

nehta

Clinical Intervention

Data Specification

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Final

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Document Information

Change history

Version	Date	Comments
1.0	29 Jun 2007	Initial public release
1.1	29 Feb 2008	<ul style="list-style-type: none">• minor typographical corrections and wording changes in Introduction• Figure 1 in Introduction updated to show more comprehensive information• there are no significant alterations that affect the data structure or use of this document
2.0	7 Sep 2009	Updated to incorporate changes made in the version 2.0 of the Discharge Summary Specification.

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- Standards Australia;
- Royal Australian College of General Practitioners;
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- Members of the Australian DataTypes Project;
- Australian Institute of Health & Welfare; and
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1 Introduction

1.1 Purpose and Scope

The Clinical Intervention data group specification forms part of a suite of data specifications that 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 generally agreed to be of high priority to standardise in order to achieve the benefits brought about by Level 4 (semantic) interoperability in the Australian health care setting.

1.2 Intended Audience

This document is intended to be read by jurisdictional ICT managers, clinicians involved in Clinical Information System specifications, software architects and developers, and implementers of Clinical Information Systems in various health care 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 EHR;
- To define collections of related information, i.e. 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.

Whilst shared EHR is referred to in these documents the implementation of the shared EHR is not dealt with here.

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.

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 IHTSDO (International Health Terminology Standards Development Organisation) 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 and 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/connecting-australia/clinical-terminologies> and direct your questions or feedback to terminologies@nehta.gov.au.

1.5 Related Documents

The following documents are companion documents to this Data Specification:

[NEHTA Data Specification and Structured Document Template Guide for Use](#)¹

Version No.: 1.0, Issued: 07 August 2009

This guide describes the generic data structures, data types, keywords and icons used within this Data Specification.

[NEHTA Participation Data Specification](#)²

Version No.: 1.0, Issued: 16 July 2009

This document contains the full specification of the participation data type used within this Data Specification.

[NEHTA Acronyms, Abbreviations & Glossary of Terms](#)³

Version No.: 1.2, Issued: 25 May 2005

A complete listing of all relevant acronyms and abbreviations, and a glossary of terms.















¹ http://www.nehta.gov.au/component/docman/doc_download/771-data-specifications-and-sdt-guide-for-use-20090807

² http://www.nehta.gov.au/component/docman/doc_download/754-participation-data-specification-v10

³ http://www.nehta.gov.au/dmdocuments/Glossary_v1-2.pdf

2 Specification

2.1 Data Hierarchy

	CLINICAL INTERVENTION		
	Clinical Intervention Description		!
	Related Problem/Diagnosis		0 ↻
	Related Clinical Intervention		0 ↻
	DateTime Started		0
	DateTime Ended		0
	Clinical Intervention Outcome		0
	Clinical Intervention Note		0
	CLINICAL INTERVENTION AWARENESS		0 ↻
	Is Aware		!
	Person Category		!
	Non-Awareness Reason		0
	DateTime Recorded		0
	REPORTER		0

2.2 CLINICAL INTERVENTION

Identification









Name	CLINICAL INTERVENTION
Meta-data Type	Data Group
Identifier	DG-15514
Version	1.0



Definition

Definition	Describes an intervention carried out by a healthcare provider to improve, maintain or assess the health of a subject of care, in a clinical situation that may require clinical judgement to produce a subjective finding (i.e. an 'action' that may include an 'evaluation'). Clinical interventions include invasive and non-invasive procedures, and cognitive interventions.
Definition Source	NEHTA
Synonymous Names	Diagnostic intervention Therapeutic intervention Diagnostic procedure Therapeutic procedure Treatment Procedure Counselling Advising
Notes	Captures detailed information on relevant clinical interventions, as performed by a healthcare provider. Includes information on therapeutic/treatment procedures during the healthcare visit/encounter and can include diagnostic procedures. This item is repeated for every instance of a clinical intervention. Should not be used for recording Medications prescribed; or Reporting Pathology or Diagnostic Imaging results.

Relationships

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
	Clinical Intervention Description	1.0	Essential		Single
	Related Problem/Diagnosis	1.0	Optional		Multiple
	Related Clinical Intervention	1.0	Optional		Multiple
	DateTime Started	1.0	Optional		Single
	DateTime Ended	1.0	Optional		Single
	Clinical Intervention Outcome	1.0	Optional		Single
	Clinical Intervention Note	1.0	Optional		Single
	CLINICAL INTERVENTION AWARENESS	1.0	Optional		Multiple

Data Type	Name	Version	Obligation	Condition	Occurrence
	DateTime Recorded	1.0	Optional		Single
	REPORTER	1.0	Optional		Single

2.3 Clinical Intervention Description

Identification

Name	Clinical Intervention Description
Meta-data Type	Data Element
Identifier	DE-15579

Definition

Definition	Describes the clinical intervention undertaken on or provided to the subject of care.
Definition Source	NEHTA
Synonymous Names	
Notes	Captures information on relevant clinical interventions, as performed by a healthcare provider. Specifies therapeutic/treatment procedures performed during the healthcare visit/encounter/interaction.
Data Type	CodeableText
Value Domain	Not specified - Use existing code sets until NEHTA determines a suitable common reference set.

Usage

Examples	<ol style="list-style-type: none"> 1. Creation of Arterio-venous shunt for haemodialysis 2. Peritoneal Dialysis
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Essential		Single

2.4 Related Problem/Diagnosis

Identification

Name	Related Problem/Diagnosis
Meta-data Type	Data Element
Identifier	DE-15562

Definition

Definition	The underlying problem/diagnosis to which the current issue is related.
Definition Source	NEHTA
Synonymous Names	
Notes	This item identifies the relevant health problem experienced by the subject of care, as assessed by the healthcare provider. This element provides a link to one or more established problem(s) or diagnoses.
Data Type	Link
Value Domain	

Usage

Examples	
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Multiple

2.5 Related Clinical Intervention

Identification

Name	Related Clinical Intervention
Meta-data Type	Data Element
Identifier	DE-15524

Definition

Definition	The clinical intervention to which the current issue/event is related.
Definition Source	NEHTA
Synonymous Names	
Notes	
Data Type	Link
Value Domain	

Usage

Examples	
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Multiple

2.6 DateTime Started

Identification

Name	DateTime Started
Meta-data Type	Data Element
Identifier	DE-15507

Definition

Definition	The date or date and time that specific Clinical Intervention was initiated.
Definition Source	NEHTA
Synonymous Names	Date and Time Performed Date and Time Procedure Performed Date and Time Test Performed
Notes	Captures the date and time values of a procedure being performed. This item must include a date component and time component.
Data Type	DateTime
Value Domain	

Usage

Examples	1. 2008-10-25 14:30
-----------------	---------------------

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Single

2.7 DateTime Ended

Identification

Name	DateTime Ended
Meta-data Type	Data Element
Identifier	DE-15510

Definition


Definition	The datetime that the specific problem was no longer evidenced.
Definition Source	NEHTA
Synonymous Names	
Notes	
Data Type	DateTime
Value Domain	

Usage

Examples	<ol style="list-style-type: none"> 2004-03-31 2004-03 2004 2004-03-3113:10
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	CLINICAL INTERVENTION	1.0	Optional		Single

2.8 Clinical Intervention Outcome

Identification

Name	Clinical Intervention Outcome
Meta-data Type	Data Element
Identifier	DE-15594

Definition

Definition	The expected result of the clinical intervention, as judged by the performing healthcare provider.
Definition Source	NEHTA
Synonymous Names	
Notes	
Data Type	CodedText
Value Domain	Not specified - Use existing code sets until NEHTA determines a suitable common reference set.

Usage

Examples	<ol style="list-style-type: none"> 1. Intervention successful as expected - no complications. 2. Intervention unsuccessful as expected - with complications.
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Single

2.9 Clinical Intervention Note

Identification

Name	Clinical Intervention Note
Meta-data Type	Data Element
Identifier	DE-15595

Definition

Definition	Additional information relevant to the clinical intervention.
Definition Source	NEHTA
Synonymous Names	Procedure Note
Notes	
Data Type	Text
Value Domain	

Usage

Examples	1. For the intervention “Lumbar Epidural Block” the note may be “Performed due to COPD prior to general anaesthetic”.
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Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Single

2.10 CLINICAL INTERVENTION AWARENESS

Identification

Name	CLINICAL INTERVENTION AWARENESS
Meta-data Type	Data Group
Identifier	DG-20147
Version	1.0

Definition

Definition	Indicates whether a person (which may be a subject of care or his/her relative or family member) is aware of the clinical intervention.
Definition Source	NEHTA
Synonymous Names	Awareness of Procedure Performed Procedure Performed Awareness.
Notes	

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Multiple

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
✓x	Is Aware	1.0	Essential		Single
TTL	Person Category	1.0	Essential		Single
T	Non-Awareness Reason	1.0	Optional		Single

2.11 Is Aware

Identification

Name	Is Aware
Meta-data Type	Data Element
Identifier	DE-20129

Definition

Definition	Denotes whether or not the subject of the Person Category is aware of the specified information in question.
Definition Source	NEHTA
Synonymous Names	Awareness
Notes	
Data Type	Boolean
Value Domain	

Usage

Examples	1. Yes 2. No
-----------------	-----------------

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION AWARENESS	1.0	Essential		Single

2.12 Person Category

Identification

Name	Person Category
Meta-data Type	Data Element
Identifier	DE-20130

Definition

Definition	The relationship of an agent of the subject of care (which includes the subject of care) in order to record whether the agent has an awareness of the specified information in question.
Definition Source	NEHTA
Synonymous Names	Person
Notes	Describes the relationship of a carer or agent of the subject of care in order to record whether the subject of care or the carer has an awareness of a condition or intervention.
Data Type	CodeableText
Value Domain	Not specified - Use existing code sets until NEHTA determines a suitable common reference set.

Usage

Examples	<ol style="list-style-type: none"> 1. Subject of Care. 2. Spouse. 3. Partner. 4. Child. 5. Grand child. 6. Parent. 7. Grand parent.
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION AWARENESS	1.0	Essential		Single

2.13 Non-Awareness Reason

Identification

Name	Non-Awareness Reason
Meta-data Type	Data Element
Identifier	DE-20131

Definition


Definition	The reason the subject of the Person Category is not aware of the specified information in question.
Definition Source	NEHTA
Synonymous Names	Reason for not being aware Reason
Notes	In the context of situation awareness, the description provides the reason(s) the subject is not aware of the health/clinical problems, issues, clinical interventions, etc. in question.
Data Type	Text
Value Domain	

Usage

Examples	<ol style="list-style-type: none"> 1. Subject not informed at request of spouse. 2. Family in opinion that subject of care is unable to cope with the impact/poor prognosis of diagnosis. 3. Subject informed at request of patient/subject of care.
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	CLINICAL INTERVENTION AWARENESS	1.0	Optional		Single

2.14 DateTime Recorded

Identification

Name	DateTime Recorded
Meta-data Type	Data Element
Identifier	DE-15511

Definition


Definition	The date or date and time that specific Clinical Intervention information was recorded.
Definition Source	NEHTA
Synonymous Names	
Notes	
Data Type	DateTime
Value Domain	

Usage

Examples	<ol style="list-style-type: none"> 2004-03-31 2004-03 2004 2004-03-31 13:10
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	CLINICAL INTERVENTION	1.0	Optional		Single

2.15 REPORTER

Identification

Name	REPORTER (Reuse of Participation Data Group)
Meta-data Type	Data Group
Identifier	DG-10296
Version	1.0

Definition

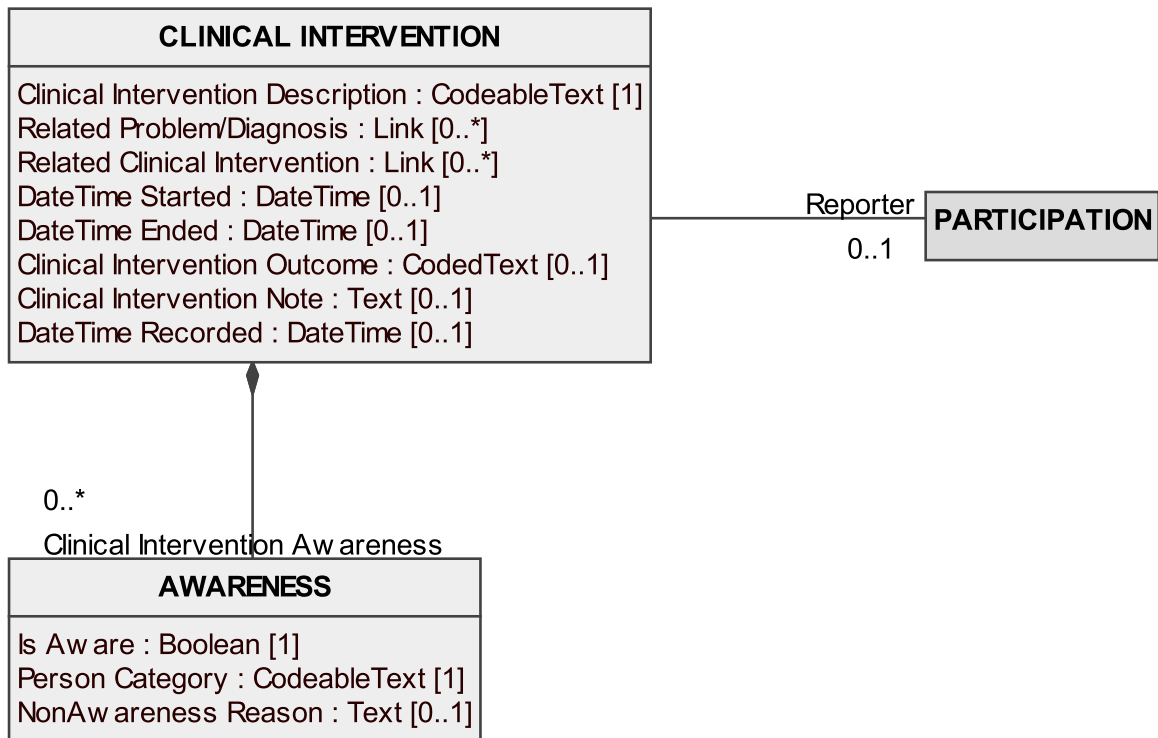
Definition	Details pertinent to the identification of a healthcare provider individual who is reporting the clinical intervention information.
Definition Source	NEHTA
Synonymous Names	
Notes	

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	CLINICAL INTERVENTION	1.0	Optional		Single

3 UML Diagram



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