

nehta

Problem/Diagnosis

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;
- Society of Hospital Pharmacists of Australia;
- Members of the Australian DataTypes Project;
- Australian Institute of Health & Welfare; and
- Ocean Informatics.

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1 Introduction

1.1 Purpose and Scope

The Problem/Diagnosis 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 also to 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

	PROBLEM/DIAGNOSIS		
	T ₀₁₀	Problem/Diagnosis Type	0
	T ₁₀₀	Problem/Diagnosis Description	!
	T	Related Problem/Diagnosis	0 
		DateTime Started	0
		DateTime Ended	0
	T ₀₁₀	Active Status	0
	T ₀₁₀	Diagnosis Progress Status	0
	T	Problem/Diagnosis Note	0
		DateTime Reported	0
	T ₁₀₀	Information Provided by	0
	PROBLEM/DIAGNOSIS AWARENESS		0 
		Is Aware	!
	T ₁₀₀	Person Category	!
	T	Non-Awareness Reason	0
	REPORTER		0

2.2 PROBLEM/DIAGNOSIS

Identification




Name	PROBLEM/DIAGNOSIS
Meta-data Type	Data Group
Identifier	DG-15530
Version	2.0



Definition

Definition	<p>The assessment, interpretation and identification of historical and/or current problem/diagnosis by a healthcare provider pertaining to a subject of care.</p> <p>A problem is a subject of care's health concern for which a specific diagnosis has not yet been defined.</p> <p>A diagnosis is the decision reached, after assessment by the healthcare provider of the nature and identity of the disease or condition of the subject of care.</p>
Definition Source	NEHTA
Synonymous Names	
Notes	<p>An account of relevant health related problems as reported by a healthcare provider. This can include a disease, condition, injury, poisoning, sign, symptom, abnormal finding, complaint, or other factor influencing health status as assessed by a healthcare provider.</p> <p>This item is repeated for every instance of a problem/diagnosis, generally constrained by the Problem/Diagnosis Type.</p>

Relationships

Children

Data Type	Name	Version	Obligation	Condition	Occurrence
T _{no}	Problem/Diagnosis Type	1.0	Optional		Single
T _{TL}	Problem/Diagnosis Description	1.0	Essential		Single
T	Related Problem/Diagnosis	2.0	Optional		Multiple
	DateTime Started	1.0	Optional		Single
	DateTime Ended	1.0	Optional		Single
T _{no}	Active Status	1.0	Optional		Single
T _{no}	Diagnosis Progress Status	1.0	Optional		Single
T	Problem/Diagnosis Note	1.0	Optional		Single
	DateTime Reported	1.0	Optional		Single
T _{TL}	Information Provided by	2.0	Optional		Single

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROBLEM/DIAGNOSIS AWARENESS	1.0	Optional		Multiple
	REPORTER	1.0	Optional		Single

2.3 Problem/Diagnosis Type

Identification

Name	Problem/Diagnosis Type
Meta-data Type	Data Element
Identifier	DE-15547

Definition

Definition	The type used to categorise the problem/diagnosis.
Definition Source	NEHTA
Synonymous Names	
Notes	The supported Problem/Diagnosis Types must include "Principal", "Complication" and "Co-morbidity".
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. Co-morbidity 2. Principal 3. Complication 4. Other Associated
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.4 Problem/Diagnosis Description

Identification

Name	Problem/Diagnosis Description
Meta-data Type	Data Element
Identifier	DE-15514

Definition

Definition	<p>A concise technical description or statement of problem/diagnosis or situation pertaining to the subject of care. The decision to apply the diagnostic label or problem description/statement by the healthcare provider is based on his/her assessment and interpretation of the cause, nature, or manifestation of the subject of care's medical/health condition(s).</p> <p>Diagnosis: represents the nature and identification of a disease.</p> <p>Problem: a description of a subject of care's condition for which a specific diagnosis has not yet been identified.</p>
Definition Source	NEHTA
Synonymous Names	
Data Type	CodeableText
Value Domain	Not specified - Use existing code sets until NEHTA determines a suitable common reference set.
Notes	This item presents the name of the condition, after an assessment carried out by healthcare provider to define the health problem or diagnosis experienced by a subject of care.

Usage

Examples	<ol style="list-style-type: none"> 1. Acopia 2. Appendicitis. 3. Acute myocardial infarction. 4. Measles. 5. Recurrent headaches. 6. Acute abdominal pain
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Essential		Single

2.5 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	
Data Type	Text
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.

Usage

Examples

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Multiple

2.6 DateTime Started

Identification

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

Definition

Definition	The datetime when a subject of care's problem started.
Definition Source	NEHTA
Synonymous Names	
Data Type	DateTime

Usage

Examples	<ol style="list-style-type: none"> 1. 2004-03-31 2. 2004-03 3. 2004 4. 2004-03-3113:10
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	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	
Data Type	DateTime

Usage

Examples	<ol style="list-style-type: none"> 1. 2004-03-31 2. 2004-03 3. 2004 4. 2004-03-3113:10
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.8 Active Status

Identification

Name	Active Status
Meta-data Type	Data Element
Identifier	DE-15517

Definition

Definition	An indication of whether the problem/diagnosis is considered an active or inactive issue.
Definition Source	NEHTA
Synonymous Names	
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. Active. 2. Inactive. 3. Resolved.
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.9 Diagnosis Progress Status

Identification

Name	Diagnosis Progress Status
Meta-data Type	Data Element
Identifier	DE-15526

Definition

Definition	An indication of the current stage of assessment and interpretation of the diagnosis.
Definition Source	NEHTA
Synonymous Names	
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. Interim. 2. Final. 3. Active. 4. Resolved.
-----------------	--

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.10 Problem/Diagnosis Note

Identification

Name	Problem/Diagnosis Note
Meta-data Type	Data Element
Identifier	DE-15597

Definition

Definition	Additional comments relevant to the problem/diagnosis.
Definition Source	NEHTA
Synonymous Names	
Data Type	Text
Notes	Used to provide additional narrative information in relation to a problem/diagnosis.

Usage

Examples	
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Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.11 DateTime Reported

Identification

Name	DateTime Reported
Meta-data Type	Data Element
Identifier	DE-15508

Definition

Definition	The date or date and time that the specific problem was reported.
Definition Source	NEHTA
Synonymous Names	
Data Type	DateTime

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
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.12 Information Provided by

Identification

Name	Information Provided by
Meta-data Type	Data Element
Identifier	DE-15503

Definition

Definition	A category of the source of the health information in this record.
Definition Source	NEHTA
Synonymous Names	
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. Carer. 3. Other.
-----------------	---

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⚑	PROBLEM/DIAGNOSIS	1.0	Optional		Single

2.13 PROBLEM/DIAGNOSIS AWARENESS

Identification

Name	PROBLEM/DIAGNOSIS 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 problem or diagnosis.
Definition Source	NEHTA
Synonymous Names	

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	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

2.14 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
Data Type	Boolean

Usage

Examples	1. Yes
	2. No

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS AWARENESS	1.0	Essential		Single

2.15 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
Data Type	CodeableText
Value Domain	Not specified - Use existing code sets until NEHTA determines a suitable common reference set.
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.

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.
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Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS AWARENESS	1.0	Essential		Single

2.16 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
Data Type	Text
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.

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.
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Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
	PROBLEM/DIAGNOSIS AWARENESS	1.0	Optional		Single

2.17 REPORTER

Identification

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

Definition

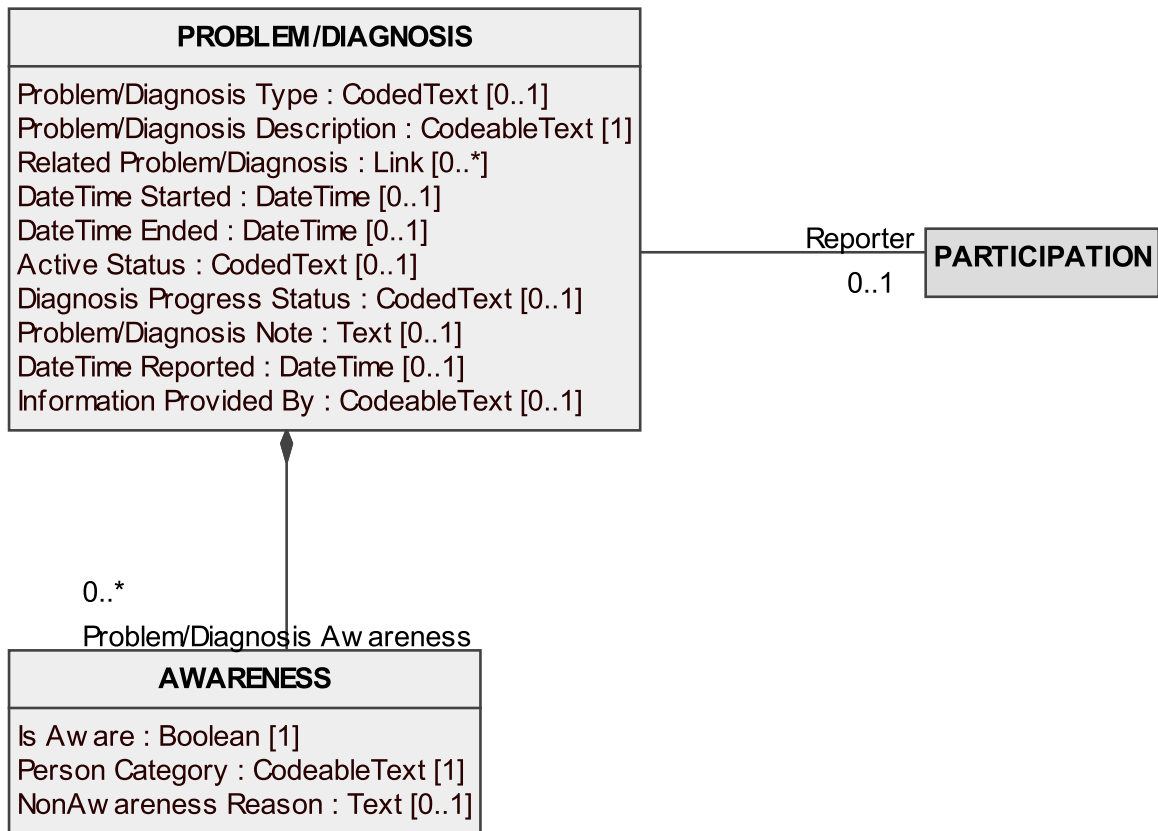
Definition	Details pertinent to the identification of a healthcare provider individual who is reporting the problem/diagnosis.
Definition Source	NEHTA
Synonymous Names	

Relationships

Parents

Data Type	Name	Version	Obligation	Condition	Occurrence
⌘	PROBLEM/DIAGNOSIS	1.0	Optional		Single

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