Medicare MBS/DVA Item
Metadata Type	Data Element
Identifier	DE-16641
OID	1.2.36.1.2001.1001.101.103.16641

Definition

Definition	The Medicare Benefits Schedule (MBS) or the Department of Veterans' Affairs item number and a short description of the service provided.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Please note that the item number and a short description of the service provided are both mapped to this element.
Data Type	CodeableText
Value Domain	Medicare MBS/DVA Item Values

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for CodeableText.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.7 Medicare MBS/DVA Item Values

Identification

Label	Medicare MBS/DVA Item Values
Metadata Type	Value Domain
Identifier	VD-16641
OID	1.2.36.1.2001.1001.101.104.16641

Definition

Definition	List of values that combine the item number and a short description of the service provided, under either the Medicare or the Department of Veterans' Affairs benefits schedule.
Definition Source	Australian Digital Health Agency
Notes	Medicare Benefits Schedule data files are available from http://www.mbsonline.gov.au/internet/mbsonline/publishing.nsf/Content/downloads (accessed 18 August 2016). The Department of Veterans' Affairs values are derived from either the Dental and Allied Health Fee Schedules available from http://www.dva.gov.au/providers/fee-schedules/dental-and-allied-health-fee-schedules (accessed 18 August 2016) or the DVA Medical Fee Schedule available from http://www.dva.gov.au/providers/fee-schedules/gps-lmos-and-specialists-fee-schedules (accessed 18 August 2016).

Value Domain

Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Medicare MBS/DVA Item	1..1

4.8 Service in Hospital Indicator

Identification

Label	Service in Hospital Indicator
Metadata Type	Data Element
Identifier	DE-16642
OID	1.2.36.1.2001.1001.101.103.16642

Definition

Definition	Whether the service was provided in a hospital.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	The value of this data element is "true" if the service was provided in a hospital.
Data Type	Boolean

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Boolean.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.9 SERVICE REQUESTER

Identification

Label	SERVICE REQUESTER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Party that asks for or orders the provision of service.
Definition Source	Australian Digital Health Agency
Synonymous Names	

Usage

Conditions of Use	This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Service Requester”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.10 SERVICE PROVIDER

Identification

Label	SERVICE PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Party that provided the service.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This item captures identification information of the healthcare provider who provided the service under the Medicare or the Department of Veterans' Affairs benefits schedule.

Usage

Conditions of Use	This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Service Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.11 INFORMATION PROVIDER

Identification

Label	INFORMATION PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Source of the information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency
Notes	This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include: • an agent of a subject of care, e.g. parent, guardian; • a clinician; • a device or software; and • the subject of the DCM, when not the subject of care of the enclosing structured document.

Usage

Conditions of Use	This **SHALL NOT** be used if the source of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.12 SUBJECT

Identification

Label	SUBJECT
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Individual to whom the service was provided.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency

Usage

Conditions of Use	This **SHALL NOT** be used if the subject of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.13 Medicare/DVA Funded Service Instance Identifier

Identification

Label	Medicare/DVA Funded Service Instance Identifier
Metadata Type	Data Element
Identifier	DE-16746
OID	1.2.36.1.2001.1001.101.103.16746

Definition

Definition	Globally unique identifier for each instance of a *Medicare/DVA Funded Service* administration entry.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..1

4.14 RELATED INFORMATION

Identification

Label	RELATED INFORMATION
Metadata Type	Data Group
Identifier	DG-16692
OID	1.2.36.1.2001.1001.101.102.16692

Definition

Definition	Information held elsewhere that is relevant to this instance of a data component.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Items of related information include, but are not limited to, documents, parts of documents, images and web pages. “Elsewhere” includes elsewhere in the same document. 1:1 and 1:N relationships between instances of DCMs can be expressed by using one, or more than one, respectively, links. Chains of links can be used to see problem threads or other logical groupings of items. Links are only to be used between instances of DCMs or documents, i.e. between objects representing complete domain concepts. This is because relationships between sub-elements of whole concepts are not necessarily meaningful and may be confusing. When the item of related information is a complete document (including images) or a web page (or part thereof) an appropriate specialisation of the *Related Information* `data group` should be used. The document or other data component instance containing the *Related Information* `data group` is called the *source*. The related information is called the *target*.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	0..*

Children

Data Type	Name	Occurrences
	Link Nature	1..1

Data Type	Name	Occurrences
	Link Role	0..1
	Target	1..1

4.15 Link Nature

Identification

Label	Link Nature
Metadata Type	Data Element
Identifier	DE-16698
OID	1.2.36.1.2001.1001.101.103.16698

Definition

Definition	General semantic category of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs or document. This attribute is intended to be a coarse-grained category that can be used to enable interoperability between sender and receiver.
Data Type	CodedText
Value Domain	Link Nature Values

Usage

Examples	1) is related to 2) is confirmed by or authorised by 3) is related to the same problem or health issue
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

4.16 Link Nature Values

Identification

Label	Link Nature Values
Metadata Type	Value Domain
Identifier	VD-16698
OID	1.2.36.1.2001.1001.101.104.16698
External Identifier	LINK_NATURE

Definition

Definition	Set of values for the general semantic category of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009	
Permissible Values	The permissible values are those specified in Termlist LINK_NATURE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*. The values are listed here with brief descriptions.	
	LINK-A0, is related to	The most general category of Link.
	LINK-B0, is confirmed by or authorised by	The link target contains an instance of a DCM or document that is either a legal or authoritative basis for what is documented in the source DCM instance, or is a declaration of intent to provide (or not provide) requested care.
	LINK-C0, is related to the same problem or health issue	The target instance of a DCM or document describes health or healthcare that concerns the same clinical situation as the source DCM instance.
	LINK-D0, is related to the same care plan, act or episode	The source and the target instances of DCMs or documents both describe parts of the same care plan, act or episode.
	LINK-E0, is a related documentation	The target instance of a DCM or document is an alternative documentary form of the source DCM instance. For example, a re-expression of the same clinical information or supplementary explanatory information.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Nature	1..1

4.17 Link Role

Identification

Label	Link Role
Metadata Type	Data Element
Identifier	DE-16699
OID	1.2.36.1.2001.1001.101.103.16699

Definition

Definition	Detailed semantic description of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs. This attribute provides for a specific description of the actual role played by the target in relation to the source. This attribute may be populated from any suitable terminology and therefore might support human readership better than interoperable automated processing.
Data Type	CodeableText
Value Domain	Link Role Values

Usage

Examples	1) unspecified link 2) suggests 3) endorses 4) evidence for 5) outcome 6) is documented by 7) excerpts

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	0..1

4.18 Link Role Values

Identification

Label	Link Role Values
Metadata Type	Value Domain
Identifier	VD-16699
OID	1.2.36.1.2001.1001.101.104.16699
External Identifier	LINK_ROLE

Definition

Definition	Set of values for the detailed semantic description of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Context	These values are used within the context of the value of the *Link Nature* `data element`. They provide greater specificity and may be selected more for human readership than for interoperable automated processing.
Context Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009
Permissible Values	Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a]. Values **MAY** be from any suitable terminology. Some values from Termlist LINK_ROLE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*, together with brief descriptions, are: LINK-A1, unspecified link — This can be used to say explicitly “there is no semantic information available for this Link”. LINK-B1, endorses — The source endorses (agrees with, confirms or verifies) the situation (or interpretation) described in the target. LINK-C3, evidence for — The source describes evidence for the situation (or interpretation) described in the target. LINK-D1, outcome — The source describes an outcome of the situation (or interpretation) that the target describes. LINK-E1, documented by — The source is a less formal description of the situation (or interpretation) documented by the target. LINK-E4, excerpts — The source is an extract (copy) of part or all of the information contained within the target. LINK-E5, derived from — The source contains information that has been derived (e.g. calculated) from information in the target.

Usage

Conditions of Use	Each of the values in LINK_ROLE from ISO 13606-3:2009 identifies a subcategory of a corresponding value in *Link Nature Values*. That correspondence is indicated by the first letter after the code string “LINK-”. For example, the term LINK-A1 is a subcategory of term LINK-A0. If a term in this list is used for the *Link Role* `data element`, the appropriate corresponding value **SHALL** be used for *Link Nature Values*.
Conditions of Use Source	ISO 13606-3:2009

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Role	1..1

4.19 Target

Identification

Label	Target
Metadata Type	Data Element
Identifier	DE-16700
OID	1.2.36.1.2001.1001.101.103.16700

Definition

Definition	“Linked to” or identified information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Link UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Link, and UniqueIdentifier.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

4.20 Detailed Clinical Model Identifier

Identification

Label	Detailed Clinical Model Identifier
Metadata Type	Data Element
Identifier	DE-16693
OID	1.2.36.1.2001.1001.101.103.16693

Definition

Definition	Globally unique identifier for this detailed clinical model.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Conditions of Use	The value of this item **SHALL** be either the default value or a semantically equivalent value from an appropriate code system.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Default Value	1.2.36.1.2001.1001.101.102.16639
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	MEDICARE/DVA FUNDED SERVICE	1..1

5 Pharmaceutical Benefit Item Detailed Clinical Model

This chapter describes version 1.2 of the *Pharmaceutical Benefit Item* Detailed Clinical Model.

5.1 Purpose

To record information from Medicare about pharmaceutical items prescribed and dispensed to an individual that were partially or fully funded under the Pharmaceutical Benefit Schedule (PBS) or the Repatriation Pharmaceutical Benefits Scheme (RPBS).

5.2 Use

Use to display or share, in the My Health Record system and related applications, information about pharmaceutical items prescribed and dispensed to an individual.

5.3 UML Class Diagram

The following figure represents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes; data groups are displayed as classes; their label names are represented as association role names. Association role names are only displayed if they differ from the associated class name. When a data element has a choice of data types, the data type of the attribute that represents it is an abstract interface class generalised from the individual data types. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.

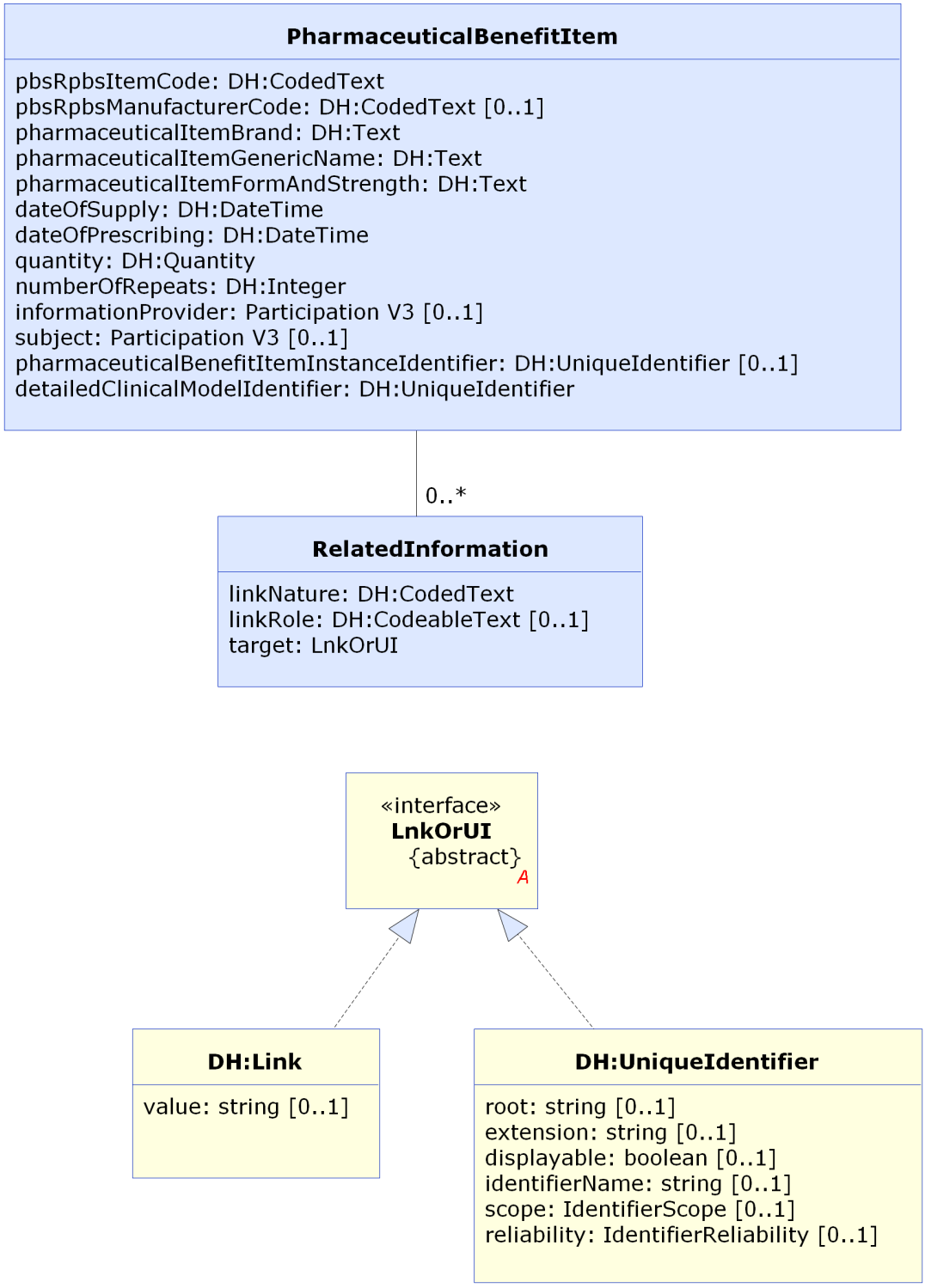

Figure 5.1. Pharmaceutical Benefit Item data hierarchy

5.4 PHARMACEUTICAL BENEFIT ITEM

Identification

Label	PHARMACEUTICAL BENEFIT ITEM
Metadata Type	Data Group
Identifier	DG-16674
OID	1.2.36.1.2001.1001.101.102.16674

Definition

Definition	Information about pharmaceutical items prescribed and dispensed to an individual that were partially or fully funded under the Pharmaceutical Benefit Scheme (PBS) or Repatriation Pharmaceutical Benefits Scheme (RPBS).
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	As this information is taken from Medicare's claims processing system, neither dose nor timing information is available. This is the pharmaceutical item for which funding was claimed and not necessarily the actual pharmaceutical item that was supplied.

Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

	PHARMACEUTICAL BENEFIT ITEM		
	001011001	PBS/RPBS Item Code	1..1
	001011001	PBS/RPBS Manufacturer Code	0..1
		Brand (Pharmaceutical Item Brand)	1..1
		Item Generic Name (Pharmaceutical Item Generic Name)	1..1
		Item Form and Strength (Pharmaceutical Item Form and Strength)	1..1
		Date of Supply	1..1
		Date of Prescribing	1..1

		Quantity		1..1
		Number of Repeats		1..1
		INFORMATION PROVIDER		0..1
		SUBJECT		0..1
		Pharmaceutical Benefit Item Instance Identifier		0..1
		RELATED INFORMATION		0..*
			Link Nature	1..1
			Link Role	0..1
			Target	1..1
		Detailed Clinical Model Identifier		1..1

5.5 PBS/RPBS Item Code

Identification

Label	PBS/RPBS Item Code
Metadata Type	Data Element
Identifier	DE-16062
OID	1.2.36.1.2001.1001.101.103.16062

Definition

Definition	Administrative code and short description of the pharmaceutical item supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This element is used to assist with claims processing. This would typically be used for the PBS Scheduled Item Code, which is a Department of Health allocated detailed code that specifies a medication use together with its funding.
Data Type	CodedText
Value Domain	PBS/RPBS Item Code Values

Usage

Examples	1) 1746X (paracetamol 500 mg tablet, 100) 2) 4657D (bandage compression 10 cm x 3.5 m bandage: high stretch, 1 bandage)
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.6 PBS/RPBS Item Code Values

Identification

Label	PBS/RPBS Item Code Values
Metadata Type	Value Domain
Identifier	VD-16645
OID	1.2.36.1.2001.1001.101.104.16645

Definition

Definition	Set of item codes (and associated short descriptions) contained in the PBS Schedule list.
Definition Source	Australian Digital Health Agency
Notes	The codes recommended for PBS Schedule item code by the Department of Health are available from http://www.pbs.gov.au/pbs/home (accessed 18 August 2016).

Value Domain

Source	Department of Health, PBS Schedule item code.

Usage

Conditions of Use	Values **SHALL** be codes recommended for PBS Schedule item code by the Department of Health.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PBS/RPBS Item Code	1..1

5.7 PBS/RPBS Manufacturer Code

Identification

Label	PBS/RPBS Manufacturer Code
Metadata Type	Data Element
Identifier	DE-16675
OID	1.2.36.1.2001.1001.101.103.16675

Definition

Definition	PBS-assigned administrative code identifying the manufacturer of the pharmaceutical item supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This element is used to assist with claims processing.
Data Type	CodedText
Value Domain	PBS/RPBS Manufacturer Code Values

Usage

Examples	1) SW (sanofi-aventis Australia) 2) MH (Molnlycke Health Care)
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	0..1

5.8 PBS/RPBS Manufacturer Code Values

Identification

Label	PBS/RPBS Manufacturer Code Values
Metadata Type	Value Domain
Identifier	VD-16647
OID	1.2.36.1.2001.1001.101.104.16647

Definition

Definition	Set of values derived from the PBS manufacturer code.
Definition Source	Australian Digital Health Agency
Notes	The codes recommended for PBS manufacturer code by the Department of Health are available from http://www.pbs.gov.au/pbs/home (accessed 18 August 2016).

Value Domain

Source	Department of Health, PBS manufacturer code.

Usage

Conditions of Use	Values **SHALL** be codes recommended for PBS manufacturer code by the Department of Health.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	**Occurrences** (child within parent)
	PBS/RPBS Manufacturer Code	1..1

5.9 Pharmaceutical Item Brand

Identification

Label	Brand
Metadata Type	Data Element
Identifier	DE-16703
OID	1.2.36.1.2001.1001.101.103.16703

Definition

Definition	Brand of the pharmaceutical item supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Text

Usage

Examples	1) Amoxil (Trade Product of Medicinal Product Amoxycillin)

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.10 Pharmaceutical Item Generic Name

Identification

Label	Item Generic Name
Metadata Type	Data Element
Identifier	DE-16676
OID	1.2.36.1.2001.1001.101.103.16676

Definition

Definition	Generic name of the item supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Text

Usage

Examples	1) Amoxycillin

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.11 Pharmaceutical Item Form and Strength

Identification

Label	Item Form and Strength
Metadata Type	Data Element
Identifier	DE-16677
OID	1.2.36.1.2001.1001.101.103.16677

Definition

Definition	Form and strength of the item supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Text

Usage

Examples	1) Capsules 500mg

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.12 Date of Supply

Identification

Label	Date of Supply
Metadata Type	Data Element
Identifier	DE-16678
OID	1.2.36.1.2001.1001.101.103.16678

Definition

Definition	Date, and optionally time, the pharmaceutical item was supplied.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is essentially the date of dispense. The PBS system does not record the date the item was actually collected by the patient.
Data Type	DateTime

Usage

Examples	Please see DateTime in Appendix B, *Specification Guide for Use* for examples and usage information on specifying a date or time (or both).

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.13 Date of Prescribing

Identification

Label	Date of Prescribing
Metadata Type	Data Element
Identifier	DE-16679
OID	1.2.36.1.2001.1001.101.103.16679

Definition

Definition	Date, and optionally time, the pharmaceutical item was prescribed.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	DateTime

Usage

Examples	Please see DateTime in Appendix B, *Specification Guide for Use* for examples and usage information on specifying a date or time (or both).

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.14 Quantity

Identification

Label	Quantity
Metadata Type	Data Element
Identifier	DE-10145
OID	1.2.36.1.2001.1001.101.103.10145

Definition

Definition	Number of doses or the physical amount of the therapeutic good.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Quantity

Usage

Examples	1) 20 capsules

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.15 Number of Repeats

Identification

Label	Number of Repeats
Metadata Type	Data Element
Identifier	DE-10169
OID	1.2.36.1.2001.1001.101.103.10169

Definition

Definition	Number of repeats of the prescription that have been authorised by the prescriber for a given medication.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Integer

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Integer.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

5.16 INFORMATION PROVIDER

Identification

Label	INFORMATION PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Source of the information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency
Notes	This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include: • an agent of a subject of care, e.g. parent, guardian; • a clinician; • a device or software; and • the subject of the DCM, when not the subject of care of the enclosing structured document.

Usage

Conditions of Use	This **SHALL NOT** be used if the source of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	0..1

5.17 SUBJECT

Identification

Label	SUBJECT
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Individual to whom the pharmaceutical item was prescribed and dispensed.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency

Usage

Conditions of Use	This **SHALL NOT** be used if the subject of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	0..1

5.18 Pharmaceutical Benefit Item Instance Identifier

Identification

Label	Pharmaceutical Benefit Item Instance Identifier
Metadata Type	Data Element
Identifier	DE-16747
OID	1.2.36.1.2001.1001.101.103.16747

Definition

Definition	Globally unique identifier for each instance of a *Pharmaceutical Benefit Item* administration entry.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	0..1

5.19 RELATED INFORMATION

Identification

Label	RELATED INFORMATION
Metadata Type	Data Group
Identifier	DG-16692
OID	1.2.36.1.2001.1001.101.102.16692

Definition

Definition	Information held elsewhere that is relevant to this instance of a data component.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Items of related information include, but are not limited to, documents, parts of documents, images and web pages. “Elsewhere” includes elsewhere in the same document. 1:1 and 1:N relationships between instances of DCMs can be expressed by using one, or more than one, respectively, links. Chains of links can be used to see problem threads or other logical groupings of items. Links are only to be used between instances of DCMs or documents, i.e. between objects representing complete domain concepts. This is because relationships between sub-elements of whole concepts are not necessarily meaningful and may be confusing. When the item of related information is a complete document (including images) or a web page (or part thereof) an appropriate specialisation of the *Related Information* `data group` should be used. The document or other data component instance containing the *Related Information* `data group` is called the *source*. The related information is called the *target*.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	0..*

Children

Data Type	Name	Occurrences
	Link Nature	1..1

Data Type	Name	Occurrences
	Link Role	0..1
	Target	1..1

5.20 Link Nature

Identification

Label	Link Nature
Metadata Type	Data Element
Identifier	DE-16698
OID	1.2.36.1.2001.1001.101.103.16698

Definition

Definition	General semantic category of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs or document. This attribute is intended to be a coarse-grained category that can be used to enable interoperability between sender and receiver.
Data Type	CodedText
Value Domain	Link Nature Values

Usage

Examples	1) is related to 2) is confirmed by or authorised by 3) is related to the same problem or health issue
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

5.21 Link Nature Values

Identification

Label	Link Nature Values
Metadata Type	Value Domain
Identifier	VD-16698
OID	1.2.36.1.2001.1001.101.104.16698
External Identifier	LINK_NATURE

Definition

Definition	Set of values for the general semantic category of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009	
Permissible Values	The permissible values are those specified in Termlist LINK_NATURE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*. The values are listed here with brief descriptions.	
	LINK-A0, is related to	The most general category of Link.
	LINK-B0, is confirmed by or authorised by	The link target contains an instance of a DCM or document that is either a legal or authoritative basis for what is documented in the source DCM instance, or is a declaration of intent to provide (or not provide) requested care.
	LINK-C0, is related to the same problem or health issue	The target instance of a DCM or document describes health or healthcare that concerns the same clinical situation as the source DCM instance.
	LINK-D0, is related to the same care plan, act or episode	The source and the target instances of DCMs or documents both describe parts of the same care plan, act or episode.
	LINK-E0, is a related documentation	The target instance of a DCM or document is an alternative documentary form of the source DCM instance. For example, a re-expression of the same clinical information or supplementary explanatory information.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Nature	1..1

5.22 Link Role

Identification

Label	Link Role
Metadata Type	Data Element
Identifier	DE-16699
OID	1.2.36.1.2001.1001.101.103.16699

Definition

Definition	Detailed semantic description of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs. This attribute provides for a specific description of the actual role played by the target in relation to the source. This attribute may be populated from any suitable terminology and therefore might support human readership better than interoperable automated processing.
Data Type	CodeableText
Value Domain	Link Role Values

Usage

Examples	1) unspecified link 2) suggests 3) endorses 4) evidence for 5) outcome 6) is documented by 7) excerpts

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	0..1

5.23 Link Role Values

Identification

Label	Link Role Values
Metadata Type	Value Domain
Identifier	VD-16699
OID	1.2.36.1.2001.1001.101.104.16699
External Identifier	LINK_ROLE

Definition

Definition	Set of values for the detailed semantic description of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Context	These values are used within the context of the value of the *Link Nature* `data element`. They provide greater specificity and may be selected more for human readership than for interoperable automated processing.
Context Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009
Permissible Values	Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a]. Values **MAY** be from any suitable terminology. Some values from Termlist LINK_ROLE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*, together with brief descriptions, are: LINK-A1, unspecified link — This can be used to say explicitly “there is no semantic information available for this Link”. LINK-B1, endorses — The source endorses (agrees with, confirms or verifies) the situation (or interpretation) described in the target. LINK-C3, evidence for — The source describes evidence for the situation (or interpretation) described in the target. LINK-D1, outcome — The source describes an outcome of the situation (or interpretation) that the target describes. LINK-E1, documented by — The source is a less formal description of the situation (or interpretation) documented by the target. LINK-E4, excerpts — The source is an extract (copy) of part or all of the information contained within the target. LINK-E5, derived from — The source contains information that has been derived (e.g. calculated) from information in the target.

Usage

Conditions of Use	Each of the values in LINK_ROLE from ISO 13606-3:2009 identifies a subcategory of a corresponding value in *Link Nature Values*. That correspondence is indicated by the first letter after the code string “LINK-”. For example, the term LINK-A1 is a subcategory of term LINK-A0. If a term in this list is used for the *Link Role* `data element`, the appropriate corresponding value **SHALL** be used for *Link Nature Values*.
Conditions of Use Source	ISO 13606-3:2009

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Role	1..1

5.24 Target

Identification

Label	Target
Metadata Type	Data Element
Identifier	DE-16700
OID	1.2.36.1.2001.1001.101.103.16700

Definition

Definition	“Linked to” or identified information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Link UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Link, and UniqueIdentifier.

Relationships

Parents

Data Type	Name	**Occurrences** (child within parent)
	RELATED INFORMATION	1..1

5.25 Detailed Clinical Model Identifier

Identification

Label	Detailed Clinical Model Identifier
Metadata Type	Data Element
Identifier	DE-16693
OID	1.2.36.1.2001.1001.101.103.16693

Definition

Definition	Globally unique identifier for this detailed clinical model.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Conditions of Use	The value of this item **SHALL** be either the default value or a semantically equivalent value from an appropriate code system.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Default Value	1.2.36.1.2001.1001.101.102.16674
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	PHARMACEUTICAL BENEFIT ITEM	1..1

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6 Vaccine Cancellation Reason Detailed Clinical Model

This chapter describes version 1.2 of the *Vaccine Cancellation Reason* Detailed Clinical Model.

6.1 Purpose

To record within the My Health Record system information from the Australian Immunisation Register (AIR) about the reasons surrounding the cancellation of a vaccine administration. The cancellation will be due to either the individual's natural immunity to the vaccine antigen or to a medical contraindication to the use of the vaccine.

6.2 Use

Use to display or share, in the My Health Record system and related applications, information about the reason for a cancellation of a vaccine administration.

6.3 Misuse

Not to be used in any context other than that of the Australian Immunisation Register.

6.4 UML Class Diagram

The following figure represents the data hierarchy using a UML 2.0 class diagram. The diagram displays data groups and data elements, together with their names, data types and multiplicities. Data elements are displayed as attributes; data groups are displayed as classes; their label names are represented as association role names. Association role names are only displayed if they differ from the associated class name. When a data element has a choice of data types, the data type of the attribute that represents it is an abstract interface class generalised from the individual data types. The diagram shows the data hierarchy excluding the details of participation. The default multiplicity is 1..1.

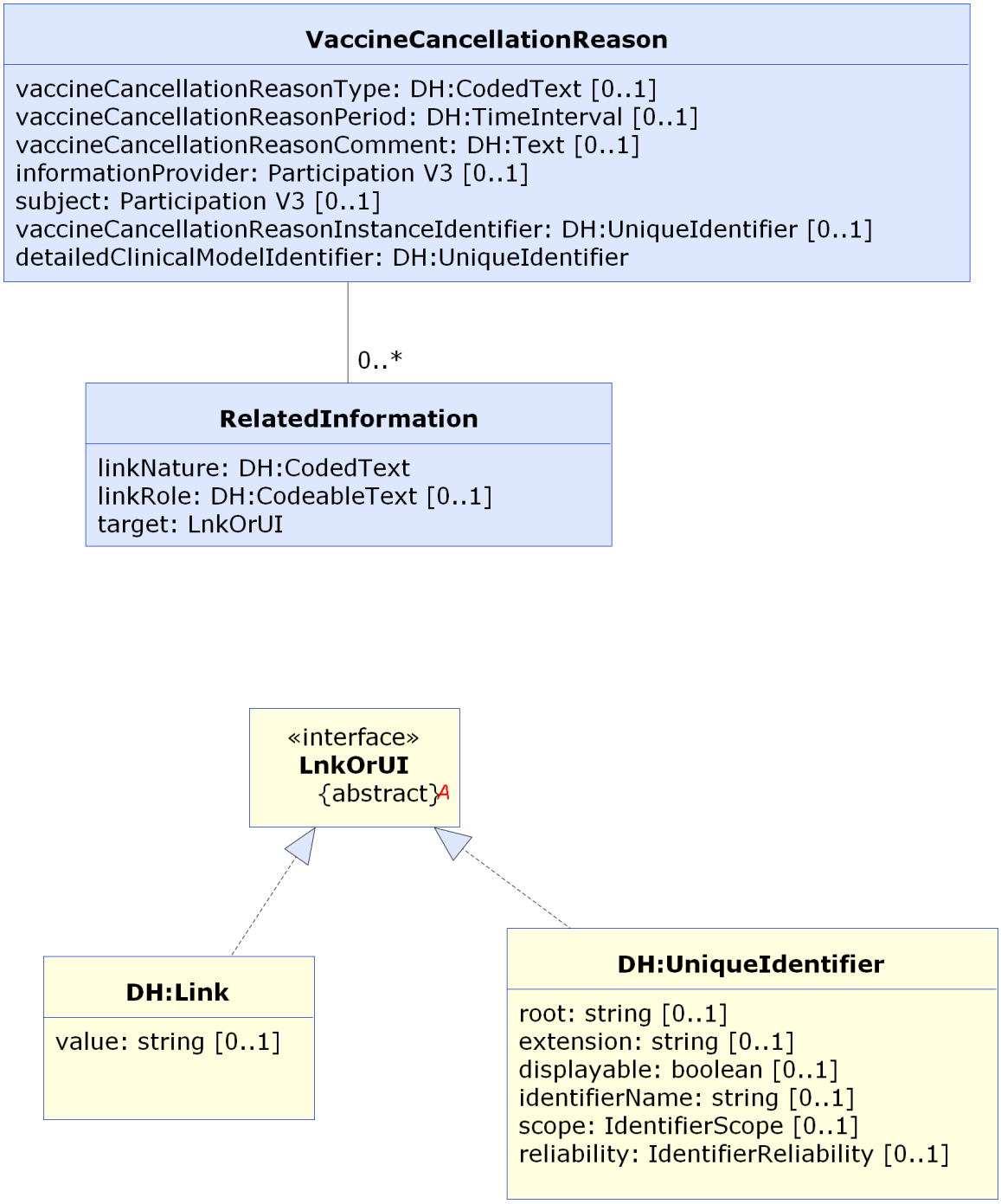

Figure 6.1. Vaccine Cancellation Reason data hierarchy

6.5 VACCINE CANCELLATION REASON

Identification

Label	VACCINE CANCELLATION REASON
Metadata Type	Data Group
Identifier	DG-16748
OID	1.2.36.1.2001.1001.101.102.16748

Definition

Definition	Details of the conditions that prevented the vaccination.
Definition Source	Australian Digital Health Agency
Synonymous Names	

Usage

Conditions of Use	Each instance of this `data group` **SHOULD** contain at least one instance of: • Vaccine Cancellation Reason Type, or • Vaccine Cancellation Reason Period.
Conditions of Use Source	Australian Digital Health Agency

Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

		VACCINE CANCELLATION REASON	
		Type (Vaccine Cancellation Reason Type)	0..1
		Period (Vaccine Cancellation Reason Period)	0..1
		Comment (Vaccine Cancellation Reason Comment)	0..1
		INFORMATION PROVIDER	0..1
		SUBJECT	0..1

		Vaccine Cancellation Reason Instance Identifier		0..1
		RELATED INFORMATION		0..*
			Link Nature	1..1
			Link Role	0..1
			Target	1..1
		Detailed Clinical Model Identifier		1..1

6.6 Vaccine Cancellation Reason Type

Identification

Label	Type
Metadata Type	Data Element
Identifier	DE-16756
OID	1.2.36.1.2001.1001.101.103.16756

Definition

Definition	Coded description of the condition that prevented the vaccination.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	There are only two expected values to this data element, namely natural immunity and medical contraindication. A null flavour supported by the underlying implementation may be used for this data element, if the reason is unknown or unsupported.
Data Type	CodedText
Value Domain	Vaccine Cancellation Reason Type Values

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for CodedText.
Exceptional Values	Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.7 Vaccine Cancellation Reason Type Values

Identification

Label	Vaccine Cancellation Reason Type Values
Metadata Type	Value Domain
Identifier	VD-16755
OID	1.2.36.1.2001.1001.101.104.16755

Definition

Definition	Set of values for specifying the reason for vaccine cancellation.
Definition Source	Australian Digital Health Agency

Value Domain

Source	Australian Digital Health Agency	
Permissible Values	1, Natural Immunity	The subject has developed a natural immunity to the antigen.
	2, Medical Contraindication	The subject displayed contraindications to administering the vaccine.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Type (Vaccine Cancellation Reason Type)	1..1

6.8 Vaccine Cancellation Reason Period

Identification

Label	Period
Metadata Type	Data Element
Identifier	DE-16757
OID	1.2.36.1.2001.1001.101.103.16757

Definition

Definition	Period of time during which the condition prevents the vaccination.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	TimeInterval

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for TimeInterval.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.9 Vaccine Cancellation Reason Comment

Identification

Label	Comment
Metadata Type	Data Element
Identifier	DE-15595
OID	1.2.36.1.2001.1001.101.103.15595

Definition

Definition	Additional narrative about the conditions preventing the vaccination not captured in other fields.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Text

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Text.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.10 INFORMATION PROVIDER

Identification

Label	INFORMATION PROVIDER
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Source of the information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency
Notes	This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include: • an agent of a subject of care, e.g. parent, guardian; • a clinician; • a device or software; and • the subject of the DCM, when not the subject of care of the enclosing structured document.

Usage

Conditions of Use	This **SHALL NOT** be used if the source of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.11 SUBJECT

Identification

Label	SUBJECT
Metadata Type	Data Group
Identifier	DG-10296
OID	1.2.36.1.2001.1001.101.102.10296

Definition

Definition	Individual about whom the vaccine cancellation information is being recorded.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Scope	Only used when the recorder needs to make it explicit. Otherwise, it is assumed to be the subject of care of the enclosing structured document.
Scope Source	Australian Digital Health Agency

Usage

Conditions of Use	This **SHALL NOT** be used if the subject of the information is the *SUBJECT OF CARE* of the enclosing structured document. This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [DH2017a]*. Further constraints on this data group that apply to this reuse of it are listed below. • Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”. • PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. Terms used in obligation and occurrence constraints are explained in Appendix B, *Specification Guide for Use*.
Conditions of Use Source	Australian Digital Health Agency

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.12 Vaccine Cancellation Reason Instance Identifier

Identification

Label	Vaccine Cancellation Reason Instance Identifier
Metadata Type	Data Element
Identifier	DE-16751
OID	1.2.36.1.2001.1001.101.103.16751

Definition

Definition	Globally unique identifier for each instance of a *Vaccine Cancellation Reason* evaluation.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..1

6.13 RELATED INFORMATION

Identification

Label	RELATED INFORMATION
Metadata Type	Data Group
Identifier	DG-16692
OID	1.2.36.1.2001.1001.101.102.16692

Definition

Definition	Information held elsewhere that is relevant to this instance of *Vaccine Cancellation Reason*.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	Items of related information include, but are not limited to, documents, parts of documents, images and web pages. “Elsewhere” includes elsewhere in the same document. 1:1 and 1:N relationships between instances of DCMs can be expressed by using one, or more than one, respectively, links. Chains of links can be used to see problem threads or other logical groupings of items. Links are only to be used between instances of DCMs or documents, i.e. between objects representing complete domain concepts. This is because relationships between sub-elements of whole concepts are not necessarily meaningful and may be confusing. When the item of related information is a complete document (including images) or a web page (or part thereof) an appropriate specialisation of the *Related Information* `data group` should be used. The document or other data component instance containing the *Related Information* `data group` is called the *source*. The related information is called the *target*.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	0..*

Children

Data Type	Name	Occurrences
	Link Nature	1..1

Data Type	Name	Occurrences
	Link Role	0..1
	Target	1..1

6.14 Link Nature

Identification

Label	Link Nature
Metadata Type	Data Element
Identifier	DE-16698
OID	1.2.36.1.2001.1001.101.103.16698

Definition

Definition	General semantic category of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs or document. This attribute is intended to be a coarse-grained category that can be used to enable interoperability between sender and receiver.
Data Type	CodedText
Value Domain	Link Nature Values

Usage

Examples	1) is related to 2) is confirmed by or authorised by 3) is related to the same problem or health issue
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

6.15 Link Nature Values

Identification

Label	Link Nature Values
Metadata Type	Value Domain
Identifier	VD-16698
OID	1.2.36.1.2001.1001.101.104.16698
External Identifier	LINK_NATURE

Definition

Definition	Set of values for the general semantic category of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009	
Permissible Values	The permissible values are those specified in Termlist LINK_NATURE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*. The values are listed here with brief descriptions.	
	LINK-A0, is related to	The most general category of Link.
	LINK-B0, is confirmed by or authorised by	The link target contains an instance of a DCM or document that is either a legal or authoritative basis for what is documented in the source DCM instance, or is a declaration of intent to provide (or not provide) requested care.
	LINK-C0, is related to the same problem or health issue	The target instance of a DCM or document describes health or healthcare that concerns the same clinical situation as the source DCM instance.
	LINK-D0, is related to the same care plan, act or episode	The source and the target instances of DCMs or documents both describe parts of the same care plan, act or episode.
	LINK-E0, is a related documentation	The target instance of a DCM or document is an alternative documentary form of the source DCM instance. For example, a re-expression of the same clinical information or supplementary explanatory information.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Nature	1..1

6.16 Link Role

Identification

Label	Link Role
Metadata Type	Data Element
Identifier	DE-16699
OID	1.2.36.1.2001.1001.101.103.16699

Definition

Definition	Detailed semantic description of the relationship between this instance of this detailed clinical model (DCM), i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Notes	This is one of two attributes that together communicate the semantics of the relationship between the source and target DCMs. This attribute provides for a specific description of the actual role played by the target in relation to the source. This attribute may be populated from any suitable terminology and therefore might support human readership better than interoperable automated processing.
Data Type	CodeableText
Value Domain	Link Role Values

Usage

Examples	1) unspecified link 2) suggests 3) endorses 4) evidence for 5) outcome 6) is documented by 7) excerpts

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	0..1

6.17 Link Role Values

Identification

Label	Link Role Values
Metadata Type	Value Domain
Identifier	VD-16699
OID	1.2.36.1.2001.1001.101.104.16699
External Identifier	LINK_ROLE

Definition

Definition	Set of values for the detailed semantic description of the relationship between this instance of this DCM, i.e. the source, and the target DCM instance or target document.
Definition Source	Australian Digital Health Agency
Context	These values are used within the context of the value of the *Link Nature* `data element`. They provide greater specificity and may be selected more for human readership than for interoperable automated processing.
Context Source	Australian Digital Health Agency

Value Domain

Source	ISO 13606-3:2009
Permissible Values	Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a]. Values **MAY** be from any suitable terminology. Some values from Termlist LINK_ROLE in *ISO 13606-3:2009 Health informatics - Electronic health record communication - Part 3: Reference archetypes and term lists [ISO2009a]*, together with brief descriptions, are:

LINK-A1, unspecified link	This can be used to say explicitly “there is no semantic information available for this Link”.
LINK-B1, endorses	The source endorses (agrees with, confirms or verifies) the situation (or interpretation) described in the target.
LINK-C3, evidence for	The source describes evidence for the situation (or interpretation) described in the target.
LINK-D1, outcome	The source describes an outcome of the situation (or interpretation) that the target describes.
LINK-E1, documented by	The source is a less formal description of the situation (or interpretation) documented by the target.
LINK-E4, excerpts	The source is an extract (copy) of part or all of the information contained within the target.
LINK-E5, derived from	The source contains information that has been derived (e.g. calculated) from information in the target.

Usage

Conditions of Use	Each of the values in LINK_ROLE from ISO 13606-3:2009 identifies a subcategory of a corresponding value in *Link Nature Values*. That correspondence is indicated by the first letter after the code string “LINK-”. For example, the term LINK-A1 is a subcategory of term LINK-A0. If a term in this list is used for the *Link Role* `data element`, the appropriate corresponding value **SHALL** be used for *Link Nature Values*.
Conditions of Use Source	ISO 13606-3:2009

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	Link Role	1..1

6.18 Target

Identification

Label	Target
Metadata Type	Data Element
Identifier	DE-16700
OID	1.2.36.1.2001.1001.101.103.16700

Definition

Definition	“Linked to” or identified information.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	Link UniqueIdentifier

Usage

Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for Link, and UniqueIdentifier.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	RELATED INFORMATION	1..1

6.19 Detailed Clinical Model Identifier

Identification

Label	Detailed Clinical Model Identifier
Metadata Type	Data Element
Identifier	DE-16693
OID	1.2.36.1.2001.1001.101.103.16693

Definition

Definition	Globally unique identifier for this detailed clinical model.
Definition Source	Australian Digital Health Agency
Synonymous Names	
Data Type	UniqueIdentifier

Usage

Conditions of Use	The value of this item **SHALL** be either the default value or a semantically equivalent value from an appropriate code system.
Conditions of Use Source	Australian Digital Health Agency
Examples	Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier.
Default Value	1.2.36.1.2001.1001.101.102.16748
Exceptional Values	Absent values are **PROHIBITED**. Abnormal values are **PROHIBITED**.

Relationships

Parents

Data Type	Name	Occurrences (child within parent)
	VACCINE CANCELLATION REASON	1..1

Appendix A. Known Issues

This appendix lists known issues with this specification at the time of publishing. We are working on solutions to these issues and encourage comments to help us develop these solutions.

Reference	Description
Links to external resources	Certain combinations of web browsers and PDF readers have problems opening URL links (usually found in reference sections) that span more than one line.
Data Hierarchies	Only the parts of these detailed clinical models (DCMs) required for current structured content specifications have been mapped to HL7 CDA. Mapping the remaining parts to CDA may reveal inconsistencies in the data hierarchies, requiring normative change.
Information Provider	We are considering making *Information Provider* one of a pair of data components: *Information Provider* for the source of the information, typically the subject of care of the enclosing structured document and *Reporter* for the author of the information, typically the author of the enclosing structured document. *Reporter* has not been added to this DCM. More investigation is needed to make a decision.
Service in Hospital Indicator	This is a Boolean item that indicates whether a service identified in the MBS/DVA report was provided within a hospital. MBS services are provided through a variety of settings/environments, which cover, in addition to those provided within hospitals: residential aged care facilities, home visits, tele-psychiartry (multi-locations), etc. This data element is not adequate for addressing the need to differentiate all of those services types and locations. Any improvement will require consultation with the custodians of the Medicare system.
Term “vaccine cancellation”	The term “vaccine cancellation” is a slight misnomer as cancellations apply to medications, but the term “exemption” applies to Australian Immunisation Register records. The term “cancellation” is to be replaced by the term “exemption” in the Australian Immunisation Register records. This term may be changed in a future version of this specification.
Vaccine Cancellation Reason Comment	The OID mentioned for this data element is incorrect, it is used for *Procedure Comment* in several publications. The correct OID for *Vaccine Cancellation Reason Comment* is 1.2.36.1.2001.1001.101.103.16758. This will be corrected in a future publication.
Vaccine Cancellation Reason Type	The specification of CodedText prohibits all exceptional values. However, this data element explicitly permits absent values to support systems that were built to an earlier design, when the data element was essential. Now the data element is optional and in some future specification this data element will also prohibit absent values.

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Appendix B. Specification Guide for Use

B.1 Overview

The participation data specification, each detailed clinical model (DCM) and each structured content specification (SCS) is designed on a shared basis for data interpretation. Each specifies rigorous business and technical definitions of data that systems may need to share. Each is intended to be a logical specification of the data to be persisted within or communicated between systems. They are also the foundation for the compliance, conformance, and declaration process. Our CDA implementation guides are guides to the implementation of HL7 CDA R2 messages based upon these DCMs and SCSs.

The participation data specification specifies data components that enable a recipient of a document to identify participations within their own systems. Participations record context-specific information about relationships between participants and healthcare events. As such, participations are only meaningful within the context in which they are used.

Each DCM specifies all of the data components required for any use of a clinical concept; for instance, an entry in a medical record such as a procedure or an imaging test. As such, they are maximal data sets. DCMs are building blocks, which are trimmed to size for use in the construction of SCSs.

Each SCS describes a template of a Structured Document. It specifies the data for a single type of clinical document or information exchange, such as a discharge summary. It is assembled using DCMs that have been constrained to eliminate data components not relevant to the particular context. For example, *Procedure* in a discharge summary uses only some of the data components required by *Procedure* in a specialist report.

B.2 The Structured Content Specification Metamodel

Our metamodel for structured content specifications (see Figure 1) is used to specify the overall structure of a structured content specification. The structure is a tree, so every item in the tree, other than the root node, has a parent node. For an SCS, the root node is a Structured Document. For a DCM, the root node is a Data Group.

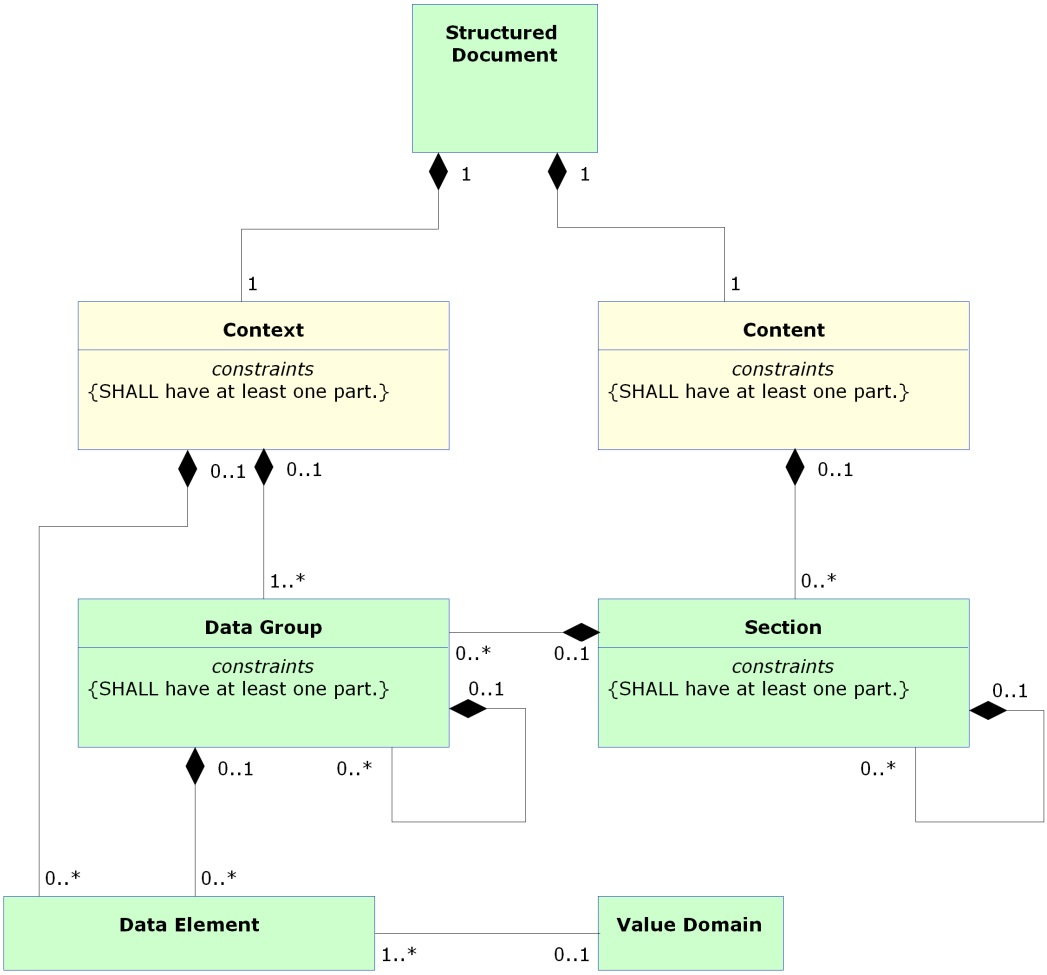

Figure B.1. SCS Metamodel

There are two main items used to organise information within an SCS as follows:

Context: This contains information related to the overall context of the document.

Content: This contains information that changes between different SCSs, but is always structured as shown in Figure 1, and consists of the following data components:

- Section
- Data Group
- Data Element
- Value Domain

These data components are described in more detail below.

Structured Document

A structured document is a collection of health information about a subject of care that is relevant to the ongoing care of that person. They are composed of one or more data groups and data elements that are organised into

sections. Examples of structured documents are *Discharge Summary*, *Shared Health Summary*, and *Advance Care Directive Custodian Record*.

Context

The purpose of the context is to identify and classify the document and to provide subjects of care and involved healthcare providers with the information related to the relevant healthcare events.

Content

Content contains a collection of personal information and health information pertinent to a subject of care that is derived from the healthcare event described in the document. The detail is organised into one or more data groups, which are optionally grouped into sections.

Section

A section is composed of data groups, other sections, or both. It is an organising container that cues the reader about expected content. A section organises information in a manner suitable for the primary purpose for which it is collected and provides a way to navigate through the data components within the document, thereby enabling more efficient querying. It is recommended that the section support safe reuse for secondary purposes, e.g. clinical coding or inclusion in a summarised form in an electronic health record. A section is context-specific to the document in which it resides.

Data Group

Each data group is used to represent one concept. A data group consists of other data groups, data elements, or both. Some data groups are reused across DCMs.

Every instance of a data group **SHALL** have at least one child data component instantiated.

Participation

Participation is a special case of a data group that is based on a data group template, which is reused throughout the DCMs and SCSs. Participations are an amalgam of the Actors (see below) operating within a defined healthcare domain and the Roles they are playing within that domain.

A Participant has been defined to align with the concepts of the Agency's *Interoperability Framework [NEHT2007b]*. It equates to an *Entity* that is related to the action described in an SCS as an *Actor*. A Participant can be a human, an organisation, or an IT system.

Choice

Choice represents a selection, to be made at run-time, of a single member from a set of data groups, where the set is defined at design-time, i.e. one and only one member of the set is chosen for each instance of the choice.

For example, at design-time a healthcare provider provides a service, but it is not until run-time that a decision can be made as to whether the provider is a person or an organisation. Hence, when a healthcare provider *Participant* is instantiated, it will contain either an instance of the *Person* data group or an instance of the *Organisation* data group.

Data Element

A data element is the smallest named unit of information in the model that can be assigned a value. For example, *DateTime of Observation* and *Observation Note*. Data elements are bound to data types (see Data Types Legend). Some data elements are reused in different data groups.

While all data elements are constrained by their data type, some data elements are further constrained by value domains (see Value Domain below).

Value Domain

A value domain constrains the permissible values for a data element. The values are often a subset of values based on a generic data type.

Value domains are reusable items, therefore the same value domain can be referred to by different data elements in different contexts. Value domains are often specified with reference to a *reference set*. A reference set is a constrained list of SNOMED CT-AU concepts that are appropriate to a particular context or use. Since many of these reference sets have been developed specifically for the context in which they appear, it is recommended that an assessment of fitness for purpose be undertaken before using any of the reference sets in another context.

Value domains constrain either by specifying a lower or upper bound (or both) on the range of permissible values or by specifying a finite set of prescribed values. Such a set of prescribed values can be specified directly within the definition of the data element, or in a separate but associated specification, or else by reference to one or more vocabulary or terminology reference sets. The table below provides some examples of value domains.

Table 1: Value Domain Examples

<table>
<tr><th>Data Element</th><th>Data Type</th><th>Example of Value Domain</th></tr>
<tr><td>Sex</td><td>CodedText</td><td>Standards Australia AS 4846 (2006) – Health Care Provider Identification [SA2006a] and Standards Australia AS 5017 (2006) – Health Care Client Identification [SA2006b] derive their values from METeOR 287316, which includes values such as:

<table><tr><th>Value</th><th>Meaning</th></tr><tr><td>1</td><td>Male</td></tr><tr><td>2</td><td>Female</td></tr><tr><td>3</td><td>Intersex or Indeterminate</td></tr><tr><td>9</td><td>Not Stated/Inadequately Described</td></tr></table></td></tr>
<tr><td>Diagnosis</td><td>CodeableText</td><td>A SNOMED CT-AU reference set that references concepts such as “Bronchitis” (Concept ID: 32398004).</td></tr>
<tr><td>Therapeutic Good Identification</td><td>CodeableText</td><td>An AMT reference set that references concepts such as “Ibuprofen Blue (Herron) (ibuprofen 200 mg) tablet: film-coated, 1 tablet” (Concept ID: 54363011000036107).</td></tr>
<tr><td>Individual Pathology Test Result Name</td><td>CodeableText</td><td>A LOINC subset that references concepts such as “Cholesterol [Moles/volume] in Serum or Plasma” (ID: 14647-2).</td></tr>
</table>

B.3 Icon Legend

These legends describe all icons that are used in the Agency's DCMs and SCSs.

Metadata Types Legend

The following table explains each of the icons used to represent the metadata types within DCMs and SCSs.

Table 2: Metadata Types Legend

Icon	Metadata Types
	Structured Document
	Section
	Data Group
	Participation
	Choice

Data Types Legend

The following table explains each of the icons used to represent the data types bound to each data element in the SCSs. These data types are a profile of the **ISO 21090-2011** data types as specified in *Data Types in NEHTA Specifications: A Profile of the ISO 21090 Specification [NEHT2010c]*.

Table 3: Data Types Legend

Icon	Data type	Explanation
	Any (ISO 21090: ANY)	Use of this icon indicates that instances of the data element can be of any concrete data type. There are no limitations on the data type of the data element. The values that can be required will vary considerably depending on the context. This is an abstract data type that is the basis for all data types and **SHOULD NOT** be used in an actual implementation.
	Boolean (ISO 21090: BL)	A data type, sometimes called the logical data type, having one of the two values: *true* and *false*. Many systems represent true as *non-zero* (often 1, or -1) and false as *zero*. **Usage/Examples** • An actual value entered by a user might be “yes” or could be chosen by a mouse click on an icon such as ☑.

CodeableText

(ISO 21090: CD)

Coded text *with* exceptions; supports various ways of holding text, both free text and coded text.

Often used to support compliance for early adopters of the structured content specifications.

While it is recommended that the values in this data type come from the bound value domain, it allows other value domains to also be used (with or without translations to the bound value domain) or free text alternatives. This is useful when it is not possible to define an entire value domain for a complex concept (e.g. *Diagnosis*) and when there are competing code sets in existence. Note that within exchange specifications or message profiles this data type **MAY** be constrained to mandate compliance with the bound value domain.

Usage/Examples

- The Australian Institute of Health and Welfare (AIHW) defines a data element concept *Episode of admitted patient care-separation mode* (the status at separation of a subject of care and the place to which they are released). An early adopter could have a similar concept (coded or otherwise) that maps to this data element but does not strictly comply with the AIHW values.
- A SNOMED CT-AU coded/complex expression that embodies single or multiple concepts. The SNOMED CT-AU concepts behind these CodeableText data elements are specified in the structured content specification value domains.

CodedText

(ISO 21090: CD)

Coded text *without* exceptions; text with code mappings. Values in this data type **SHALL** come from the bound value domain, with no exceptions.

Often used for reference sets with only a small number of applicable values, e.g. Gender and Document Status.

Usage/Examples

Standards Australia AS 5017 (2006) – Health Care Client Identification [SA2006b] specifies the following value domain representing a type of address:

Value	Meaning
1	Business
2	Mailing or Postal
3	Temporary Accommodation
4	Residential (permanent)
9	Not Stated/Unknown/Inadequately Described

DateTime

(ISO 21090: TS)

A single date, optionally with a time of day.

Has the ability to indicate a level of precision, but not whether the date or time is estimated. Cannot represent a time alone.

String representations of known dates **SHALL** conform to the format within the **ISO 21090-2011** standard without the use of extensions, i.e. YYYY[MM[DD[HH[MM[SS[.U[U[U[U]]]]]]]]][+|-ZZzz].

Usage/Examples

- Partial dates: 2008, 20081001.
- To indicate 1:20 pm on May the 31st, 1999 for a time zone that is 10 hours ahead of Coordinated Universal Time (UTC): 19990531132000+1000.

Duration (ISO 21090: PQ.TIME)	The period of time during which something continues. Consists of a value and a unit that represents the time value, e.g. hours, months. Compound durations are not allowed, e.g. 10 days 3 weeks 5 hours. **Usage/Examples** • 3 hours • 6 months • 1 year
EncapsulatedData (ISO 21090: ED)	Data that is primarily intended for human interpretation or for further machine processing outside the scope of this specification. This includes unformatted or formatted written language, multimedia data, or structured information as defined by a different standard (e.g. XML signatures). **Usage/Examples** • JPEG images • HTML documents • [RFC1521] MIME types
Integer (ISO 21090: INT)	The mathematical data type comprising the exact integral values. **Usage/Examples** • 1 • -50 • 125
Link (ISO 21090: TEL)	A general link, reference or pointer to an object, data or application that exists logically or is stored electronically in a computer system. **Usage/Examples** • URL (Uniform Resource Locator) – the World Wide Web address of a site on the internet, such as the URL for the Google internet search engine – *http://www.google.com*. • An absolute or relative path within a file or directory structure – e.g. in the Windows operating system, the “link” or absolute path to a particular letter could be *C:\Documents and Settings\GuestUser\MyDocuments\letter.doc*
Quantity (ISO 21090: PQ)	A magnitude value with a unit of measurement. This is used for recording many real world measurements and observations. As the default unit of measure is 1, even counts of items can be recorded with *Quantity*. **Usage/Examples** • 100 centimetres • 25.5 grams • 3 per month

QuantityRange

(ISO 21090: IVL)

A range of *Quantity* values.

It may be identified using a combination of an optional minimum *Quantity* and an optional maximum *Quantity* (i.e. lower and upper bounds).

This is typically used for defining the valid range of values for a particular measurement or observation. Unbounded quantity ranges can be identified by not including a minimum or a maximum *Quantity* value.

Usage/Examples

- -20 to 100 Celsius
- 30-50 mg
- >10 kg
- 2-3 hours

QuantityRatio

(ISO 21090: RTO)

A relative magnitude of two *Quantity* values.

Usually recorded as numerator and denominator.

Usage/Examples

- 25 mg / 500 ml
- 200 mmol per litre

Real

(ISO 21090: REAL)

A computational approximation to the standard mathematical concept of real numbers.

These are often called floating-point numbers.

Usage/Examples

- 1.075
- -325.1
- 3.14157

Text

(ISO 21090: ST)

A character string (with optional language) containing any combination of alpha, numeric, or symbols from the Unicode character set. Also referred to as *free text*.

Usage/Examples

“The patient is a 37 year old man who was referred for cardiac evaluation after complaining of occasional palpitations, racing heart beats and occasional dizziness.”

TimeInterval

(ISO 21090:IVL)

An interval in time.

It is identified using a combination of an optional start *DateTime*, an optional end *DateTime*, and an optional *Duration*.

Usage/Examples

- 20080101+1000 - 20081231+1000
- 200801010130+1000 - 200801011800+1000
- 200801010130+1000, duration=16.5 hours

UniqueIdentifier (ISO 21090: II)	A unique value used to identify a physical or virtual object or concept. In using this data type, the attributes of the UniqueIdentifier data type **SHOULD** be populated from the identifiers as defined in *AS 4846 (2006) – Health Care Provider Identification [SA2006a]* and *AS 5017 (2006) – Health Care Client Identification [SA2006b]* as follows: • *root*: a globally unique object identifier that identifies the combination of geographic area, issuer and type. If no such globally unique object identifier exists, it **SHALL** be created. • *extension*: a unique identifier within the scope of the root that is directly equivalent to the identifier designation element. • *identifierName*: a human readable name for the namespace represented by the root that is populated with the issuer or identifier type values, or a concatenation of both, as appropriate. The content of this attribute is not intended for machine processing and **SHOULD NOT** be used for that purpose. • *identifierScope*: the geographic span or coverage that applies to or constrains the identifier. It is directly equivalent to the geographic area element. The content of this attribute is not intended for machine processing and **SHOULD NOT** be used as such. Also, the following constraints apply on the UniqueIdentifier data type: 1) The *root* attribute **SHALL** be used. 2) For an Entity Identifier, the *root* attribute **SHALL** be an OID that consists of a node in a hierarchically assigned namespace, formally defined using the ITU-T's ASN.1 standard. 3) For an Entity Identifier, the *root* attribute **SHALL NOT** be a UUID. **Usage/Examples** Australian health identifiers (e.g. IHI, HPI-I and HPI-O) and patient hospital medical record numbers are examples of identifiers that may be carried by data elements of this data type.

Keywords Legend

Where used in this document and in DCMs and SCSs, the keywords **SHALL, SHOULD, MAY, SHALL NOT** and **SHOULD NOT** are to be interpreted as described in *Key Words for Use in RFCs to Indicate Requirement Levels [RFC2119]*. Our specifications use the terms **SHALL** in place of “MUST” and **SHALL NOT** in place of “MUST NOT”. The key word definitions in RFC 2119, adjusted to remove the key words not used in the Agency specifications, are presented in the following table.

Table 4: Keywords Legend

Keyword	Definition
SHALL	This word means that the statement is an absolute requirement of the specification.
SHOULD	This word means that there may exist valid reasons in particular circumstances to ignore a particular data component, but the full implications must be understood and carefully weighed before choosing a different course.

MAY	This word means that a data component is truly optional. One implementer may choose to include the data component because a particular implementation requires it, or because the implementer determines that it enhances the implementation, while another implementer may omit the same data component. An implementation that does not include a particular option shall be prepared to interoperate with another implementation that does include the option, perhaps with reduced functionality. In the same vein, an implementation that does include a particular option shall be prepared to interoperate with another implementation that does not include the option (except of course, for the feature the option provides).
SHALL NOT	This phrase means that the statement is an absolute prohibition of the specification.
SHOULD NOT	This phrase means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.

Obligation Legend

In DCMs and SCSs obligations on a data component specify whether or not it **SHALL** be populated in the logical record architecture of a message. We intend that all data components that are not **PROHIBITED** will be implemented.

Obligations in statements about values specify whether or not certain values are permitted.

Implementation guides specify the rules and formats for implementing and populating data components in specific messaging formats.

The following table defines the obligations.

Table 5: Obligations Legend

Keyword	Interpretation
ESSENTIAL	Indicates that the data component is considered a mandatory item of information and **SHALL** be populated. **Usage/Examples:** The Participant data component for a Subject of Care **SHALL** include an Entity Identifier data component in order to hold the IHI.
OPTIONAL	Indicates that the data component is not considered a mandatory item of information and **MAY** be populated. **Usage/Examples:** Such data components will be implemented, only inclusion and population are optional. This is only needed when a DCM incorrectly asserts that a data component is **ESSENTIAL**. It will be used with a note stating that the DCM needs revision.
PROHIBITED	On a data component this indicates that the data component is considered a forbidden item of information and **SHALL NOT** be included. In a statement about values this indicates that the use of the specified values is considered forbidden and they **SHALL NOT** be used. **Usage/Examples:** Within a Participation data group depicting a Subject of Care, the Participation Healthcare Role **SHALL NOT** be populated.

CONDITIONAL	Indicates that a data component is considered **ESSENTIAL** only on satisfaction of a given condition. Individual data components specify the obligation of the data component when the condition is not met. When a condition is met, the data component is considered to be **ESSENTIAL** and **SHALL** be populated. When a condition is not met, the data component may be considered **PROHIBITED**, or the data component may be considered **OPTIONAL**. **Usage/Examples:** Within a Pathology Result Report, the *Specimen Detail* `data group` is **ESSENTIAL** if the requested test is to be performed on a specimen; otherwise it **SHALL NOT** be included.

Obligations follow the usual scope rules: where **ESSENTIAL** child data components are contained within **OPTIONAL** parent data components, the child data components **SHALL NOT** be included when the parent is not included.

B.4 Exceptional Values

Occasionally a data element will have an exceptional value: an abnormal value (i.e. the value cannot be described using the expected set of values) or an absent value (i.e. no value is provided). Some abnormal values are only relevant to data elements of certain data types (e.g. positive infinity is relevant to numbers but not Booleans).

Unless otherwise specified, all data elements are permitted to have exceptional values. Constraints on the use of exceptional values are contained in the Exceptional Values row of the Usage section, except for instances of Participation, when they are in the Conditions of Use row. The most common statements constraining exceptional values are:

- Absent values are **PROHIBITED**.
- Abnormal values are **PROHIBITED**.

The commonly used implementation specifications ISO 21090 and HL7 CDA R2 use *nullFlavor* to manage abnormal and absent values.

The following table provides a classification of nullFlavor values as abnormal or absent.

Table 6: Classification of ISO 21090 nullFlavor values as absent or abnormal

Level	Code	Term	Abnormal	Absent
1	NI	No information		Absent
2	INV	Invalid	Abnormal	
3	OTH	Other	Abnormal	
4	PINF	Positive infinity	Abnormal	
4	NINF	Negative infinity	Abnormal	
3	UNC	Unencoded	Abnormal	
3	DER	Derived	Abnormal	
2	UNK	Unknown		Absent
3	ASKU	Asked but unknown		Absent
4	NAV	Temporarily unavailable		Absent
3	NASK	Not asked		Absent
3	QS	Sufficient quantity	Abnormal	

Level	Code	Term	Abnormal	Absent
3	TRC	Trace	Abnormal	
2	MSK	Masked		Absent
2	NA	Not applicable		Absent

B.5 Information Model Specification Parts Legends

This section illustrates the format and parts used to define each section, data group and data element within the Agency's DCMs and SCSs, and identifies when each part is applicable.

Chapter Name

Each section, data group, data element, value domain or choice has its own eponymous chapter. The chapter name is used in all data hierarchies.

Identification Section Legend

The following table illustrates the layout of the Identification section and describes the various parts of the section.

Table 7: Identification Section Legend

Label	A suggested display name for the data component.
Metadata Type	The type of the data component, e.g. section, data group or data element.
Identifier	An Agency-assigned internal identifier of the data component. Note that if one data component is used twice (e.g. *Therapeutic Good Identification* is used in both *Medication Instruction* and *Medication Action*), both uses of the data component will have the same identifier. A data component identifier identifies a data component, not a **use** of a data component.
OID	An object identifier equivalent to the data component identifier.
External Identifier	An identifier of the concept represented by the data component that is assigned by an organisation other than the Agency.

Definition Section Legend

The following table illustrates the layout of the Definition section and describes the various parts of the section.

Table 8: Definition Section Legend

Definition	The meaning, description or explanation of the data component. For data groups used in a particular context, the definition **MAY** be a refinement of the generic data group definition.
Definition Source	The authoritative source for the Definition statement.
Synonymous Names	A list of any names the data component may also be known as.

	Implementers may prefer to use synonymous names to refer to the data component in specific contexts.
Scope	Situations in which the data component may be used, including the Scope circumstances where specified data are required or recommended. For example, Medication Instruction (data group) has a scope that includes all prescribable therapeutic goods, both medicines and non-medicines. This item is not relevant to data elements or value domains.
Scope Source	The authoritative source for the Scope statement.
Context	The environment in which the data component is meaningful, i.e. the circumstance, purpose and perspective under which this data component is defined or used. For example, Street Name has a context of Address. This item is applicable only to data elements.
Assumptions	Suppositions and notions used in defining the data component.
Assumptions Source	The authoritative source for the Assumptions statement.
Notes	Informative text that further describes the data component, or assists in the understanding of how the data component can be used.
Data Type	The data type (or data types) of the data element, e.g. DateTime or Text. The valid data types are specified in the Data Types Legend. This item is applicable only to data elements.
Value Domain	The name of the Value Domain used to define the range of values of the data element, or a statement describing what values to use in the absence of a defined value domain for the related data element. The statement is: In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the HL7 code set registration procedure with an appropriate object identifier (OID), and **SHALL** be publicly available. When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. This item is applicable only to data elements with data type CodedText or CodeableText.

Data Hierarchy

The top-level data components (a Structured Document in an SCS or Data Groups in a DCM) contain a data hierarchy. Each row contains information about a single data component. The entries are nested to represent inclusion of one data component in another. Each entry contains at least three occupied cells. The left-most cell contains an icon to indicate the entry's data type. The next cell to the right contains the label of the data component (if the label is different from the name, the name is displayed in brackets after the label). The next cell to the right contains the multiplicity range for the data component.

If a row is not shaded, this indicates that the data component **SHOULD** be used. Where the minimum multiplicity is zero, this does not mean that it is optional to support the data component in the clinical information system, rather it means that the clinical information system has the capability to record that data component but that it may not populate it in a particular clinical document instance.

If a row is shaded grey, this indicates that the data component **SHOULD NOT** be used. This will be because analysis of requirements either did not find reasons to use it or found reasons to not use it.

If the text in a row is in a ~~strike through~~ font and the multiplicity is 0..0, this indicates that the data component **SHALL NOT** be used. This will be because analysis of requirements found reasons to prohibit the use of it.

Sample SCS Data Hierarchy

Note

Items below whose text is lighter (mid-blue and mid-grey) are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. Typically, such identifiers will be generated internally by systems and not displayed to users since they rarely have clinical significance.

Items below with a grey background are data components that are included in the relevant detailed clinical model specification, but whose use is discouraged in this particular scenario.

Items below with a clear background are data components whose use is encouraged in this particular scenario.

	SPECIALIST LETTER		
CONTEXT			
	SUBJECT OF CARE		1..1
	DOCUMENT AUTHOR		1..1
	ENCOUNTER		1..1
		DateTime Subject of Care Seen (DateTime Health Event Started)	1..1
		DateTime Health Event Ended	0..0
		HEALTHCARE FACILITY	0..0
	Document Instance Identifier		0..1
	RELATED INFORMATION		0..0
	Document Type		1..1
CONTENT			
	RESPONSE DETAILS		1..1
		Diagnosis (PROBLEM/DIAGNOSIS)	0..*
		Diagnosis Name (Problem/Diagnosis Identification)	1..1
		Clinical Description	0..0
	and more		

Value Domain Section Legend

The following table illustrates the layout of the Value Domain section and describes the various parts of the section.

Table 9: Value Domain Section Legend

Source	The name of the terminology or vocabulary from which the value domain's permissible values are sourced, e.g. SNOMED CT-AU, LOINC.
Version Number	Version number of the value domain source.
Permissible Values	A specification of the permissible values in the value domain. This may be a list of codes. (Each code is typically presented as a triple with code values, text equivalent, and description) for example: 1, Registered No result yet available. This may be a conformance statement (e.g. "The permissible values are the members of the following seven AMT reference sets: ...").

Usage Section Legend

The following table illustrates the layout of the Usage section and describes the various parts of the section.

Table 10: Usage Section Legend

Examples	Sample values for the data element, with or without notes about sample values. Where a data element has an associated value domain, examples representative of that domain are used where possible. Where the value domain is yet to be determined, indicative examples are provided. Implementation guides may contain specific examples of how data elements may be populated and how they relate to each other. This item is applicable only to data elements.
Conditions of Use	Prerequisites, provisos or restrictions for use of the data component.
Conditions of Use Source	The authoritative source for the Conditions of Use statement.
Misuse	Incorrect, inappropriate or wrong uses of the data component.
Default Value	A common denomination, or at least a usable denomination, from the Value Domain where available or applicable, typically assigned at the creation of an instance of the data component.
Exceptional Values	A statement of limitations on the use of exceptional values, see Exceptional Values. Unless otherwise specified, all data elements are permitted to have exceptional values. The most common statements constraining exceptional values are: • Abnormal values are **PROHIBITED**. • Absent values are **PROHIBITED**. This item is applicable only to data elements.

Relationships Section Legend

The Relationships section specifies the cardinality between parent and child data components.

The following table illustrates the layout of the Parent relationships table. Note that the occurrences in the relationships described by this table are from the parent to the child data component, i.e. from the data component listed in the table to the data component described by the section.

Table 11: Parent Legend

Data Type	**Name**	**Occurrences** (child within parent)
The icon illustrating the metadata type or data type.	Parent Data Component Name	The minimum and maximum number of instances of the data component described on this page that **SHALL** occur.

The following table illustrates the layout of the Children relationships table.

Table 12: Children Legend

Data Type	**Name**	**Occurrences**
The icon illustrating the metadata type or data type.	Child Data Component Name	The minimum and maximum number of instances of the data component described on this page that **SHALL** occur.

Appendix C. Change History

A summary of changes from one document version to the next. Changes to the change history are excluded.

C.1 Changes Since Version 1.2 - 5 August 2016

Preliminary Pages

Document Information section has been changed to include the latest release details.

Chapter 1 Introduction

No changes.

Chapter 2 ACD Custodian Entry Detailed Clinical Model

The version has changed from 1.1 to 1.2.

Guidance on data elements with exceptional values has been added. This affects all uses of the following data elements:

- *ACD CUSTODIAN ENTRY > ACD Custodian Entry Instance Identifier*;
- *ACD CUSTODIAN ENTRY > RELATED INFORMATION > Link Nature*; and
- *ACD CUSTODIAN ENTRY > Detailed Clinical Model Identifier*.

2.4 INFORMATION PROVIDER has changed to the current standard design: there were editorial change to the definition, notes and conditions of use. A scope statement was added and the notes and conditions of use were changed from assuming that the default provider of information is the author to assuming that it is the subject of care. The design is now based on Participation v3.3.

2.5 SUBJECT has changed to align with the current standard design: there were editorial change to the conditions of use. All conditions of use have been removed, other than limiting *Participation Type* to "ACD Custodian" or a semantic equivalent, and prohibiting the type of party from being a device. The design is now based on Participation v3.3.

In 2.6 ACD Custodian Entry Instance Identifier, there were editorial change to the definition and redundant context and notes were removed.

In 2.8 Link Nature, there were editorial changes to the definition.

In 2.9 Link Nature Values, there were editorial changes to the permissible values.

In 2.10 Link Role, there were editorial change to the definition and notes.

In 2.11 Link Role Values, the permissible values have been updated and editorial changes have been made in the condition of use.

In 2.12 Target, there were editorial change to the definition.

In 2.13 Detailed Clinical Model Identifier, there were editorial change to the definition and redundant notes were removed. The conditions of use were changed to allow the value to be the default value or a semantic equivalent.

Chapter 3 Australian Organ Donor Register Entry Detailed Clinical Model

The version has changed from 1.1 to 1.2.

Guidance on data elements with exceptional values has been added. This affects all uses of the following data elements:

- *AUSTRALIAN ORGAN DONOR REGISTER ENTRY* > *Donation Decision*;
- *AUSTRALIAN ORGAN DONOR REGISTER ENTRY* > *Australian Organ Donor Register Entry Instance Identifier*;
- *AUSTRALIAN ORGAN DONOR REGISTER ENTRY* > *RELATED INFORMATION* > *Link Nature*; and
- *AUSTRALIAN ORGAN DONOR REGISTER ENTRY* > *Detailed Clinical Model Identifier*.

In 3.1 Purpose, there were editorial changes.

In 3.2 Use, there was an editorial change.

In 3.5 Date of Initial Registration, there was an editorial change to the definition.

In 3.6 Donation Decision, there was an editorial change to the definition.

In 3.7 ORGAN AND TISSUE DONATION DETAILS, there was an editorial change to the definition.

In 3.8 Bone Tissue Indicator, there was an editorial change to the definition.

In 3.9 Eye Tissue Indicator, there was an editorial change to the definition.

In 3.10 Heart Indicator, there was an editorial change to the definition.

In 3.11 Heart Valve Indicator, there was an editorial change to the definition.

In 3.12 Kidney Indicator, there was an editorial change to the definition.

In 3.13 Liver Indicator, there was an editorial change to the definition.

In 3.14 Lungs Indicator, there was an editorial change to the definition.

In 3.15 Pancreas Indicator, there was an editorial change to the definition.

In 3.16 Skin Tissue Indicator, there was an editorial change to the definition.

3.17 INFORMATION PROVIDER has changed to the current standard design: there were editorial change to the definition, notes and conditions of use. A scope statement was added and the notes and conditions of use were changed from assuming that the default provider of information is the author to assuming that it is the subject of care. The design is now based on Participation v3.3.

3.18 SUBJECT has changed to the current standard design: there were editorial changes to the definition, scope and conditions of use. The design is now based on Participation v3.3.

In 3.19 Australian Organ Donor Register Entry Instance Identifier, there were editorial change to the definition and redundant notes were removed.

In 3.21 Link Nature, there were editorial changes to the definition.

In 3.22 Link Nature Values, there were editorial changes to the permissible values.

In 3.23 Link Role, there were editorial change to the definition and notes.

In 3.24 Link Role Values, the permissible values have been updated and editorial changes have been made in the condition of use.

In 3.25 Target, there were editorial change to the definition.

In 3.26 Detailed Clinical Model Identifier, there were editorial change to the definition and redundant notes were removed. The conditions of use were changed to allow the value to be the default value or a semantic equivalent.

Chapter 4 Medicare/DVA Funded Service Detailed Clinical Model

The version has changed from 1.1 to 1.2.

Guidance on data elements with exceptional values has been added. This affects all uses of the following data elements:

- *MEDICARE/DVA FUNDED SERVICE* > *Medicare/DVA Funded Service Instance Identifier*;
- *MEDICARE/DVA FUNDED SERVICE* > *RELATED INFORMATION* > *Link Nature*; and
- *MEDICARE/DVA FUNDED SERVICE* > *Detailed Clinical Model Identifier*.

In 4.1 Purpose, there were editorial changes.

In 4.5 Date of Service, there was an editorial change to the definition.

In 4.7 Medicare MBS/DVA Item Values, there was an editorial change to the definition, and the references' web addresses were updated.

4.9 SERVICE REQUESTER has changed to the current standard design: all conditions of use have been removed, other than limiting *Participation Type* to "Service Requester" or a semantic equivalent, and limiting the type of party to being a person. The design is now based on Participation v3.3.

4.10 SERVICE PROVIDER has changed to the current standard design: there was an editorial change to the definition, and all conditions of use have been removed, other than limiting *Participation Type* to "Service Provider" or a semantic equivalent, and limiting the type of party to being a person. The design is now based on Participation v3.3.

4.11 INFORMATION PROVIDER has changed to the current standard design: there were editorial change to the definition, notes and conditions of use. A scope statement was added and the notes and conditions of use were changed from assuming that the default provider of information is the author to assuming that it is the subject of care. The design is now based on Participation v3.3.

4.12 SUBJECT has changed to the current standard design: there were editorial changes to the definition, scope and conditions of use. The design is now based on Participation v3.3.

In 4.13 Medicare/DVA Funded Service Instance Identifier, there were editorial change to the definition and redundant notes were removed.

In 4.15 Link Nature, there were editorial changes to the definition.

In 4.16 Link Nature Values, there were editorial changes to the permissible values.

In 4.17 Link Role, there were editorial change to the definition and notes.

In 4.18 Link Role Values, the permissible values have been updated and editorial changes have been made in the condition of use.

In 4.19 Target, there were editorial change to the definition.

In 4.20 Detailed Clinical Model Identifier, there were editorial change to the definition and redundant notes were removed. The conditions of use were changed to allow the value to be the default value or a semantic equivalent.

Chapter 5 Pharmaceutical Benefit Item Detailed Clinical Model

The version has changed from 1.1 to 1.2.

Guidance on data elements with exceptional values has been added. This affects all uses of the following data elements:

- *PHARMACEUTICAL BENEFIT ITEM* > *PBS/RPBS Item Code*;
- *PHARMACEUTICAL BENEFIT ITEM* > *PBS/RPBS Manufacturer Code*;
- *PHARMACEUTICAL BENEFIT ITEM* > *Pharmaceutical Benefit Item Instance Identifier*;
- *PHARMACEUTICAL BENEFIT ITEM* > *RELATED INFORMATION* > *Link Nature*; and
- *PHARMACEUTICAL BENEFIT ITEM* > *Detailed Clinical Model Identifier*.

In 5.1 Purpose, there were editorial changes.

In 5.4 PHARMACEUTICAL BENEFIT ITEM, a note has been added.

In 5.6 PBS/RPBS Item Code Values, there was an editorial change to the definition, and the date of access to a web addresses was updated.

In 5.8 PBS/RPBS Manufacturer Code Values, there was an editorial change to the definition, and the date of access to a web addresses was updated.

In 5.9 Pharmaceutical Item Brand, there was an editorial change to the definition.

In 5.10 Pharmaceutical Item Generic Name, there was an editorial change to the definition.

In 5.11 Pharmaceutical Item Form and Strength, there was an editorial change to the definition.

In 5.12 Date of Supply, there was an editorial change to the definition and the notes.

In 5.13 Date of Prescribing, there was an editorial change to the definition.

In 5.14 Quantity, there was an editorial change to the definition.

In 5.15 Number of Repeats, there was an editorial change to the definition.

5.16 INFORMATION PROVIDER has changed to the current standard design: there were editorial change to the definition, notes and conditions of use. A scope statement was added and the notes and conditions of use were changed from assuming that the default provider of information is the author to assuming that it is the subject of care. The design is now based on Participation v3.3.

5.17 SUBJECT has changed to the current standard design: there were editorial changes to the definition, scope and conditions of use. The design is now based on Participation v3.3.

In 5.18 Pharmaceutical Benefit Item Instance Identifier, there were editorial change to the definition and redundant notes were removed.

In 5.20 Link Nature, there were editorial changes to the definition.

In 5.21 Link Nature Values, there were editorial changes to the permissible values.

In 5.22 Link Role, there were editorial change to the definition and notes.

In 5.23 Link Role Values, the permissible values have been updated and editorial changes have been made in the condition of use.

In 5.24 Target, there were editorial change to the definition.

In 5.25 Detailed Clinical Model Identifier, there were editorial change to the definition and redundant notes were removed. The conditions of use were changed to allow the value to be the default value or a semantic equivalent.

Chapter 6 Vaccine Cancellation Reason Detailed Clinical Model

The version has changed from 1.1 to 1.2.

Guidance on data elements with exceptional values has been added. This affects all uses of the following data elements:

- *VACCINE CANCELLATION REASON* > *Type*;
- *VACCINE CANCELLATION REASON* > *Vaccine Cancellation Reason Instance Identifier*;
- *VACCINE CANCELLATION REASON* > *RELATED INFORMATION* > *Link Nature*; and
- *VACCINE CANCELLATION REASON* > *Detailed Clinical Model Identifier*.

In 6.1 Purpose, the focus was changed from the Australian Childhood Immunisation Register to the Australian Immunisation Register. There were also editorial changes.

In 6.2 Use, the statement was completely rewritten.

In 6.3 Misuse, the focus was changed from the Australian Childhood Immunisation Register to the Australian Immunisation Register. There were also editorial changes.

In 6.5 VACCINE CANCELLATION REASON, there were editorial changes to the conditions of use.

In 6.6 Vaccine Cancellation Reason Type, there was an editorial change to the definition.

In 6.7 Vaccine Cancellation Reason Type Values, there was an editorial change to the definition.

In 6.8 Vaccine Cancellation Reason Period, there were editorial changes to the definition.

6.10 INFORMATION PROVIDER has changed to the current standard design: there were editorial change to the definition, notes and conditions of use. A scope statement was added and the notes and conditions of use were changed from assuming that the default provider of information is the author to assuming that it is the subject of care. The design is now based on Participation v3.3.

6.11 SUBJECT has changed to the current standard design: there were editorial changes to the definition, scope and conditions of use. The design is now based on Participation v3.3.

In 6.12 Vaccine Cancellation Reason Instance Identifier, there were editorial change to the definition and redundant notes were removed.

In 6.13 RELATED INFORMATION, there were editorial changes to the definition and the notes.

In 6.14 Link Nature, there were editorial changes to the definition.

In 6.15 Link Nature Values, there were editorial changes to the permissible values.

In 6.16 Link Role, there were editorial change to the definition and notes.

In 6.17 Link Role Values, the permissible values have been updated and editorial changes have been made in the condition of use.

In 6.18 Target, there were editorial change to the definition.

In 6.19 Detailed Clinical Model Identifier, there were editorial change to the definition and redundant notes were removed. The conditions of use were changed to allow the value to be the default value or a semantic equivalent.

Appendix A. Known Issues

One known issue was removed and five were added.

Appendix B. Specification Guide for Use

In B.1 Overview, a paragraph mentioning the participation data specification. Also there were editorial changes.

In Participation, the reference to Participation Data Specification has been removed.

In Data Types Legend, UniqueIdentifier, constraint 4 (The *extension* attribute **SHALL** be used.) was removed.

In Data Hierarchy, a paragraph on rows that are not shaded was added. The paragraph on columns on the right-hand side of the data hierarchy was removed.

In Sample SCS Data Hierarchy, a paragraph on rows that are not shaded was added.

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