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## **Data Specifications and Structured Document Templates - Guide for Use**

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Final

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# Document Information

## Change History

Version	Date	Author	Comments
0.1	Feb 2009	Eleanor Royle	First draft
0.2	24/02/2009	Eleanor Royle	Updated after internal NEHTA review
0.3	11/03/2009	Eleanor Royle	Updated after further internal NEHTA review
0.4	25/03/2009	Andrew Westcombe	Technical writer review
0.5	21/05/2009	Robert L'egan	Reworded section 4.3 to indicate that Obligations only refer to population and that NEHTA intends all data elements are implemented [depending on the message exchange format]
0.6	06/08/2009	Richard Townley-O'Neill	Correct minor spelling and formatting problems.  Revise SDT Metamodel diagram.  Revise wording in Section 3.  Update references to published documents.
1.0	07/08/2009	Richard Townley-O'Neill	Prepare for publication

## Authorisation History

Version	Date	Status	Comments
1.0	07/08/2009	Final	

# 1 Introduction

## 1.1 Document Purpose

This document is a companion guide to all NEHTA Data Specifications and Structured Document Template (SDT) documents. This guide is designed to assist with the interpretation of these documents by those involved in the development, implementation or operation of systems that generate or interpret data pertaining to the health care of individuals.

In particular, this guide describes the generic data structures, data types, keywords and icons used in Data Specifications and SDTs.

## 1.2 Intended Audience

This document is intended to be read and understood by all readers of NEHTA Data Specifications and SDTs. This includes:

- *Software development teams* who wish to plan, architect or implement clinical applications, infrastructure components or messaging interfaces facilitating semantic interoperability.
- *IT-aware clinicians* who wish to evaluate the clinical suitability of NEHTA-endorsed standards.
- *Researchers* who wish to explore certain aspects of NEHTA-endorsed standards.

## 1.3 Background

The term 'Event Summary' was coined by the National Electronic Health Records Taskforce to describe a contribution to a shared Electronic Health Record that records key information pertaining to a health care activity, such as a pathology test, a hospital stay, a GP visit etc.

NEHTA, in consultation with a broad range of stakeholders, developed clinical data specifications to support 12 priority event summary types, identified in 2004.

These consultations identified a high degree of commonality between the data groups required for the 12 priority events. During the prioritisation of the events, several indicators suggested that identifying the data groups required for each event summary might be too constraining and limit the clinical utility of the event summary construct (given the number of clinical exceptions that could be identified). An alternative proposition was to allow the data groups used within any event summary to be dynamically allocated/selected by the clinician in line with clinical preferences at the point of care. It was envisaged that such an approach would ensure clinical utility irrespective of the clinical scenario, and remove the need to gain consensus on the data groups required for each of the priority event summaries. It also prevents the proliferation of different event summary constructs over time. Such an approach was supported by the NEHTA Clinical Reference Group (CRG) meeting on 9 September 2004. NEHTA's early data development therefore focussed on refining priority data group specifications rather than priority event summaries.

As a result of this a number of data group specifications have been developed and published on the NEHTA website as 'Data Specifications'.

Recent work undertaken by NEHTA has taken these data groups and used them to construct Structured Document Templates (SDTs). These SDTs organise the data elements from the data groups into a logical model for

clinical communication for a given purpose, and as such may be viewed as a constrained 'event summary' intended for communication.

In particular, Structured Document Templates:

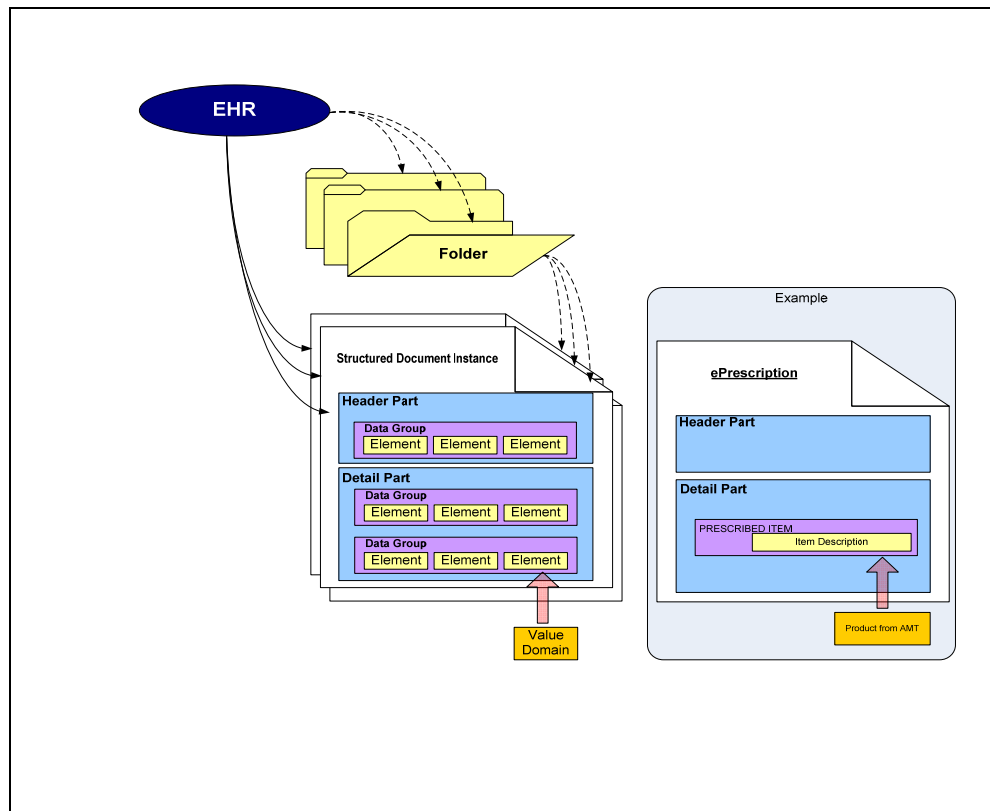
- Define the specific event summary purpose;
- Specify the data groups to be used to form the event summary for the specific purpose, organise the data groups into sections, and constrain the data groups and/or data elements to be used;
- Remove the optional information items that are not needed in the context of use;
- Select the required terminology set to be used for each data element that requires a value domain; and
- Place additional constraints on the information items such as adding a valid value range, specifying the units to be used, and modifying any existing constraints on information items such as minimum and maximum occurrences of data items etc. to suit specific contexts.

In this way, a SDT provides an information framework on which to achieve semantic interoperability, independent of any messaging format.

The SDT is a template for information exchange and although it can be a useful input into the development of the following, it is:

- Not a specification for software functionality;
- Not a user interface design;
- Not a data capture and storage schema; and
- Not a guide to implementing any specific messaging standard.

Figure 1 below shows how a Structured Document Instance can be organised in an EHR environment. The EHR environment in this diagram is essentially a document management system. An instance of a structured document is therefore equivalent to an attested (authorised) document which is uploaded into an EHR.



**Figure 1 Event Summary Collection in Shared EHR System**

While an EHR is referred to in this document, there is no implication of how and when this will be achieved as these issues are being dealt with through other projects.

Whilst it is possible to implement the Structured Document Template using messaging formats that do not support structured documents, doing so may result in some loss of context and meaning. It therefore follows that clinical safety and quality advice should be sought when implementing in a non supporting environment. Specific messaging format implementation guides should be referred to for more information in this respect.

## 1.4 Logical Record Architecture

The data groups and SDTs have been constructed in a manner which is designed to support a logical record architecture.

A logical record architecture is defined in [NPFIT-FNT-TO-SCG-0019.04](#) as:

*... a set of integrated and internally consistent abstract data and semantic definitions linked to specific health records business requirements and objectives.... It determines what data is shared across multiple applications within a single enterprise, as well as how it is to be managed, accessed and stored.*

The role of the SDT in this architecture is to specify data for a fully specified business requirement, to support many different physical implementations, in a way that enables them to share data without significant loss of meaning.

## 2 Data Specifications

NEHTA is developing a suite of data specifications for the Australian Health 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 healthcare setting.

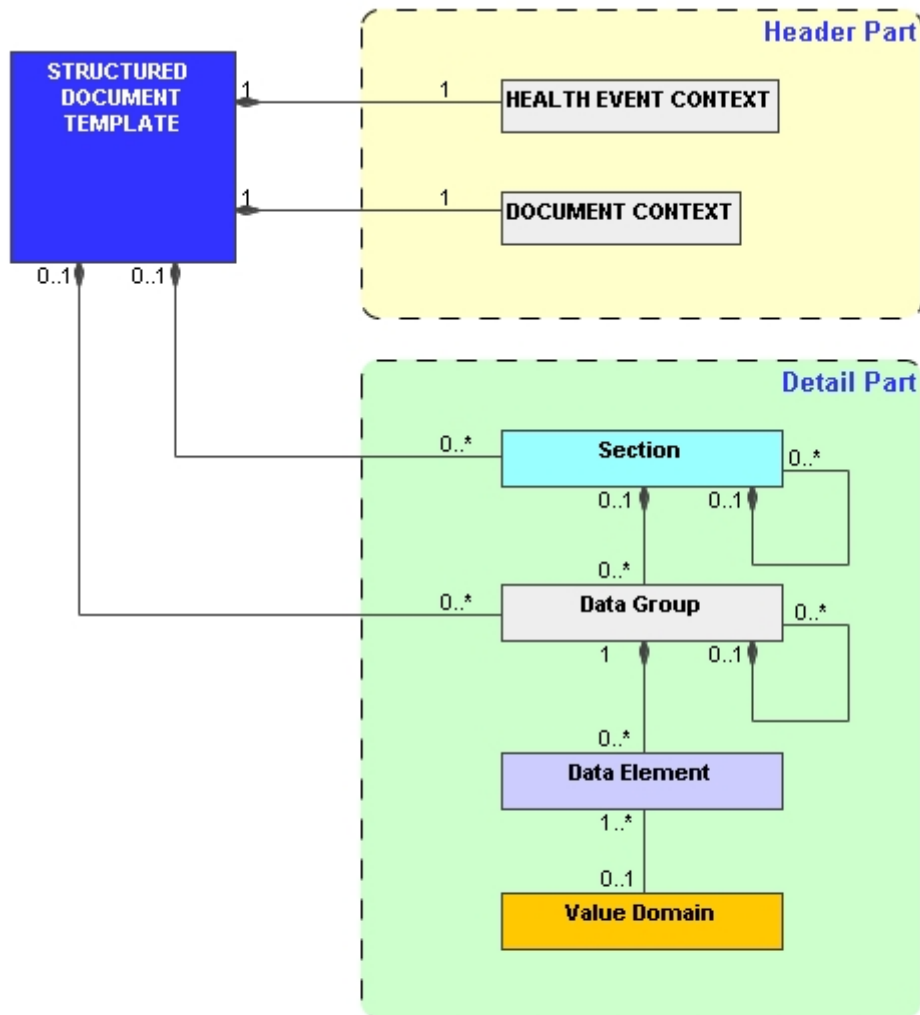
Data Specifications need to be independent of messaging formats. They are concerned with providing an information framework in which to achieve semantic interoperability.

Data specifications have been developed:

- Based on jurisdiction and clinician identified priorities;
- 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 define a set of clinical terminologies, specific to the requirements of the Australian healthcare system.

### 3 The Structured Document Metamodel

The NEHTA Structured Document Metamodel is used to specify the overall structure of a Structured Document Template. Figure 2 below shows the high level metamodel.



#### Constraints

- Every SDT must have at least one section or one data group as a part.
- Every section must be a part of exactly one SDT or one section.
- Every section must have at least one section or one data group as a part.
- Every data group must be a part of exactly one SDT, one section or one data group.
- Every data group must have at least one data group or one data element as a part.

**Figure 2: SDT Metamodel**

There are two main components used to organise the information within a Structured Document Template as follows:

1. **Header Part:** This always comprises a Document Context data group covering Document Control and Document Recipients, and a Health Event Context data group. A specification of the header is contained in the [NEHTA Document Header Data Specifications](#).
2. **Detail Part:** The information contained within this part changes between different Structured Document Templates, but is always structured as shown, and consists of the following subcomponents:

- Section
- Data Group
- Data Element
- Value Domain

These components and subcomponents are described in more detail below. The data groups contained in the Header Part are described later in the document.

### 3.1 Header Part

The purpose of the header is to identify and classify the document and to provide information relating to authentication, the healthcare event that the document relates to, the subject of care and the involved healthcare providers. The header always contains the Document Context data group that includes the Document Control data group and the details of Document Recipients, and a Health Event Context data group as shown in Figure 2 in all types of NEHTA Structured Document Templates.

### 3.2 Detail Part

The detail contains the clinical content. This is a collection of health information pertinent to a subject of care which is derived from the healthcare event described in the document. The detail may be organised into one or more sections, each of which contain one or more data groups and/or possible data elements.

### 3.3 Section

The contents of the structured document detail part may be subdivided into one or more sections. A section is an organising container that gives a reader a clue as to the expected content. The primary purpose of a section is to organise information in the manner that is suitable for the primary purpose for which it is collected and that provides a way to navigate through the data items within the structured document, thereby enabling more efficient querying. It should also support safe re-use 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.

### 3.4 Data Group

A data group is a composite data structure (a collection of data groups and/or data elements that can be treated as a single block) for holding related items of information. A data group can only be assigned values through the data elements that are contained within it. Unlike sections, each data group may be based on a data group template, which can be the basis for related data groups in other SDTs. For example "Observation".

#### 3.4.1 Participant

Participant is a special case of a data group that is based on a data group template which is reused throughout the data specifications and SDTs. Participants are the individuals, organisations and IT systems operating within a defined healthcare domain and the roles that they are playing within that domain.

A participant has been defined to align with the concepts of the NEHTA interoperability framework. It equates to an *entity* that is related to the action described in an SDT as an *actor*. A participant can be a human, an organisation or an IT system.

### 3.5 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 datatypes (See [Datatypes Legend](#)).

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

### 3.6 Value Domain

A value domain constrains the permissible values for a data element. The values may be a subset of values based on a generic datatype.

Value domains are reusable components and therefore, the same value domain can be referred to by different data elements in different contexts. Value domains are often specified as a reference set. A reference set is a constrained list of SNOMED CT concepts that are appropriate to a particular context. It should be noted that many of these reference sets have been developed specifically for the context in which they appear. An assessment of fitness for purpose should therefore be undertaken before using any of the reference sets in another context.

Value domains constrain by either specifying a lower and/or upper bound on the range of permissible values or else 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/terminology reference sets. The table below provides some examples of value domains.

**Table 1: Value Domain Examples**





Data Element	Data Type	Example of Value Domain										
Sex	CodedText	<p><a href="#">AS 5017-2006/ AS4846-2006</a> derive their values from METeOR 270263 which includes values such as:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td><u>1</u></td> <td>Male</td> </tr> <tr> <td><u>2</u></td> <td>Female</td> </tr> <tr> <td><u>3</u></td> <td>Intersex or Indeterminate</td> </tr> <tr> <td><u>9</u></td> <td>Not Stated/Inadequately Described</td> </tr> </tbody> </table>	Value	Meaning	<u>1</u>	Male	<u>2</u>	Female	<u>3</u>	Intersex or Indeterminate	<u>9</u>	Not Stated/Inadequately Described
Value	Meaning											
<u>1</u>	Male											
<u>2</u>	Female											
<u>3</u>	Intersex or Indeterminate											
<u>9</u>	Not Stated/Inadequately Described											
Diagnosis	CodeableText	A SNOMED CT reference set which references concepts such as ‘Bronchitis’ (Concept ID: 32398004)										

## 4 Icon Legend

These legends describe all icons that are used within the various NEHTA information specifications.

### 4.1 Metadata Types Legend


Table 2: Metadata Types

Icon	Metadata Types
	Structured Document
	Section
	Data Group
	Participant

### 4.2 Datatypes Legend




The table below explains each of the icons used to represent the datatypes bound to each data element in the Structured Document Templates. These datatypes comply with ISO-DIS 21090- 2008 datatypes.






Table 3: Datatypes Legend

Icon	Datatype	Explanation
	Boolean	<p>A primitive datatype, sometimes called the logical datatype, having one of two values: <i>true</i> and <i>false</i>. Many systems represent true as <i>non-zero</i> (often 1, or -1) and false as <i>zero</i>.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>An actual value entered by a user might be 'yes' or could be chosen by a mouse click on an icon such as <input checked="" type="checkbox"/></li> </ul>

Icon	Datatype	Explanation
<b>T</b> / <b>T</b> <sub>010</sub>	CodeableText	<p>Coded text <i>with</i> exceptions; flexible datatype to support various ways of holding text, both free text and coded text. Commonly used to support compliance for early adopters of the Data Hierarchies. Whilst it is recommended that the values in this datatype 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 a recognition that it may not be possible to define an entire value domain for a complex concept (e.g. Diagnosis) or that there may be competing code sets in existence. Note that within exchange specifications and/or message profiles this datatype may be constrained to mandate compliance with the bound value domain.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• AIHW Separation Mode specifies the status at separation of a person from an organisation. An early adopter may have a similar concept (Coded or otherwise) that maps to this Data Element but does not strictly comply with the AIHW values.</li> <li>• A SNOMED coded/complex expression that embodies single or multiple concepts. The SNOMED concepts behind these CodeableText items are specified in the Structured Document Template Value Domains</li> </ul>

<b>T</b> <sub>010</sub>	CodedText	<p>Coded text <i>without</i> exceptions; text with code mappings. Values in this datatype must 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.</p> <p><b>Usage/Examples</b></p> <p>AS 5017-2006 specifies the following value domain representing a type of address:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Meaning</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Business</td> </tr> <tr> <td>2</td> <td>Mailing or Postal</td> </tr> <tr> <td>3</td> <td>Temporary Accommodation</td> </tr> <tr> <td>4</td> <td>Residential (permanent)</td> </tr> <tr> <td>9</td> <td>Not Stated/Unknown/Inadequately Described</td> </tr> </tbody> </table>	Value	Meaning	1	Business	2	Mailing or Postal	3	Temporary Accommodation	4	Residential (permanent)	9	Not Stated/Unknown/Inadequately Described
Value	Meaning													
1	Business													
2	Mailing or Postal													
3	Temporary Accommodation													
4	Residential (permanent)													
9	Not Stated/Unknown/Inadequately Described													

Icon	Datatype	Explanation
	DateTime	<p>Used for specifying a single date and/or time. Has the ability to indicate a level of precision, as well as that the date/time is estimated. String representations of known dates should conform to the non-extended format within standard <a href="#">ISO-DIS 21090- 2008</a> i.e. YYYYMMDDHHMMSS.UUUU[+]-ZZzz.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>Estimated or partial dates: 2008, 2008-10</li> <li>To indicate 1:20 pm on May the 31st, 1999 for a time zone which is 5 hours behind Coordinated Universal Time (UTC): 19990531132000-0500</li> </ul>
	Duration	<p>The period of time during which something continues. Consists of a value and a unit which represents the time value, e.g. hours, months. Compound durations are not allowed, e.g. 10 days 3 weeks 5 hours.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>3 hours</li> <li>6 months</li> <li>1 year</li> </ul>
any	Dynamic	<p>Represents a data element where the datatype to be used is conditional upon another data item. The values that can be required will vary considerably depending on the context.</p> <p><b>Usage/Examples</b></p> <p>Result Observable Value in Pathology Result Report.</p> <ul style="list-style-type: none"> <li>If Result Observable Test Name = "Serum Glucose Test" then Result Observable Value will be bound to a quantity data type (example value = 10.5 mmol/L)</li> <li>If Result Observable Test Name = Sensitivity Test then the Result Observable Value will be bound to a text data type (example values = S, N, R)</li> </ul>
	EncapsulatedData	<p>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 (eg., XML-signatures).</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>JPEG images</li> <li>HTML documents</li> <li>RFC 1521 MIME types</li> </ul>

Icon	Datatype	Explanation
	Integer	<p>The mathematical datatype comprising the exact integral values (according to ISO 11404).</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 1</li> <li>• -50</li> <li>• 125</li> </ul>
	Link	<p>This is a general link, reference or pointer to an object, data or application that exists logically or is stored electronically in a computer system.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 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 – <i>'http://www.google.com'</i>;</li> <li>• An absolute or relative path within a file/directory structure – e.g. in the Windows operating system, the 'link' or absolute path to a particular letter may be <i>C:\Documents and Settings\GuestUser\MyDocuments\letter.doc</i></li> </ul>
	Quantity	<p>Used for recording many real world measurements and observations. Includes the magnitude value and the units.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 100 centimetres</li> <li>• 25.5 grams</li> </ul>
	QuantityRatio	<p>The relative magnitudes of two <i>Quantity</i> values (usually expressed as a quotient).</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 25 mg/500 ml</li> <li>• 200 mmol per litre</li> </ul>
	QuantityRange	<p>Two <i>Quantity</i> values that define the minimum and maximum values, i.e. lower and upper bounds. This is typically used for defining the valid range of values for a particular measurement or observation. Unbounded quantity ranges can be defined by not including a minimum and/or a maximum quantity value.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• -20 to 100° C</li> <li>• 30-50 mg</li> <li>• &gt;10 kg</li> </ul>

Icon	Datatype	Explanation
	RealNumber	<p>A computational approximation to the standard mathematical concept of real numbers. These are often called floating point numbers.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 1.075</li> <li>• -325.1</li> <li>• 3.14157</li> </ul>
	Text	<p>Character strings (with optional language). Unless otherwise constrained by an implementation, can be any combination of alpha, numeric or symbols from the Unicode character set. Sometimes referred to as free text.</p> <p><b>Usage/Examples</b></p> <p>'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.'</p>
	TimeInterval	<p>An interval in time, with (optionally) a start date/time and (optionally) an end date/time and/or a duration/width.</p> <p><b>Usage/Examples</b></p> <ul style="list-style-type: none"> <li>• 01/01/2008 – 31/12/2008</li> <li>• 1:30 a.m. – 6:00 p.m., duration/width = 16.5 hours</li> </ul>
	UniqueIdentifier	<p>A general unique value to identify a physical or virtual object or concept.</p> <p><b>Usage/Examples</b></p> <p>Identifiers from the NEHTA Unique Health Identifier (UHI) service or patient hospital medical record number are two identifiers that may be carried by this datatype.</p>

### 4.3 Obligation Legend

Obligation in a data specification or SDT specifies whether or not a data item **must** be populated in the logical record architecture of a message. NEHTA intends that all data items are implemented.

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

The following table defines the Essential, Optional and Conditional obligations.




**Table 4: Obligations Legend**

Icon	Obligation	Explanation
!	Essential	<p>Indicates that the data item is considered a mandatory component of information and required in order for the entry to make sense.</p> <p><b>Usage/Examples:</b></p> <p>An Alert data item for a Subject of Care must include an Alert Description data item in order to make sense as the Alert Description defines the nature of the Alert.</p>
0	Optional	<p>Indicates that the data item is not considered a core component of information and is not required in order for the entry to make sense.</p> <p><b>Usage/Examples:</b></p> <p>An Alert data item for a Subject of Care need not include an Alert Note data item in order to make sense as the Alert Description typically provides enough information to understand the nature of the Alert.</p>
$a \rightarrow b$	Conditional	<p>Indicates that a data item is considered Essential only on satisfaction of a given condition. Individual data items specify the obligation of the data item when the condition is not met.</p> <p>When a condition is met, the data item is considered Essential and must be populated.</p> <p>When a condition is not met, the data item may be considered as not permitted, i.e. it must not be populated, or the data item may be considered Optional.</p> <p><b>Usage/Examples:</b></p> <p>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 <b>must not</b> be completed.</p>

Where Essential child data items are contained within Optional parent data items, the child data items only need to be populated when the parent is populated.

The following table defines other icons used within the document.

Table 5: Other Icons

Icon	Meaning	Explanation
	<b>Optional Multiple</b> <b>(Repeated 0 to Many times)</b>	Indicates the data item is optional but may be populated and repeated many times. An ordered list is implicit.  <b>Usage/Examples:</b> A Clinical Intervention Awareness data group is repeatable to enable recording of many Awarenesses of a Clinical Intervention. A Clinical Intervention Awareness data group does not need to be populated.
	<b>Mandatory Multiple</b> <b>(Repeated 1 to Many times)</b>	Indicates the data item must be populated and may be repeated many times. An ordered list is implicit.  <b>Usage/Examples:</b> The Prescribed Item data group within an ePrescription is repeatable to enable recording of many prescribed items within the ePrescription. At least one prescribed item must be populated in an ePrescription.
	<b>Conditional Multiple</b> <b>(Repeated 0 to Many times)</b>	Indicates the data item is considered Essential only on satisfaction of a given condition, but may be populated and repeated many times. Individual data items specify the obligation of the data item when the condition is and is not met. An ordered list is implicit.  <b>Usage/Examples:</b> A Specimen Qualifier in a pathology result report is only essential if the specimen requires qualification, in which case it may be necessary to qualify the specimen multiple times – eg. Mid-morning postprandial are two qualifiers that may be required to qualify a urine specimen.

## 4.4 Keywords

Where used in this document, the keywords **must**, **should**, **may**, **must not** and **should not** are to be interpreted as described in [RFC2119](#).

Table 6: Keywords used in this document

Keyword	Interpretation
<b>Must</b>	This word, or the terms “required” or “shall”, means that the definition is an absolute requirement of the specification.
<b>Should</b>	This word, or the adjective “recommended”, means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.

<b>Keyword</b>	<b>Interpretation</b>
<b>May</b>	This word, or the adjective "optional", means that an item is truly optional. One implementer may choose to include the item because a particular implementation requires it, or because the implementer determines that it enhances the implementation while another implementer may omit the same item. An implementation which does not include a particular option must be prepared to interoperate with another implementation which does include the option, perhaps with reduced functionality. In the same vein, an implementation which does include a particular option must be prepared to interoperate with another implementation which does not include the option (except of course, for the feature the option provides).
<b>Must Not</b>	This phrase, or the phrase "shall not" means that the definition is an absolute prohibition of the specification.
<b>Should Not</b>	This phrase, or the phrase "not recommended" 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.

## 5 Data Specifications

This section describes the format used to define each Section, Data Group and Data Element within a Data Specification or SDT. The tables below illustrate the layout of these definitions, describe the components of the definitions and identify when each component is applicable.

### 5.1 Identification

<b>T/T<sub>010</sub></b>	<b>Name</b>	Item Name
	<b>Metadata Type</b>	Metadata type e.g. Section, Data Group or Data Element
	<b>Identifier</b>	NEHTA internal Identifier.
	<b>Version</b>	Item Version number used to track structural changes to published versions of data groups. This provides a pointer to the applicable data group within the NEHTA data library repository. Note that the applicable data group within a Structured Document Template may not be the latest published version. Applicable only to data groups.

### 5.2 Definition

<b>Definition</b>	The definition of the item. For data groups used in a particular context the definition may be a refinement of the generic data group definition.
<b>Synonymous Names</b>	List of any names the item may also be known as. Implementers may prefer to use synonymous names to refer to the item in specific contexts.
<b>Notes</b>	Informative text further describing the item.  The purpose of the notes section is to include extra information that further describes the item, adds context or assists in the understanding of how the data item can be used.
<b>Datatype</b>	The datatype of the data element. E.g. DateTime or Text. Applicable only to data elements.
<b>Value Domain</b>	Contains the name and identifier of the defined value domain, or a statement describing what values to use in the absence of a defined value domain for the related data element. Applicable only to CodedText and CodeableText data elements.

## 5.3 Usage

### Examples

The usage section displays one or more examples of the data that is catered for by the data element. In the SDT, examples are only included for Data Elements.

Implementation guides may contain examples for how data groups should be populated and how they relate to each other.

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 an indicative example is provided.

## 5.4 Relationships

Table 7: Children

Type	Name	Version	Obligation	Condition	Occurrence
Icon illustrating the Metadata or Datatype	Item Name	Version of the item – only applicable for Data Groups	Obligation of this child item to the item described on this page	The conditions that must be met to include this child data element. Only applicable for elements with a Conditional obligation	The number of instances of this child item that must occur as determined by the obligation and multiplicity.

Table 8: Parent

Type	Name	Version	Obligation	Condition	Occurrence
Icon illustrating the Metadata or Datatype	Item Name	Version of the item – only applicable for Data Groups	Obligation of the item described on this page to this parent item.	The conditions that must be met to include the data element. Only applicable for elements with a Conditional obligation	The number of instances of the item described on this page that must occur as determined by the obligation and multiplicity.

For Participant data groups the following child table is provided.

**Table 9: Participant Children**

Type	Name	Condition	Occurrence
Icon illustrating the Metadata or Datatype	Item name	<b>For Role Name</b> Role name.description="The role name of the participant individual or organisation"  <b>For data groups</b> Statement of reasons and/or conditions for inclusion of this data group.	Number of instances of this item that must occur.

## 6 References

REF	Document Name	Publisher	Repository
AS 5017-2006	AS 5017 (2006) – Healthcare Client Identification	Standards Australia	<a href="http://infostore.saiglobal.com/store/">http://infostore.saiglobal.com/store/</a> Accessed 6 August 2009
AS4846-2006	AS 4846 (2006) – Healthcare Provider Identification	Standards Australia	<a href="http://infostore.saiglobal.com/store/">http://infostore.saiglobal.com/store/</a> Accessed 6 August 2009
ISO 8601-2004	ISO 8601:2004 – Data elements and interchange formats – Information interchange – Representation of dates and times, Edition 3	ISO	<a href="http://www.iso.org">http://www.iso.org</a> Accessed 6 August 2009
ISO-DIS 21090-2008	Draft International Standard ISO/DIS 21090 Health Informatics - Harmonized data types for information exchange	ISO	<a href="http://www.iso.org">http://www.iso.org</a> Accessed 6 August 2009
NEHTA-HDR	Document Header Data Specifications	NEHTA	<a href="http://www.nehta.gov.au/component/docman/doc_download/754-participation-data-specification-v10">http://www.nehta.gov.au/component/docman/doc_download/754-participation-data-specification-v10</a> Accessed 6 August 2009
NPFIT-FNT-TO-SCG-0019.04	A NHS Logical Health Record Architecture: Vision, Objectives and Success Criteria	NHS Connecting for Health	<a href="http://www.connectingforhealth.nhs.uk/systemsandservices/data/scg/publications/SCG0019.pdf">http://www.connectingforhealth.nhs.uk/systemsandservices/data/scg/publications/SCG0019.pdf</a> Accessed 6 August 2009
PDS	Participation Data Specification	NEHTA	<a href="http://www.nehta.gov.au/component/docman/doc_download/754-participation-data-specification-v10">http://www.nehta.gov.au/component/docman/doc_download/754-participation-data-specification-v10</a> Accessed 6 August 2009

REF	Document Name	Publisher	Repository
RFC2119	RFC2119 - Key words for use in RFCs to Indicate Requirement Levels	United Kingdom Network Working Group	<a href="http://www.faqs.org/rfcs/rfc2119.html">http://www.faqs.org/rfcs/rfc2119.html</a> Accessed 6 August 2009