nehta

# Miscellaneous Detailed Clinical Models
# Detailed Clinical Model Specification
# Version 1.4

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Approved for external use

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**National E-Health Transition Authority**

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# Document Information

## Key Information

| | |
|---|---|
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## Product Version History

| Product version | Date | Release comments |
|---|---|---|
| 1.0 | 23 Aug 2011 | Initial public release. The document is created in accordance with archetypes from NEHTA Clinical Knowledge Manager[1]. |
| 1.1 | 30 Nov 2011 | This version of the specification is published primarily to remove the Record Review Detailed Clinical Model and include the Requested Service Detailed Clinical Model. |
| 1.2 | 22 Dec 2011 | This version of the specification is published to support the Structured Content Specifications published (at the end of 2011) that use the versions of the DCMs included in this specification. Changes to the DCMs, included in this specification, are primarily to support the Consolidated View in the PCEHR. |
| 1.3 | 4 Sep 2013 | This version of the specification is published to include the Summary of Medication Entries and General Observation DCMs in support of the PCEHR Prescription and Dispense View Structured Content Specification and Consumer Entered Achievements Structured Content Specification respectively. |
| 1.4 | 18 Dec 2015 | This version of the specification is published to support the Structured Content Specifications published (in the first half of 2015) that use the versions of the DCMs included in this specification. Changes to the DCMs, included in this specification, are primarily to support Shared Health Summary and Event Summary in the PCEHR R5.<br><br>Medical History Item DCM has been excluded from this specification. Document Use Authorisation DCM has been included. New major version of Requested Service DCM is included. |

## Related Documents

| Name | Version/Release Date |
|---|---|
| *Participation Data Specification* | Version 3.2, Issued 20 July 2011 |

### Included Detailed Clinical Models

This specification contains the following Detailed Clinical Models:

- Clinical Synopsis, version 4.3

[1] http://dcm.nehta.org.au/ckm

- Recommendations (Instruction), version 2.2
- Exclusion Statement, version 1.2
- Referral Detail, version 1.2
- Requested Service (Action), version 5.0
- Summary of Medication Entries, version 1.1
- General Observation, version 1.1
- Document Use Authorisation (Instruction), version 1.0

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# Table of Contents

# 1 Introduction

## 1.1 Purpose and Scope

This detailed clinical model (DCM) specification forms part of a suite of data specifications that the National E-Health Transition Authority (NEHTA) 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 NEHTA and to realise the benefits derived from Level 4 (semantic) interoperability[1] in the Australian healthcare setting.

NEHTA values your questions and comments about this document. Please direct your questions or feedback to *help@nehta.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.

It is reasonably technical in nature and expects the audience to be familiar with the language of health data specification and have some familiarity with health information standards and specifications. Definitions and examples are provided to clarify relevant terminology usage and intent.

## 1.3 Background

There are several e-health priority areas to be addressed by NEHTA specifications. One area of priority is identification of the data to be communicated and its structure. NEHTA is 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 jurisdiction and clinician identified priorities;
- Specifically to suit the Australian model for a shared electronic health record (EHR);
- To define collections of related information, e.g. event summaries, data groups, data elements;
- To allow for expansion and extension as electronic systems mature;
- So they are human readable (with information enhanced by the hierarchical structure);
- Incorporating clinical examples of use to enhance utility and adoption; and
- To provide a set of clinical terminologies, specific to the requirements of the Australian healthcare system.

While the Personally Controlled Electronic Health Record (PCEHR) system is referred to in these documents, the implementation of the PCEHR system is not dealt with here.

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

# 1.4 Terminology

NEHTA, through the National Clinical Terminology and Information Service (NCTIS), 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.

The Systematized Nomenclature of Medicine - Clinical Terms (SNOMED CT) has been recommended by NEHTA and endorsed by the Australian, state and territory governments as the preferred clinical terminology for Australia, and is now freely available for e-health software developers to use in their Australian products under International Health Terminology Standards Development Organisation (IHTSDO) licensing arrangements.

While NEHTA's achievement of a national standard clinical terminology is based on SNOMED CT as the foundational resource, local variations and customisation of terms relevant to the Australian healthcare sector will be incorporated. SNOMED CT Australian Release (SNOMED CT-AU) is the Australian extension to SNOMED CT; the integrated national release of SNOMED CT for implementation in Australian deployed clinical IT systems. NEHTA is also developing the Australian Medicines Terminology (AMT) as the designated clinical terminology for medicines available in Australia. The AMT will provide a consistent approach to the identification and naming of medicines, to support medicines management and activity across the Australian healthcare domain. The AMT will be integrated with SNOMED CT-AU in the near 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 and complement the SNOMED CT concept model. For further information regarding terminology and the development of reference sets please visit http://www.nehta.gov.au/our-work/clinical-terminology and direct your questions or feedback to *help@nehta.gov.au*.

# 2 Clinical Synopsis Detailed Clinical Model

This chapter describes version 4.3 of the *Clinical Synopsis* Detailed Clinical Model (DCM).

## 2.1 Purpose

A clinician-entered clinical synopsis contains summary information or comments about the clinical management of the subject of care, and the prognosis of problems or diagnoses identified during the healthcare encounter. It may also include health-related information pertinent to the subject of care, and a clinical interpretation of relevant investigations and observations performed on the subject of care (including pathology and diagnostic imaging).

A clinical synopsis entered by the subject of care or their carer contains information such as reporting on one or more health events, summaries of health issues and assessments of health problems. Health events include blood pressure measurements, descriptions of instances of adverse reactions to food and reflections on mood.

## 2.2 Use

When used by a healthcare provider, clinical synopsis is used to describe additional information, including clinical interpretation of the condition or tests, the subject of care's understanding of the healthcare event, and other relevant clinical details not captured by other structured or unstructured information components pertinent to that healthcare event.

When used by the subject of care or a nominated representative (including carer), clinical synopsis is used to provide information such as descriptions of health events, summaries of health issues, and assessments of health problems as perceived by the subject of care or a nominated representative.

## 2.3 Misuse

Using when more specialised data components are available.

## 2.4 UML Class Diagrams

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.

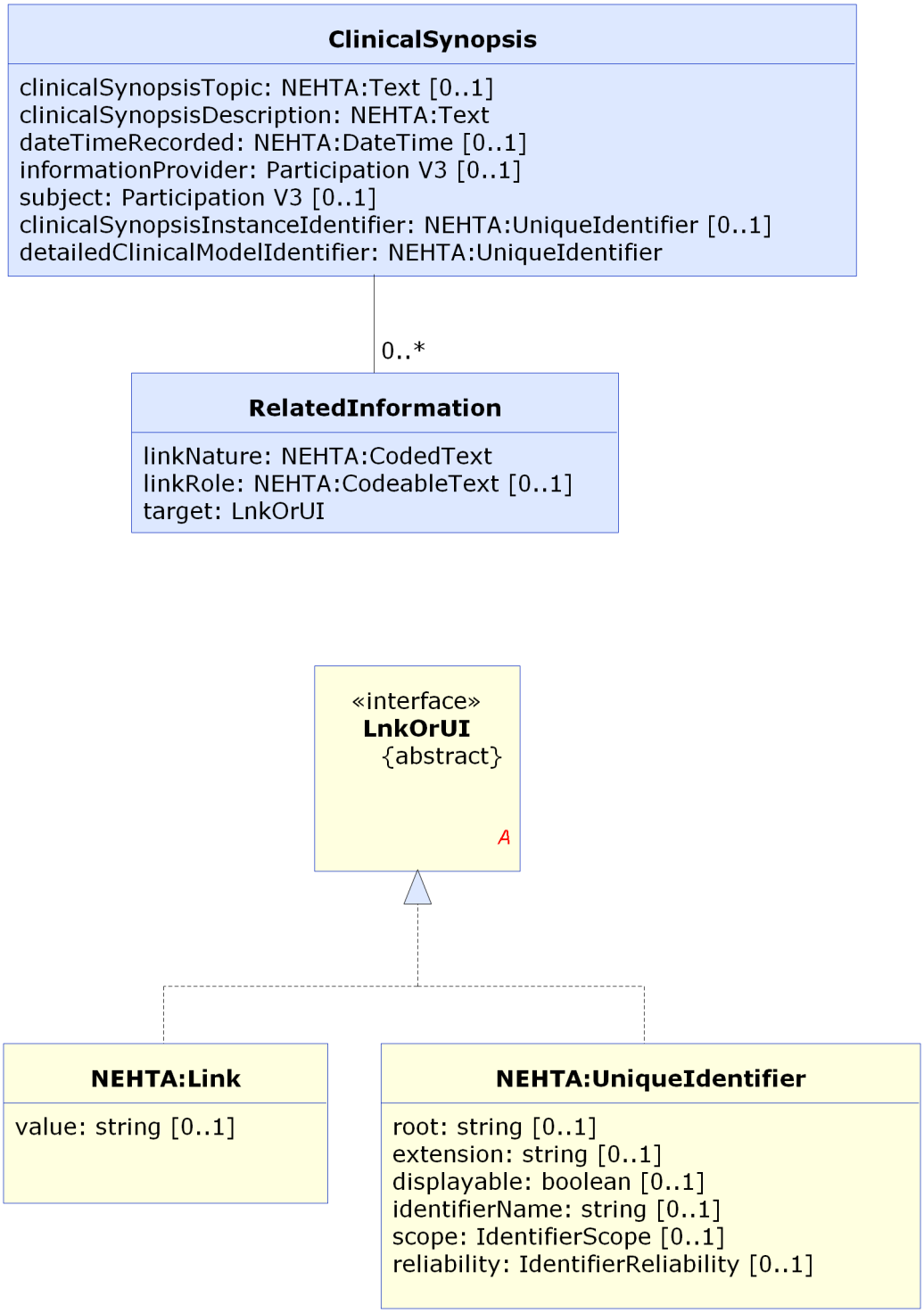


**Figure 2.1. Clinical Synopsis**

# 2.5 CLINICAL SYNOPSIS

## Identification

| | |
|---|---|
| **Label** | CLINICAL SYNOPSIS |
| **Metadata Type** | Data Group |
| **Identifier** | DG-15513 |
| **OID** | 1.2.36.1.2001.1001.101.102.15513 |

## Definition

| | |
|---|---|
| **Definition** | Summary information or comments about the clinical management of the patient, and the prognosis of diagnoses or problems identified during the healthcare encounter. It may also include health-related information pertinent to the patient, and a clinical interpretation of relevant investigations and observations performed on the patient (including pathology and diagnostic imaging). |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Clinical Comment<br>Clinical Note<br>Clinical Summary<br>Clinical Management Summary |
| **Scope** | Narrative information is captured or entered here by a healthcare provider from the focus of a healthcare provider, carer, subject of care or others unrelated to the subject of care. |
| **Scope Source** | NEHTA |
| **Notes** | Used by the healthcare provider to describe additional information, such as interpretation and the subject of care's understanding of the healthcare event, which is not captured by other structured or unstructured information components pertinent to that healthcare event. |

## Usage

| | |
|---|---|
| **Misuse** | Do not use in place of other individual data items. |

# 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.

| | | | |
|---|---|---|---|
| | CLINICAL SYNOPSIS | | |
| | T | Clinical Synopsis Topic | 0..1 |
| | T | Clinical Synopsis Description | 1..1 |

| | | | | |
|---|---|---|---|---|
| | | DateTime Recorded | | 0..1 |
| | | INFORMATION PROVIDER | | 0..1 |
| | | SUBJECT | | 0..1 |
| | | Clinical Synopsis Instance Identifier | | 0..1 |
| | | RELATED INFORMATION | | 0..* |
| | | | Link Nature | 1..1 |
| | | | Link Role | 0..1 |
| | | | Target | 1..1 |
| | | Detailed Clinical Model Identifier | | 1..1 |

# 2.6 Clinical Synopsis Topic

## Identification

| | |
|---|---|
| **Label** | Clinical Synopsis Topic |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16673 |
| **OID** | 1.2.36.1.2001.1001.101.103.16673 |

## Definition

| | |
|---|---|
| **Definition** | The title or topic of the clinical synopsis. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | Topic of the clinical description about the subject of care and the healthcare event or encounter. The topic enables the organisation of the healthcare provider's description or the subject of care's interpretation of the health event or encounter. |
| **Context Source** | NEHTA |
| **Notes** | Possible uses include being a title to identify the synopsis in a list of synopses, being a summary to provide a short precis of the synopsis, and being a topic to classify the content of the synopsis. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) My Diabetes:<br>2) Diagnosis:<br>3) My Blood Pressure: |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..1 |

# 2.7 Clinical Synopsis Description

## Identification

| | |
|---|---|
| **Label** | Clinical Synopsis Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-15582 |
| **OID** | 1.2.36.1.2001.1001.101.103.15582 |

## Definition

| | |
|---|---|
| **Definition** | Short description, overview or summary of a clinical event and its reasons. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Clinical Summary Description |
| **Context** | Provides concise narrative about the subject of care and the healthcare event or encounter. It may include the healthcare provider's interpretation (meta-observation) and the subject of care's understanding of the healthcare event that complements other structured or unstructured information captured or communicated about the health event or encounter. |
| **Context Source** | NEHTA |
| **Notes** | The description may include a summary of the issues or problems, management strategies, outcomes or progress, and possible prognosis. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) Admitted for elective bronchoscopy for assessment of left lingular and bibasal pneumonia. No focal endobronchial pathology identified. No evidence of malignancy and no pathogens isolated on bronchial brushings and washings.<br>2) 3/52 ago involved in a rear end motor vehicle accident, mid-velocity impact; complaining of neck pain, dizziness, nausea and difficulties concentrating. Disturbed sleep. No spinal cord signs. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 1..1 |

# 2.8 DateTime Recorded

## Identification

| | |
|---|---|
| **Label** | DateTime Recorded |
| **Metadata Type** | Data Element |
| **Identifier** | DE-15511 |
| **OID** | 1.2.36.1.2001.1001.101.103.15511 |

## Definition

| | |
|---|---|
| **Definition** | The date, or date and time, when the clinical synopsis recording was made. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..1 |

# 2.9 INFORMATION PROVIDER

## Identification

| | |
|---|---|
| **Label** | INFORMATION PROVIDER |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |
| **External Identifier** | AS4846-2006 |

## Definition

| | |
|---|---|
| **Definition** | Details pertinent to the identification of a healthcare provider individual who is reporting the clinical synopsis information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..1 |

# 2.10 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual about whom the clinical synopsis was written. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..1 |

# 2.11 Clinical Synopsis Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Clinical Synopsis Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16706 |
| **OID** | 1.2.36.1.2001.1001.101.103.16706 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Clinical Synopsis* evaluation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..1 |

# 2.12 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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. 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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
|  | Link Nature | 1..1 |
|  | Link Role | 0..1 |
|  | Target | 1..1 |

# 2.13 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 2.14 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 2.15 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** | 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** | NEHTA |
| **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.<br><br>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<br><br>2) suggests<br><br>3) endorses<br><br>4) evidence for<br><br>5) outcome<br><br>6) is documented by<br><br>7) excerpts |

# Relationships

**Parents**

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

# 2.16 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 2.17 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 2.18 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.15513 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | CLINICAL SYNOPSIS | 1..1 |

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# 3 Recommendation Detailed Clinical Model

This chapter describes version 2.2 of the *Recommendations (Instruction)* Detailed Clinical Model (DCM).

## 3.1 Purpose

To capture a recommendation, such as from a referee or specialist to a recipient healthcare provider, regarding the management of the patient.

## 3.2 Use

Use in a letter from a specialist to the referring healthcare provider.

## 3.3 UML Class Diagrams

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.

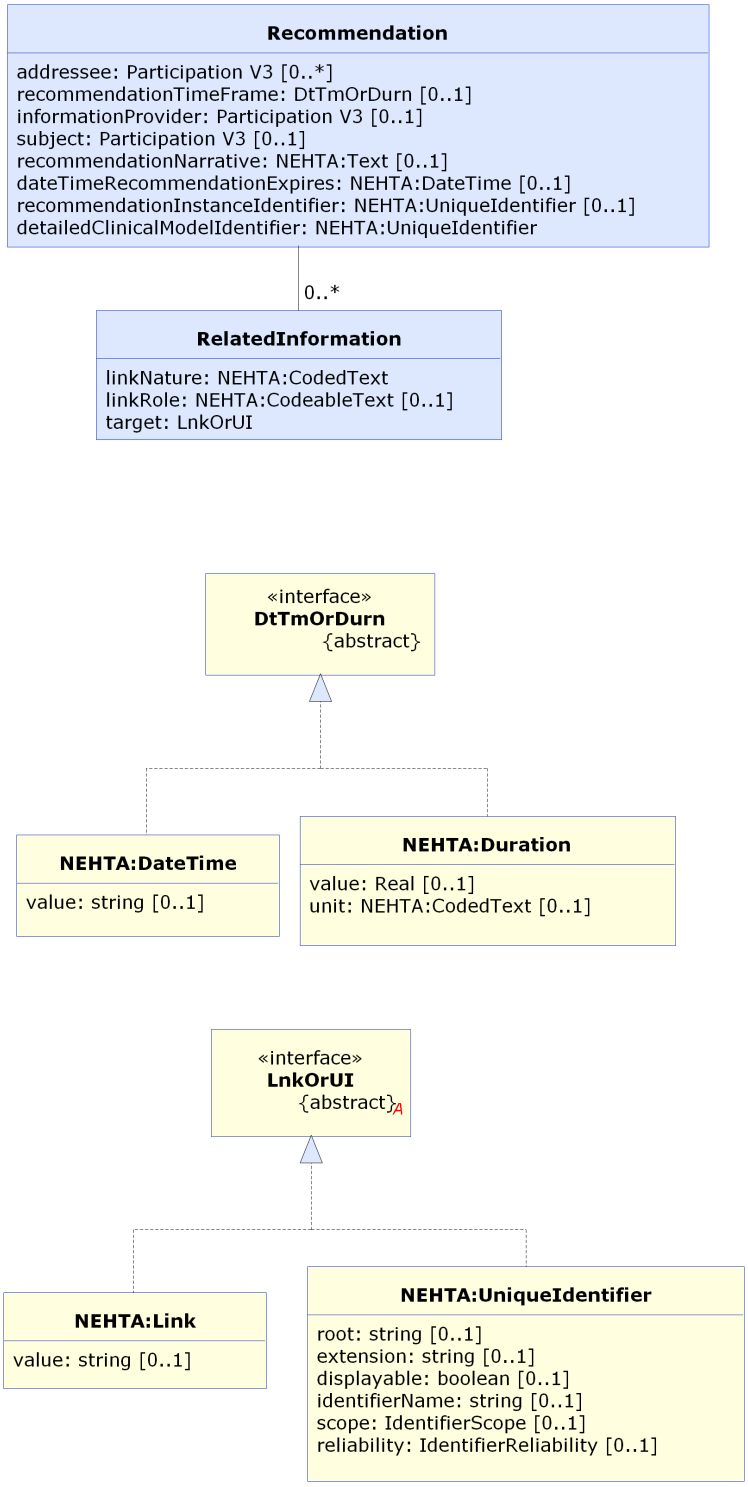


**Figure 3.1. Recommendations**

# 3.4 RECOMMENDATION

## Identification

| | |
|---|---|
| **Label** | RECOMMENDATION |
| **Metadata Type** | Data Group |
| **Identifier** | DG-20116 |
| **OID** | 1.2.36.1.2001.1001.101.102.20116 |

## Definition

| | |
|---|---|
| **Definition** | Recommendation by a clinician to a recipient healthcare provider regarding the management of the patient. |
| **Definition Source** | NEHTA |
| **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.

| | | | |
|---|---|---|---|
| RECOMMENDATION | | | |
| | ADDRESSEE | | 0..* |
| | Time Frame (Recommendation Time Frame) | | 0..1 |
| | INFORMATION PROVIDER | | 0..1 |
| | SUBJECT | | 0..1 |
| | Recommendation Narrative | | 0..1 |
| | DateTime Recommendation Expires | | 0..1 |
| | Recommendation 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 ADDRESSEE

## Identification

| | |
|---|---|
| **Label** | ADDRESSEE |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The intended recipient of the recommendation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This is a person and the types of addressees include:<br>• the clinician; and<br>• a healthcare provider.<br>A recommendation is intended to be for a clinician, but, as the individual may be unknown, it can be addressed to an organisation. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Recommendation Addressee”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or an ORGANISATION. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 0..* |

# 3.6 Recommendation Time Frame

## Identification

| | |
|---|---|
| **Label** | Time Frame |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16586 |
| **OID** | 1.2.36.1.2001.1001.101.103.16586 |

## Definition

| | |
|---|---|
| **Definition** | The time or time period for which the recommendation applies. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime<br>Duration |

## 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) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.7 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** | Details pertinent to the identification of the source of the information about the recommendation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.8 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual upon whom the recommendation is (to be) performed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.9 Recommendation Narrative

## Identification

| | |
|---|---|
| **Label** | Recommendation Narrative |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16587 |
| **OID** | 1.2.36.1.2001.1001.101.103.16587 |

## Definition

| | |
|---|---|
| **Definition** | A textual narrative describing what the recommendation instruction is about. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This could include a recommendation regarding when the subject of care should see the specialist again/discharge from the specialist's care, changes initiation of treatment or recommended investigations. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) Monitor diabetic status, renal function and digoxin levels.<br>2) Review cardiac status. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.10 DateTime Recommendation Expires

## Identification

| | |
|---|---|
| **Label** | DateTime Recommendation Expires |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16588 |
| **OID** | 1.2.36.1.2001.1001.101.103.16588 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time after which the recommendation instruction is no longer effective or in force. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.11 Recommendation Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Recommendation Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16707 |
| **OID** | 1.2.36.1.2001.1001.101.103.16707 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Recommendation* instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 0..1 |

# 3.12 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
|  | RECOMMENDATION | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
|  | Link Nature | 1..1 |

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

# 3.13 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 3.14 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 3.15 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** | 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** | NEHTA |
| **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.<br><br>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<br>2) suggests<br>3) endorses<br>4) evidence for<br>5) outcome<br>6) is documented by<br>7) excerpts |

# Relationships

**Parents**

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

# 3.16 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 3.17 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 3.18 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.20116 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | RECOMMENDATION | 1..1 |

# 4 Exclusion Statement Detailed Clinical Model

This chapter describes version 1.2 of the *Exclusion Statement* Detailed Clinical Model (DCM).

## 4.1 Purpose

To positively record the absence or exclusion of any clinical findings or evaluations within the health record.

## 4.2 Use

Use to record the positive exclusion or absence of clinical findings or evaluations within the health record. This Detailed Clinical Model (DCM) avoids the need to use terminology to express negation about any item within the health record.

Specialisations of this DCM will capture specific and more detailed information about common exclusions, such as problems or diagnoses. This DCM has been deliberately kept simple and open in order to capture simple statements about anything that may be usefully recorded as absent or excluded within the health record.

## 4.3 Misuse

Do not use to record the exclusion or absence of adverse reactions, problems, diagnoses or interventions (procedures) - use specific specialisations of this DCM in these situations.

## 4.4 UML Class Diagrams

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.

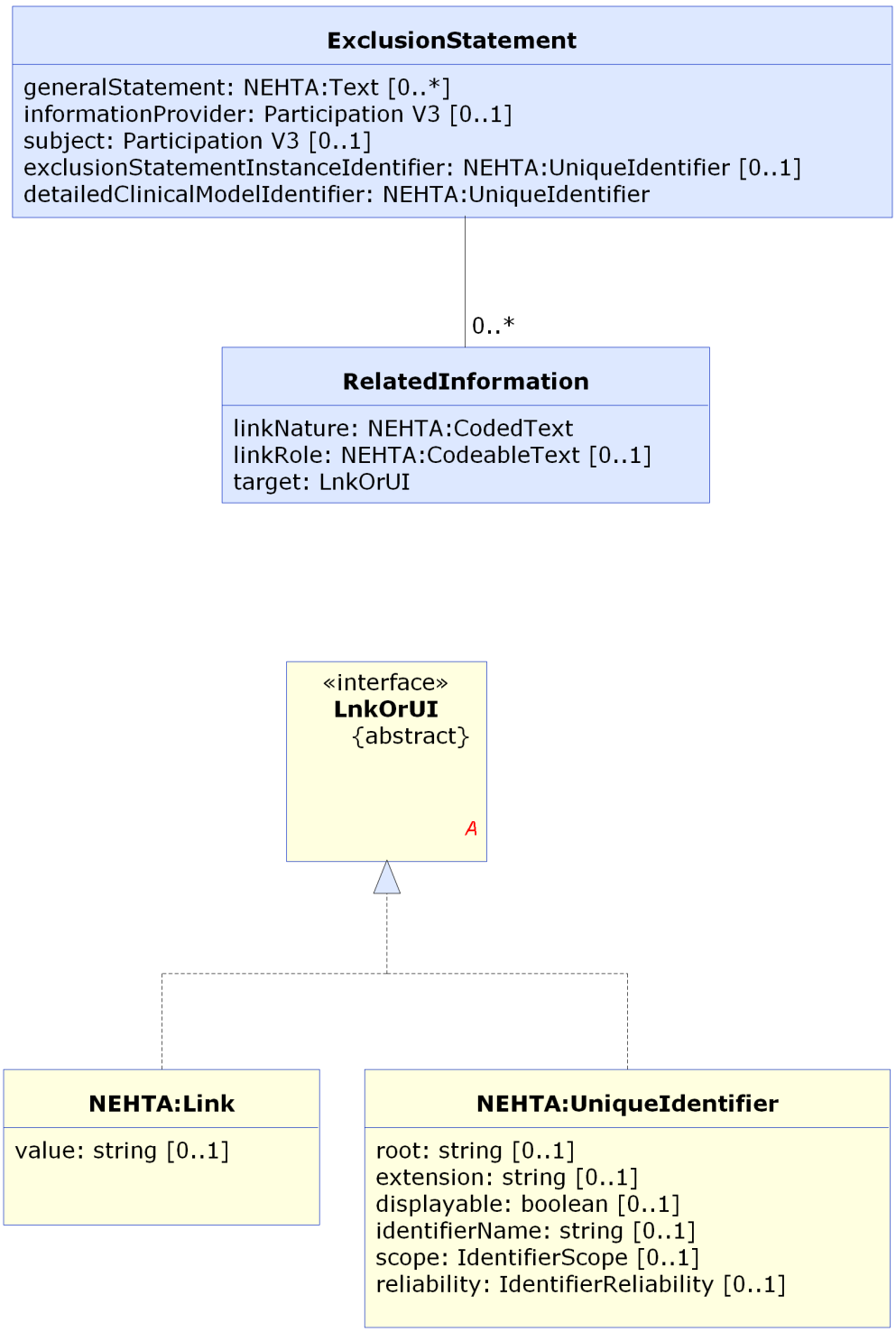


**Figure 4.1. Exclusion Statement**

# 4.5 EXCLUSION STATEMENT

## Identification

| | |
|---|---|
| **Label** | EXCLUSION STATEMENT |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16134 |
| **OID** | 1.2.36.1.2001.1001.101.102.16134 |

## Definition

| | |
|---|---|
| **Definition** | Statements that need to be positively asserted about the absence or exclusion of data values. |
| **Definition Source** | openEHR Foundation |
| **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.

| | | | |
|---|---|---|---|
| EXCLUSION STATEMENT | | | |
| | General Statement | | 0..* |
| | INFORMATION PROVIDER | | 0..1 |
| | SUBJECT | | 0..1 |
| | Exclusion Statement Instance Identifier | | 0..1 |
| | RELATED INFORMATION | | 0..* |
| | | Link Nature | 1..1 |
| | | Link Role | 0..1 |
| | | Target | 1..1 |
| | Detailed Clinical Model Identifier | | 1..1 |

# 4.6 General Statement

## Identification

| | |
|---|---|
| **Label** | General Statement |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16135 |
| **OID** | 1.2.36.1.2001.1001.101.103.16135 |

## Definition

| | |
|---|---|
| **Definition** | A general statement about the absence or exclusion of data values. |
| **Definition Source** | openEHR Foundation |
| **Synonymous Names** | |
| **Context** | Any information required to be explicitly recorded within the record as being absent or excluded. |
| **Context Source** | openEHR Foundation |
| **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) |
|---|---|---|
|  | EXCLUSION STATEMENT | 0..* |

# 4.7 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** | The party who was the source of the information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the author of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | EXCLUSION STATEMENT | 0..1 |

# 4.8 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual about whom the exclusion statement information is being recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | EXCLUSION STATEMENT | 0..1 |

# 4.9 Exclusion Statement Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Exclusion Statement Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16708 |
| **OID** | 1.2.36.1.2001.1001.101.103.16708 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of an *Exclusion Statement* evaluation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | EXCLUSION STATEMENT | 0..1 |

# 4.10 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
| | EXCLUSION STATEMENT | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
| | Link Nature | 1..1 |

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

# 4.11 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 4.12 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 4.13 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** | 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** | NEHTA |
| **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.<br><br>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<br>2) suggests<br>3) endorses<br>4) evidence for<br>5) outcome<br>6) is documented by<br>7) excerpts |

# Relationships

**Parents**

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

# 4.14 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 4.15 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 4.16 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.16134 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | EXCLUSION STATEMENT | 1..1 |

# 5 Referral Detail Detailed Clinical Model

This chapter describes version 1.2 of the *Referral Detail* Detailed Clinical Model (DCM).

## 5.1 Purpose

Detailed information about the clinical referral.

## 5.2 UML Class Diagrams

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.

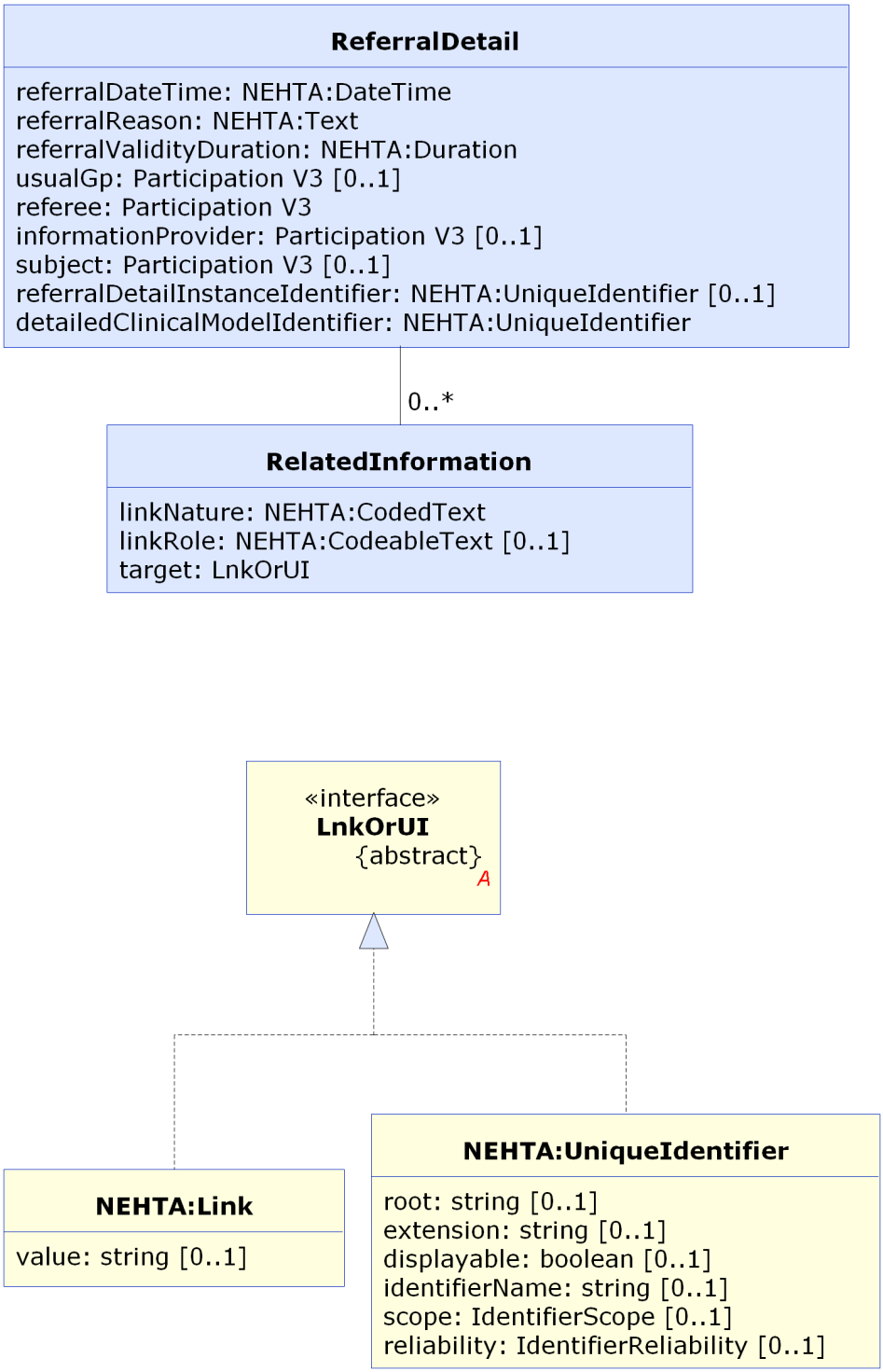


**Figure 5.1. Referral Detail**

# 5.3 REFERRAL DETAIL

## Identification

| | |
|---|---|
| **Label** | REFERRAL DETAIL |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16347 |
| **OID** | 1.2.36.1.2001.1001.101.102.16347 |

## Definition

| | |
|---|---|
| **Definition** | Specific information about the clinical referral. |
| **Definition Source** | NEHTA |
| **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.

| | | | |
|---|---|---|---|
| | REFERRAL DETAIL | | |
| | | Referral DateTime | 1..1 |
| | | Referral Reason | 1..1 |
| | | Referral Validity Duration | 1..1 |
| | | USUAL GP | 0..1 |
| | | REFEREE | 1..1 |
| | | INFORMATION PROVIDER | 0..1 |
| | | SUBJECT | 0..1 |
| | | Referral Detail Instance Identifier | 0..1 |
| | | RELATED INFORMATION | 0..* |
| | | Link Nature | 1..1 |

| | | | | |
|---|---|---|---|---|
| | |  | Link Role | 0..1 |
| | |  | Target | 1..1 |
| |  | Detailed Clinical Model Identifier | | 1..1 |

# 5.4 Referral DateTime

## Identification

| | |
|---|---|
| **Label** | Referral DateTime |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16620 |
| **OID** | 1.2.36.1.2001.1001.101.103.16620 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time when the referral document was sent. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

| | |
|---|---|
| **Conditions of Use** | The exact referral dates **SHALL** be used. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | Please see DateTime in Appendix B, *Specification Guide for Use* for examples and usage information on specifying a date or time (or both). |
| **Misuse** | Entering approximate dates when an exact date is available. |

# Relationships

### Parents

| Data Type | Name | **Occurrences** (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 1..1 |

# 5.5 Referral Reason

## Identification

| | |
|---|---|
| **Label** | Referral Reason |
| **Metadata Type** | Data Element |
| **Identifier** | DE-20118 |
| **OID** | 1.2.36.1.2001.1001.101.103.20118 |

## Definition

| | |
|---|---|
| **Definition** | A narrative of the reasons for the referral, including the presenting problems, clinical presentation, etc. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | The *Referral Reason* **SHALL** be used to communicate to the referee information about the reasons for the referral, which may include information about the problems or issues experienced by the subject of care, as identified by the referrer. |
| **Context Source** | NEHTA |
| **Notes** | This data element complements the structured information contained in the referral specification. It is used by the referrer to communicate the reasons for referral and any synopsis of clinical information about the subject of care that is relevant to the referral, such as chief complaints, presenting problems and key physical examination findings, etc.<br><br>The content in this data element may vary from a single line in simple cases to many paragraphs for more complex circumstances. |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) To rule out ischaemic heart disease.<br><br>2) To rule out organic brain lesions.<br><br>3) Thank you for seeing this 14-year-old schoolboy who fell whilst playing football at school yesterday. On examination he has a swollen painful R ankle and cannot weight bear on it today. I suspect he has a fracture of his right tibia and fibula.<br><br>4) Thank you for seeing this 43-year-old lady who has had 2 episodes of cholecystitis in the last month. She is currently well.<br><br>Ultrasound of her abdomen done at the Public Hospital Emergency Department shows she has gall stones. She has private cover and wishes to see you to consider cholecystectomy at the Private Hospital. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 1..1 |

# 5.6 Referral Validity Duration

## Identification

| | |
|---|---|
| **Label** | Referral Validity Duration |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16622 |
| **OID** | 1.2.36.1.2001.1001.101.103.16622 |

## Definition

| | |
|---|---|
| **Definition** | The length of time the referral is valid from the date of the first subject of care and specialist encounter. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | *Referral Validity Duration* captures the valid duration of the referral that may be constrained by, for example, Medicare funding policy. |
| **Data Type** | Duration |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 1..1 |

# 5.7 USUAL GP

## Identification

| | |
|---|---|
| **Label** | USUAL GP |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | A healthcare provider (person or organisation) nominated by the subject of care as being primarily responsible for their ongoing healthcare. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | In general, this is the healthcare provider nominated by the subject of care at the time as being their main primary healthcare provider or the primary healthcare provider with whom communications should be conducted for the purposes of the healthcare event in question. As such, it is not necessarily the subject of care's "usual GP"; indeed, it may not be a GP at all. However, the *current* scope is limited to the primary healthcare provider who is deemed to be the subject of care's usual GP. |
| **Scope Source** | NEHTA |
| **Notes** | This is a person or an organisation. Examples include:<br>• a clinician;<br>• a healthcare provider; and<br>• a GP practice. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>Additional obligation and occurrence constraints:<br>• Participation Period is **PROHIBITED**.<br>• LOCATION OF PARTICIPATION is **PROHIBITED**.<br>• Entity Identifier is **ESSENTIAL**.<br>• Relationship to Subject of Care is **PROHIBITED**.<br>• DEMOGRAPHIC DATA is **PROHIBITED**.<br>• ENTITLEMENT is **PROHIBITED**. |

| | |
|---|---|
| | • Qualifications is **PROHIBITED**.<br><br>Other additional constraints when the *Usual GP* is a person (PERSON OR ORGANISATION OR DEVICE is instantiated as a PERSON):<br><br>• EMPLOYMENT DETAIL is **ESSENTIAL**.<br><br>• Entity Identifier is **ESSENTIAL**.<br><br>• EMPLOYER ORGANISATION is **ESSENTIAL**.<br><br>• EMPLOYER ORGANISATION.Entity Identifier is **ESSENTIAL**.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Usual GP”.<br><br>• Role **SHOULD** have a value chosen from *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]*. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and is publicly available **MAY** be used.<br><br>• The value of one Entity Identifier **SHALL** be an Australian HPI-I.<br><br>• The value of one EMPLOYER ORGANISATION.Entity Identifier **SHALL** be an Australian HPI-O.<br><br>• AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON.<br><br>Other additional constraints when the *Usual GP* is an Organisation (PERSON OR ORGANISATION OR DEVICE is instantiated as an ORGANISATION):<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Usual GP”.<br><br>• Role **SHALL** have a value representing the type of Facility e.g. Clinic.<br><br>• The value of one Entity Identifier **SHALL** be an Australian HPI-O.<br><br>• AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. |
| **Conditions of Use Source** | NEHTA |
| **Misuse** | This data group **SHALL NOT** be recorded if the *Usual GP* is same as the “document author/referring GP”. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 0..1 |

# 5.8 REFEREE

## Identification

| | |
|---|---|
| **Label** | REFEREE |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | The specialist to whom the subject of care is being referred. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Types of sources include:<br>• a clinician; and<br>• a healthcare provider. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>Additional obligation and occurrence constraints:<br>• Participation Period is **PROHIBITED**.<br>• LOCATION OF PARTICIPATION is **PROHIBITED**.<br>• Entity Identifier is **ESSENTIAL**.<br>• ADDRESS is **ESSENTIAL**.<br>• ELECTRONIC COMMUNICATION DETAIL is **ESSENTIAL**.<br>• Relationship to Subject of Care is **PROHIBITED**.<br>• DEMOGRAPHIC DATA is **PROHIBITED**.<br>• ENTITLEMENT is **PROHIBITED**.<br>• Qualifications is **PROHIBITED**.<br><br>Other additional constraints when the Referee is a person (PERSON OR ORGANISATION OR DEVICE is instantiated as a PERSON):<br>• EMPLOYMENT DETAIL is **ESSENTIAL**. |

| | |
|---|---|
| | • Participation Type **SHALL** have an implementation-specific value equivalent to “Referee”.<br>• Role **SHOULD** have a value chosen from *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]*. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and is publicly available **MAY** be used.<br>• The value of one Entity Identifier **SHALL** be an Australian HPI-I.<br>• The value of one EMPLOYER ORGANISATION.Entity Identifier **SHALL** be an Australian HPI-O.<br>• AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON.<br>Other additional constraints when the Referee is an Organisation (PERSON OR ORGANISATION OR DEVICE is instantiated as an ORGANISATION):<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Referee”.<br>• Role **SHALL** have a value representing the type of Facility e.g. Clinic.<br>• The value of one Entity Identifier **SHALL** be an Australian HPI-O.<br>• AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 1..1 |

# 5.9 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** | Details pertinent to the identification of the source of the information about the referral. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to "Information Provider".<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 0..1 |

# 5.10 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual who is the subject of care of the referral. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the procedure is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 0..1 |

# 5.11 Referral Detail Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Referral Detail Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16717 |
| **OID** | 1.2.36.1.2001.1001.101.103.16717 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Referral Detail* administration entry. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 0..1 |

# 5.12 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
| | REFERRAL DETAIL | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
| | Link Nature | 1..1 |

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

# 5.13 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 5.14 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 5.15 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** | 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** | NEHTA |
| **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.<br><br>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<br>2) suggests<br>3) endorses<br>4) evidence for<br>5) outcome<br>6) is documented by<br>7) excerpts |

# Relationships

**Parents**

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

# 5.16 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 5.17 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 5.18 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.16347 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REFERRAL DETAIL | 1..1 |

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# 6 Requested Service Detailed Clinical Model

This chapter describes version 5.0 of the *Requested Service (Action)* Detailed Clinical Model (DCM).

## 6.1 Purpose

Describe the types of service requested for, or provided to, the subject of care. If the service provision has not been confirmed, then the service date or provider (or both) may not be recorded.

## 6.2 Misuse

Do not use to specify medication prescriptions.

## 6.3 UML Class Diagrams

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.

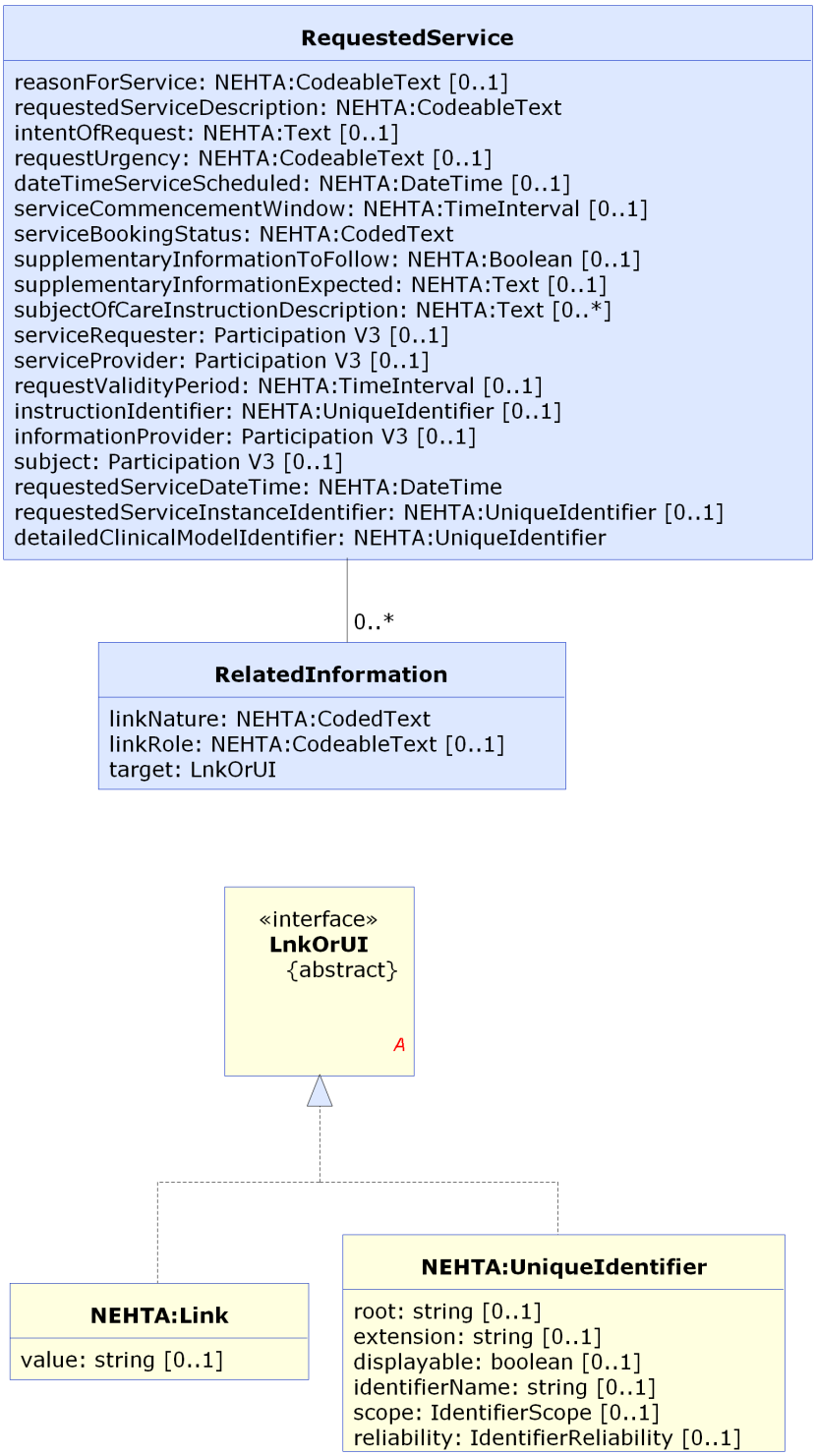


**Figure 6.1. Requested Service**

# 6.4 REQUESTED SERVICE

## Identification

| | |
|---|---|
| **Label** | REQUESTED SERVICE |
| **Metadata Type** | Data Group |
| **Identifier** | DG-20158 |
| **OID** | 1.2.36.1.2001.1001.101.102.20158 |

## Definition

| | |
|---|---|
| **Definition** | Details of the types of service requested for, or provided to, the subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Arranged Service |
| **Notes** | This item does not include details of specific medication prescriptions or diagnostic test orders made by current providers (at the time of discharge).<br><br>If the service provision has not been confirmed then recording the service date and provider is optional. |

## Usage

| | |
|---|---|
| **Misuse** | Use to specify medication prescriptions or diagnostic test requests. |

# 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.

| | | | |
|---|---|---|---|
| | REQUESTED SERVICE | | |
| | | Reason for Service | 0..1 |
| | | Requested Service Description | 1..1 |
| | | Intent of Request | 0..1 |
| | | Request Urgency | 0..1 |
| | | DateTime Service Scheduled | 0..1 |
| | | Service Commencement Window | 0..1 |

| | | | | |
|---|---|---|---|---|
| | | Service Booking Status | | 1..1 |
| | | Supplementary Information to Follow | | 0..1 |
| | | Supplementary Information Expected | | 0..1 |
| | | Subject of Care Instruction Description | | 0..* |
| | | SERVICE REQUESTER | | 0..1 |
| | | SERVICE PROVIDER | | 0..1 |
| | | Request Validity Period | | 0..1 |
| | | Request Identifier (Instruction Identifier) | | 0..1 |
| | | INFORMATION PROVIDER | | 0..1 |
| | | SUBJECT | | 0..1 |
| | | Requested Service DateTime | | 1..1 |
| | | Requested 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 |

# 6.5 Reason for Service

## Identification

| | |
|---|---|
| **Label** | Reason for Service |
| **Metadata Type** | Data Element |
| **Identifier** | DE-20172 |
| **OID** | 1.2.36.1.2001.1001.101.103.20172 |

## Definition

| | |
|---|---|
| **Definition** | A clinical reason for the service being requested or received. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Reason for Requesting Service<br>Service Reason |
| **Context** | In the context of a discharge summary, this data component captures information about reasons for requesting services (by the healthcare provider) to be provided to the subject of care after discharge from the healthcare facility. |
| **Context Source** | NEHTA |
| **Notes** | Captures information about reasons for requesting admission if the subject of care was referred to the organisation, or for requesting services (by the healthcare provider) to be provided to the subject of care after discharge from the healthcare facility. |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>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[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## 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) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

[1] http://www.hl7.org/oid/index.cfm

# 6.6 Requested Service Description

## Identification

| | |
|---|---|
| **Label** | Requested Service Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-20117 |
| **OID** | 1.2.36.1.2001.1001.101.103.20117 |

## Definition

| | |
|---|---|
| **Definition** | Describes the service arranged for, or provided to, the subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Service Requested<br>Arranged Service Description |
| **Context** | For use in a healthcare setting.<br><br>Used to identify diagnostic procedures, clinical procedures or clinical management requested by the healthcare provider to be undertaken on, or provided to, the subject of care. |
| **Context Source** | NEHTA |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>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[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1) Dialysis<br><br>2) Adjustment of heart failure/hypertensive medications<br><br>3) Adjust INR to therapeutic range<br><br>4) Elective orthopaedic surgery for TKR<br><br>5) Ultrasound pelvis<br><br>6) Full blood count |

[2] http://www.hl7.org/oid/index.cfm

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 1..1 |

# 6.7 Intent of Request

## Identification

| | |
|---|---|
| **Label** | Intent of Request |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16126 |
| **OID** | 1.2.36.1.2001.1001.101.103.16126 |

## Definition

| | |
|---|---|
| **Definition** | The purpose for which the referrer made the request. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.8 Request Urgency

## Identification

| | |
|---|---|
| **Label** | Request Urgency |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16128 |
| **OID** | 1.2.36.1.2001.1001.101.103.16128 |

## Definition

| | |
|---|---|
| **Definition** | An assessment of the criticality of a rapid response. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>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[3] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

| | |
|---|---|
| **Examples** | 1) Emergency<br><br>2) Urgent<br><br>3) Routine |

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

[3] http://www.hl7.org/oid/index.cfm

# 6.9 DateTime Service Scheduled

## Identification

| | |
|---|---|
| **Label** | DateTime Service Scheduled |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16054 |
| **OID** | 1.2.36.1.2001.1001.101.103.16054 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time at which the arranged service is scheduled to be provided to the subject of care. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.10 Service Commencement Window

## Identification

| | |
|---|---|
| **Label** | Service Commencement Window |
| **Metadata Type** | Data Element |
| **Identifier** | DE-20173 |
| **OID** | 1.2.36.1.2001.1001.101.103.20173 |

## Definition

| | |
|---|---|
| **Definition** | The datetime or date range at or during which the arranged service is scheduled to be provided to the subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Service Commences |
| **Notes** | Specifies the range of time within which the requesting provider is expecting the arranged service to be provided to the subject of care. |
| **Data Type** | TimeInterval |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.11 Service Booking Status

## Identification

| | |
|---|---|
| **Label** | Service Booking Status |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16056 |
| **OID** | 1.2.36.1.2001.1001.101.103.16056 |

## Definition

| | |
|---|---|
| **Definition** | An indication of the booking status of the arranged service. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Service Booking Status Values |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 1..1 |

# 6.12 Service Booking Status Values

## Identification

| | |
|---|---|
| **Label** | Service Booking Status Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16055 |
| **OID** | 1.2.36.1.2001.1001.101.104.16055 |

## Definition

| | |
|---|---|
| **Definition** | The set of values that indicate the booking status of the arranged service. |
| **Definition Source** | NEHTA |

## Value Domain

| | | |
|---|---|---|
| **Source** | HL7 v3 CDA: Act.moodCode. | |
| **Permissible Values** | APT, Appointment | Planned act for specific time and place |
| | ARQ, Appointment Request | Request for Booking of an Appointment |
| | EVN, Event | Service actually happens or happened or is ongoing |
| | INT, Intent | Plan to perform a service |
| | PRMS, Promise | An intent to perform a service |
| | PRP, Proposal | Non-mandated intent to perform an act |
| | RQO, Request | Request or Order for a service |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | Service Booking Status | 1..1 |

# 6.13 Supplementary Information to Follow

## Identification

| | |
|---|---|
| **Label** | Supplementary Information to Follow |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16129 |
| **OID** | 1.2.36.1.2001.1001.101.103.16129 |

## Definition

| | |
|---|---|
| **Definition** | A flag indicating whether or not there will be any further information sent in support of this request. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | True indicates that additional information has been identified and will be forwarded when available e.g. incomplete pathology test results. |
| **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) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.14 Supplementary Information Expected

## Identification

| | |
|---|---|
| **Label** | Supplementary Information Expected |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16130 |
| **OID** | 1.2.36.1.2001.1001.101.103.16130 |

## Definition

| | |
|---|---|
| **Definition** | Details of the nature of supplementary information that is to follow. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) X-ray image of left ankle. |

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.15 Subject of Care Instruction Description

## Identification

| | |
|---|---|
| **Label** | Subject of Care Instruction Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10146 |
| **OID** | 1.2.36.1.2001.1001.101.103.10146 |

## Definition

| | |
|---|---|
| **Definition** | Describes the instructions, advice or information that has been given to the subject of care from a healthcare provider in relation to the requested service. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Patient Instructions |
| **Data Type** | Text |

## Usage

| | |
|---|---|
| **Examples** | 1) Bring post-op instruction materials and any old private x-rays. |

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..* |

# 6.16 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 arranges provision of a service. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Referred by Provider<br>Referred by |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix *B: Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Service Requester”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or ORGANISATION. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.17 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** | The provider (individual or organisation) that has been arranged to provide the service. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Referred to Provider<br>Referred to |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in *B: Specification Guide for Use*.<br><br>Additional obligation and occurrence constraints when the service provider is an individual (PERSON OR ORGANISATION OR DEVICE is instantiated as a PERSON):<br><br>• Participation Period is **PROHIBITED**.<br><br>• LOCATION OF PARTICIPATION is **PROHIBITED**.<br><br>• Entity Identifier is **ESSENTIAL**.<br><br>• ADDRESS is **ESSENTIAL**.<br><br>• Relationship to Subject of Care is **PROHIBITED**.<br><br>• DEMOGRAPHIC DATA is **PROHIBITED**.<br><br>• ENTITLEMENT is **PROHIBITED**.<br><br>• Qualifications is **PROHIBITED**.<br><br>Other additional constraints when the service provider is a person (PERSON OR ORGANISATION OR DEVICE is instantiated as a PERSON):<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Service Provider”.<br><br>• Role **SHOULD** have a value chosen from *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]*. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and is publicly available **MAY** be used.<br><br>• The value of one Entity Identifier **SHALL** be an Australian HPI-I. |

| | |
|---|---|
| | • AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON.<br>Additional obligation and occurrence constraints when the service provider is an organisation (PERSON OR ORGANISATION OR DEVICE is instantiated as an ORGANISATION):<br>• Entity Identifier is **ESSENTIAL**.<br>• ENTITLEMENT is **PROHIBITED**.<br>• Qualifications is **PROHIBITED**.<br>Other additional constraints when the service provider is an organisation (PERSON OR ORGANISATION OR DEVICE is instantiated as an ORGANISATION):<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Service Provider”.<br>• Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.<br>• The value of one Entity Identifier **SHALL** be an Australian HPI-O.<br>• AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | **Occurrences** (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.18 Request Validity Period

## Identification

| | |
|---|---|
| **Label** | Request Validity Period |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16132 |
| **OID** | 1.2.36.1.2001.1001.101.103.16132 |

## Definition

| | |
|---|---|
| **Definition** | The period during which the request is valid. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This may be open ended. |
| **Data Type** | TimeInterval |

## Usage

| | |
|---|---|
| **Examples** | |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.19 Instruction Identifier

## Identification

| | |
|---|---|
| **Label** | Request Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16995 |
| **OID** | 1.2.36.1.2001.1001.101.103.16995 |

## Definition

| | |
|---|---|
| **Definition** | Identifier of the causing instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.20 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** | Details pertinent to the identification of the source of the information about the service being requested or received. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.21 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual upon whom the service is (to be) performed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.22 Requested Service DateTime

## Identification

| | |
|---|---|
| **Label** | Requested Service DateTime |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16635 |
| **OID** | 1.2.36.1.2001.1001.101.103.16635 |

## Definition

| | |
|---|---|
| **Definition** | The point in time at which the *Requested Service* action is completed. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | For a request to supply a service, this is the date and, optionally, time of the request.<br><br>For supply of a service, this is the date and, optionally, time of completion of supply. |
| **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) |
|---|---|---|
|  | REQUESTED SERVICE | 1..1 |

# 6.23 Requested Service Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Requested Service Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16716 |
| **OID** | 1.2.36.1.2001.1001.101.103.16716 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Requested Service* action. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 0..1 |

# 6.24 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
|  | REQUESTED SERVICE | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
|  | Link Nature | 1..1 |

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

# 6.25 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 6.26 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 6.27 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** | 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** | NEHTA |
| **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.<br><br>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<br>2) suggests<br>3) endorses<br>4) evidence for<br>5) outcome<br>6) is documented by<br>7) excerpts |

# Relationships

**Parents**

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

# 6.28 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 6.29 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 6.30 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.20158 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | REQUESTED SERVICE | 1..1 |

# 7 Summary of Medication Entries Detailed Clinical Model

This chapter describes version 1.1 of the *Summary of Medication Entries* Detailed Clinical Model (DCM).

## 7.1 Purpose

To support summary views involving information about prescribing and dispensing.

## 7.2 Use

Use to hold a summary of information from a set of instances of Medication Instruction and Medication Action.

One use is to be a summary of one prescription (with or without repeats) and the dispense records associated with it.

Another use is to be a summary of several prescriptions for the one therapeutic good (with or without repeats) and their associated dispense records.

## 7.3 UML Class Diagrams

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.

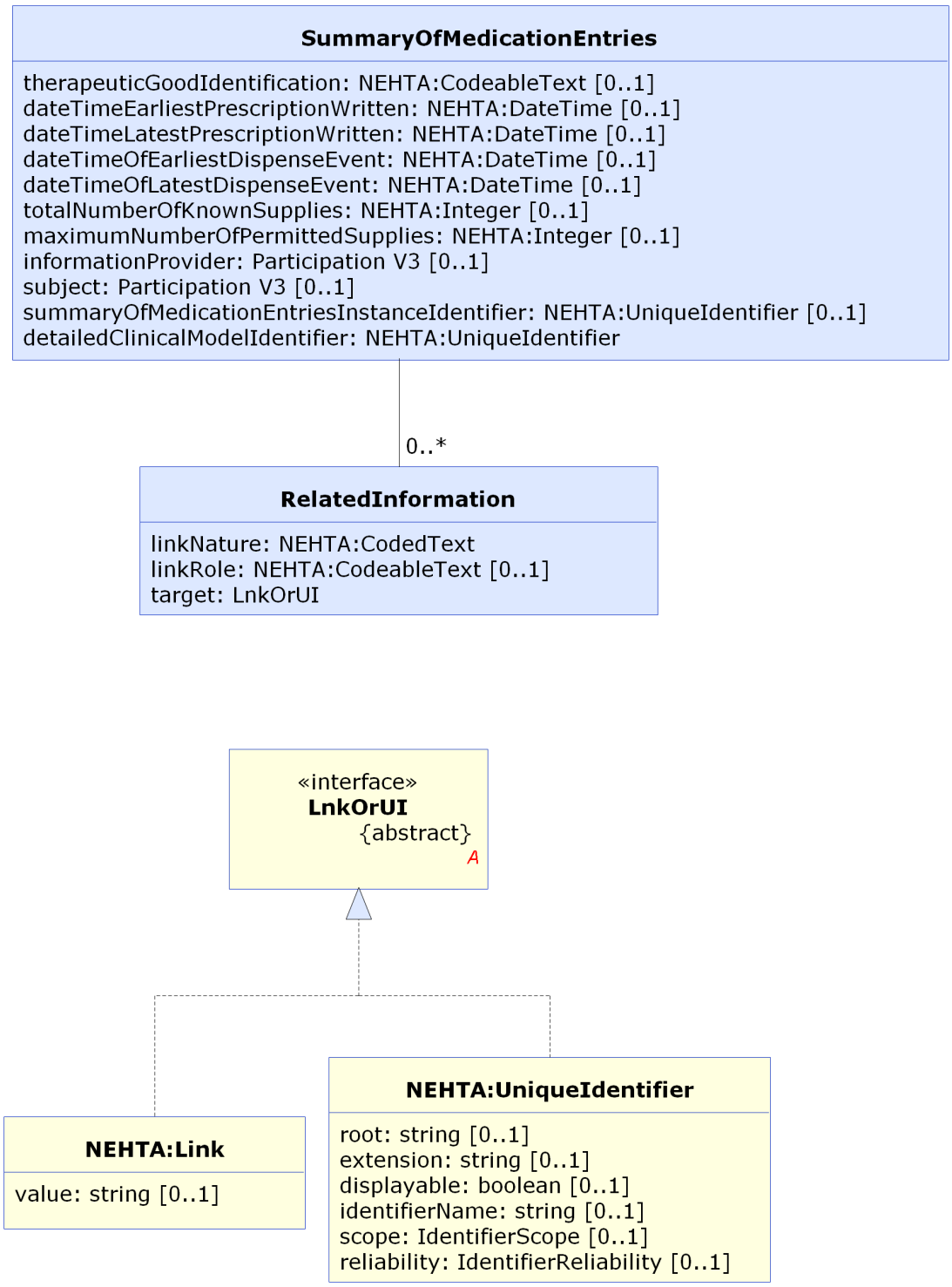


**Figure 7.1. Summary Of Medication Entries**

# 7.4 SUMMARY OF MEDICATION ENTRIES

## Identification

| | |
|---|---|
| **Label** | SUMMARY OF MEDICATION ENTRIES |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16798 |
| **OID** | 1.2.36.1.2001.1001.101.102.16798 |

## Definition

| | |
|---|---|
| **Definition** | A summary of the information contained in a set of medication entries. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | One use of *Summary of Medication Entries* is to summarise one prescription and its dispense records; another is to summarise one therapeutic good and its prescriptions and dispense records. |

# 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.

| | | | |
|---|---|---|---|
| | SUMMARY OF MEDICATION ENTRIES | | |
| | | Therapeutic Good Identification | 0..1 |
| | | DateTime Earliest Prescription Written | 0..1 |
| | | DateTime Latest Prescription Written | 0..1 |
| | | DateTime of Earliest Dispense Event | 0..1 |
| | | DateTime of Latest Dispense Event | 0..1 |
| | | Total Number of Known Supplies | 0..1 |
| | | Maximum Number of Permitted Supplies | 0..1 |
| | | INFORMATION PROVIDER | 0..1 |
| | | SUBJECT | 0..1 |

| | | | | |
|---|---|---|---|---|
| | | Summary of Medication Entries Instance Identifier | | 0..1 |
| | | RELATED INFORMATION | | 0..* |
| | | | Link Nature | 1..1 |
| | | | Link Role | 0..1 |
| | | | Target | 1..1 |
| | | Detailed Clinical Model Identifier | | 1..1 |

# 7.5 Therapeutic Good Identification

## Identification

| | |
|---|---|
| **Label** | Therapeutic Good Identification |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10194 |
| **OID** | 1.2.36.1.2001.1001.101.103.10194 |

## Definition

| | |
|---|---|
| **Definition** | The medicine, vaccine or other therapeutic good being ordered for, administered to or used by the subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Item Name |
| **Context** | This includes medications and medical devices. It includes drugs, appliances, dressings, and reagents. |
| **Context Source** | NEHTA |
| **Notes** | Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use (unless specifically excluded or included under Section 7 of the *Therapeutic Goods Act 1989*).<br><br>Therapeutic use means use in or in connection with:<br><br>• preventing, diagnosing, curing or alleviating a disease, ailment, defect or injury; or<br><br>• influencing, inhibiting or modifying a physiological process; or<br><br>• testing the susceptibility of persons to a disease or ailment; or<br><br>• influencing, controlling or preventing conception; or<br><br>• testing for pregnancy; or<br><br>• replacement or modification of parts of the anatomy.<br><br>From the *Therapeutic Goods Act 1989* [TGA1989a].<br><br>The formal definition of a therapeutic good is given in Section 3 of the *Therapeutic Goods Act 1989*. |
| **Data Type** | CodeableText |
| **Value Domain** | Medicines Terminology |

## Usage

| | |
|---|---|
| **Conditions of Use** | Where the therapeutic good can be identified by an Australian Medicines Terminology (AMT) concept, the value of this data element **SHOULD** be the AMT ConceptID and Preferred Term. For details see Medicines Terminology.<br><br>For items without an AMT code (including some extemporaneous preparations), a text description is suitable. For a medication, this **SHALL** include the name of the medication |

| | |
|---|---|
| | (brand name or generic name equivalent), the strength and, where appropriate, the dose form. |
| **Conditions of Use Source** | NEHTA |
| **Examples** | Some examples of AMT ConceptIDs and their AMT Preferred Terms are:<br>1) 23641011000036102 \|*paracetamol 500 mg + codeine phosphate 30 mg tablet*\|<br>2) 28329011000036108 \|*paracetamol 500 mg + codeine phosphate 30 mg tablet, 20*\|<br>3) 13362011000036106 \|*Panadeine Forte tablet: uncoated, 20*\|<br>4) 6647011000036101 \|*Panadeine Forte tablet: uncoated*\|<br>5) 20138011000036107 \|*Panadeine Forte tablet: uncoated, 20, blister pack*\|<br>6) 51295011000036108 \|*bandage compression 10 cm x 3.5 m bandage: high stretch*\|<br>7) 48667011000036100 \|*Eloflex (2480) 10 cm x 3.5 m bandage: high stretch*\|<br>8) 926706011000036104 \|*Engerix-B Paediatric 10 microgram/0.5 mL injection: suspension, 0.5 mL syringe*\| |
| **Misuse** | Detailing the formula of a compounded (extemporaneous) medication. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.6 Medicines Terminology

## Identification

| | |
|---|---|
| **Label** | Medicines Terminology |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16115 |
| **OID** | 1.2.36.1.2001.1001.101.104.16115 |

## Definition

| | |
|---|---|
| **Definition** | A set of values used to refer to medicines and other therapeutic goods. |
| **Definition Source** | NEHTA |
| **Notes** | An explanation of AMT concepts can be found in *Australian Medicines Terminology v3 Model - Editorial Rules v2.0 [NEHT2014ag]*. |

## Value Domain

| | |
|---|---|
| **Source** | Australian Medicines Terminology |
| **Permissible Values** | The permissible values are the members of the following seven AMT reference sets:<br>• 929360061000036106 \|*Medicinal product reference set*\|<br>• 929360081000036101 \|*Medicinal product pack reference set*\|<br>• 929360071000036103 \|*Medicinal product unit of use reference set*\|<br>• 929360021000036102 \|*Trade product reference set*\|<br>• 929360041000036105 \|*Trade product pack reference set*\|<br>• 929360031000036100 \|*Trade product unit of use reference set*\|<br>• 929360051000036108 \|*Containered trade product pack reference set*\| |

# Relationships

### Parents

| Data Type | Name | **Occurrences** (child within parent) |
|---|---|---|
|  | Therapeutic Good Identification | 1..1 |

# 7.7 DateTime Earliest Prescription Written

## Identification

| | |
|---|---|
| **Label** | DateTime Earliest Prescription Written |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16799 |
| **OID** | 1.2.36.1.2001.1001.101.103.16799 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time when the earliest prescription in a set was written. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.8 DateTime Latest Prescription Written

## Identification

| | |
|---|---|
| **Label** | DateTime Latest Prescription Written |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16800 |
| **OID** | 1.2.36.1.2001.1001.101.103.16800 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time when the latest prescription in a set was written. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Context** | This is only applicable when the summary involves more than one prescription. |
| **Context Source** | NEHTA |
| **Data Type** | DateTime |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.9 DateTime of Earliest Dispense Event

## Identification

| | |
|---|---|
| **Label** | DateTime of Earliest Dispense Event |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16801 |
| **OID** | 1.2.36.1.2001.1001.101.103.16801 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time when the earliest dispense event in a set occurred. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The earliest dispense record may not be for the earliest prescription. |
| **Data Type** | DateTime |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.10 DateTime of Latest Dispense Event

## Identification

| | |
|---|---|
| **Label** | DateTime of Latest Dispense Event |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16802 |
| **OID** | 1.2.36.1.2001.1001.101.103.16802 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time when the latest dispense event in a set occurred. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The latest dispense record may not be for the latest prescription. |
| **Data Type** | DateTime |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.11 Total Number of Known Supplies

## Identification

| | |
|---|---|
| **Label** | Total Number of Known Supplies |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16804 |
| **OID** | 1.2.36.1.2001.1001.101.103.16804 |

## Definition

| | |
|---|---|
| **Definition** | The total number of times a therapeutic good was supplied, according to a set of dispense records. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | If the summary involves dispense records from only one prescription, this is the highest value of the *Number of this Dispense* `data element` from those dispense records.<br><br>If the summary involves dispense records from more than one prescription, this is the sum of the highest value *Number of this Dispense* `data element` from the dispense records for each prescription. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Conditions of Use** | The value **SHALL** be >= 0. |
| **Conditions of Use Source** | NEHTA |
| **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) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.12 Maximum Number of Permitted Supplies

## Identification

| | |
|---|---|
| **Label** | Maximum Number of Permitted Supplies |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16805 |
| **OID** | 1.2.36.1.2001.1001.101.103.16805 |

## Definition

| | |
|---|---|
| **Definition** | The total number of times a therapeutic good was supplied, according to a set of prescriptions. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | If the summary involves only one prescription, this data element has as its value:<br><br>(one {for the original prescription} + *Maximum Number of Repeats*).<br><br>If the summary involves more than one prescription, this data element has as its value:<br><br>sum of (one {for the original prescription} + *Maximum Number of Repeats*) for every prescription. |
| **Data Type** | Integer |

## Usage

| | |
|---|---|
| **Conditions of Use** | The value **SHALL** be >= 1. |
| **Conditions of Use Source** | NEHTA |
| **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) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.13 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** | Details pertinent to the identification of the source of the information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, does not have to be a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.14 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The individual about whom the medication action and medication instruction information was recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.15 Summary of Medication Entries Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Summary of Medication Entries Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16806 |
| **OID** | 1.2.36.1.2001.1001.101.103.16806 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Summary of Medication Entries* administration entry. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..1 |

# 7.16 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
|  | Link Nature | 1..1 |

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

# 7.17 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 7.18 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 7.19 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** | 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** | NEHTA |
| **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.<br><br>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<br>2) suggests<br>3) endorses<br>4) evidence for<br>5) outcome<br>6) is documented by<br>7) excerpts |

# Relationships

**Parents**

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

# 7.20 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 7.21 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 7.22 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.16798 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | SUMMARY OF MEDICATION ENTRIES | 1..1 |

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# 8 General Observation Detailed Clinical Model

This chapter describes version 1.1 of the *General Observation* Detailed Clinical Model (DCM).

## 8.1 Purpose

To allow a clinician or other person to record an observation concerning a subject of care where the observation is a general one or where no other suitable archetype is available.

## 8.2 Use

One use is for a single achievement in *Consumer Entered Achievements*.

## 8.3 UML Class Diagrams

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.

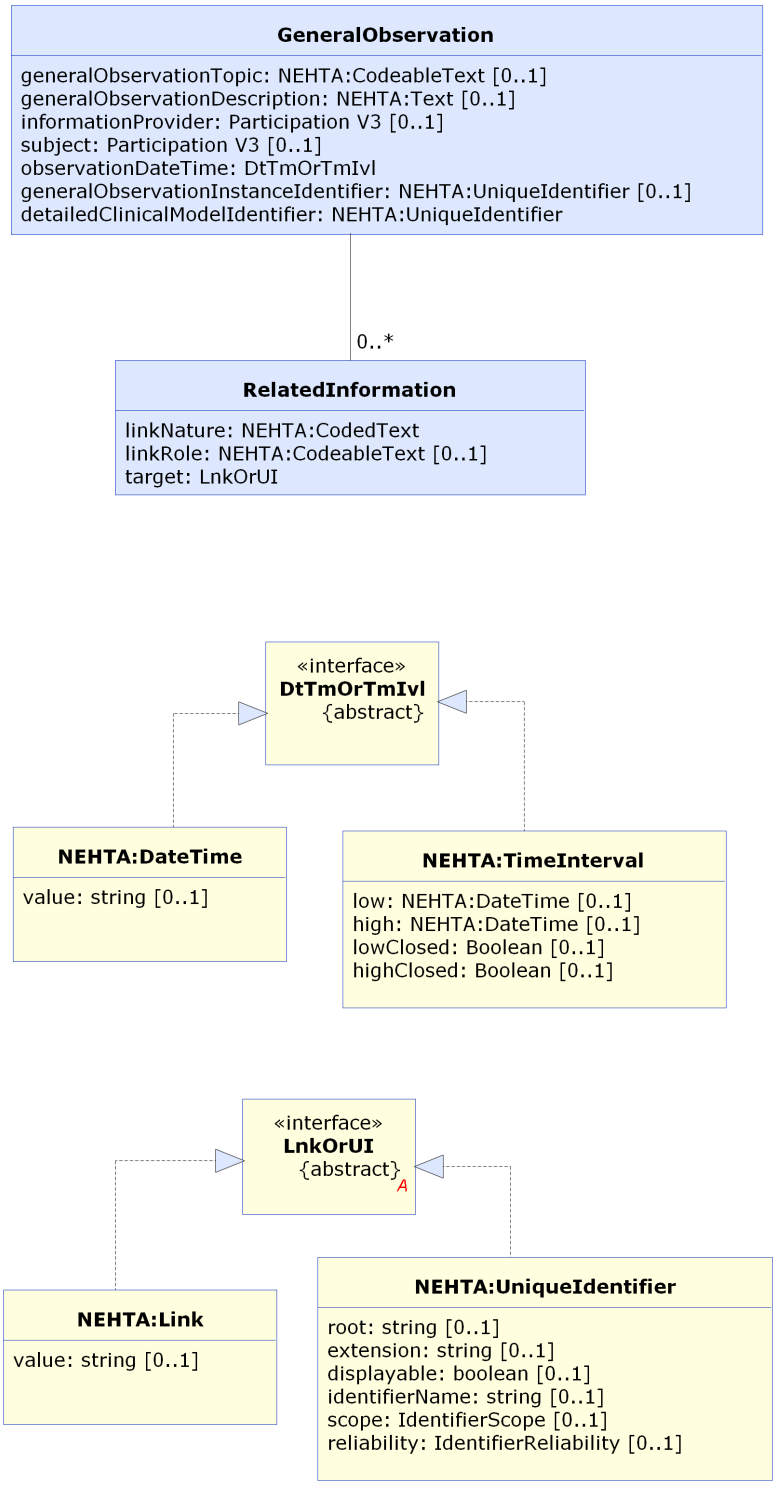


**Figure 8.1. General Observation**

# 8.4 GENERAL OBSERVATION

## Identification

| | |
|---|---|
| **Label** | GENERAL OBSERVATION |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16823 |
| **OID** | 1.2.36.1.2001.1001.101.102.16823 |

## Definition

| | |
|---|---|
| **Definition** | An observation concerning a subject of care. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | This can be used for observations of a general nature and also for observations that cannot be included in available specific observation DCMs, such as *Body Weight*. |
| **Scope Source** | NEHTA |

# 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.

| | | | | |
|---|---|---|---|---|
| | GENERAL OBSERVATION | | | |
| | | General Observation Topic | | 0..1 |
| | | General Observation Description | | 0..1 |
| | | INFORMATION PROVIDER | | 0..1 |
| | | SUBJECT | | 0..1 |
| | | Observation DateTime | | 1..1 |
| | | General Observation Instance Identifier | | 0..1 |
| | | RELATED INFORMATION | | 0..* |
| | | | Link Nature | 1..1 |

| | | | | |
|---|---|---|---|---|
| | |  | Link Role | 0..1 |
| | |  | Target | 1..1 |
| |  | Detailed Clinical Model Identifier | | 1..1 |

# 8.5 General Observation Topic

## Identification

| | |
|---|---|
| **Label** | General Observation Topic |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16825 |
| **OID** | 1.2.36.1.2001.1001.101.103.16825 |

## Definition

| | |
|---|---|
| **Definition** | The title or topic. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodeableText |
| **Value Domain** | *Not specified.*<br><br>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[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## 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) |
|---|---|---|
|  | GENERAL OBSERVATION | 0..1 |

[1] http://www.hl7.org/oid/index.cfm

# 8.6 General Observation Description

## Identification

| | |
|---|---|
| **Label** | General Observation Description |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16826 |
| **OID** | 1.2.36.1.2001.1001.101.103.16826 |

## Definition

| | |
|---|---|
| **Definition** | The details, written in free text. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | GENERAL OBSERVATION | 0..1 |

# 8.7 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** | Details pertinent to the identification of the source of the information about the observation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not have to be a person and, in particular, not a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Information Provider”.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | GENERAL OBSERVATION | 0..1 |

# 8.8 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The person about whom the observation information is being recorded. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, the subject of the enclosing Structured Document is assumed. |
| **Scope Source** | NEHTA |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the subject of the information is not the *Subject of Care* of the enclosing Structured Document.<br><br>This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | GENERAL OBSERVATION | 0..1 |

# 8.9 Observation DateTime

## Identification

| | |
|---|---|
| **Label** | Observation DateTime |
| **Metadata Type** | Data Element |
| **Identifier** | DE-15561 |
| **OID** | 1.2.36.1.2001.1001.101.103.15561 |

## Definition

| | |
|---|---|
| **Definition** | Date, and optionally time, when an observation is clinically significant to the condition of the subject of the observation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Clinically Significant DateTime<br>Effective DateTime |
| **Context** | For a *Pathology Test Result* the value is the date, and optionally time, of collection of the specimen.<br><br>For an *Imaging Examination Result* the value is the date, and optionally time, of the imaging examination. For a series of images this is the date, and optionally time, when the last image was taken. |
| **Context Source** | NEHTA |
| **Notes** | Associated with every observation of a subject are two different times that often, but not always, coincide, and are consequently often conflated: the time that the activity of observing occurred (the time the subject **was** observed, the *measuring time*), and the time that the subject was the way it looked (the time the subject was **as** observed, the *state time*.)<br><br>Generally, there is no delay between a person being in a state, and an observation of the person being in that state. For example, if a pulse of 72 bpm is recorded at 13:45 on 12 February 2015, one can assume that the heart rate was 72 bpm at that time. (Pulse is a surrogate for heart rate.) In such cases the *measuring time* and the *state time* are the same.<br><br>Sometimes, when there is a delay between the time the person is in a state and the time when they are measured, the delay is important. For example, if a sample is taken from a person and its testing is completed over a period of days, the test results will provide information about the state of the person at the time the sample was taken, not the time the test was completed.<br><br>The clinically significant time in all clinical observations is the time that the person was as observed, the *state time*. In observations involving specimens, the time that the specimen was taken is the closest practicable proxy for the *state time*.<br><br>The meaning of *Observation DateTime* is always the time that the person was **as** observed.<br><br>This approach follows that of openEHR. |
| **Data Type** | DateTime<br>TimeInterval |

# 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) |
|---|---|---|
|  | GENERAL OBSERVATION | 1..1 |

# 8.10 General Observation Instance Identifier

## Identification

| | |
|---|---|
| **Label** | General Observation Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16829 |
| **OID** | 1.2.36.1.2001.1001.101.103.16829 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *General Observation* observation. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | GENERAL OBSERVATION | 0..1 |

# 8.11 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
| | GENERAL OBSERVATION | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
| | Link Nature | 1..1 |

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

# 8.12 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 8.13 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 8.14 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** | 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** | NEHTA |
| **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.<br><br>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<br><br>2) suggests<br><br>3) endorses<br><br>4) evidence for<br><br>5) outcome<br><br>6) is documented by<br><br>7) excerpts |

# Relationships

**Parents**

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

# 8.15 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 8.16 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 8.17 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.16823 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | GENERAL OBSERVATION | 1..1 |

# 9 Document Use Authorisation Detailed Clinical Model

This chapter describes version 1.0 of the *Document Use Authorisation (Instruction)* Detailed Clinical Model (DCM).

## 9.1 Purpose

To record authorisations to use documents. This includes authorisations to post to a shared repository.

## 9.2 Use

Record an authority to post a document to the PCEHR system.

Record an authority to make a document in a shared repository private or public.

Record an authority to post all future documents for the subject to a shared repository.

## 9.3 Misuse

Recording an authority to change or alter a document.

## 9.4 UML Class Diagrams

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.

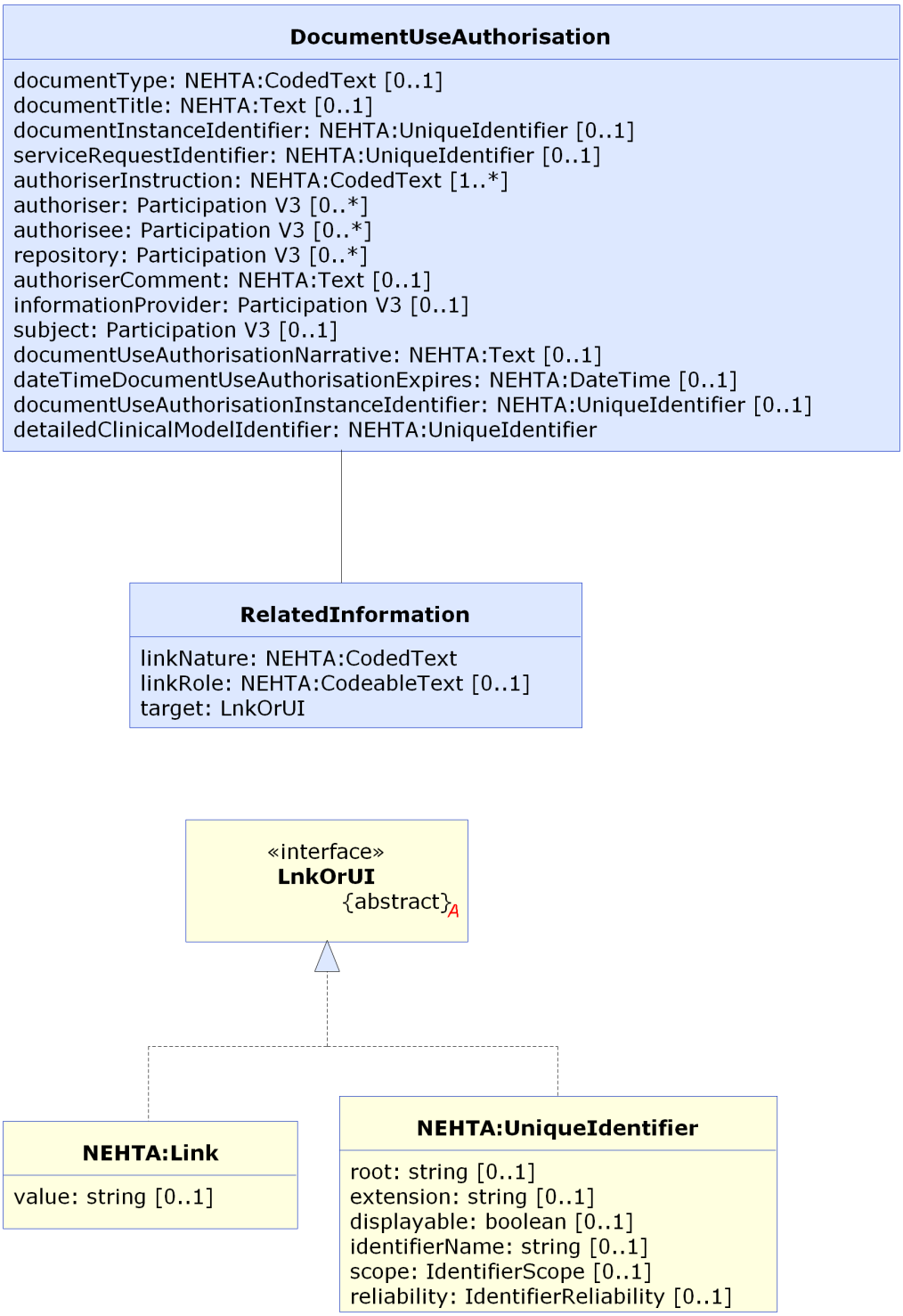


**Figure 9.1. Document Use Authorisation**

# 9.5 DOCUMENT USE AUTHORISATION

## Identification

| | |
|---|---|
| **Label** | DOCUMENT USE AUTHORISATION |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16982 |
| **OID** | 1.2.36.1.2001.1001.101.102.16982 |

## Definition

| | |
|---|---|
| **Definition** | Details of an authorisation to perform an action with a document. |
| **Definition Source** | NEHTA |
| **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.

| | | | |
|---|---|---|---|
|  | DOCUMENT USE AUTHORISATION | | |
| |  | Document Type | 0..1 |
| |  | Document Title | 0..1 |
| |  | Document Instance Identifier | 0..1 |
| |  | Service Request Identifier | 0..1 |
| |  | Authoriser Instruction | 1..* |
| |  | AUTHORISER | 0..* |
| |  | AUTHORISEE | 0..* |
| |  | REPOSITORY | 0..* |
| |  | Authoriser Comment | 0..1 |
| |  | INFORMATION PROVIDER | 0..1 |

| | | | |
|---|---|---|---|
| | | SUBJECT | 0..1 |
| | | Document Use Authorisation Narrative | 0..1 |
| | | DateTime Document Use Authorisation Expires | 0..1 |
| | | Document Use Authorisation Instance Identifier | 0..1 |
| | | RELATED INFORMATION | 0..* |
| | | Link Nature | 1..1 |
| | | Link Role | 0..1 |
| | | Target | 1..1 |
| | | Detailed Clinical Model Identifier | 1..1 |

# 9.6 Document Type

## Identification

| | |
|---|---|
| **Label** | Document Type |
| **Metadata Type** | Data Element |
| **Identifier** | DE-10335 |
| **OID** | 1.2.36.1.2001.1001.101.103.10335 |

## Definition

| | |
|---|---|
| **Definition** | Type of the document of interest. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Each clinical document contains as a coded value an identification of its Document Type. This data element contains the coded value of Document Type from the document of interest. |
| **Data Type** | CodedText |
| **Value Domain** | *Not specified.*<br><br>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[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

[1] http://www.hl7.org/oid/index.cfm

# 9.7 Document Title

## Identification

| | |
|---|---|
| **Label** | Document Title |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16966 |
| **OID** | 1.2.36.1.2001.1001.101.103.16966 |

## Definition

| | |
|---|---|
| **Definition** | Title of the document of interest. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.8 Document Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Document Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-20101 |
| **OID** | 1.2.36.1.2001.1001.101.103.20101 |

## Definition

| | |
|---|---|
| **Definition** | Identifier of the document of interest. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | Document or Report Identifier |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.9 Service Request Identifier

## Identification

| | |
|---|---|
| **Label** | Service Request Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16986 |
| **OID** | 1.2.36.1.2001.1001.101.103.16986 |

## Definition

| | |
|---|---|
| **Definition** | Requester's identifier of the service request which lead to the creation of the document of interest. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.10 Authoriser Instruction

## Identification

| | |
|---|---|
| **Label** | Authoriser Instruction |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16988 |
| **OID** | 1.2.36.1.2001.1001.101.103.16988 |

## Definition

| | |
|---|---|
| **Definition** | Action authorised to be performed with the document of interest. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | CodedText |
| **Value Domain** | Authoriser Instruction Values |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 1..* |

# 9.11 Authoriser Instruction Values

## Identification

| | |
|---|---|
| **Label** | Authoriser Instruction Values |
| **Metadata Type** | Value Domain |
| **Identifier** | VD-16987 |
| **OID** | 1.2.36.1.2001.1001.101.104.16987 |

## Definition

| | |
|---|---|
| **Definition** | Set of values for *Authoriser Instruction*. |
| **Definition Source** | NEHTA |
| **Notes** | Currently only one value is defined. |

## Value Domain

| | |
|---|---|
| **Source** | NCTIS Authoriser Instruction Values |
| **Permissible Values** | 1, Post document  Post the identified document to the identified repositories. |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | Authoriser Instruction | 1..1 |

# 9.12 AUTHORISER

## Identification

| | |
|---|---|
| **Label** | AUTHORISER |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Party who authorises action. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | The date of authorisation is contained in the *Participation Period* of the *Authoriser*. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to "Authoriser".<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..* |

# 9.13 AUTHORISEE

## Identification

| | |
|---|---|
| **Label** | AUTHORISEE |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Party who is authorised to perform action. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

**Conditions of Use**

This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.

The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.

**ALL DOCUMENTS**

The following constraints are applicable to all documents:

- Other additional constraints:
  - Participation Type **SHALL** have an implementation-specific value equivalent to “authorised party”.
  - PERSON OR ORGANISATION OR DEVICE **SHALL NOT** be instantiated as a DEVICE.

**HEALTHCARE PROVIDER**

The following constraints are applicable when the party who is authorised is a healthcare provider and the context is exchange with the PCEHR:

- Additional obligation and occurrence constraints:
  - Participation Period is **PROHIBITED**.
  - LOCATION OF PARTICIPATION is **PROHIBITED**.
  - Entity Identifier is **ESSENTIAL**.
  - Relationship to Subject of Care is **PROHIBITED**.
  - EMPLOYMENT DETAIL is **ESSENTIAL**.
  - EMPLOYER ORGANISATION is **ESSENTIAL**.

- EMPLOYER ORGANISATION.Entity Identifier is **ESSENTIAL**.
- DEMOGRAPHIC DATA is **PROHIBITED**.

- Other additional constraints:
  - Role **SHOULD** have a value chosen from *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]*. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and is publicly available **MAY** be used.
  - The value of one Entity Identifier **SHOULD** be an Australian HPI-I.
  - The value of one EMPLOYER ORGANISATION.Entity Identifier **SHALL** be an Australian HPI-O.
  - PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON.

**PERSON OTHER THAN A HEALTHCARE PROVIDER**

The following constraints are applicable when the party who is authorised is a person other than a healthcare provider and the context is exchange with the PCEHR:

- Additional obligation and occurrence constraints:
  - Participation Period is **PROHIBITED**.
  - LOCATION OF PARTICIPATION is **PROHIBITED**.
  - DEMOGRAPHIC DATA is **PROHIBITED**.
- Other additional constraints:
  - Role **SHOULD** have a value chosen from *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]*. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and is publicly available **MAY** be used.
  - PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON.

**ORGANISATION**

The following constraints are applicable when the party who is authorised is an organisation and the context is exchange with the PCEHR:

- Additional obligation and occurrence constraints:
  - Participation Period is **PROHIBITED**.
  - LOCATION OF PARTICIPATION is **PROHIBITED**.
  - Entity Identifier is **ESSENTIAL**.
  - ENTITLEMENT is **PROHIBITED**.
  - Qualifications is **PROHIBITED**.
- Other additional constraints:
  - Role **SHOULD** have a value representing the type of Healthcare Facility e.g. Hospital, Clinic. Role **MAY** have an implementation-specific null flavour.
  - The value of one Entity Identifier **SHALL** be an Australian HPI-O.

| | |
|---|---|
| | ○ PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..* |

# 9.14 REPOSITORY

## Identification

| | |
|---|---|
| **Label** | REPOSITORY |
| **Metadata Type** | Data Group |
| **Identifier** | DG-10296 |
| **OID** | 1.2.36.1.2001.1001.101.102.10296 |

## Definition

| | |
|---|---|
| **Definition** | Repository of documents. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix *B: Specification Guide for Use*.<br><br>Additional obligation and occurrence constraints:<br><br>• Participation Period is **PROHIBITED**.<br>• LOCATION OF PARTICIPATION is **PROHIBITED**.<br>• Entity Identifier is **ESSENTIAL**.<br>• ADDRESS is **PROHIBITED**.<br>• ELECTRONIC COMMUNICATION DETAIL is **PROHIBITED**.<br>• ENTITLEMENT is **PROHIBITED**.<br>• Qualifications is **PROHIBITED**.<br><br>Other additional constraints:<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Repository”.<br>• Role **SHALL** have an implementation-specific value equivalent to “Not Applicable”.<br>• The value of one Entity Identifier **SHALL** be an Australian PAI-R.<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..* |

# 9.15 Authoriser Comment

## Identification

| | |
|---|---|
| **Label** | Authoriser Comment |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16044 |
| **OID** | 1.2.36.1.2001.1001.101.103.16044 |

## Definition

| | |
|---|---|
| **Definition** | A comment relevant to the authorisation to perform an action. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.16 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** | Details pertinent to the identification of the source of the information about the instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This does not necessarily have to be a person and, in particular, not a healthcare provider. Types of sources include:<br>• the subject of care;<br>• a subject of care agent, e.g. parent, guardian;<br>• the clinician; and<br>• a device or software. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This **SHALL NOT** be used unless the provider of the information is not the *Composer/Author* of the enclosing Structured Document.<br>This is a reuse of the PARTICIPATION data group, which is described in *Participation Data Specification [NEHT2011v]*.<br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br>• Participation Type **SHALL** have an implementation-specific value equivalent to "Information Provider".<br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON or as a DEVICE. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.17 SUBJECT

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The person whose health record this authorisation is intended to affect. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Scope** | Generally only used when the recorder needs to make it explicit. Otherwise, subject of the enclosing `Structured Document` is assumed. |
| **Scope Source** | NEHTA |
| **Notes** | If the authorisation is to post a document to a person's record in a repository, this is the person who is the subject of the repository record of interest. |

## Usage

| | |
|---|---|
| **Conditions of Use** | This is a reuse of the *PARTICIPATION* `data group`, which is described in *Participation Data Specification [NEHT2011v]*.<br><br>The following constraints are additional to those specified in *Participation Data Specification [NEHT2011v]*. Constraints are explained in Appendix B, *Specification Guide for Use*.<br><br>• Participation Type **SHALL** have an implementation-specific value equivalent to “Subject”.<br><br>• PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. |
| **Conditions of Use Source** | NEHTA |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.18 Document Use Authorisation Narrative

## Identification

| | |
|---|---|
| **Label** | Document Use Authorisation Narrative |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16989 |
| **OID** | 1.2.36.1.2001.1001.101.103.16989 |

## Definition

| | |
|---|---|
| **Definition** | A textual narrative describing what the Document Use Authorisation instruction is about. |
| **Definition Source** | NEHTA |
| **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) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.19 DateTime Document Use Authorisation Expires

## Identification

| | |
|---|---|
| **Label** | DateTime Document Use Authorisation Expires |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16990 |
| **OID** | 1.2.36.1.2001.1001.101.103.16990 |

## Definition

| | |
|---|---|
| **Definition** | The date and, optionally, time after which the Document Use Authorisation instruction is no longer effective or in force. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | DateTime |

## Usage

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

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.20 Document Use Authorisation Instance Identifier

## Identification

| | |
|---|---|
| **Label** | Document Use Authorisation Instance Identifier |
| **Metadata Type** | Data Element |
| **Identifier** | DE-16991 |
| **OID** | 1.2.36.1.2001.1001.101.103.16991 |

## Definition

| | |
|---|---|
| **Definition** | A globally unique identifier for each instance of a *Document Use Authorisation* instruction. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | This `data element` is intended for machine/system use only and hence need not be displayed on documents. |
| **Data Type** | UniqueIdentifier |

## Usage

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

# Relationships

**Parents**

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..1 |

# 9.21 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 *Exclusion Statement*. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Notes** | Items of related information include, but are not limited to, documents, parts of documents, images and web pages.<br><br>“Elsewhere” includes elsewhere in the same document.<br><br>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.<br><br>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.<br><br>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.<br><br>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) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 0..* |

### Children

| Data Type | Name | Occurrences |
|---|---|---|
|  | Link Nature | 1..1 |

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

# 9.22 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** | The 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** | NEHTA |
| **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<br>2) is confirmed by or authorised by<br>3) is related to the same problem or health issue |

# Relationships

### Parents

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

# 9.23 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** | NEHTA |

## 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]*. They are listed here. | |
| | LINK-A0, is related to | A generic category for any Link, the details of which will be given by the value of Link Role. |
| | LINK-B0, is confirmed by or authorised by | The target link contains [an instance of a DCM or document] that acts as the legal or clinical basis for the activity documented in the source [DCM instance], or is a declaration of intent to provide (or not to provide) requested care. This Link is to be used to connect two [DCM instances or DCM and document], as opposed to the inclusion of a corroborating or authorising participant as an identified party within a single [DCM instance or document]. |
| | LINK-C0, is related to the same problem or health issue | The target [instance of a DCM or document] documents health or health care that pertains to the same clinical situation as the source [DCM instance]. One of the two might be defining a problem for which the other is a manifestation, or the relationship might for example be cause and effect, stages in an evolving clinical history, a different interpretation of an observation, a clinical indication or contraindication. |
| | LINK-D0, is related to the same care plan, act or episode | The source and the target [instances of DCM or documents] are each documenting parts of the same care plan, act or episode. One of the two might be defining the same care plan, act or episode, or both might be related milestones. |

| | | |
|---|---|---|
| | LINK-E0, is a related documentation | The target [instance of a DCM or document] is an alternative documentary form of the source [DCM instance], such as re-expression of the same clinical information or additional supplementary explanatory information. |

# Relationships

### Parents

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

# 9.24 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** | 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** | NEHTA |
| **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.<br><br>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<br><br>2) suggests<br><br>3) endorses<br><br>4) evidence for<br><br>5) outcome<br><br>6) is documented by<br><br>7) excerpts |

# Relationships

**Parents**

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

# 9.25 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** | NEHTA |
| **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** | NEHTA |

## Value Domain

| | |
|---|---|
| **Source** | ISO 13606-3:2009 |
| **Permissible Values** | Values **SHOULD** be from Termlist LINK_ROLE in ISO 13606-3:2009 [ISO2009a].<br><br>Values **MAY** be from any suitable terminology.<br><br>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]* are: |

| | |
|---|---|
| LINK-A1, unspecified link | The term is used when no semantic information is available for this Link in the EHR system from which the EXTRACT has been created. |
| LINK-A2, suggests | The interpretation expressed in the target component is a possible cause or outcome of the findings documented in the source component. |
| LINK-B1, endorses | The interpretation expressed in the source component provides confirmatory evidence or a confirmatory opinion of the interpretation expressed in the target component. |
| LINK-C3, evidence for | The observation or interpretation documented in the source component provides confirmatory evidence of the interpretation expressed in the target component. |
| LINK-D1, outcome | The clinical situation documented in the target component is the direct outcome of the situation documented in the source component. |

| | | |
|---|---|---|
| | LINK-E1, documented by | A clinical situation documented in the source component is more formally documented in the target component. |
| | LINK-E4, excerpts | The source component is an extract (copy) of part or all of the information contained within the target component. |

# Usage

| | |
|---|---|
| **Conditions of Use** | Each of the link terms in LINK_ROLE from ISO 13606-3:2009 is a subcategory of a corresponding term in *Link Nature Values*, where 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 from *Link Nature Values*. |
| **Conditions of Use Source** | ISO 13606-3:2009 |

# Relationships

### Parents

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

# 9.26 Target

## Identification

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

## Definition

| | |
|---|---|
| **Definition** | The “linked to” or identified information. |
| **Definition Source** | NEHTA |
| **Synonymous Names** | |
| **Data Type** | Link<br>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 |

# 9.27 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** | A globally unique identifier for this Detailed Clinical Model. |
| **Definition Source** | NEHTA |
| **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** | NEHTA |
| **Examples** | Please see Appendix B, *Specification Guide for Use* for examples and usage information for UniqueIdentifier. |
| **Default Value** | 1.2.36.1.2001.1001.101.102.16982 |

# Relationships

### Parents

| Data Type | Name | Occurrences (child within parent) |
|---|---|---|
|  | DOCUMENT USE AUTHORISATION | 1..1 |

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# Appendix A. Known Issues

This appendix lists known issues with this specification at the time of publishing. NEHTA is working on solutions to these issues, and we encourage comments to further assist with the development of these solutions.

| Reference | Description |
|---|---|
| Links to external resources | If a link (usually in references section) spans several lines, certain combinations of PDF reader and web browser have problems opening it. |
| Data Hierarchy | Only the parts of these Detailed Clinical Models (DCM) 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. |
| Continuous Improvement | In the DCMs defined in this document only those data components that are currently used in NEHTA Structure Content Specifications (SCS) have been reviewed and revised for this publication. A more extensive review will be undertaken in the future. |
| Exclusion Statement | The Exclusion Statement DCMs are the subject of ongoing development and review and may well change in the future. |
| Requested Service - Distribution List | This approach to distribution lists is deprecated; distribution lists are managed in the CDA IG. This data component will be removed in the next release of the Requested Service DCM. |
| Undefined Value Domains | The following data elements lack a defined value domain: *Reason for Service*, *Requested Service Description*, *Request Urgency*, *General Observation Topic* and *Document Type*.<br><br>NEHTA is in the process of developing national code sets for these items. In the meantime, you are free to use your own code set(s), providing any code set used **SHALL** be registered, i.e. registered through the HL7 code set registration procedure with an appropriate object identifier (OID), and **SHALL** be publicly available. Note that when national standard code set(s) do become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated. |

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# Appendix B. Specification Guide for Use

## B.1 Overview

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

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

The NEHTA metamodel for sructured 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.

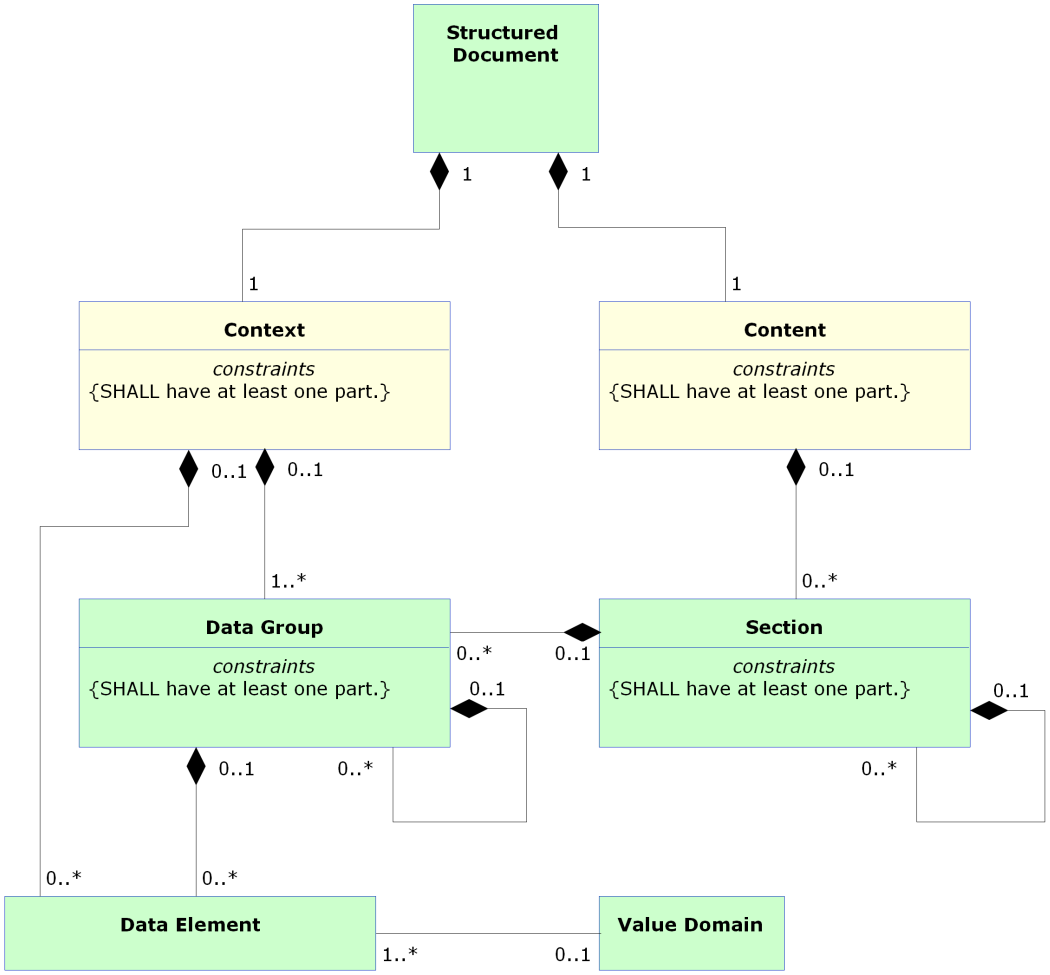


**Figure 1: SCS Metamodel**

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 which 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 other sections, data groups, or both. It is an organising container that gives the reader a clue as to the 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 NEHTA'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.

NEHTA's *Participation Data Specification [NEHT2011v]* defines the full Participation specification.

# 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:<br><br><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 which references concepts such as “Bronchitis” (Concept ID: 32398004).</td></tr>
<tr><td>Therapeutic Good Identification</td><td>CodeableText</td><td>An AMT reference set which 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 which 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 NEHTA'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<br><br>(ISO 21090: ANY) | Use of this icon indicates that the data type to be used is conditional on another data component.<br><br>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<br><br>(ISO 21090: BL) | A data type, sometimes called the logical data type, having one of the two values: *true* and *false*.<br><br>Many systems represent true as *non-zero* (often 1, or -1) and false as *zero*.<br><br>**Usage/Examples**<br><br>• 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 which is 10 hours ahead of Coordinated Universal Time (UTC): 19990531132000+1000.

| | |
|---|---|
|  Duration<br><br>(ISO 21090: PQ.TIME) | The period of time during which something continues.<br><br>Consists of a value and a unit which represents the time value, e.g. hours, months.<br><br>Compound durations are not allowed, e.g. 10 days 3 weeks 5 hours.<br><br>**Usage/Examples**<br><br>• 3 hours<br><br>• 6 months<br><br>• 1 year |
|  EncapsulatedData<br><br>(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).<br><br>**Usage/Examples**<br><br>• JPEG images<br><br>• HTML documents<br><br>• [RFC1521] MIME types |
|  Integer<br><br>(ISO 21090: INT) | The mathematical data type comprising the exact integral values.<br><br>**Usage/Examples**<br><br>• 1<br><br>• -50<br><br>• 125 |
|  Link<br><br>(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.<br><br>**Usage/Examples**<br><br>• 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*.<br><br>• 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<br><br>(ISO 21090: PQ) | A magnitude value with a unit of measurement.<br><br>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*.<br><br>**Usage/Examples**<br><br>• 100 centimetres<br><br>• 25.5 grams |

| | |
|---|---|
|  QuantityRange<br><br>(ISO 21090: IVL) | A range of *Quantity* values.<br><br>It may be identified using a combination of an optional minimum *Quantity* and an optional maximum *Quantity* (i.e. lower and upper bounds).<br><br>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.<br><br>**Usage/Examples**<br><br>• -20 to 100 Celsius<br><br>• 30-50 mg<br><br>• >10 kg |
|  QuantityRatio<br><br>(ISO 21090: RTO) | A relative magnitude of two *Quantity* values.<br><br>Usually recorded as numerator and denominator.<br><br>**Usage/Examples**<br><br>• 25 mg / 500 ml<br><br>• 200 mmol per litre |
|  Real<br><br>(ISO 21090: REAL) | A computational approximation to the standard mathematical concept of real numbers.<br><br>These are often called floating-point numbers.<br><br>**Usage/Examples**<br><br>• 1.075<br><br>• -325.1<br><br>• 3.14157 |
|  Text<br><br>(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*.<br><br>**Usage/Examples**<br><br>“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<br><br>(ISO 21090:IVL) | An interval in time.<br><br>It is identified using a combination of an optional start *DateTime*, an optional end *DateTime*, and an optional *Duration*.<br><br>**Usage/Examples**<br><br>• 20080101+1000 - 20081231+1000<br><br>• 200801010130+1000 - 200801011800+1000<br><br>• 200801010130+1000, duration=16.5 hours |

| | |
|---|---|
|  UniqueIdentifier<br><br>(ISO 21090: II) | A unique value used to identify a physical or virtual object or concept.<br><br>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:<br><br>• *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.<br><br>• *extension*: a unique identifier within the scope of the root that is directly equivalent to the identifier designation element.<br><br>• *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.<br><br>• *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.<br><br>Also, the following constraints apply on the UniqueIdentifier data type:<br><br>1) The *root* attribute **SHALL** be used.<br><br>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.<br><br>3) For an Entity Identifier, the *root* attribute **SHALL NOT** be a UUID.<br><br>4) The *extension* attribute **SHALL** be used.<br><br>**Usage/Examples**<br><br>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]*. NEHTA 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 NEHTA 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. NEHTA intends 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.<br><br>**Usage/Examples:**<br><br>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.<br><br>**Usage/Examples:**<br><br>Such data components will be implemented, only inclusion and population are optional.<br><br>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.<br><br>In a statement about values this indicates that the use of the specified values is considered forbidden and they **SHALL NOT** be used.<br><br>**Usage/Examples:**<br><br>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.<br><br>When a condition is met, the data component is considered to be **ESSENTIAL** and **SHALL** be populated.<br><br>When a condition is not met, the data component may be considered as **PROHIBITED**, or the data component may be considered **OPTIONAL**.<br><br>**Usage/Examples:**<br><br>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 Abnormal and Absent Values

Occasionally a data element will have 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).

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

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

**Table 6: Classification of ISO 21090 nullFlavor values as Absent or Abnormal**

| Level | Code | Term | Absent | Abnormal |
|---|---|---|---|---|
| 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 |
| 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 NEHTA'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** | A NEHTA-assigned internal identifier of the data component.<br><br>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 NEHTA. |

## 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.<br><br>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.<br><br>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.<br><br>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.<br><br>For example, Street Name has a context of Address.<br><br>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. |
| **Notes Source** | The authoritative source for the Notes statement. |
| **Data Type** | The data type (or data types) of the data element, e.g. DateTime or Text.<br><br>The valid data types are specified in the Data Types Legend.<br><br>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.<br><br>The statement is:<br><br>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.<br><br>When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.<br><br>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 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.

In some documents the right-hand side of the data hierarchy contains one or more columns under the heading “Core Requirement”. Each column contains information for one document exchange scenario. A cell that is empty indicates that the data component on that row is **OPTIONAL** to implement. That is, software that creates documents made in conformance with this specification **MAY** exclude the data component, and software that reads documents made in conformance with this specification **MAY** ignore the data component. All other data components **SHALL** be implemented.

# 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.

| | | | | |
|---|---|---|---|---|
| | 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.<br><br>This may be a list of codes. (Each code is typically presented as a triple with code values, text equivalent, and description; e.g. 1, Registered, No result yet available.)<br><br>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.<br><br>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.<br><br>Implementation guides may contain specific examples of how data elements may be populated and how they relate to each other.<br><br>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. |
| **Absent and Abnormal Values** | A statement of limitations on the use of abnormal values and absent values.<br><br>Unless otherwise specified, all data elements are permitted to have abnormal or absent values. Some abnormal values are only relevant to data elements of certain data types (e.g. positive infinity is relevant to numbers but not Booleans).<br><br>Representative examples of conditions of use statements involving value annotations:<br><br>• Absent values are **PROHIBITED**.<br><br>• Abnormal values are **PROHIBITED**.<br><br>• Abnormal and absent values are **PROHIBITED**.<br><br>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 1.3 - 4 September 2013

The presentation format has changed between version 1.3 and version 1.4. Changes that result from the change in presentation format are not listed below.

## Preliminary Pages

A number of editorial errors have been corrected in Disclaimer and Document Control.

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

Acknowledgements chapter has been updated to replace generic acknowledgements to Standards Australia, Members of the Australian DataTypes Project, Australian Institute of Health and Welfare and Ocean Informatics with the funding acknowledgement for the Council of Australian Governments, and acknowledgements for LOINC, SNOMED CT and HL7 International.

## 1 Introduction

In 1.1 Purpose and Scope, corrected email address to help@nehta.gov.au.

In 1.4 Terminology, corrected email address to help@nehta.gov.au.

## Chapter 2 Clinical Synopsis Detailed Clinical Model

The version of the DCM has changed from 4.2 to 4.3.

2.4 UML Class Diagram, the diagram and explanatory text have been updated.

In 2.5 Data Hierarchy the following changes have been made:

- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

In 2.7 Clinical Synopsis Topic:

- Definition has been reworded; and
- Notes has been reworded.

In 2.7 Clinical Synopsis Description:

- Definition has been reworded; and
- Context has been reworded.

2.12 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 2.13 Link Nature, Definition has been reworded.

In 2.14 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 2.15 Link Role, Notes has been reworded.

In 2.16 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 2.17 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 2.18 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 3 Recommendation Detailed Clinical Model

The version of the DCM has changed from 2.1 to 2.2.

In 3.2 Use, wording has been updated through an editorial review.

3.3 UML Class Diagram, the diagram and explanatory text have been updated.

In 3.4 Data Hierarchy the following changes have been made:

- *ADDRESSEE*, label *RECOMMENDATION ADDRESSEE* has been removed;
- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target.*

In 3.5 ADDRESSEE, the label has been removed to match the name.

3.12 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 3.13 Link Nature, Definition has been reworded.

In 3.14 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 3.15 Link Role, Notes has been reworded.

In 3.16 Link Role Values:

- External Identifier has been added;

- Definition has been reworded; and
- Context has been reworded.

In 3.17 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 3.18 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 4 Exclusion Statement Detailed Clinical Model

The version of the DCM has changed from 1.1 to 1.2.

In 4.2 Use, the first paragraph has been updated through editorial review.

4.4 UML Class Diagram, the diagram and explanatory text have been updated.

In 4.5 Data Hierarchy the following changes have been made:

- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

In 4.6 General Statement, Context has been reworded.

In 4.7 INFORMATION PROVIDER, Scope and Scope Source have been added.

4.10 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 4.11 Link Nature, Definition has been reworded.

In 4.12 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 4.13 Link Role, Notes has been reworded.

In 4.14 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 4.15 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 4.16 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 5 Referral Detail Detailed Clinical Model

The version of the DCM has changed from 1.1 to 1.2.

5.2 UML Class Diagram, the diagram and explanatory text have been updated.

In 5.3 Data Hierarchy the following changes have been made:

- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

In 5.7 USUAL GP, Conditions of Use has been updated.

In 5.8 REFEREE, Conditions of Use has been updated.

5.12 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 5.13 Link Nature, Definition has been reworded.

In 5.14 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 5.15 Link Role, Notes has been reworded.

In 5.16 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 5.17 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 5.18 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 6 Medical History Detailed Clinical Model

This chapter has been deleted.

# Chapter 6 Requested Service Detailed Clinical Model

The version of the DCM has changed from 4.0 to 5.0.

6.1 Purpose has been reworded.

6.2 Misuse has been reworded.

6.3 UML Class Diagram, the diagram and explanatory text have been updated.

In 6.4 REQUESTED SERVICE:

- Definition has been reworded; and
- Notes has been reworded.

In 6.4 Data Hierarchy the following changes have been made:

- *DISTRIBUTION LIST* has been deleted;
- *Request Identifier (Instruction Identifier)* has been added;
- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

In 6.12 Service Booking Status Values, Permissible Values has been updated.

7.16 DISTRIBUTION LIST has been deleted.

In 6.16 SERVICE REQUESTER, Definition has been reworded.

In 6.17 SERVICE PROVIDER, Conditions of Use has been updated.

6.19 Instruction Identifier has been added.

6.24 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 6.25 Link Nature, Definition has been reworded.

In 6.26 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 6.27 Link Role, Notes has been reworded.

In 6.28 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 6.29 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 6.30 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 7 Summary of Medication Entries Detailed Clinical Model

The version of the DCM has changed from 1.0 to 1.1.

7.2 Use has been reworded.

7.3 UML Class Diagram, the diagram and explanatory text have been updated.

In 7.4 Data Hierarchy the following changes have been made:

- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

In 7.5 Therapeutic Good Identification:

- Definition Source has been updated;
- Notes has been reworded;
- Conditions of Use has been reworded; and
- Examples has been reworded.

In 7.6 Medicines Terminology:

- Notes has been updated; and
- Permissible Values has been updated.

7.16 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 7.17 Link Nature, Definition has been reworded.

In 7.18 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 7.19 Link Role, Notes has been reworded.

In 7.20 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 7.21 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 7.22 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 8 General Observation Detailed Clinical Model

The version of the DCM has changed from 1.0 to 1.1.

8.1 Purpose has been reworded.

8.3 UML Class Diagram, the diagram and explanatory text have been updated.

In 8.4 Data Hierarchy the following changes have been made:

- *General Observation DateTime* has been deleted;
- *General Observation Duration* has been deleted;
- *Observation DateTime* has been added;
- *Link* has been replaced with *Related Information*; and
- *Link Target* has been renamed to *Target*.

8.9 Observation DateTime has been added.

9.9 General Observation DateTime has been deleted.

9.10 General Observation Duration has been deleted.

In 8.10 General Observation Instance Identifier, Definition has been reworded.

8.11 RELATED INFORMATION has a new Name, Label, Definition and Notes. The Identifier is the same as the meaning has not changed.

In 8.12 Link Nature, Definition has been reworded.

In 8.13 Link Nature Values:

- External Identifier has been added; and
- Definition has been reworded.

In 8.14 Link Role, Notes has been reworded.

In 8.15 Link Role Values:

- External Identifier has been added;
- Definition has been reworded; and
- Context has been reworded.

In 8.16 Target:

- Label Link Target has been updated to match the name; and
- Definition has been reworded.

In 8.17 Detailed Clinical Model Identifier:

- Definition has been reworded;
- Conditions of Use and Conditions of Use Source have been added; and
- Default Value Conditions of Use has been removed.

# Chapter 9 Document Use Authorisation Detailed Clinical Model

This chapter has been added.

# Appendix A Known Issues

Continuous improvement issue has been added.

Undefined Value Domains issue has been updated.

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