



Data Specifications and Structured Document Templates - Guide for Use

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Authorisation History

Version	Date	Status	Comments
1.0	07/08/2009	Final	
1.1	07/06/2010	Draft for Comment	

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, or a GP visit.

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

These consultations identified a high degree of commonality between the data groups required for the 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 approach 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 components 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 components such as adding a valid value range, specifying the units to be used, and modifying any existing constraints on information components such as minimum and maximum occurrences of data components 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.

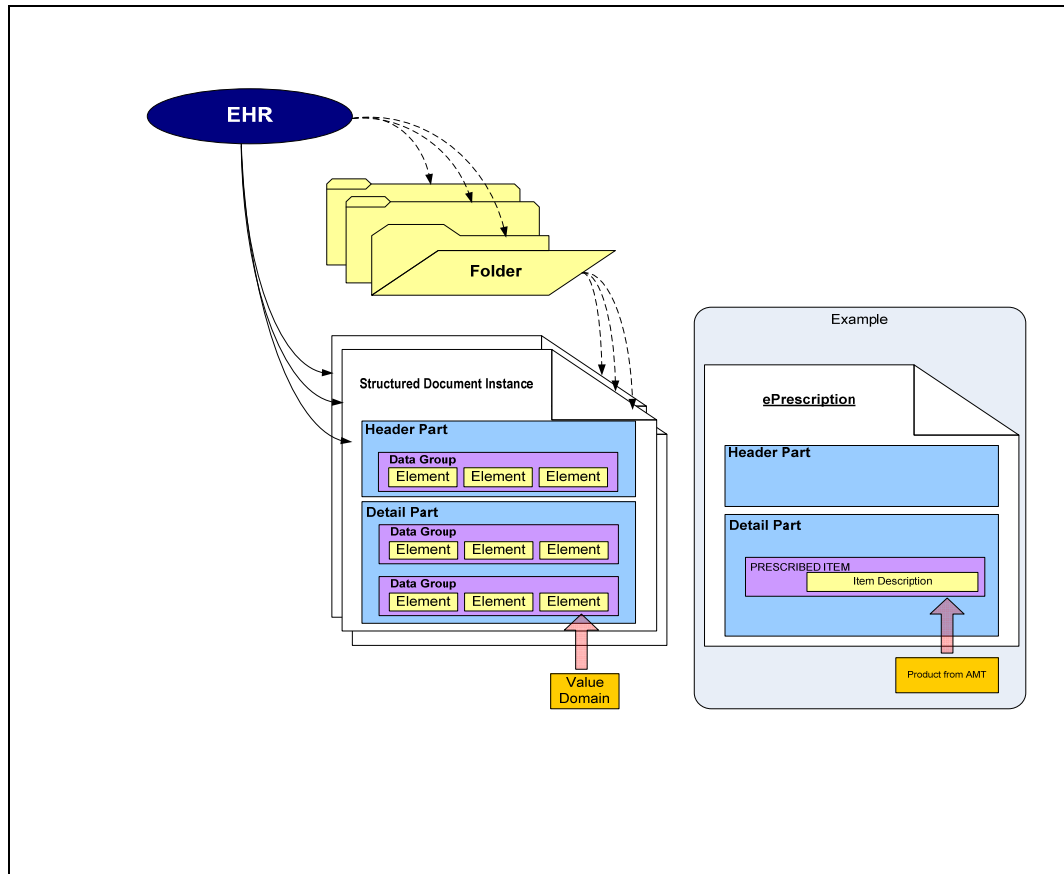


Figure 1 Event Summary Collection in Shared EHR System

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

A logical record architecture is defined in [NHS2008a](#) 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 metamodel.

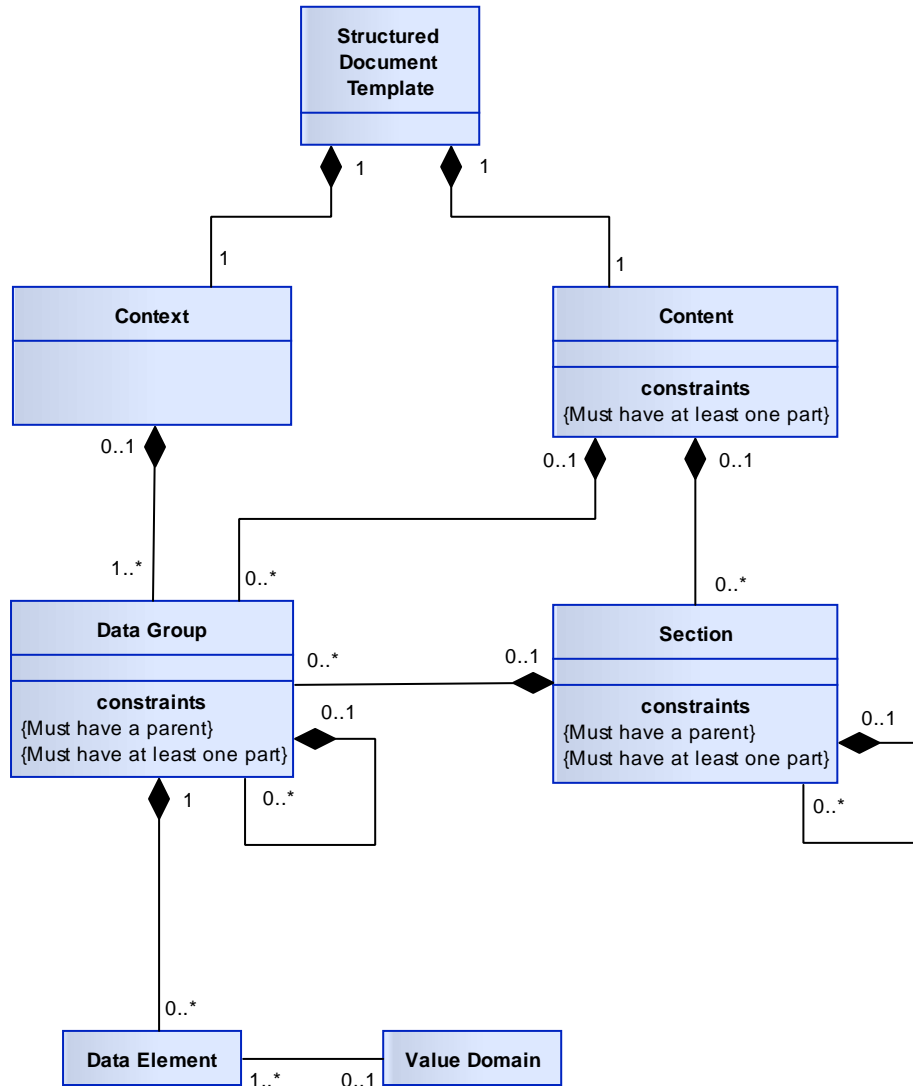


Figure 2: SDT Metamodel

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

1. **Context:** This contains information related to the overall context of the document.
2. **Content:** This contains information which changes between different Structured Document Templates, but is always structured as shown, and consists of the following components:
 - Section
 - Data Group
 - Data Element
 - Value Domain

These components and components are described in more detail below.

3.1 Context

The purpose of the Context is to identify and classify the document and to provide information relating to the healthcare event that the document relates to, the subject of care and the involved healthcare providers.

3.2 Content

The Content contains 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 Content **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 components 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

3.4.1 Participation

Participation 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. Participations are an amalgam of the Actors 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.

[NEHT2009c](#) defines the full Participation specification.

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 data types (See [Data types Legend](#)).

Whilst all data elements are constrained by their data type, 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 data type.

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.

Data Element	Data Type	Example of Value Domain										
Sex	CodedText	<p>SA2006a and SA2006b 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>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> </tbody> </table>	Value	Meaning	1	Male	2	Female	3	Intersex or Indeterminate	9	Not Stated/Inadequately Described
Value	Meaning											
1	Male											
2	Female											
3	Intersex or Indeterminate											
9	Not Stated/Inadequately Described											
Diagnosis	CodeableText	A SNOMED CT reference set which references concepts such as ‘Bronchitis’ (Concept ID: 32398004)										

Table 1: Value Domain Examples

4 Icon Legend

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

4.1 Metadata types Legend

The following table explains each of the icons used to represent the metadata types within Data Specifications and SDTs.






Icon	Metadata Types
	Structured Document
	Section
	Data Group
	Participation
	Table 2: Metadata Types Legend Choice

Table 2: Metadata Types Legend


4.1.1 Choice

Choice represents a decision to be made at run-time between a disjunctive mandatory set of data groups defined at design-time, i.e. one and only one member of the set **must** be chosen.

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 **must** be done with the "Person or Organisation" containing the choice of either the Person data group or the Organisation data group.




4.2 Data types Legend






The following table explains each of the icons used to represent the data types bound to each data element in the Structured Document Templates. These data types are a profile of the [ISO21090-2008](#) data types as specified in [NEHT2010c](#).




Icon	Data type	Explanation
	Boolean	<p>A primitive data type, sometimes called the logical data type, 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>Usage/Examples</p> <ul style="list-style-type: none"> 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"/>

Icon	Data type	Explanation
T / T ₀₁₀	CodeableText	<p>Coded text <i>with</i> exceptions; flexible data type 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 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 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 data type may be constrained to mandate compliance with the bound value domain.</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • 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. • A SNOMED coded/complex expression that embodies single or multiple concepts. The SNOMED concepts behind these CodeableText components are specified in the Structured Document Template Value Domains

T ₀₁₀	CodedText	<p>Coded text <i>without</i> exceptions; text with code mappings. Values in this data type 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>Usage/Examples</p> <p>SA2006b 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	Data type	Explanation
	DateTime	<p>Used for specifying a single date and/or time. Has the ability to indicate a level of precision, but not whether the date/time is estimated. String representations of known dates should conform to the non-extended format within the ISO21090-2008 standard, i.e. YYYYMMDDHHMMSS.UUUU[+]-ZZzz.</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • Partial dates: 2008, 2008-10 • 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
	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>Usage/Examples</p> <ul style="list-style-type: none"> • 3 hours • 6 months • 1 year
any	Dynamic	<p>Represents a data element where the data type to be used is conditional upon another data component. The values that can be required will vary considerably depending on the context.</p> <p>Usage/Examples</p> <p>Result Observable Value in Pathology Result Report.</p> <ul style="list-style-type: none"> • 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) • 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)
	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>Usage/Examples</p> <ul style="list-style-type: none"> • JPEG images • HTML documents • RFC1521 MIME types

Icon	Data type	Explanation
	Integer	<p>The mathematical data type comprising the exact integral values (according to ISO11404-2007).</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • 1 • -50 • 125
	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>Usage/Examples</p> <ul style="list-style-type: none"> • 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>; • 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>
	Quantity	<p>Used for recording many real world measurements and observations. Includes the magnitude value and the units.</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • 100 centimetres • 25.5 grams
	QuantityRatio	<p>The relative magnitudes of two <i>Quantity</i> values (usually expressed as a quotient).</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • 25 mg/500 ml • 200 mmol per litre
	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>Usage/Examples</p> <ul style="list-style-type: none"> • -20 to 100° C • 30-50 mg • >10 kg

Icon	Data type	Explanation
	RealNumber	<p>A computational approximation to the standard mathematical concept of real numbers. These are often called floating point numbers.</p> <p>Usage/Examples</p> <ul style="list-style-type: none"> • 1.075 • -325.1 • 3.14157
	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>Usage/Examples</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>Usage/Examples</p> <ul style="list-style-type: none"> • 01/01/2008 – 31/12/2008 • 1:30 a.m. – 6:00 p.m., duration/width = 16.5 hours

Icon	Data type	Explanation
ID	UniqueIdentifier	<p>A general unique value to identify a physical or virtual object or concept.</p> <p>In using this data type, the attributes of the UniqueIdentifier data type should be populated from the identifiers as defined in AS 4846 (2006) SA2006a and AS 5017 (2006) SA2006b as follows:</p> <ul style="list-style-type: none"> • <i>root</i>: a globally unique object identifier that identifies the combination of geographic area, issuer and type. If no such globally unique object identifier exists, it must be created. • <i>extension</i>: a unique identifier within the scope of the root that is directly equivalent to the identifier designation element. • <i>identifierName</i>: 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 as such. • <i>identifierScope</i>: 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. <p>Also, the following constraints apply on the UniqueIdentifier data type:</p> <ol style="list-style-type: none"> 1. The <i>root</i> attribute must be used. 2. For an entity identifier the <i>root</i> attribute must be an OID that consists of a node in a hierarchically-assigned namespace, formally defined using the ITU-T's ASN.1 standard. 3. For an entity identifier the <i>root</i> attribute must not be a UUID. 4. The <i>extension</i> attribute must be used. <p>Usage/Examples</p> <p>Identifiers from the NEHTA Unique Health Identifier (UHI) service or a patient hospital medical record number are two identifiers that may be carried by this data type.</p>




Table 3: Data types Legend

4.3 Obligation Legend

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

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

The following table defines the obligations.

Icon	Obligation	Explanation
	Essential	<p>Indicates that the data component is considered a mandatory component of information and required in order for the entry to make sense.</p> <p>Usage/Examples: An Alert data component for a Subject of Care must include an Alert Description data component in order to make sense as the Alert Description defines the nature of the Alert.</p>
	Optional	<p>Indicates that the data component is not considered a mandatory component of information and is not required in order for the entry to make sense.</p> <p>Usage/Examples: An Alert data component for a Subject of Care need not include an Alert Note data component in order to make sense as the Alert Description typically provides enough information to understand the nature of the Alert.</p>
	Conditional	<p>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.</p> <p>When a condition is met, the data component is considered Essential and must be populated.</p> <p>When a condition is not met, the data component may be considered as not permitted, i.e. it must not be populated, or the data component may be considered Optional.</p> <p>Usage/Examples: Within a Pathology Result Report, the Specimen Detail data group is Essential if the requested test is to be performed on a specimen, otherwise it must not be completed.</p>


	Prohibited	Indicates that the data component is considered a forbidden component of information and must not be populated. Usage/Examples: Within a Participation data group depicting a Subject of Care, the Participation Healthcare Role must not be completed.
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Table 4: Obligations Legend

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

4.4 Other Icons Legend

The following table defines other icons used within the Data Specification and SDT documents.




Icon	Meaning	Explanation
	Optional Multiple (Repeated 0 to Many times)	Indicates the data component is optional but may be populated and repeated many times. An ordered list is implicit. Usage/Examples: 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.
	Mandatory Multiple (Repeated 1 to Many times)	Indicates the data component must be populated and may be repeated many times. An ordered list is implicit. Usage/Examples: The Prescribed Item data group within an ePrescription is repeatable to enable recording of many prescribed items. At least one prescribed item must be populated in an ePrescription.
	Conditional Multiple (Repeated 0 to Many times)	Indicates the data component is considered Essential only on satisfaction of a given condition, but may be populated and repeated many times. Individual data components specify the obligation of the data component when the condition is and is not met. An ordered list is implicit. Usage/Examples: 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.

Table 5: Other Icons Legend

4.5 Keywords Legend

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

The following table defines these keywords

Keyword	Interpretation
Must	This word, or the terms "required" or "shall", means that the definition is an absolute requirement of the specification.
Should	This word, or the adjective "recommended", means that there may exist valid reasons in particular circumstances to ignore a particular component, but the full implications must be understood and carefully weighed before choosing a different course.
May	This word, or the adjective "optional", means that a component is truly optional. One implementer may choose to include the component because a particular implementation requires it, or because the implementer determines that it enhances the implementation while another implementer may omit the same component. 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).
Must not	This phrase, or the phrase "shall not" means that the definition is an absolute prohibition of the specification.
Should not	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.

Table 6: Keywords Legend

5 Data Specification and SDT Parts Legends

This section illustrates the format and parts used to define each Section, Data Group and Data Element within a Data Specification or SDT and identifies when each part is applicable.

5.1 Identification Section Legend

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

T/T ₀₁₀	Name	The identifying name of the component. (Source NEHTA).
	Metadata Type	The metadata type of the component, e.g. Section, Data Group or Data Element. (Source NEHTA).
	Identifier	A NEHTA assigned internal identifier of the component. (Source NEHTA).
	Version	A number used to track structural changes to published versions of data groups. This number provides a pointer to the applicable data group within the NEHTA data library repository. (Source NEHTA). Note that the applicable data group within a Structured Document Template may not be the latest published version. The Version is applicable only to data groups.

Table 7: Identification Section Legend

5.2 Definition Section Legend

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

Definition	The meaning, description and/or explanation of the component. (Source NEHTA). 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 component may also be known as. (Source NEHTA). Implementers may prefer to use synonymous names to refer to the component in specific contexts.
Scope	The extent and capacity within which this data component may be used. This attribute is relevant only to Event Summaries and Data Groups. (Source NEHTA). The circumstances under which the collection of specified data are required or recommended. Applicable to data set specifications only. (Source METeOR).
Scope Source	The authoritative source for the Scope statement.
Context	The setting in which a data element or data group is used. Context is used when a data element or data group is closely related to similar ones that have similar meanings or similar, but distinct, domains of value e.g. Street Name

	<p>has a context of Address.</p> <p>Context is used when a data element or data group is used for a concept that changes meaning in different situations. (Source NEHTA).</p> <p>A designation and/or description of the application environment or discipline in which the data set specification has meaning. (Source METeOR).</p> <p>The circumstance, purpose, and perspective under which an object is defined or used. (Source ISO/IEC 11179-1:2004(E) Framework).</p>
Assumptions	Suppositions and notions used in defining the component. (Source NEHTA).
Assumptions Source	The authoritative source for the Assumptions statement.
Notes	Informative text that further describes the component, or assists in the understanding of how the data component can be used. (Source NEHTA).
Notes Source	The authoritative source for the Notes statement.
Data type	<p>The data type of the data element, e.g. DateTime or Text. (Source NEHTA).</p> <p>The Data type is applicable only to data elements.</p> <p>The valid data types are specified in the Data types Legend.</p>
Value Domain	<p>The name and identifier of the terminologies, code sets and classifications to define the data element value range, or a statement describing what values to use in the absence of a defined value domain for the related data element.</p> <p>In the absence of national standard code sets, the code sets used must be registered code sets, i.e. registered through HL7 code set registration procedure with an appropriate object identifier (OID), and must be publicly available.</p> <p>When national standard code sets become available, they must be used and the non standard code sets must be deprecated. (Source NEHTA).</p> <p>The Value Domain is applicable only to CodedText and CodeableText data elements.</p>

Table 8: Definition Section Legend

5.3 Usage Section Legend

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

Examples	<p>One or more demonstrations of the data that is catered for by the data element. (Source NEHTA).</p> <p>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.</p> <p>Implementation guides may contain specific examples for how data elements must be populated and how they relate to each other.</p> <p>The Value Domain is applicable only to CodedText and CodeableText data elements.</p>
Conditions of Use	Prerequisites, provisos and/or restrictions for use of the component. (Source NEHTA).
Conditions of Use Source	The authoritative source for the Conditions of Use statement.
Misuse	Incorrect, misappropriate and/or wrong uses of the component. (Source NEHTA).
Default Value	A common denomination, or at least a usable denomination, from the Value Domain where available and/or applicable, typically assigned at the creation of an instance of the component. (Source NEHTA).

Table 8: Usage Section Legend

5.4 Relationships Section Legend

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

The following table illustrates the layout of the Children relationships.

Type	Name	Obligation	Condition	Occurrence
Icon illustrating the Metadata type or Data type	Component Name	Obligation of this child component to the component 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 component that must occur as determined by the obligation and multiplicity.

Table 9: Children Legend

The following table illustrates the layout of the Parent relationships.

Type	Name	Obligation	Condition	Occurrence
Icon illustrating the Metadata or Data type	Component Name	Obligation of the component described on this page to this parent component.	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 component described on this page that must occur as determined by the obligation and multiplicity.

Table 10: Parent Legend

The following table illustrates the layout of the Participation Children relationships. Participation Children relationships only apply when the Parent component is a Participation data group.

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

Table 11: Participant Children Legend

6 References

REF	Document Name	Publisher	Repository
ISO11404-2007	ISO 11404:2007 – Information technology -- General- Purpose Datatypes (GPD)	ISO	http://www.iso.org Accessed 7 June 2010
ISO21090-2008	Draft International Standard ISO/DIS 21090 Health Informatics - Harmonized data types for information exchange	ISO	http://www.iso.org Accessed 7 June 2010
NHS2008a	A NHS Logical Health Record Architecture: Vision, Objectives and Success Criteria	NHS Connecting for Health	http://www.connectingforhealth.nhs.uk/systemsandservices/data/scg/publications/scg0019.pdf Not available as at 7 June 2010
RFC1521	RFC1521 - MIME (Multipurpose Internet Mail Extensions) Part One	United Kingdom Network Working Group	http://www.faqs.org/rfcs/rfc1521.html Accessed 7 June 2010
RFC2119	RFC2119 - Key words for use in RFCs to Indicate Requirement Levels	United Kingdom Network Working Group	http://www.faqs.org/rfcs/rfc2119.html Accessed 7 June 2010
SA2006a	AS 4846 (2006) – Healthcare Provider Identification	Standards Australia	http://infostore.saiglobal.com/store/ Accessed 7 June 2010

REF	Document Name	Publisher	Repository
SA2006b	AS 5017 (2006) – Healthcare Client Identification	Standards Australia	http://infostore.saiglobal.com/stor e/ Accessed 7 June 2010
NEHT2009c	Participation Data Specification V2.0 Published 30 November 2009	NEHTA	Document not published as at 7 June 2010
NEHT2010c	Data Types in NEHTA Specifications – A Profile of the ISO 21090 Specification	NEHTA	http://www.nehta.gov.au/component/docman/doc_download/895-participation-data-specification-v20 Accessed 7 June 2010

Appendix A. Known Issues

This appendix lists known issues for this document.

The identified issues will be addressed in subsequent releases of this document.

Reference	Description
Data Types	This document refers to the incomplete and unpublished <i>Data Types in NEHTA Specifications – A Profile of the ISO 21090 Specification</i> NEHT2010c . When the document is published this Guide for Use may require revision.
Figure 3	The Figure 4: “Event Summary Collection in Shared EHR System” could be misleading as there are no plans for prescriptions to form part of an EHR. This figure requires updating as it depicts Header and Detail parts rather than Context and Content parts.