nehta

Shared Health Summary

CDA Implementation Guide

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Final

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Document Information

Document owner

Document Owner
The National Clinical Terminology and Information Service

Related documents

Name	Version/Release Date
Shared Health Summary Structured Content Specification	Version 1.0, Issued 18 November 2011
Information Requirements Shared Health Summary (SHS)	Version 1.0
Participation Data Specification	Version 3.2, Issued 20 July 2011

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1 Introduction

1.1 Document Purpose and Scope

The purpose of this document is to provide a guide to implementing the 'logical' model detailed by NEHTA's Shared Health Summary Structured Content Specification (SHS SCS) as an HL7 Clinical Document Architecture Release 2 (CDA) XML document. This guide is based on Version 1.0 of the SHS SCS [NEHT2011an]. The primary aim of the guide is to take implementers step by step through mapping each data component of the SHS SCS to a corresponding CDA attribute or element.

The guide contains descriptions of both constraints on the CDA and, where necessary, custom extensions to the CDA, for the purposes of fulfilling the requirements for Australian implementations of a Shared Health Summary. The resulting CDA document would be used for the electronic exchange of Shared Health Summaries between healthcare providers.

In addition, this guide presents conformance requirements against which implementers can attest the conformance of their systems.

This release is intended to inform and seek feedback from prospective software system designers and their clinical consultants. The content of this release is not suitable for implementation in live clinical systems. The National Clinical Terminology and Information Service (NCTIS) values your questions, comments and suggestions about this document. Please direct your questions or feedback to <*clinicalinformation@nehta.gov.au*>.

1.2 Shared Health Summary Definition

A Shared Health Summary is defined in the SHS SCS [NEHT2011an] as:

> A clinical document written by the nominated provider, which contains key pieces of information about an individual's health status and is useful to a wide range of providers in assessing individuals and delivering care.

1.3 HL7 Clinical Document Architecture

CDA is a document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange and unambiguous interpretation both at human and system levels.

CDA has been chosen as the format for electronic clinical documents, as it is consistent with NEHTA's commitment to a service and document oriented approach to electronic information exchange, contributing to future electronic health records.

Some of the advantages of CDA are:

- It is machine computable and human readable.
- It provides a standardised display of clinical information without loss of clinical meaning.
- It provides assurance of clinical quality and safety more effectively than message-based interfaces by storing and displaying the clinical data as entered by the clinician.
- It provides better support than HL7 V2 messages for:
  - more complex information structures, such as pathology synoptic reporting; and
  - terminologies such as SNOMED CT-AU®.[1]

[1] SNOMED CT-AU® is a registered trademark of the International Health Terminology Standards Development Organisation.

- It supports legal attestation by the clinician (requiring that a document has been signed manually or electronically by the responsible individual).
- It is able to be processed by unsophisticated applications (displayed in web browsers, for instance).
- It provides a number of levels of compliance to assist with technical implementation and migration.
- It aligns Australia with e-health initiatives in other countries (such as Canada, UK, USA, Brazil, Germany and Finland).

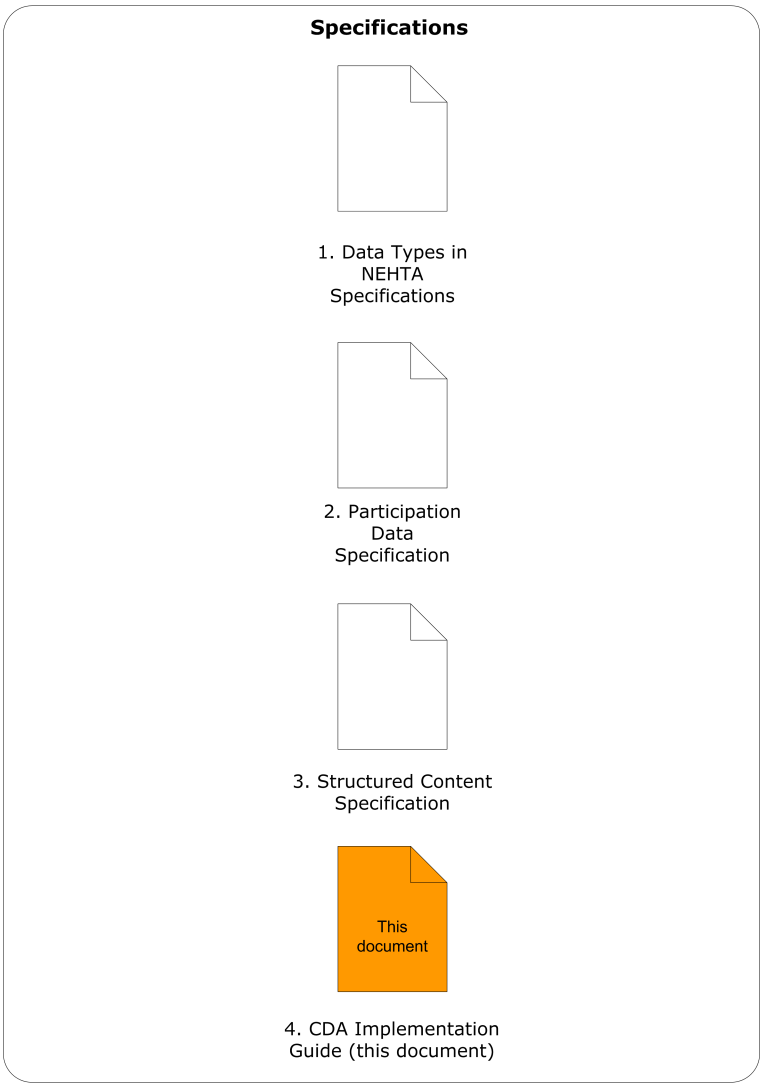
1.4 Intended Audience

This document is intended to be read and understood by software architects and developers, implementers of Clinical Information Systems in various healthcare settings, IT-aware clinicians who wish to evaluate the clinical suitability of NEHTA-endorsed standards and researchers who wish to explore certain aspects of NEHTA-endorsed standards.

This document and related artefacts are very technical in nature and the audience is expected to be familiar with the language of health data specifications and to have some familiarity with health information standards and specifications such as CDA, and "Standards Australia AS 4700.6" [SA2007a]. Definitions and examples are provided to clarify relevant terminology usage and intent.

1.5 Document Map

This Implementation Guide is not intended to be used in isolation. Companion documents are listed below:



1. Data Types in NEHTA Specifications [NEHT2010c] - a detailed description of the data types used within the Structured Content Specification.

2. Participation Data Specification [NEHT2011v] – contains the full specification which forms the basis of all participations contained in NEHTA Structured Content Specifications.

3. Shared Health Summary – Structured Content Specification [NEHT2011an] – clinical content specification describing the logical data structures, data components, and value domains which constitute a Shared Health Summary.

1.6 Acronyms

CDA	Clinical Document Architecture
UUID	Universally Unique Identifier
HL7	Health Level Seven
RIM	Reference Information Model
SCS	Structured Content Specification
XHTML	Extensible Hypertext Markup Language
XML	Extensible Markup Language
XSL	Extensible Stylesheet Language

For a complete listing of all relevant acronyms, abbreviations and a glossary of terms please refer to "NEHTA Acronyms, Abbreviations and Glossary of Terms, Version 1.2" [NEHT2005a].

1.7 Keywords

Where used in this document, the keywords **SHALL**, **SHOULD**, **MAY**, **SHALL NOT** and **SHOULD NOT** are to be interpreted as described in "Key words for use in RFCs to Indicate Requirement Levels" [RFC2119].

Keywords used in this document

Keyword	Interpretation
SHALL	This word, or the terms '**REQUIRED**' or '**MUST**', 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 item, but the full implications must be understood and carefully weighed before choosing a different course.
MAY	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).
SHALL NOT	This phrase, or the phrase '**MUST 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.

1.8 Conformance

This document describes how a Shared Health Summary SCS is implemented as a CDA document. Conformance claims are not made against this Implementation Guide directly; rather, they are made against additional conformance profiles documented elsewhere. Any document that claims conformance to any derived conformance profile must meet these base requirements:

- It **SHALL** be a valid HL7 CDA instance. In particular:
  - It **SHALL** be valid against the HL7 CDA Schema (once extensions have been removed, see W3C XML Schema).
  - It **SHALL** conform to the HL7 V3 R1 data type specification.
  - It **SHALL** conform to the semantics of the RIM and Structural Vocabulary.
  - It **SHALL** render correctly using the HL7 provided CDA transform.
- It **SHALL** be valid against the Australian CDA Schema that accompanies this specification after any additional extension not in the NEHTA extension namespace have been removed, along with any other CDA content no described by this implementation guide.
- It **SHALL** use the mappings as they are stated in this document.
- It **SHALL** use all fixed values as specified in the mappings. (e.g. @attribute="`FIXED_VALUE`").
- If the vocabulary has been explicitly stated as 'NS' it must be interpreted as:

  > *NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the HL7 code set registration procedure[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.*
  >
  > *When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.*

- It **SHALL** be valid against the additional conformance requirements that are established in this document (i.e. any use of the word “SHALL” in uppercase and bold typeface).
- The narrative **SHALL** conform to the requirements described in this guide.
- The document **SHALL** conform to the requirements specified in the CDA Rendering Specification.
- The data as contained in the data types **SHALL** conform to the additional data type specification [NEHT2010c].
- Any additional content included in the CDA document that is not described by this implementation guide **SHALL** not qualify or negate content described by this guide and it **SHALL** be clinically safe for receivers of the document to ignore the non-narrative additions when interpreting the existing content.

A system that *consumes* Shared Health Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject non-conformant documents. Conformant systems that consume Shared Health Summary CDA documents are not required to process any or all of the structured data entries in the CDA document but they **SHALL** be able to correctly render the document for end-users when appropriate (see 2.1 Clinical Document Architecture Release 2).

Conformance Profiles of this document may make additional rules that override this document in regard to:

- Allowing the use of alternative value sets in place of the value sets specified in this document
- Allowing the use of alternative identifiers in place of the HI Service identifiers

[2] http://www.hl7.org/oid/index.cfm?ref=footer

- Making required data elements and/or section divisions optional

1.9 Known Issues

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

Reference	Description
Document Recipients	Document Recipients were not specified in the Structured Content Specification but most likely need to be added in the CDA Header section.
Document Status	As a NEHTA Managed Specification, the contents of this document are the result of extensive clinical collaboration and editorial review, and the specification is considered to be 'Final'. Nonetheless, as software implementations and standards review of this specification progress, normative updates may be required.
Clinical Document Architecture Release 2	How is structured text different from structured data? Is the statement intended to assert "text" and "coded data"? Is the "structured text" is intended to mean "marked up text"? And if yes, how is it different from "narratives" that are "CDA defined hypertext"?
AS 5017-2006: Health Care Client Identifier Geographic Area	The Health Care Client Identifier Geographic Area vocabulary table lists displayName, code, codeSystem-Name and codeSystem while only the displayName is used in the mapping. Verification of using only the display-Name needs to be performed.
Throughout document	Australian vs American spelling - in cases where definitions have been taken from HL7 documentation, the American spelling has been preserved, e.g. organization rather than organisation.
Thoughout document	While every effort has been taken to ensure that the examples are consistent with consistent with the normative mappings in this message specification, care need to be taken when copying XML examples for implementation and validation.

2 Guide for Use

This document describes how to properly implement the Australian SHS SCS as a conformant HL7 CDA XML document. The Shared Health Summary is built in two parts:

1. A *Structured Content Specification* (SCS), which, in conjunction with its related documents (see Document Map), describes the Shared Health Summary, in a form that is consistent with other NEHTA specifications. It has the potential to be implemented in multiple different exchange formats as is most suitable for a particular context. It describes the data content of an Shared Health Summary as a hierarchy of data components, and provides documentation concerning their use and meaning.

2. A *CDA Implementation Guide* (this document) which specifies how the data described in the SCS is properly represented in a CDA document.

In order to properly implement this specification, the reader should be familiar with the SHS SCS, with the HL7 CDA documentation and how to read this document.

For further information regarding NEHTA Structured Content Specifications, see the links in Document Map.

2.1 Clinical Document Architecture Release 2

A CDA document is an XML document built following the rules described in the CDA specification which conforms to the HL7 CDA Schema provided by HL7. The CDA document is based on the semantics provided by the HL7 Reference Information Model, Data Types, and Vocabulary.

A CDA document has two main parts: the header and the body.

The CDA document header is consistent across all CDA documents regardless of document type. The header identifies and classifies the document and provides information on authentication, the encounter, the patient, and the involved providers.

The body contains the clinical report, and can be marked-up text (narrative, renderable text) or a combination of both marked-up text and structured data. The marked up text can be transformed to XHTML and displayed to a human. The structured data allows machine processing of the information shown in the narrrative section.

CDA contains a requirement that all of its clinical information must be marked up in CDA narratives. These narratives are CDA defined hypertext, able to be rendered in web browsers with only a standard accompanying transformation. This transformation is produced and distributed by HL7.

As noted, it is a conformance requirement that the rendered narrative must be able to stand alone as a source of authenticated information for consuming parties. No content from the CDA body may be omitted from the narrative.

Further information and guidance on the CDA narrative is available in Appendix A, *CDA Narratives*.

These references are recommended to gain a better understanding of CDA:

- CDA specification: [HL7CDAR2]

- RIM, Data types and Vocabulary: [HL7V3DT]
- Useful CDA examples repository: [RING2009]
- CDA validation tools: [INFO2009]

2.2 Mapping Interpretation

The core of this guide is a mapping from the SHS SCS to the CDA document representation.

The mappings may not be deterministic; in some cases the differences in approach between the logical model specified in SCS and CDA document implementation specifications makes it inappropriate to have a 1:1 mapping, or any simple mapping that can be represented in a transform. This is especially true for names and addresses, where the SCS requirements, based on Australian Standards such as AS 5017 2006, differ from the HL7 data types and vocabularies which are not based on these standards.

Many of the mappings use one of a few common patterns for mapping between the SCS and the CDA document. These common mapping patterns are described in 8 *Common Patterns*.

An example of a mapping section of this guide is illustrated below:

x.x ITEM NAME

Identification (normative)

Name	ITEM NAME
Metadata type	Metadata type e.g. Section, Data Group or Data Element

Relationships (normative)

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
Icon illustrating the Metadata or Data type.	ITEM NAME This is a link to another section containing the mapping for this item. Item names in upper case indicate that the item is a section or data group. Item names in start case indicate that the item is a data element.	Obligation of this child item to the item described on this page.	The number of instances of this child item that may occur.

Parent

Data Type	Name	Obligation	Occurrence
Icon illustrating the Metadata or Data type.	ITEM NAME This is a link to another section containing the mapping for this item. Item names in upper case indicate that the item is a section or data group. Item names in start case indicate that the item is a data element.	Obligation of the item described on this page to this parent item.	The number of instances of the item described on this page that may occur.

CDA R-MIM Representation

The text contains an explanation of the mapping (this text is non-normative).

The model is a constrained representation of the R-MIM (this diagram is non-normative). The colours used in the CDA model align with the usage in the R-MIM. In many cases the cardinalities shown in the model will be less constrained than those shown in the mapping table.

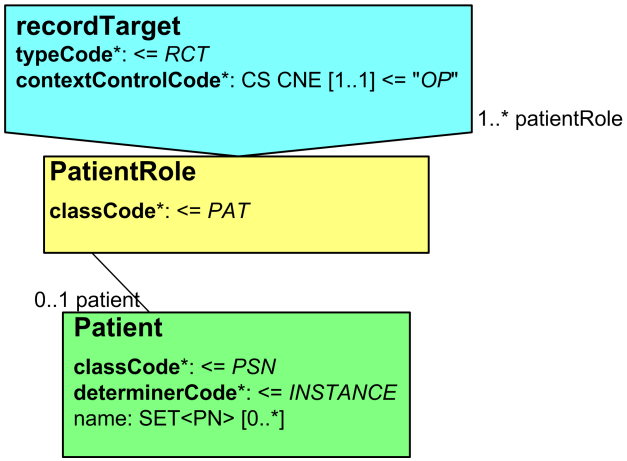


Figure 2.1. Example - Header Part

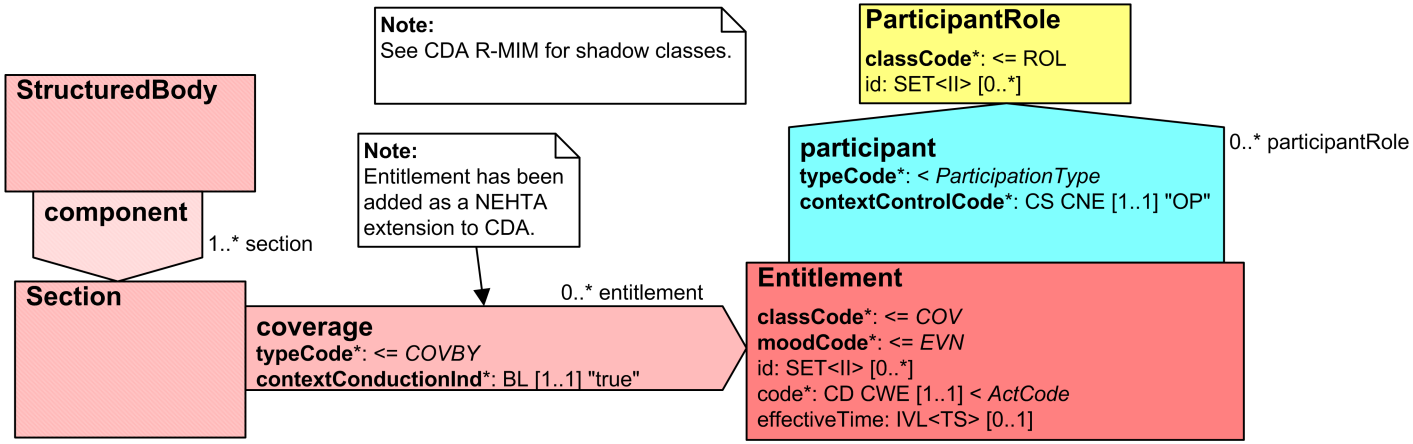


Figure 2.2. Example - Body Part

CDA Mapping (normative)

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Element Type (Header, Body Level 2 etc.)			Context: Parent of elements below		
The path in the SCS. Each section in this document corresponds to an SCS section or data group, and is scoped by that section or data group. The hierarchical path uses ">" as a separator for paths within the SCS data hierarchy. If there is a name in round brackets after the path, this is the name of the reused data group for the SCS component. The data component in **bold** text (the last in the path) is the data component for this row. i.e. Parent Data Component > **Child Data Component**	The definition of the item from the SCS.	The cardinality of the data element in the SCS. The cardinality of the data element in the SCS maps to the cardinality of the element in the CDA document. Where the cardinality of the SCS data element is more constrained that the cardinality of the CDA element then the SCS cardinality takes precedence. i.e. if an element is mandatory in the SCS and optional in CDA then it will also become mandatory in the CDA document. If an item with a maximum cardinality > 1 maps to an xml attribute, the attribute will contain multiple values separated by spaces. No such item will have valid values that themselves contain spaces.	The schema element(s) in the CDA document that correspond(s) to the SCS data component. The syntax for this is similar to XPath: {/name{[index]}}n{/<pattern>} Where: • {} indicates optional • {}n means a section that may repeat • <pattern> contains a link to a common pattern • [index] differentiates two similar mappings Examples: 1. component/act/participation[inf_prov]/role/ **<Address>** 2. **participant** participant/**@typeCode="ORG"** participant/**associatedEntity** participant/associatedEntity/**@classCode="SDLOC"** participant/associatedEntity/**code** A sequence of names refers to the XML path in the CDA document. The path always starts from a defined context which is defined in the grey header row above each group of mapping rows. The last name is shown in bold to make the path easier to read. The last name may be a reference to an attribute or an element, as defined in the Australian CDA Schema. The cardinalities of the items map through from the SCS. It is possible to specify an index after the name, such as 'participation[inf_prov]' in Example 1. The presence of the index means there are two or more mappings to the same participation class that differ only in the inner details. The indexes show which of the multiple mappings is the parent of the inner detail. Note that each of the indexed participations may exist more than once (as specified by the SCS group cardinality). To determine the mapping for these kinds of elements, a document reader must look at the content inside the element. It is possible for one SCS data component to map to more than one CDA Schema element as in Example 2. Any fixed attribute values are represented as a separate line of the mapping such as those shown in Example 2. The path may end with a pattern designator, such as <Address>. This indicates that the mapping involves a number of sub-elements of the named element following the pattern as shown in the name (which is a link to the appropriate pattern in this document).	The name of the vocabulary.	Helpful additional information about the mapping.

How to interpret the following example mapping:

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Subject of Care	Identifies the person about whom the healthcare event/encounter/clinical interaction has been captured and/or interchanged, that led to the creation of the document. In other words, the subject of the information.	1..1	recordTarget/**patientRole**		
n/a	n/a	1..1	recordTarget/patientRole/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element. If there are any entitlements for Subject of Care this value **SHALL** be the same as: ClinicalDocument/ component/ structuredBody/ component[admin_obs]/ section/ entry/ act/ participant/ participantRole/ **id** where participantRole/ @classCode = "PAT".
Subject of Care > Participant > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in recordTarget/ patientRole/ patient.
Subject of Care > Participant > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	recordTarget/patientRole/patient/**<Person Name>**		See common pattern: Person Name.

The Subject of Care (Patient) section is part of the context section of the SCS (as opposed to being part of the content section of the SCS). Although it is located in the context section of the SCS, it contains data components that map to the CDA body as well as data components that map to the CDA header. The information specifying the location of the elements is in the shaded context header row located above each group of mapping rows. The context remains the same until a new context header row starts.

The first row of the mapping (after the context header row), 'Subject of Care', is a CDA Header Element and has a context of 'ClinicalDocument' (the root element of a CDA document). Adding together the context and the mapping using '/' gives a full path of:

1. ClinicalDocument/recordTarget/patientRole

Due to the fact that 'Subject of Care' is part of the context section of the SCS (as opposed to a content element), information about it and its child elements can be located in the SCS document by finding the data component 'Subject of Care' in the table of contents under the context section and navigating to the relevant page.

If the data component were part of the content section of the SCS, information about it could be located by finding the data component (or its parent) in the table of contents under the content section of the SCS.

2. The next row in the mapping (n/a) is a row that is not defined in the SCS but which is required by CDA. The CDA schema data element is recordTarget/patientRole/id. This is a technical identifier that is used for system purposes such as matching the Entitlement details back to the Subject of Care (patient). This identifier must be a UUID.

3. The next row in the mapping table (Subject of Care > Participant > Person) is defined in the SCS but is not mapped directly to the CDA because it is already encompassed implicitly by CDA in recordTarget/patientRole/patient.

Moving to the next row in the table (Subject of Care > Participant > Person > **Person Name**) and concatenating the context and the mapping, we get:

4. ClinicalDocument/recordTarget/patientRole/patient/**<Person Name>**

<PersonName> holds a link to the common pattern section where a new table lays out the mapping for the Person Name common pattern.

Moving down the table to the context row '**CDA Body Level 3 Data Elements**', any data components after this row (until the occurrence of a new context row) map to the CDA body. Because there is no equivalent concept in CDA, an Australian CDA extension has been added in order to represent Entitlement. This extension is indicated by the presence of the 'ext:' prefix. For the data component 'Entitlement', adding together the context and the mapping using '/' gives the following paths for the CDA body level 3 data elements ([index] is dependent on context):

5. ClinicalDocument/component/structuredBody/component[index]/section/**ext:coverage2/@typeCode="COVBY"**

6. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/**ext:entitlement**

7. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/**@classCode="COV"**

8. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/**@moodCode="EVN"**

9. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/**ext:entitlement/ext:participant/@typeCode="BEN"**

10. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/ext:participant/**ext:participantRole/@classCode="PAT"**

11. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/**ext:id**

This id is also a technical identifier and must hold the same value as the ClinicalDocument/recordTarget/patientRole/id mentioned above in comment 1.

The order of the SCS data components is not always the same as the order of the CDA elements. In addition, the CDA elements need to be in the order specified in the Australian CDA Schema.

The "id" element is not specified in the SCS and should be filled with a UUID. This element may be used to reference the act from other places in the CDA document.

The next row in the table (Subject of Care > Participant > Entitlement > Entitlement Number) maps to the id element:

12. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/**ext:id**

The next row in the table (Subject of Care > Participant > Entitlement > Entitlement Type) maps to the code element:

13. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/**ext:code**

The next row in the table (Subject of Care > Participant > Entitlement > Entitlement Validity Duration) maps to the effectiveTime element:

14. ClinicalDocument/component/structuredBody/component[index]/section/ext:coverage2/ext:entitlement/**ext:effectiveTime**

See comments in the example below.

Example 2.1. Mapping Interpretation

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->
<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/1.0"
 …
 >

      …

   <!-- Begin Subject of Care - Header Part -->
   <recordTarget>
      <!-- 1 Corresponds to:
            '//recordTarget/patientRole'
         in the mapping. -->
      <patientRole>
         <!-- 2 Corresponds to:
                  '//recordTarget/patientRole/id'
```

```
            in the mapping -->
         <id root="04A103C4-7924-11DF-A383-FC69DFD72085"/>

         …

         <telecom value="tel:0499999999" use="H"/>
         <!-- 3 -->
         <patient>
            <!-- 4 Corresponds to:
                  '//recordTarget/patientRole/patient/<Person Name>'
               in the mapping -->
            <name use="L">
               <prefix>Ms</prefix>
               <given>Sally</given>
               <family>Grant</family>
            </name>

            …

         </patient>
      </patientRole>
   </recordTarget>
   <!-- End Subject of Care - Header Part -->

…

   <!-- Begin CDA Body -->
   <component>
      <structuredBody>

         <!-- Begin section -->
         <component>
            <section>

               …

               <!-- Begin Subject of Care Entitlement -->
               <!— 5 Corresponds to:
                     '//ext:coverage2'
                  in the mapping. -->
               <ext:coverage2 typeCode="COVBY">
                  <!-- 6, 7, 8 Corresponds to:
                        '//ext:coverage2/ext:entitlement',
                        '//ext:coverage2/ext:entitlement/@classCode="COV"',
                        '//ext:coverage2/ext:entitlement/@moodCode="EVN"'
                     in the mapping -->
                  <ext:Entitlement classCode="COV" moodCode="EVN">
                     <!-- 12 Corresponds to:
                           '//ext:coverage2/ext:entitlement/ext:id'
                        in the mapping -->
                     <ext:id root="1.2.36.174030967.0.5" extension="1234567892"
                        assigningAuthorityName="Medicare Australia"/>
                     <!-- 13 Corresponds to:
                        '//ext:coverage2/ext:entitlement/ext:code'
                     in the mapping -->
                     <ext:code code="1"
          codeSystem="1.2.36.1.2001.1001.101.104.16047"
          codeSystemName="NCTIS Entitlement Type Values"
          displayName="Medicare Benefits">
                     <!-- 14 Corresponds to:
                           '//ext:coverage2/ext:entitlement/ext:effectiveTime'
                        in the mapping -->
                     <ext:effectiveTime>
                        <low value="200701010101"/>
                        <high value="202701010101"/>
```

```
                        </ext:effectiveTime>
                        <!-- 9 Corresponds to:
                              '//ext:coverage2/ext:entitlement/ext:participant/@typeCode="BEN"'
                           in the mapping -->
                        <ext:participant typeCode="BEN">
                           <!-- 10 Corresponds to:
                                 '//ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/@classCode="PAT"'
                              in the mapping -->
                           <ext:participantRole classCode="PAT">
                              <!-- 11 Corresponds to:
                                    '//ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/ext:id'
                                 in the mapping -->
                              <!-- Same as recordTarget/patientRole/id -->
                              <ext:id root="04A103C4-7924-11DF-A383-FC69DFD72085"/>
                           </ext:participantRole>
                        </ext:participant>
                     </ext:Entitlement>
                  </ext:coverage2>
                  <!-- End Entitlement -->

                  …

               </section>
            </component>
            <!-- End section -->

         </structuredBody>
      </component>
      <!-- End CDA Body -->
   </ClinicalDocument>
```

2.3 CDA Extensions

The SCS is based on Australian requirements, either as expressed in existing Australian Standards, or based upon extensive consultation with major stakeholders. Not all of these requirements are supported by HL7 Clinical Document Architecture Release 2 (CDA).

CDA provides a mechanism for handling this. Implementation guides are allowed to define extensions, provided some key rules are followed:

- Extensions must have a namespace other than the standard HL7v3 namespace.
- The extension cannot alter the intent of the standard CDA document. For example, an extension cannot be used to indicate that an observation does not apply where the CDA document requires it.
- HL7 encourages users to get their requirements formalised in a subsequent version of the standard so as to maximise the use of shared semantics.

Accordingly, a number of extensions to CDA have been defined in this *Implementation Guide*. To maintain consistency, the same development paradigm has been used as CDA, and all the extensions have been submitted to HL7 for inclusion into a future release of CDA (Release 3 currently under development).

Version 1.0 of these extensions are incorporated in the namespace <http://ns.electronichealth.net.au/Ci/Cda/Extensions/1.0> as shown in the CDA example output throughout this document. Future versions of will be versioned as per the following example:

<http://ns.electronichealth.net.au/Ci/Cda/Extensions/2.0>

2.4 W3C XML Schema

This document refers to an accompanying Shared Health Summary CDA W3C XML Schema (referred to in this document as the SHS CDA Schema). This schema differs from the base HL7 CDA W3C XML Schema (referred to in this document as the HL7 CDA Schema) in two ways:

- CDA features that are not used in this implementation guide have been removed from the SHS CDA Schema; and
- Australian CDA extensions have been added to the SHS CDA Schema.

The modified SHS CDA Schema specifies the same document format with some components removed and Australian CDA extensions added.

CDA documents which include extensions will fail to validate against the HL7 CDA Schema – this is a known limitation.

Shared Health Summaries that conform to this specification **SHALL** validate against the SHS CDA Schema that accompanies this specification, and **SHALL** validate against the HL7 CDA Schema once the extensions have been removed. Note that merely passing schema validation does not ensure conformance; for more information, refer to Conformance.

2.5 Schematron

Many of the rules this document makes about CDA documents cannot be captured in the W3C XML Schema language (XSD) as XSD does not provide a mechanism to state that the value or presence of one attribute is dependent on the values or presence of other attributes (co-occurrence constraints).

Schematron is a rule-based validation language for making assertions about the presence or absence of patterns in XML trees. The rules defined by this document may be captured as Schematron rules. As of this release, the matching Schematron assertions have not yet been developed: NEHTA is considering the distribution of these rules in association with future releases of this guide.

2.6 Implementation Strategies

There are many platform specific implementation options for readers pursuing the implementation of a CDA document according to this guide. Examples of these implementation options include:

- Read or write CDA documents directly using a Document Object Model (DOM) and/or 3rd Generation Language (3GL) code.
- Transform an existing XML format to and from a CDA document.
- Use a toolkit to generate a set of classes from HL7 CDA Schema or the SHS CDA Schema provided with this implementation guide, to read or write documents.
- Use existing libraries, possibly open source, which can read and write CDA documents.

The best approach for any given implementation is strongly dictated by existing architecture, technology and legacy constraints of the implementation project or existing system.

3 Shared Health Summary Data Hierarchy

The data hierarchy below provides a logical representation of the data structure of the SHS SCS data components.

The data hierarchy is a logical representation of the data components of a Shared Health Summary, and is not intended to represent how the data contents are represented in a CDA document.

	Shared Health Summary					
CONTEXT						
		SUBJECT OF CARE				1..1
		DOCUMENT AUTHOR				1..1
		DateTime Attested				1..1
CONTENT						
		ADVERSE REACTIONS				1..1
			EXCLUSION STATEMENT - ADVERSE REACTION			0..1
				Global Statement		1..1
			ADVERSE REACTION			0..*
				Substance/Agent		1..1
				REACTION EVENT		0..1
					Manifestation	1..*
		MEDICATIONS				1..1
			EXCLUSION STATEMENT - MEDICATIONS			0..1
				Global Statement		1..1
			KNOWN MEDICATION			0..*
				Medicine (Therapeutic Good Identification)		1..1
				Directions		1..1
				Clinical Indication		0..1
				Comment		0..1
		MEDICAL HISTORY				1..1
			PROBLEM/DIAGNOSIS			0..*

				Problem/Diagnosis (Problem/Diagnosis Identification)	1..1
				Date of Onset	0..1
				Date of Resolution/Remission	0..1
				Comment (Problem/Diagnosis Comment)	0..1
			EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES		0..1
				Global Statement	1..1
			PROCEDURE		0..*
				Procedure Name	1..1
				Comment (Procedure Comment)	0..1
				Start Date/Time (DateTime Started)	0..1
			EXCLUSION STATEMENT - PROCEDURES		0..1
				Global Statement	1..1
			OTHER MEDICAL HISTORY ITEM		0..*
				Medical History Item Description	1..1
				Medical History Item Timeinterval	0..1
				Medical History Item Comment	0..1
		IMMUNISATIONS			1..1
			ADMINISTERED IMMUNISATION		0..*
				Therapeutic Good Identification	1..1
				Vaccine Sequence Number	0..1
				Medication Action DateTime	1..1
			EXCLUSION STATEMENT - IMMUNISATIONS		0..1
				Global Statement	1..1

4 Administrative Observations

The SHS SCS contains a number of data elements that are logically part of the SCS context, but for which there are no equivalent data elements in the CDA header. These data elements are considered to be "Administrative Observations" about the encounter, the patient or some other participant. Administrative Observations is a CDA section that is created to hold these data components in preference to creating extensions for them.

CDA R-MIM Representation

Figure 4.1, “Administrative Observations” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Administrative Observations section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

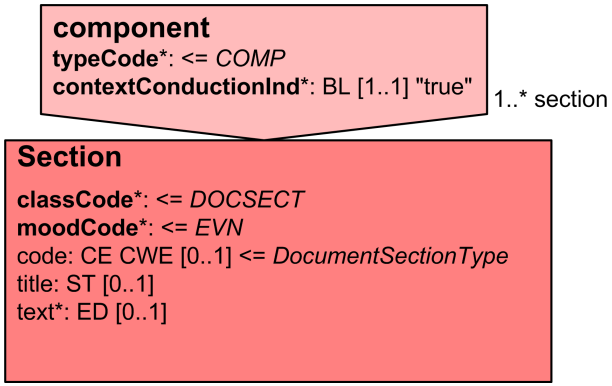


Figure 4.1. Administrative Observations

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
n/a	n/a	0..1	component/section/[admin_obs]/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
		1..1	component/section/[admin_obs]/**code**		
			component/section/[admin_obs]/code/**@code="102.16080"**		
			component/section/[admin_obs]/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component/section/[admin_obs]/code/**@codeSystemName="NCTIS Data Components"**		
			component/section/[admin_obs]/code/**@displayName="Administrative Observations"**		
			component[admin_obs]/section/**title="Administrative Observations"**		
			component[admin_obs]/section/**text**		See Appendix A, *CDA Narratives*

Example 4.1. Administrative Observations XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema
shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->

   …

   <component>
      <structuredBody>

         …

         <!-- Begin Administrative Observations section -->
   <component><!-- [admin_obs] -->
    <section>
     <id root="88CDBCA4-EFD1-11DF-8DE4-E4CDDFD72085"/>
     <code code="102.16080"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Administrative Observations"/>
     <title>Administrative Observations</title>

     <!-- Narrative text for Administrative Observations -->
     <text/>

     …

    </section>
   </component><!-- [admin_obs] -->
   <!-- End Administrative Observations section -->

      </structuredBody>
   </component>
   <!-- End CDA Header -->
</ClinicalDocument>
```

5 CDA Header

This chapter contains elements that are not specified in the SHS SCS specification. These elements include CDA specific header elements (both required and optional) and data elements described in the Endpoint Specification (EPS). The CDA header elements are specified in the CDA Schema Data Element column and where they map to Endpoint specification elements is indicated in the EPS Element column.

All the definitions in this chapter are sourced from "HL7 Clinical Document Architecture, Release 2" [HL7CDAR2].

5.1 ClinicalDocument

Identification

Name	ClinicalDocument
Definition	The ClinicalDocument class is the entry point into the CDA R-MIM, and corresponds to the <ClinicalDocument> XML element that is the root element of a CDA document.

Relationships

Children Not Included in Mapping for This Section

Name	Obligation	Occurrence
LegalAuthenticator	Optional	0..1
Custodian	Essential	1..1

CDA R-MIM Representation

Figure 5.1, “ClinicalDocument”

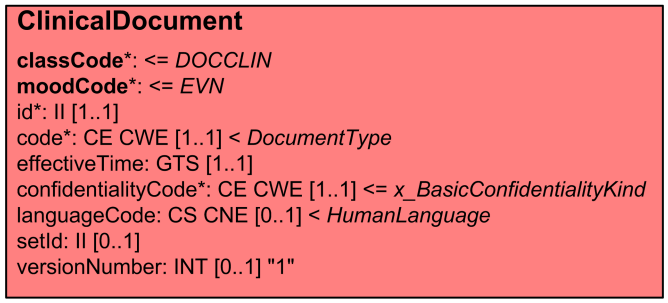


Figure 5.1. ClinicalDocument

CDA Mapping

CDA Schema Data Element	Definition	Card	Vocab	EPS Element	Comments
Context: /					
ClinicalDocument	The ClinicalDocument class is the entry point into the CDA R-MIM, and corresponds to the <ClinicalDocument> XML element that is the root element of a CDA document.	1..1			
ClinicalDocument/**typeId**	A technology-neutral explicit reference to this CDA, Release Two specification.	1..1			
ClinicalDocument/typeId/**@extension="POCD_HD000040"**		1..1			The unique identifier for the CDA, Release Two Hierarchical Description.
ClinicalDocument/typeId/**@root="2.16.840.1.113883.1.3"**		1..1			The OID for HL7 Registered models.
ClinicalDocument/**templateId**		1..*			One or more template identifiers that indicate constraints on the CDA document that this document conforms to. One of the identifiers must be the templateId that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA Rendering Specification. Systems are not required to recognise any other the template identifiers than the one below in order to understand the document as a [type] but these identifiers may influence how the document must be handled.
ClinicalDocument/templateId/**@root="1.2.36.1.2001.1001.101.100.1002.120"**		1..1		docType	The healthcare context-specific name of the published Shared Health Summary CDA Implementaion Guide.
ClinicalDocument/templateId/**@extension="1.3"**		1..1			The identifier of the version that was used to create the document instance.
ClinicalDocument/**id**	Represents the unique instance identifier of a clinical document.	1..1		docId	

CDA Schema Data Element	Definition	Card	Vocab	EPS Element	Comments
ClinicalDocument/**code**	The code specifying the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note).	1..1			A clinical document written by the nominated provider, which contains key pieces of information about an individual's health status and is useful to a wide range of providers in assessing individuals and delivering care.
ClinicalDocument/code/**@code="60591-5"**					
ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**					
ClinicalDocument/code/**@codeSystemName="LOINC"**					
ClinicalDocument/code/**@displayName="Patient summary"**					
ClinicalDocument/**effectiveTime**	Signifies the document creation time, when the document first came into being. Where the CDA document is a transform from an original document in some other format, the ClinicalDocument.effectiveTime is the time the original document is created.	1..1		creationTime	
ClinicalDocument/**confidentialityCode/@nullFlavor="NA"**	Codes that identify how sensitive a piece of information is and/or that indicate how the information may be made available or disclosed.	1..1			
ClinicalDocument/**languageCode**		0..1	[RFC3066] – Tags for the Identification of Languages		<Language Code> – <COUNTRY CODE>
ClinicalDocument/**ext:completionCode**	The lifecycle status of a document.	1..1	NCTIS: Admin Codes - Document Status	docStatus	See Australian CDA extension: ClinicalDocument.completionCode

Example

Example 5.1. ClinicalDocument Body XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument xmlns="urn:hl7-org:v3"
      xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
      xmlns:xs="http://www.w3.org/2001/XMLSchema"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="CDA-SS-V1_0.xsd">
 <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
 <templateId root="1.2.36.1.2001.1001.101.100.1002.120" extension="1.3"/>
 <id root="8BC3406A-B93F-11DE-8A2B-6A1C56D89593"/>
 <code code="60591-5"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Patient Summary"/>
 <effectiveTime value="200910201235"/>
 <confidentialityCode nullFlavor="NA"/>
 <languageCode code="en-AU"/>
 <ext:completionCode code="F"
         codeSystem="1.2.36.1.2001.1001.101.104.20104"
         codeSystemName="NCTIS Document Status Values"
        displayName="Final"/>

 <!-- Begin CDA Header -->

   ...

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->

 ...

 <!-- End CDA Body -->
</ClinicalDocument>
```

5.1.1 LegalAuthenticator

Identification

Name	LegalAuthenticator
Definition	Represents a participant who has legally authenticated the document.

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Optional	0..1

CDA R-MIM Representation

Figure 5.2, “LegalAuthenticator”shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

The LEGAL AUTHENTICATOR data group maps to the CDA Header element legalAuthenticator. The legalAuthenticator participation class represents who has legally authenticated the document. The role is AssignedEntity and is represented by the Person and/or Organization entities.

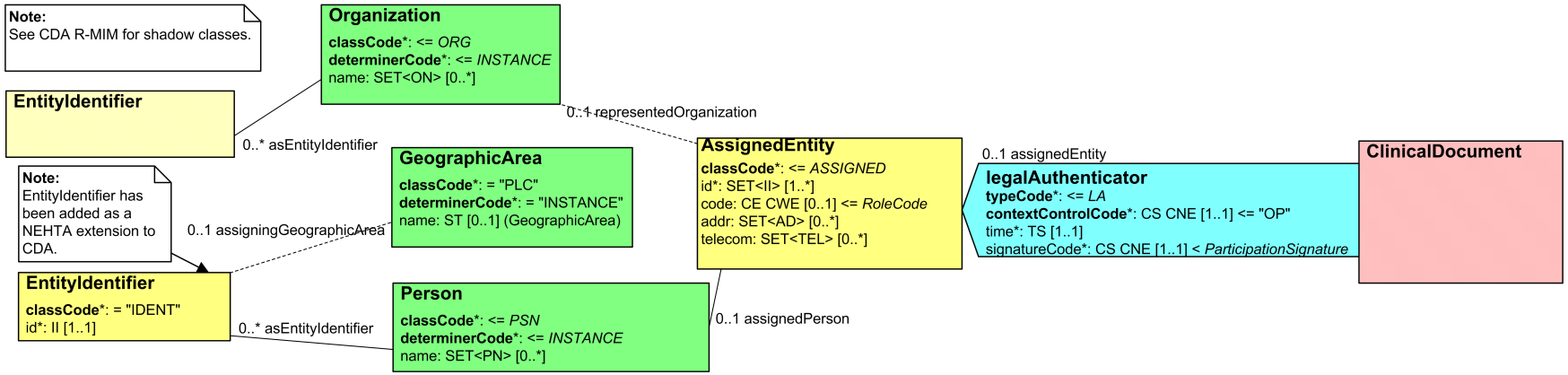


Figure 5.2. LegalAuthenticator

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
legalAuthenticator	Represents a participant who has legally authenticated the document.	0..1		
legalAuthenticator/**time/@value**	Indicates the time of authentication.	1..1		
legalAuthenticator/**signatureCode/@code="S"**	Indicates that the signature has been affixed and is on file.	1..1		
legalAuthenticator/assignedEntity/**code**	The specific kind of role.	0..1	NS	See <code> for available attributes.
legalAuthenticator/assignedEntity/**id**	A unique identifier for the player entity in this role.	1..1	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	
legalAuthenticator/**assignedEntity**	A legalAuthenticator is a person in the role of an assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).	1..1		
legalAuthenticator/assignedEntity/**assignedPerson**	The entity playing the role (assignedEntity) is a person.	0..1		
legalAuthenticator/assignedEntity/assignedPerson/**<Entity Identifier>**	The entity identifier of the person.	0..*		See common pattern: Entity Identifier.
legalAuthenticator/assignedEntity/**<Address>**	A postal address for the entity (assignedPerson) while in the role (assignedEntity).	0..*		See common pattern: Address.
legalAuthenticator/assignedEntity/**<Electronic Communication Detail>**	A telecommunication address for the entity (assignedPerson) while in the role (assignedEntity).	0..*		See common pattern: Electronic Communication Detail.
legalAuthenticator/assignedEntity/assignedPerson/**<Person Name>**	A non-unique textual identifier or moniker for the entity (assignedPerson).	0..*		See common pattern: Person Name.
legalAuthenticator/assignedEntity/**representedOrganization**	The entity scoping the role (assignedEntity).	0..1		

[1] http://www.hl7.org/oid/index.cfm?ref=footer

CDA Schema Data Element	Definition	Card	Vocab	Comments
legalAuthenticator/assignedEntity/representedOrganization/**<Entity Identifier>**	A unique identifier for the scoping entity (represented organization) in this role (assignedEntity).	0..*		See common pattern: Entity Identifier.
legalAuthenticator/assignedEntity/representedOrganization/**name**	A non-unique textual identifier or moniker for the entity (representedOrganization).	0..*		

Example

Example 5.2. LegalAuthenticator XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

 …

 <!-- Begin CDA Header -->

 …

  <!-- Begin legalAuthenticator -->
  <legalAuthenticator>
   <time value="201001061149"/>
   <signatureCode code="S"/>
   <assignedEntity>
    <id root="123F9366-78EC-11DF-861B-EE24DFD72085"/>
    <code code="253111"
      codeSystem="2.16.840.1.113883.13.62"
      codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification
            of Occupations, First Edition, 2006"
      displayName="General Medical Practitioner"/>

    <!-- Address -->
    <addr use="H">
     <streetAddressLine>1 Clinician Street</streetAddressLine>
     <city>Nehtaville</city>
     <state>QLD</state>
     <postalCode>5555</postalCode>
     <additionalLocator>32568931</additionalLocator>
    </addr>

    <!-- Electronic Communication Detail -->
    <telecom use="WP" value="tel:0712341234"/>
    <assignedPerson>

     <!-- Person Name -->
     <name>
      <prefix>Dr.</prefix>
      <given>Prescribing</given>
      <family>Doctor</family>
     </name>

     <!-- Entity Identifier -->
     <ext:asEntityIdentifier classCode="IDENT">
      <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003611234567890"/>
      <ext:assigningGeographicArea classCode="PLC">
       <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
     </ext:asEntityIdentifier>
    </assignedPerson>
```

```
    <representedOrganization>

     <!-- Organisation Name -->
     <name>Primary Healthcare Clinic Name</name>

     <!-- Entity Identifier -->
     <ext:asEntityIdentifier classCode="IDENT">
      <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.800362555555"/>
      <ext:assigningGeographicArea classCode="PLC">
       <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
     </ext:asEntityIdentifier>
    </representedOrganization>
   </assignedEntity>
  </legalAuthenticator>
  <!-- End legalAuthenticator -->

 …

 <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
  <structuredBody>

 …

  </structuredBody>
 </component>
 <!-- End CDA Body -->
</ClinicalDocument>
```

5.1.2 Custodian

Identification

Name	Custodian
Definition	Represents the organization that is in charge of maintaining the document. The custodian is the steward that is entrusted with the care of the document. Every CDA document has exactly one custodian.

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Essential	1..1

CDA R-MIM Representation

Figure 5.3, “Custodian”shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

The CUSTODIAN data group maps to the CDA Header element custodian. The custodian participation class represents the organization that is in charge of maintaining the document. The role is AssignedCustodian and is represented by the CustodianOrganization entity.

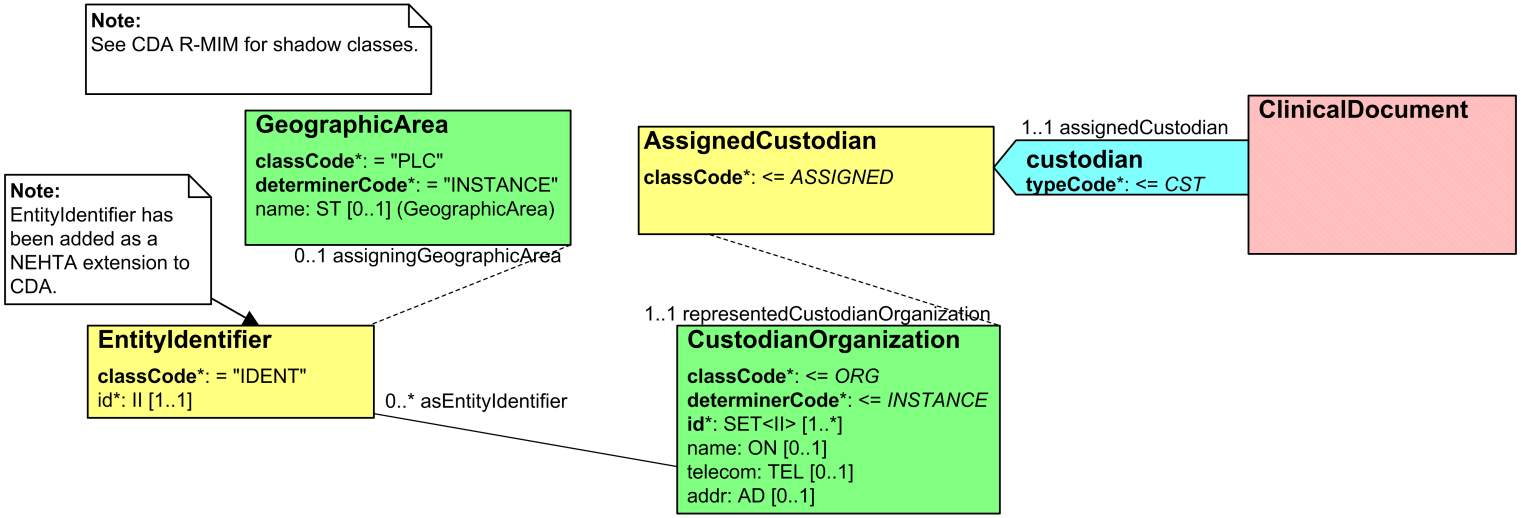


Figure 5.3. Custodian

CDA Mapping

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
custodian	Represents the organization that is in charge of maintaining the document. The custodian is the steward that is entrusted with the care of the document. Every CDA document has exactly one custodian.	1..1		
custodian/**assignedCustodian**	A custodian is a scoping organization in the role of an assigned custodian.	1..1		
custodian/assignedCustodian/**representedCustodianOrganization**	The steward organization (CustodianOrganization class) is an entity scoping the role of AssignedCustodian.	1..1		
custodian/assignedCustodian/representedCustodianOrganization/**id**	A unique identifier for the scoping entity (representedCustodianOrganization) in this role.	1..*	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
custodian/assignedCustodian/representedCustodianOrganization/**<Entity Identifier>**	The entity identifier of the custodian organization.	0..*		See common pattern: Entity Identifier.
custodian/assignedCustodian/representedCustodianOrganization/**name**	The name of the steward organization.	0..1		
custodian/assignedCustodian/representedCustodianOrganization/**<Electronic Communication Detail>**	The telecom of the steward organization.	0..1		See common pattern: Electronic Communication Detail.
custodian/assignedCustodian/representedCustodianOrganization/**<Address>**	The address of the steward organization	0..1		See common pattern: Address.

Example

Example 5.3. Custodian Body XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

   …

   <!-- Begin CDA Header -->

   …

    <!-- Begin Custodian -->
 <custodian>
  <assignedCustodian>
   <representedCustodianOrganization>
    <id root="072EC7BC-78EC-11DF-B9AC-D524DFD72085"/>

    <!-- Organisation Name -->
    <name>Oz Health Clinic</name>

    <!-- Electronic Communication Detail -->
    <telecom use="WP" value="tel:0712341234"/>

    <!-- Address -->
    <addr use="H">
     <streetAddressLine>99 Clinician Street</streetAddressLine>
     <city>Nehtaville</city>
     <state>QLD</state>
     <postalCode>5555</postalCode>
     <additionalLocator>32568931</additionalLocator>
    </addr>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621234567890"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
   </representedCustodianOrganization>
  </assignedCustodian>
 </custodian>
 <!-- End Custodian -->

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->
   <component>
      <structuredBody>
```

```
      …

      </structuredBody>
   </component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

6 Context Data Specification - CDA Mapping

6.1 Shared Health Summary

Identification

Name	SHARED HEALTH SUMMARY
Metadata Type	Structured Document
Identifier	SD-16565

Relationships

Children Not Included in Mapping for This Section (Context Data Components)

Data Type	Name	Obligation	Occurrence
	SUBJECT OF CARE	Essential	1..1
	DOCUMENT AUTHOR	Essential	1..1

CDA R-MIM Representation

Figure 6.1, “CDA Header Model for Shared Health Summary Context” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

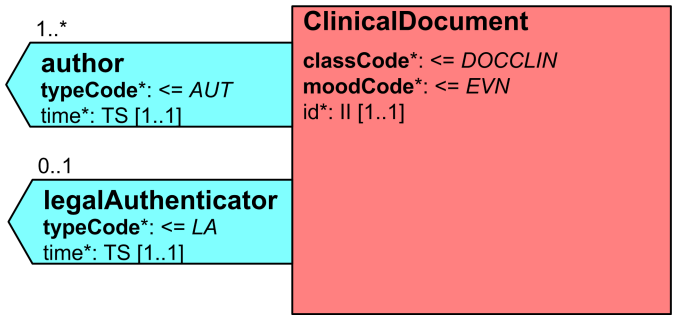


Figure 6.1. CDA Header Model for Shared Health Summary Context

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
Shared Health Summary	A clinical document written by the nominated provider, which contains key pieces of information about an individual's health status and is useful to a wide range of providers in assessing individuals and delivering care.	1..1	ClinicalDocument/**code**		
			ClinicalDocument/code/**@code="60591-5"**		
			ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**		
			ClinicalDocument/code/**@codeSystemName="LOINC"**		
			ClinicalDocument/code/**@displayName="Patient summary"**		
			ClinicalDocument/**effectiveTime**		Document creation time.
Shared Health Summary > **DateTime Attested**	The date (and time if known) that the document author or document authoriser/approver confirms (usually by signature) that a document is complete and genuine.	1..1	ClinicalDocument/**legalAuthenticator/time**		See <time> for available attributes.
Shared Health Summary > ***Subject of Care***	See: SUBJECT OF CARE				
Shared Health Summary > ***Document Author***	See: DOCUMENT AUTHOR				

For CDA Header mappings and model which are not explicitly included in the SCS, see ClinicalDocument.

Example 6.1. Shared Health Summary Context XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="CDA-eDS-V3_0.xsd"
  xmlns="urn:hl7-org:v3"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0">

 …

 <code code="60591-5"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Patient summary"/>
 <effectiveTime value="200910201235"/>
 >

   …

   <!-- Begin CDA Header -->

   …

 <!-- Begin Authenticator -->
 <legalAuthenticator>

  <!-- DateTime Attested -->
  <time value="200910201235"/>

 </legalAuthenticator>
 <!-- End Authenticator -->

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->

               …

   <!-- End CDA Body -->
</ClinicalDocument>
```

6.1.1 DOCUMENT AUTHOR

Identification

Name	DOCUMENT AUTHOR
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 6.2, “Document Author” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

The DOCUMENT AUTHOR data group is related to its context of ClinicalDocument by the author participation class. An author is a person in the role of assignedAuthor (AssignedAuthor class). The entity playing the role is assignedAuthorChoice (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (Australian CDA extension) and is associated to the assignedAuthorChoice.

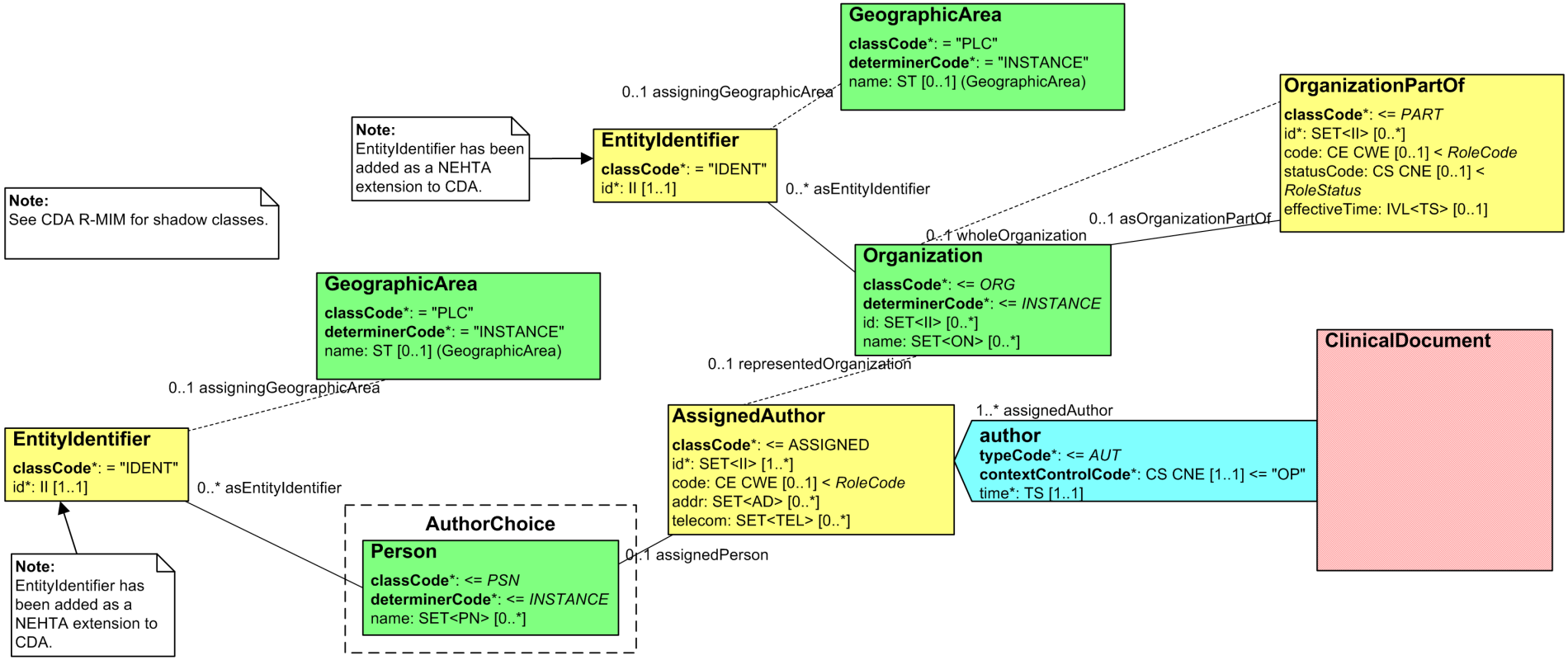


Figure 6.2. Document Author

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Document Author	The healthcare provider who composed the shared health summary.	1..1	**author**		
Document Author > **Participation Period**	The time interval during which the participation in the health care event occurred.	0..1	author/**time**	This element will hold the same value as Shared Health Summary > Date-Time Attested (ClinicalDocument/ **legalAuthenticator/ time**) Although the definition of this element states that it is a time interval, the following applies: "The end of the participation period of a Document Author participation is the time associated with the completion of editing the content of a document.". Thus only the end time need be recorded.	Required CDA element.
Document Author > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	n/a	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Document Author".	Not mapped directly, encompassed implicitly in author/typeCode="AUT" (optional, fixed value).

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Document Author > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	author/**assignedAuthor/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
n/a	n/a	1..1	author/assignedAuthor/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Document Author > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	author/assignedAuthor/**assignedPerson**		
Document Author > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	author/assignedAuthor/assignedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Document Author > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	author/assignedAuthor/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Document Author > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	author/assignedAuthor/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Document Author > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a	PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON.	This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Document Author > Participant > Person or Organisation or Device > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in author/assignedAuthor/assignedPerson.
Document Author > Participant > Person or Organisation or Device > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	author/assignedAuthor/assignedPerson/**<Person Name>**		See common pattern: Person Name.
Document Author > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	1..1	author/assignedAuthor/assignedPerson/**<Employment>**		See common pattern: Employment.

Example 6.2. Document Author XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

   …

   <!-- Begin Source of Shared Health Summary -->
 <author>

  <!-- Must hold same value as DateTime attested (ClinicalDocument.legalAuthenticator.time) -->
  <time value="200910201235+1000"/>

  <assignedAuthor>

   <!-- ID is used for system purposes such as matching -->
   <id root="7FCB0EC4-0CD0-11E0-9DFC-8F50DFD72085"/>

   <!-- Role -->
   <code code="253317"
    codeSystem="2.16.840.1.113883.13.62"
    codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification
          of Occupations, First Edition, 2006"
    displayName="Intensive Care Specialist"/>

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>1 Clinician Street</streetAddressLine>
    <city>Nehtaville</city>
    <state>QLD</state>
    <postalCode>5555</postalCode>
    <additionalLocator>32568931</additionalLocator>
    <country>Australia</country>
   </addr>

   <!-- Electronic Communication Detail -->
   <telecom use="WP" value="tel:0712341234"/>

   <!-- Participant -->
   <assignedPerson>

    <!-- Person Name -->
    <name>
     <prefix>Dr.</prefix>
     <given>Good</given>
     <family>Doctor</family>
    </name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003611234567890"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
```

```
      <!-- Employment Details -->
      <ext:asEmployment classCode="EMP">
       <!-- Position In Organisation -->
       <ext:code>
        <originalText>Senior Intensive Care Specialist</originalText>
       </ext:code>

       <!-- Occupation -->
       <ext:jobCode code="253317" codeSystem="2.16.840.1.113883.13.62"
        codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
        displayName="Intensive Care Specialist" />

       <!-- Employment Type -->
       <ext:jobClassCode code="FT" codeSystem="2.16.840.1.113883.5.1059" codeSystemName="HL7:EmployeeJobClass"
        displayName="full-time" />

       <!-- Employer Organisation -->
       <ext:employerOrganization>

        <!-- Department/Unit -->
        <name>Acme Hospital One</name>

        <asOrganizationPartOf>
         <wholeOrganization>

          <!-- Organisation Name -->
          <name use="ORGB">Acme Hospital Group</name>

          <!-- Entity Identifier -->
          <ext:asEntityIdentifier classCode="IDENT">
           <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621231167899" />
           <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
           </ext:assigningGeographicArea>
          </ext:asEntityIdentifier>

         </wholeOrganization>
        </asOrganizationPartOf>
       </ext:employerOrganization>
      </ext:asEmployment>

    </assignedPerson>

   </assignedAuthor>
  </author>
  <!-- End Source of Shared Health Summary -->

    …

    <component>
       <structuredBody>

       …

       </structuredBody>
    </component>
</ClinicalDocument>
```

6.1.2 SUBJECT OF CARE

Identification

Name	SUBJECT OF CARE
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 6.3, “Subject of Care - Header Data Elements” and Figure 6.4, “Subject of Care - Body Data Elements” show a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to both CDA Header and CDA Body elements.

The SUBJECT OF CARE data group maps mostly to CDA Header elements. The recordTarget participation class represents the medical record to which this document belongs. The recordTarget is associated to the Patient class by the PatientRole class. In order to represent the Date of Death of the Subject of Care, Patient.deceasedTime has been added as an Australian CDA extension.

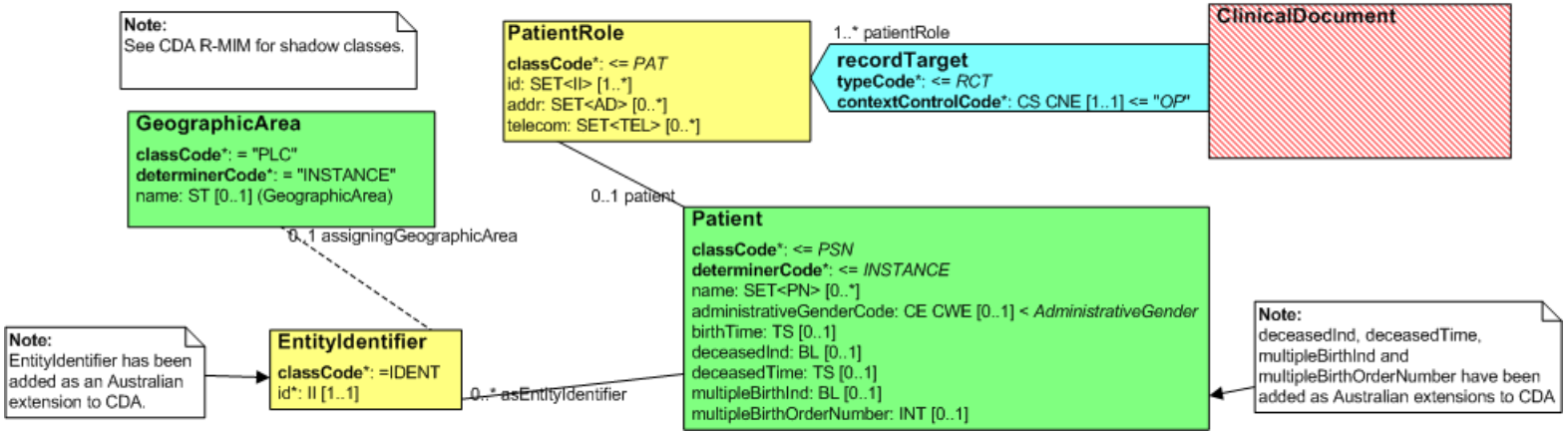


Figure 6.3. Subject of Care - Header Data Elements

Note

Several data elements contained in the SUBJECT OF CARE data group could not be mapped to CDA Header elements. These data elements – have been mapped to Observations in the Administrative Observations section (see *4 Administrative Observations*).

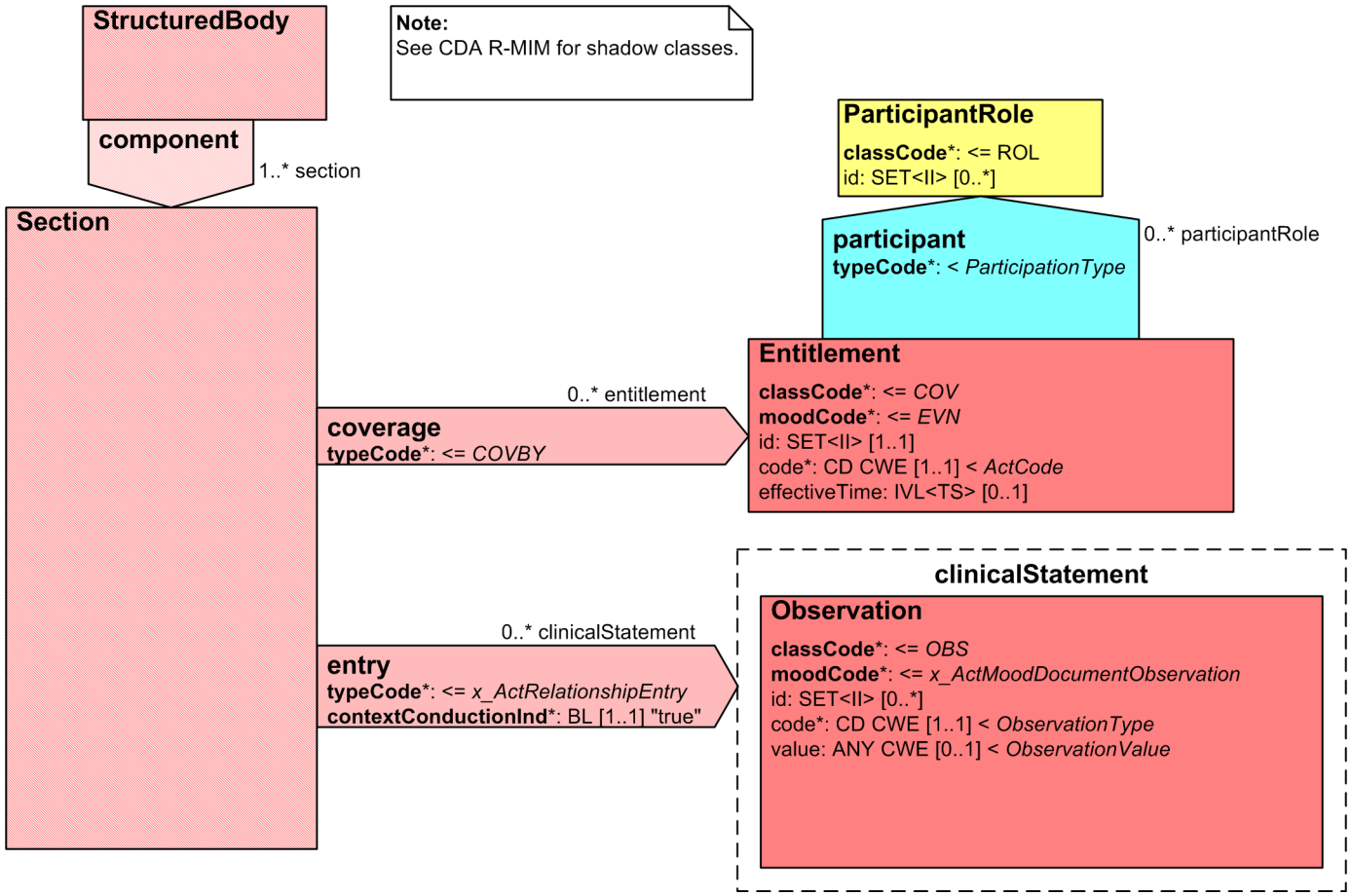


Figure 6.4. Subject of Care - Body Data Elements

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Subject of Care	Identifies the person about whom the healthcare event/encounter/clinical interaction has been captured and/or interchanged, that led to the creation of the document. In other words, the subject of the information.	1..1	recordTarget/**patientRole**		
n/a	n/a	1..1	recordTarget/patientRole/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element. If there are any entitlements for Subject of Care this value **MUST** be the same as: ClinicalDocument/ component/ structuredBody/ component[admin_obs]/ section/ entry/ act/ participant/ participantRole/ **id** where participantRole/ @classCode = "PAT".
Subject of Care > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	n/a	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Subject of Care".	Not mapped directly, encompassed implicitly in recordTarget/ typeCode = "RCT" (optional, fixed value).

[1] http://www.hl7.org/oid/index.cfm?ref=footer

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care >**Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	n/a	Role **SHALL** have an implementation-specific fixed value equivalent to "Patient".	Not mapped directly, encompassed implicitly in recordTarget/ patientRole/ classCode = "PAT" .
Subject of Care > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	recordTarget/patientRole/**patient**		
Subject of Care > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	recordTarget/patientRole/patient/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian IHI.	See common pattern: Entity Identifier. The Subject of Care's Medicare card number is recorded in Entitlement, not Entity Identifier.
Subject of Care > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	recordTarget/patientRole/**<Address>**		See common pattern: Address.
Subject of Care > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	recordTarget/patientRole/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Subject of Care > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a	PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON.	This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Subject of Care > Participant > Person or Organisation or Device > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in recordTarget/ patientRole/ patient.
Subject of Care > Participant > Person or Organisation or Device > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	recordTarget/patientRole/patient/**<Person Name>**		See common pattern: Person Name.
Subject of Care > Participant > Person or Organisation or Device > Person > **Demographic Data**	Additional characteristics of a person that may be useful for identification or other clinical purposes.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Sex**	The biological distinction between male and female. Where there is inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.	1..1	recordTarget/patientRole/patient/**administrativeGenderCode**	AS 5017-2006 Health Care Client Identifier Sex	
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Date of Birth Detail**	Details of the accuracy, origin and value of a person's date of birth.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > **Date of Birth**	The date of birth of the person.	1..1	recordTarget/patientRole/patient/**birthTime**		See <time> for available attributes.
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[admin_obs]/section (See *4 Administrative Observations*)		
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > **Date of Birth is Calculated From Age**	Indicates whether or not a person's date of birth has been derived from the value in the Age data element.	0..1	**entry[calc_age]**		
			entry[calc_age]/**observation**		
			entry[calc_age]/observation/**@classCode="OBS"**		
			entry[calc_age]/observation/**@moodCode="EVN"**		
			entry[calc_age]/observation/**code**		
			entry[calc_age]/observation/code/**@code="103.16233"**		
			entry[calc_age]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[calc_age]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[calc_age]/observation/code/**@displayName="Date of Birth is Calculated From Age"**		
			entry[calc_age]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[calc_age]/observation/**value:BL**		If the date of birth has been calculated from age this is true, otherwise it is false.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > **Date of Birth Accuracy Indicator**	The level of certainty or estimation of a person's date of birth.	0..1	**entry[dob_acc]**		
			entry[dob_acc]/**observation**		
			entry[dob_acc]/observation/**@classCode="OBS"**		
			entry[dob_acc]/observation/**@moodCode="EVN"**		
			entry[dob_acc]/observation/**code**		
			entry[dob_acc]/observation/code/**@code="102.16234"**		
			entry[dob_acc]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[dob_acc]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[dob_acc]/observation/code/**@displayName="Date of Birth Accuracy Indicator"**		
			entry[dob_acc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[dob_acc]/observation/**value:CS**	AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator	
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth Accuracy Indicator > **Date of Birth Day Accuracy Indicator**	The accuracy of the day component of a person's date of birth.	1..1	n/a		Encompassed in the mapping for Date of Birth Accuracy Indicator (above).
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth Accuracy Indicator > **Date of Birth Month Accuracy Indicator**	The accuracy of the month component of a person's date of birth.	1..1	n/a		Encompassed in the mapping for Date of Birth Accuracy Indicator (above).
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth Accuracy Indicator > **Date of Birth Year Accuracy Indicator**	The accuracy of the year component of a person's date of birth.	1..1	n/a		Encompassed in the mapping for Date of Birth Accuracy Indicator (above).

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Age Detail**	Details of the accuracy and value of a person's age.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Age Detail > **Age**	The age of a person/subject of care at the time.	1..1	**entry[age]**		
			entry[age]/**observation**		
			entry[age]/observation/**@classCode="OBS"**		
			entry[age]/observation/**@moodCode="EVN"**		
			entry[age]/observation/**code**		
			entry[age]/observation/code/**@code="103.20109"**		
			entry[age]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[age]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[age]/observation/code/**@displayName="Age"**		
			entry[age]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[age]/observation/**value:PQ**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Age Detail > **Age Accuracy Indicator**	The accuracy of a person's age.	0..1	**entry[age_acc]**		
			entry[age_acc]/**observation**		
			entry[age_acc]/observation/**@classCode="OBS"**		
			entry[age_acc]/observation/**@moodCode="EVN"**		
			entry[age_acc]/observation/**code**		
			entry[age_acc]/observation/code/**@code="103.16279"**		
			entry[age_acc]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[age_acc]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[age_acc]/observation/code/**@displayName="Age Accuracy Indicator"**		
			entry[age_acc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[age_acc]/observation/**value:BL**		If the age is considered to be accurate this is true, otherwise it is false.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Birth Plurality**	An indicator of multiple birth, showing the total number of births resulting from a single pregnancy.	0..1	**entry[brth_plr]**		
			entry[brth_plr]/**observation**		
			entry[brth_plr]/observation/**@classCode="OBS"**		
			entry[brth_plr]/observation/**@moodCode="EVN"**		
			entry[brth_plr]/observation/**code**		
			entry[brth_plr]/observation/code/**@code="103.16249"**		
			entry[brth_plr]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[brth_plr]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[brth_plr]/observation/code/**@displayName="Birth Plurality"**		
			entry[brth_plr]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[brth_plr]/observation/**value:INT**		
CDA Header Data Elements			Context: ClinicalDocument		
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Birth Order**	The sequential order of each baby of a multiple birth regardless of live or still birth.	0..1	recordTarget/patientRole/patient/**ext:multipleBirthInd**		See Australian CDA extension: Multiple Birth.
			recordTarget/patientRole/patient/**ext:multipleBirthOrderNumber**		
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Date of Death Detail**	Details of the accuracy and value of a person's date of death.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > **Date of Death**	The date or date and time at which a person was estimated or certified to have died.	1..1	recordTarget/patientRole/patient/**ext:deceasedInd**		See Australian CDA extension: Deceased Time.
			recordTarget/patientRole/patient/**ext:deceasedTime**		See <time> for available attributes.
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[admin_obs]/section (See *4 Administrative Observations*)		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > **Date of Death Accuracy Indicator**	The level of certainty or estimation of a person's date of death.	0..1	**entry[dod_acc]**		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
			entry[dod_acc]/**observation**		
			entry[dod_acc]/observation/**@classCode="OBS"**		
			entry[dod_acc]/observation/**@moodCode="EVN"**		
			entry[dod_acc]/observation/**code**		
			entry[dod_acc]/observation/code/**@code="102.16252"**		
			entry[dod_acc]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[dod_acc]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[dod_acc]/observation/code/**@displayName="Date of Death Accuracy Indicator"**		
			entry[dod_acc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[doc_acc]/observation/**value:CS**	AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator	
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > Date of Death Accuracy Indicator > **Date of Death Day Accuracy Indicator**	The accuracy of the day component of a person's date of death.	1..1	n/a		Encompassed in the mapping for Date of Death Accuracy Indicator (above).
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > Date of Death Accuracy Indicator > **Date of Death Month Accuracy Indicator**	The accuracy of the month component of a person's date of death.	1..1	n/a		Encompassed in the mapping for Date of Death Accuracy Indicator (above).

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > Date of Death Accuracy Indicator > **Date of Death Year Accuracy Indicator**	The accuracy of the year component of a person's date of death.	1..1	n/a		Encompassed in the mapping for Date of Death Accuracy Indicator (above).
CDA Header Data Elements			Context: ClinicalDocument		
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Country of Birth**	The country in which the person was born.	0..1	recordTarget/patientRole/patient/**birthplace/place/addr/country**	Australia Bureau of Statistics, Standard Australian Classification of Countries (SACC) Cat. No. 1269 [ABS2008]	Use the name, not the numbered code.
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **State/Territory of Birth**	The identifier of the Australian state or territory where a person is born.	0..1	recordTarget/patientRole/patient/**birthplace/place/addr/state**	AS 5017-2006 Australian State/Territory Identifier - Postal	
Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Indigenous Status**	Indigenous Status is a measure of whether a person identifies as being of Aboriginal or Torres Strait Islander origin.	1..1	recordTarget/patientRole/patient/**ethnicGroupCode**	METeOR 291036: Indigenous Status	
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[admin_obs]/section		
Subject of Care > Participant > **Entitlement**	The entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	0..*	**ext:coverage2/@typeCode="COVBY"**		See Australian CDA extension: Entitlement.
			ext:coverage2/**ext:entitlement**		
			ext:coverage2/ext:entitlement/**@classCode="COV"**		
			ext:coverage2/ext:entitlement/**@moodCode="EVN"**		
			ext:coverage2/ext:entitlement/**ext:participant/@typeCode="BEN"**		
			ext:coverage2/ext:entitlement/ext:participant/**ext:participantRole/@classCode="PAT"**		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/**ext:id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	**SHALL** hold the same value as ClinicalDocument/ recordTarget/ patientRole/ **id**.
Subject of Care > Participant > Entitlement > **Entitlement Number**	A number or code issued for the purpose of identifying the entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	1..1	ext:coverage2/ext:entitlement/**ext:id**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Entitlement > **Entitlement Type**	The description of the scope of an entitlement.	1..1	ext:coverage2/ext:entitlement/**ext:code**	NCTIS: Admin Codes - Entitlement Type	See <code> for available attributes.
Subject of Care > Participant > Entitlement > **Entitlement Validity Duration**	The time interval for which an entitlement is valid.	0..1	ext:coverage2/ext:entitlement/**ext:effectiveTime**		See <time> for available attributes.

Example 6.3. Subject of Care XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

      …

   <!-- Begin Patient - Header Part -->
 <recordTarget>
  <patientRole>
   <!-- This system generated id is used for matching patient details such as Entitlement, Date of Birth Details and Age Details -->
   <id root="7AA0BAAC-0CD0-11E0-9516-4350DFD72085"/>

   <!-- Address -->
   <addr use="H">
    <streetAddressLine>1 Clinician Street</streetAddressLine>
    <city>Nehtaville</city>
    <state>QLD</state>
    <postalCode>5555</postalCode>
    <additionalLocator>32568931</additionalLocator>
    <country>Australia</country>
   </addr>

   <!-- Electronic Communication Detail -->
   <telecom use="H" value="tel:0499999999"/>

   <!-- Participant -->
   <patient>

    <!-- Person Name -->
    <name use="L">
     <prefix>Ms</prefix>
     <given>Sally</given>
     <family>Grant</family>
    </name>

    <!-- Sex -->
    <administrativeGenderCode code="F"
              codeSystem="2.16.840.1.113883.13.68"
              codeSystemName="AS 5017-2006 Health Care Client Identifier Sex"/>

    <!-- Date of Birth -->
    <birthTime value="19480607"/>

    <!-- Indigenous Status -->
    <ethnicGroupCode code="4" codeSystem="2.16.840.1.113883.3.879" codeSystemName="METeOR Indigenous Status"
     displayName="Neither Aboriginal nor Torres Strait Islander origin" />

    <!-- Multiple Birth Indicator -->
    <ext:multipleBirthInd value="true"/>
    <ext:multipleBirthOrderNumber value="2"/>

    <!-- Date of Death -->
    <ext:deceasedInd value="true"/>
    <ext:deceasedTime value="20101201"/>
```

```
    <!-- Country of Birth -->
    <birthplace>
     <place>
      <addr>
       <country>Australia</country>
       <state>QLD</state>
      </addr>
     </place>
    </birthplace>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="IHI" root="1.2.36.1.2001.1003.0.8003601234512345"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
   </patient>
  </patientRole>
</recordTarget>
<!-- End Patient - Header Part -->

…

  <!-- Begin CDA Body -->
  <component>
     <structuredBody>

        …

        <!-- Begin Section Administrative Observations -->
  <component><!-- [admin_obs] -->
   <section>
    <code code="102.16080"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Administrative Observations"/>

    <title>Administrative Observations</title>

    <!-- Narrative text -->
    <text>
     <table>
      <tbody>
       <tr>
        <th>Date of Birth is Calculated From Age</th>
        <td>True</td>
       </tr>
       <tr>
        <th>Date of Birth Accuracy Indicator</th>
        <td>AAA</td>
       </tr>
       <tr>
        <th>Age</th>
        <td>54</td>
       </tr>
       <tr>
        <th>Age Accuracy Indicator</th>
        <td>True</td>
       </tr>
       <tr>
        <th>Birth Plurality</th>
        <td>3</td>
       </tr>
```

```
   ...

  </tbody>
 </table>
</text>

<!-- Begin Patient – Body -->
<!-- Begin Date of Birth is Calculated From Age -->
<entry><!-- [calc_age] -->
 <observation classCode="OBS" moodCode="EVN">
  <id root="DA10C13E-EFD0-11DF-91AF-B5CCDFD72085"/>
  <code code="103.16233"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Date of Birth is Calculated From Age"/>
  <value value="true" xsi:type="BL"/>
 </observation>
</entry><!-- [calc_age] -->
<!-- End Date of Birth is Calculated From Age -->

<!-- Begin Date of Birth Accuracy Indicator-->
<entry><!-- [dob_acc] -->
 <observation classCode="OBS" moodCode="EVN">
  <id root="D253216C-EFD0-11DF-A686-ADCCDFD72085"/>
  <code code="102.16234"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Date of Birth Accuracy Indicator"/>
  <value code="AAA" xsi:type="CS"/>
 </observation>
</entry><!-- [dob_acc] -->
<!-- End Date of Birth Accuracy Indicator-->

<!-- Begin Age -->
<entry><!-- [age] -->
 <observation classCode="OBS" moodCode="EVN">
  <id root="CCF0D55C-EFD0-11DF-BEA2-A6CCDFD72085"/>
  <code code="103.20109"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Age"/>
  <value xsi:type="PQ" value="54" unit="a"/>
 </observation>
</entry><!-- [age] -->
<!-- End Age -->

<!-- Age Accuracy Indicator -->
<entry><!-- [age_acc] -->
 <observation classCode="OBS" moodCode="EVN">
  <id root="C629C9F4-EFD0-11DF-AA9E-96CCDFD72085"/>
  <code code="103.16279"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Age Accuracy Indicator"/>
  <value value="true" xsi:type="BL"/>
 </observation>
</entry><!-- [age_acc] -->

<!-- Birth Plurality -->
<entry><!-- [birth_plr] -->
 <observation classCode="OBS" moodCode="EVN">
  <id root="C1EE2646-EFD0-11DF-8D9C-95CCDFD72085"/>
  <code code="103.16249"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
```

```
          displayName="Birth Plurality"/>
         <value value="3" xsi:type="INT"/>
        </observation>
       </entry><!-- [birth_plr] -->

       <!-- Begin Date of Death Accuracy Indicator-->
        <entry><!-- [dod_acc] -->
         <observation classCode="OBS" moodCode="EVN">

          <!-- ID is used for system purposes such as matching -->
          <id root="D253216C-EFD0-11DF-A686-ADCCDFD72085"/>
          <code code="102.16252"
           codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components"
           displayName="Date of Death Accuracy Indicator"/>
          <value code="AAA" xsi:type="CS"/>
         </observation>
        </entry><!-- [dod_acc] -->
        <!-- End Date of Death Accuracy Indicator-->

        <!-- Begin Entitlement -->
        <ext:coverage2 typeCode="COVBY">
         <ext:entitlement classCode="COV" moodCode="EVN">
          <ext:id root="1.2.36.174030967.0.5" extension="1234567892" assigningAuthorityName="Australian Medicare number" />
          <ext:code code="1" codeSystem="1.2.36.1.2001.1001.101.104.16047" codeSystemName="NCTIS Entitlement Type Values" displayName="Medicare Benefits"/>
          <ext:effectiveTime>
           <high value="20110101"/>
          </ext:effectiveTime>
          <ext:participant typeCode="BEN">
           <ext:participantRole classCode="PAT">
            <ext:id root="7AA0BAAC-0CD0-11E0-9516-4350DFD72085" />
           </ext:participantRole>
          </ext:participant>
         </ext:entitlement>
        </ext:coverage2>
        <!-- End Entitlement -->

       <!-- End Patient – Body -->

       ...

      </section>

     </component>
     <!-- End Section Administrative Observations -->

     ...

        </structuredBody>
     </component>
     <!-- End CDA Body -->
</ClinicalDocument>
```

7 Content Data Specification - CDA Mapping

7.1 Shared Health Summary

Identification

Name	SHARED HEALTH SUMMARY
Metadata Type	Structured Document
Identifier	SD-16565

Relationships

Children Not Included in Mapping for This Section (Content Data Components)

Data Type	Name	Obligation	Occurrence
	ADVERSE REACTIONS	Essential	1..1
	MEDICATIONS	Essential	1..1
	MEDICAL HISTORY	Essential	1..1
	IMMUNISATIONS	Essential	1..1

CDA R-MIM Representation

Figure 7.1, “Shared Health Summary” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Shared Health Summary is composed of a ClinicalDocument, which is the entry point into the CDA R-MIM. The ClinicalDocument is associated with the bodyChoice through the component relationship. The structuredBody class represents a CDA document body that is comprised of one or more document sections.

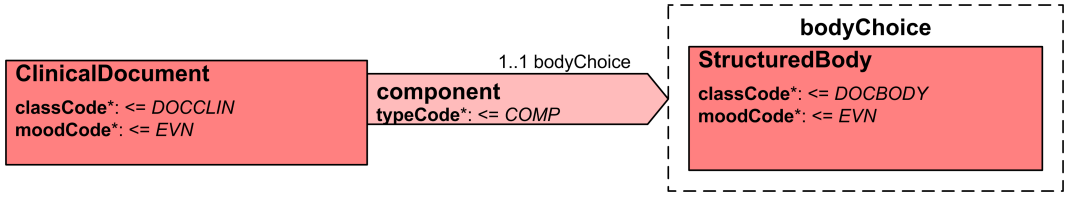


Figure 7.1. Shared Health Summary

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
Shared Health Summary	A clinical document written by the nominated provider, which contains key pieces of information about an individual's health status and is useful to a wide range of providers in assessing individuals and delivering care.	1..1	**ClinicalDocument**		
CDA Body Level 2 Data Elements					
Shared Health Summary (Body)	See above.	1..1	ClinicalDocument/**component/structuredBody**		

Example 7.1. Shared Health Summary Body XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

   …

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->
   <component>
      <structuredBody>

      …

      </structuredBody>
   </component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.1 ADVERSE REACTIONS

Identification

Name	ADVERSE REACTIONS
Metadata Type	Section
Identifier	S-20113

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	ADVERSE REACTION	Optional	0..*
	EXCLUSION STATEMENT - ADVERSE REACTION	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.2, “Adverse Reactions” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Adverse Reactions section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

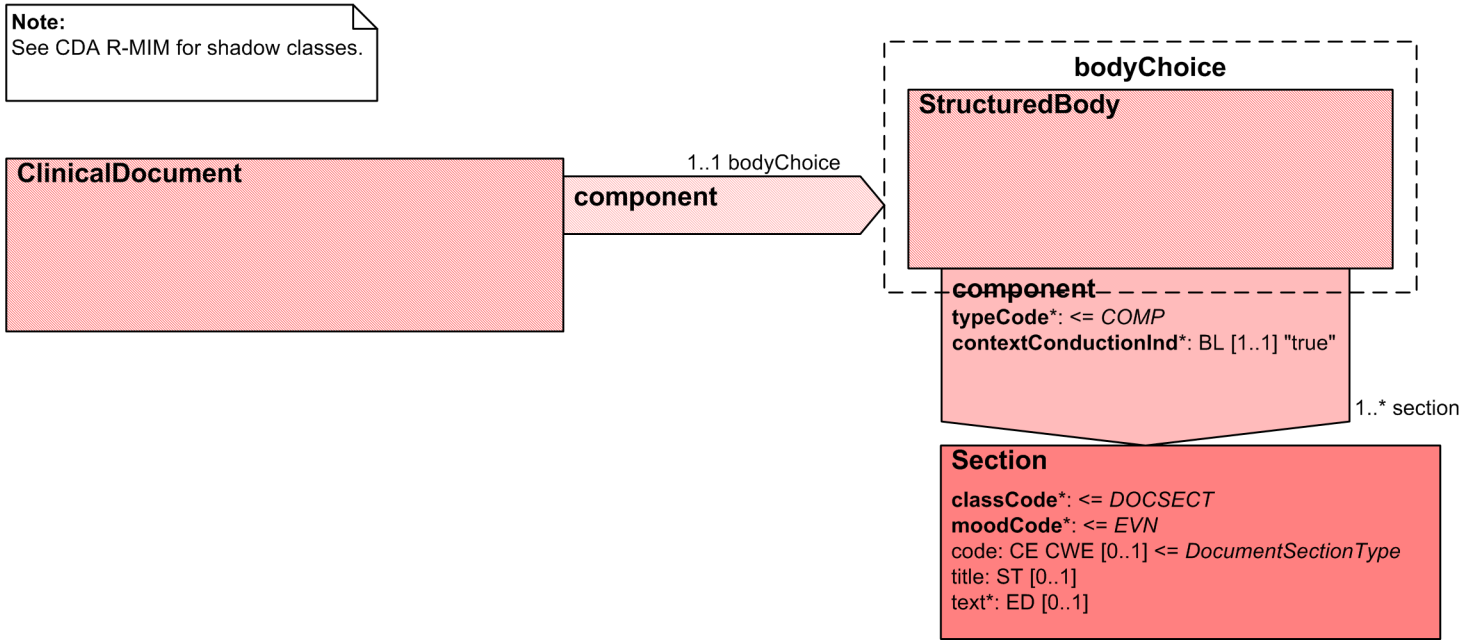


Figure 7.2. Adverse Reactions

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Adverse Reactions	Information about adverse reactions and/or propensity to adverse reaction of the patient (including allergies and intolerances), and any relevant reaction details.	1..1	component[adv_reacts]/**section**		
			component[adv_reacts]/section/**code**		
			component[adv_reacts]/section/code/**@code="101.20113"**		
			component[adv_reacts]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[adv_reacts]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[adv_reacts]/section/code/**@displayName="Adverse Reactions"**		
			component[adv_reacts]/section/**title="Adverse Reactions"**		
			component[adv_reacts]/section/**text**		See Appendix A, *CDA Narratives*
Adverse Reactions > **Adverse Reaction**	A harmful or undesirable effect associated with exposure to any substance or agent, including food, plants, animals, venom from animal stings or a medication at therapeutic or sub-therapeutic doses.	0..*	See: ADVERSE REACTION		
Adverse Reactions > **Exclusion Statement - Adverse Reactions**	Statements about Adverse Reactions that need to be positively recorded as absent or excluded.	0..1	See: EXCLUSION STATEMENT - ADVERSE REACTION		

Example 7.2. Adverse Reactions XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    ...

     <!-- Adverse Reactions -->
   <component>
    <section>
     <code code="101.20113" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Adverse Reactions" />
     <title>Adverse Reactions</title>
     <text>Adverse Reactions narrative goes here.</text>

     ...

    </section>
   </component>
   <!-- End Adverse Substance Reactions -->

  ...

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.1.1 ADVERSE REACTION

Identification

Name	ADVERSE REACTION
Metadata Type	Data Group
Identifier	DG-15517

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	ADVERSE REACTIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.3, “Adverse Reaction” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

Each ADVERSE REACTION data group modelled as an act which is related to its containing section by an entry relationship. This act has a related participant which represents the Substance/Agent. It also has two related observations representing the Reaction Event and the Manifestation.

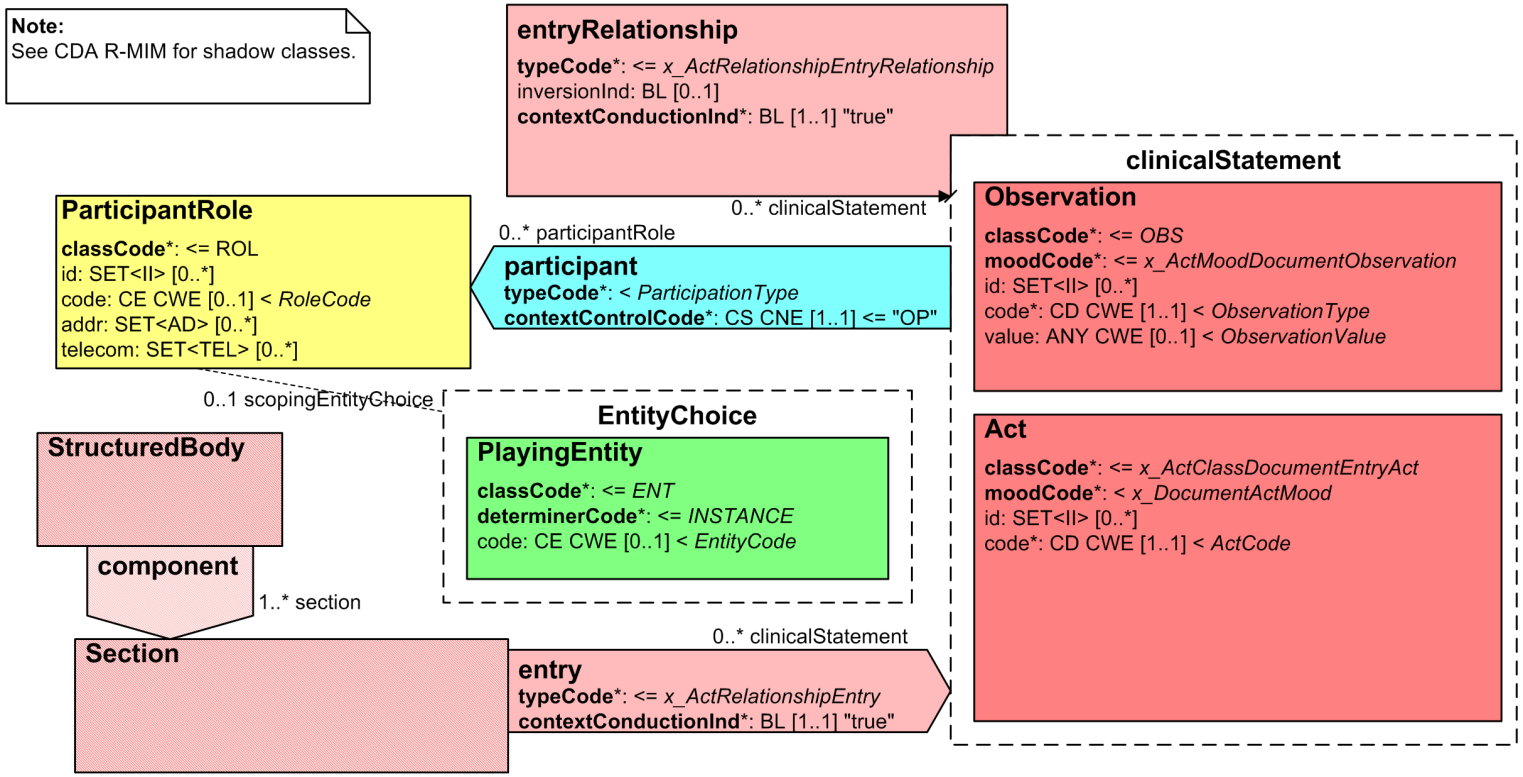


Figure 7.3. Adverse Reaction

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[1] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[adv_reacts]/section		
Adverse Reaction	A harmful or undesirable effect associated with exposure to any substance or agent, including food, plants, animals, venom from animal stings or a medication at therapeutic or sub-therapeutic doses.	0..*	**entry**		
			entry/**act**		
			entry/act/**@classCode="ACT"**		
			entry/act/**@moodCode="EVN"**		
			entry/act/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry/act/**code**		
			entry/act/code/**@code="102.15517"**		
			entry/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry/act/code/**@displayName="Adverse Reaction"**		
Adverse Reaction > **Substance/Agent**	Identification of a substance, agent, or a class of substance, that is considered to be responsible for the adverse reaction.	1..1	entry/act/**participant**		
			entry/act/participant/**@typeCode="CAGNT"**		
			entry/act/participant/**participantRole/playingEntity/code**	NEHTA Substance/Agent Values	See <code> for available attributes.

[1] http://www.hl7.org/oid/index.cfm?ref=footer

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Adverse Reaction > **Reaction Event**	Details about each adverse reaction event.	0..1	entry/act/**entryRelationship[rct_evnt]/@typeCode="CAUS"**		
			entry/act/entryRelationship[rct_evnt]/**observation**		
			entry/act/entryRelationship[rct_evnt]/observation/**@classCode="OBS"**		
			entry/act/entryRelationship[rct_evnt]/observation/**@moodCode="EVN"**		
			entry/act/entryRelationship[rct_evnt]/observation/**code**		
			entry/act/entryRelationship[rct_evnt]/observation/**@code="102.16474"**		
			entry/act/entryRelationship[rct_evnt]/observation/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/act/entryRelationship[rct_evnt]/observation/**@codeSystemName="NCTIS Data Components"**		
			entry/act/entryRelationship[rct_evnt]/observation/**@displayName="Reaction Event"**		
Adverse Reaction > Reaction Event > **Manifestation**	Clinical manifestation of the adverse reaction expressed as a single word, phrase or brief description.	1..*	entry/act/entryRelationship[rct_evnt]/observation/**entryRelationship[mfst]/@typeCode="MFST"**		
			entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/**@inversionInd="true"**		
			entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/**observation**		
			entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/**@classCode="OBS"**		
			entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/**@moodCode="EVN"**		
			entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/**code**	SNOMED CT-AU Clinical Manifestation Values	See <code> for available attributes.

Example 7.3. Adverse Reaction XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    …

     <!-- Reviewed Adverse Reactions -->
   <component>
    <section>

     ...

     <!-- Adverse Reaction -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <id root="547FC5C0-7F8A-11E0-AE79-EE2B4924019B"/>
       <code code="102.15517" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Adverse Reaction" />
       <!-- Substance/Agent -->
       <participant typeCode="CAGNT">
        <participantRole>
         <playingEntity>
          <code code="90580008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
           displayName="fish" />
         </playingEntity>
        </participantRole>
       </participant>

       <!-- Reaction Event -->
       <entryRelationship typeCode="CAUS">
        <observation classCode="OBS" moodCode="EVN">
         <code code="102.16474" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Reaction Event" />

         <!-- Manifestation -->
         <entryRelationship typeCode="MFST" inversionInd="true">
          <observation classCode="OBS" moodCode="EVN">
           <code code="271807003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
            codeSystemVersion="20090731" displayName="skin rash" />
          </observation>

         </entryRelationship>
        </observation>
       </entryRelationship>
       <!-- End Reaction Event -->
```

```
      </act>
     </entry>
     <!-- End Adverse Reaction -->

     ...

    </section>
   </component>
   <!-- End Reviewed Adverse Reactions -->

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.1.2 EXCLUSION STATEMENT - ADVERSE REACTION

Identification

Name	EXCLUSION STATEMENT - ADVERSE REACTIONS
Metadata Type	Data Group
Identifier	DG-16137

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	ADVERSE REACTIONS	Optional	0..1

CDA R-MIM Representation

Figure 7.4, “Exclusion Statement - Adverse Reactions” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The EXCLUSION STATEMENT - ADVERSE REACTIONS data group is represented by an observation class and is related to its containing section by an entry relationship.

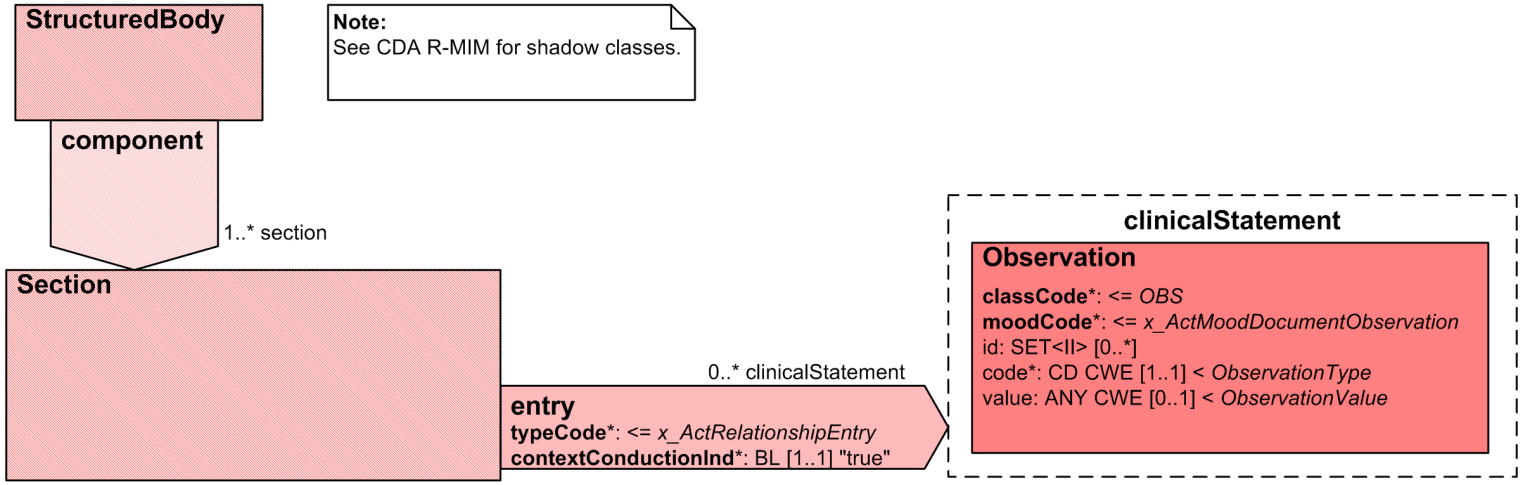


Figure 7.4. Exclusion Statement - Adverse Reactions

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[adv_reacts]/section		
Exclusion Statement - Adverse Reactions	Statements about Adverse Reactions that need to be positively recorded as absent or excluded.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

[2] http://www.hl7.org/oid/index.cfm?ref=footer

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Exclusion Statement - Adverse Reactions > **Global Statement**	The statement about the absence or exclusion.	1..1	**entry[gbl_adv]**		
			entry[gbl_adv]/**observation**		
			entry[gbl_adv]/observation/**@classCode="OBS"**		
			entry[gbl_adv]/observation/**@moodCode="EVN"**		
			entry[gbl_adv]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[gbl_adv]/observation/**code**		
			entry[gbl_adv]/observation/code/**@code="103.16302.120.1.1"**		
			entry[gbl_adv]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_adv]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_adv]/observation/code/**@displayName="Global Statement "**		
			entry[gbl_adv]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.4. Exclusion Statement - Adverse Reactions XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     ...

        <!-- Reviewed Adverse Reactions -->
   <component>
    <section>

     ...

     <!-- Exclusion Statement - Adverse Reactions -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <!-- ID is used for system purposes such as matching -->
       <id root="D1645208-09A6-11E1-8B51-296A4824019B"/>
       <code code="103.16302.120.1.1" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Global Statement" />
       <value code="02" codeSystem="1.2.36.1.2001.1001.101.104.16299" codeSystemName="NCTIS Global Statement Values" displayName="Not asked" xsi:type="CD" />
      </observation>
     </entry>
     <!-- End Exclusion Statement - Adverse Reactions -->

    </section>
   </component>
   <!-- End Reviewed Adverse Reactions -->

    ...

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.2 MEDICATIONS

Identification

Name	Medications
Metadata Type	Section
Identifier	S-16146

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	KNOWN MEDICATION	Optional	0..*
	EXCLUSION STATEMENT - MEDICATIONS	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.5, “Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Medications section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

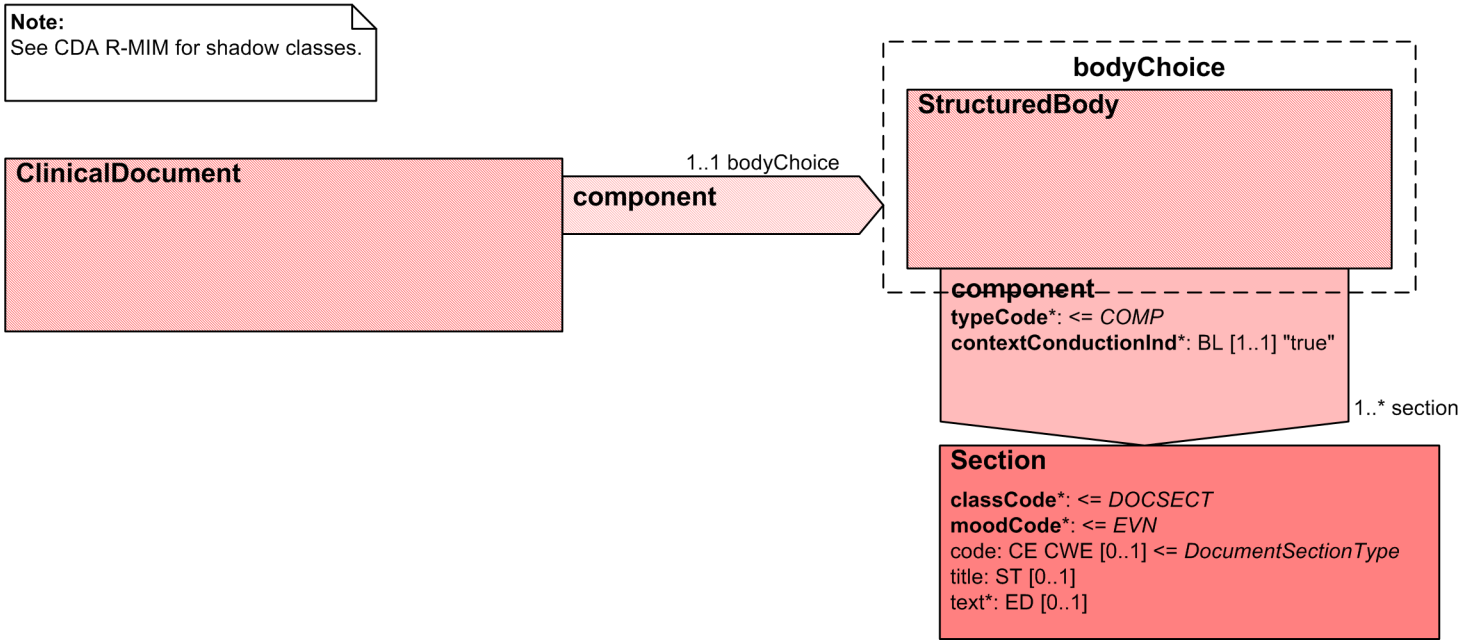


Figure 7.5. Medications

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Medications	Medicines which the subject of care is using, this includes self-prescribed, clinician prescribed and nonprescription medicines.	1..1	component[meds]/**section**		
			component[meds]/section/**code**		
			component[meds]/section/code/**@code="101.16146"**		
			component[meds]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[meds]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[meds]/section/code/**@displayName="Medications"**		
			component[meds]/section/**title="Medications"**		
			component[meds]/section/**text**		See Appendix A, *CDA Narratives*
Medications > **Known Medication**	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	0..*	See: KNOWN MEDICATION		
Medications > **Exclusion Statement - Medications**	Statement positively asserting that the subject of care has not been prescribed or is not taking any medication.	0..1	See: EXCLUSION STATEMENT - MEDICATIONS		

Example 7.5. Medications XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    …

     <!-- Begin Medications -->
   <component>
    <section>
     <code code="101.16146"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Medications"/>

     <title>Medications</title>
     <text>...</text>

     ...

    </section>
   </component>
   <!-- End Medications -->

  ...

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.2.1 KNOWN MEDICATION

Identification

Name	Known Medication
Metadata Type	Data Group
Identifier	DG-16211

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.6, “Known Medication” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Known Medication data group is described by a SubstanceAdministration which is related to the containing section by an entry. The text element of the SubstanceAdministration holds the the Directions. SubstanceAdministration has two related clinicalStatements: a reason Act to represent Clinical Indication and a component Act to represent the comment. Therapeutic Good Identification maps to consumable.manufacturedProduct.manufacturedMaterial.code.

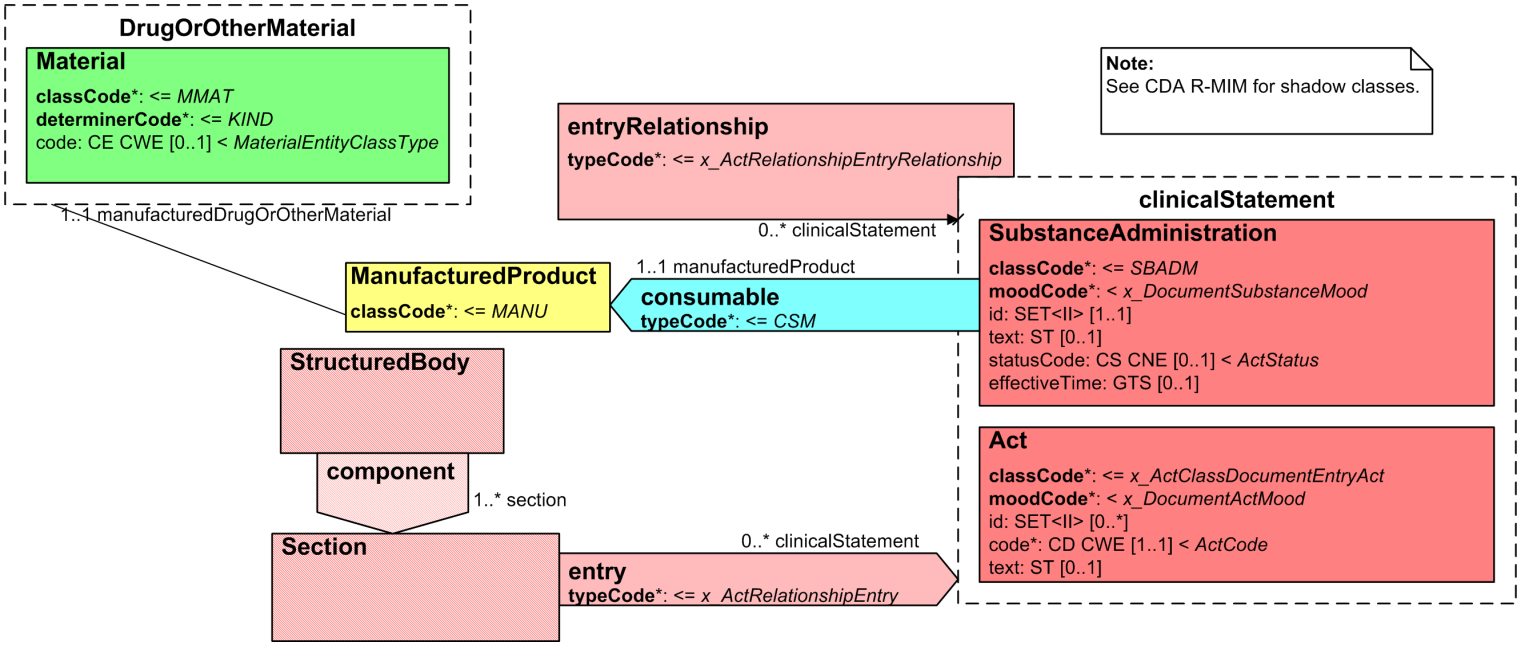


Figure 7.6. Known Medication

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[meds]/section		
Known Medication	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	0..*	**entry[med_inst]**		
			entry[med_inst]/**substanceAdministration**		
			entry[med_inst]/substanceAdministration/**@moodCode="EVN"**		
			entry[med_inst]/substanceAdministration/**@classCode="SBADM"**		
			entry[med_inst]/substanceAdministration/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Known Medication > **Medicine**	The medicine or other therapeutic good being ordered, administered to or used by the subject of care.	1..1	entry[med_inst]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code**	Australian Medicines Terminology The permissible values are the members of the following 7 AMT reference sets: • 929360061000036106 Medicinal product reference set • 929360081000036101 Medicinal product pack reference set • 929360071000036103 Medicinal product unit of use reference set • 929360021000036102 Trade product reference set • 929360041000036105 Trade product pack reference set • 929360031000036100 Trade product unit of use reference set • 929360051000036108 Containered trade product pack reference set	See <code> for available attributes.
Known Medication > **Directions**	A complete narrative description of how much, when and how to use the medicine, vaccine or other therapeutic good.	1..1	entry[med_inst]/substanceAdministration/**text:ST**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Known Medication > **Clinical Indication**	A reason for ordering the medicine, vaccine or other therapeutic good.	0..1	entry[med_inst]/substanceAdministration/**entryRelationship[cln_ind]/@typeCode="RSON"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/**act**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**@classCode="INFRM"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**@moodCode="EVN"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**code**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@code="103.10141"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@displayName="Clinical Indication"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**text:ST**		
Known Medication > **Comment**	Any additional information that may be needed to ensure the continuity of supply, rationale for current dose and timing, or safe and appropriate use.	0..1	entry[med_inst]/substanceAdministration/**entryRelationship[cmts]/@typeCode="COMP"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/**act**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**@classCode="INFRM"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**@moodCode="EVN"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**code**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/**@code="103.16044"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/**@displayName="Additional Comments"**		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**text:ST**		

Example 7.6. Known Medication XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     …

     <!-- Medications -->
   <component>
    <section>

     ...

     <!-- Known Medications -->
     <entry>
      <substanceAdministration classCode="SBADM" moodCode="EVN">
       <id root="361B6EF6-754C-11E0-A3C3-D19F4824019B" />
       <!-- Directions -->
       <text xsi:type="ST">2 tablets daily after breakfast</text>
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <!-- Therapeutic Good Identification -->
          <code code="23641011000036102" codeSystem="1.2.36.1.2001.1004.100"
           codeSystemName="Australian Medicinces Terminology (AMT)"
           displayName="paracetamol 500 mg + codeine phosphate 30 mg tablet" />
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>

       <!-- Clinical Indication -->
       <entryRelationship typeCode="RSON">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.10141" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Clinical Indication" />
         <text xsi:type="ST">Pain control.</text>
        </act>
       </entryRelationship>
       <!-- End Clinical Indication -->

       <!-- Comment -->
       <entryRelationship typeCode="COMP">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Additional Comments" />
         <text xsi:type="ST">Dosage to be reviewed in 10 days.</text>
        </act>
```

```
        </entryRelationship>
        <!-- End Comment -->

       </substanceAdministration>
      </entry>
      <!-- End Known Medications -->

      ...

     </section>
    </component>
    <!-- End Medications -->

     </structuredBody>
  <component>
    <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.2.2 EXCLUSION STATEMENT - MEDICATIONS

Identification

Name	EXCLUSION STATEMENT - MEDICATIONS
Metadata Type	Data Group
Identifier	DG-16136

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICATIONS	Optional	0..1

CDA R-MIM Representation

Figure 7.7, “Exclusion Statement - Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Exclusion Statement - Medications data group is represented by an observation class and is related to its containing section by an entry relationship.

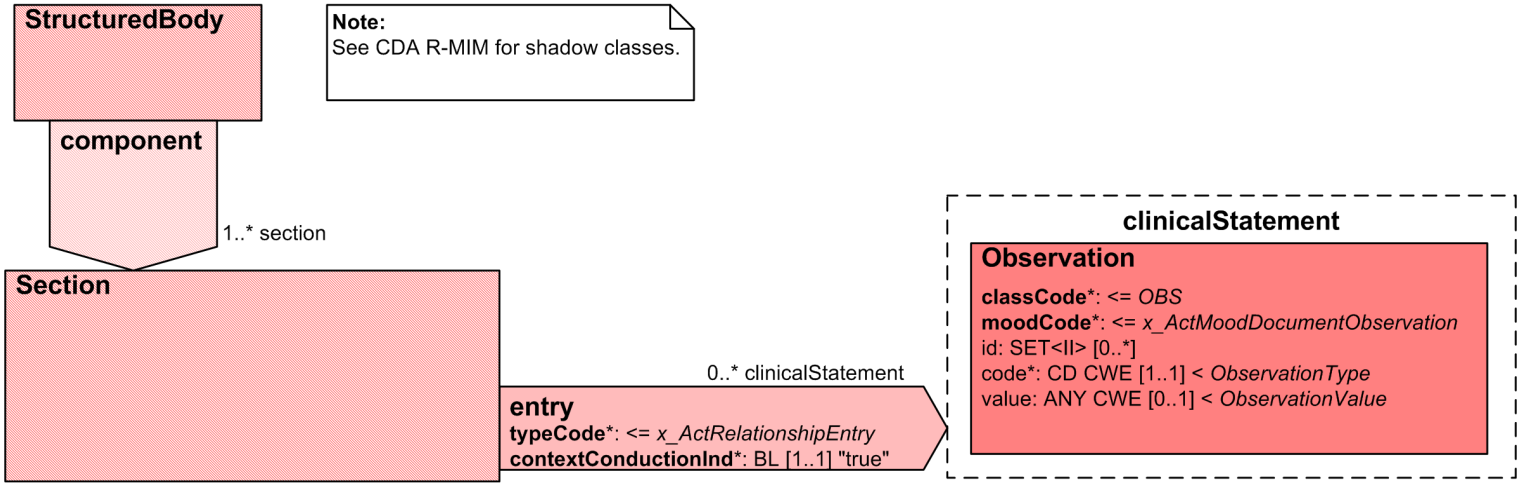


Figure 7.7. Exclusion Statement - Medications

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[meds]/section		
Exclusion Statement - Medications	Statements that positively assert that the patient has not received immunisations.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Medications > **Global Statement**	The statement about the absence or exclusion of certain medication.	1..1	**entry[gbl_meds]**		
			entry[gbl_meds]/**observation**		
			entry[gbl_meds]/observation/**@classCode="OBS"**		
			entry[gbl_meds]/observation/**@moodCode="EVN"**		
			entry[gbl_meds]/observation/**code**		
			entry[gbl_meds]/observation/code/**@code="103.16302.120.1.2"**		
			entry[gbl_meds]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_meds]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_meds]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_meds]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.7. Exclusion Statement - Medications XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    …

    <!-- Reviewed Medications -->
   <component>
    <section>

     ...

    <!-- Exclusion Statement - Medications -->
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <code code="103.16302.120.1.2" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Global Statement" />
      <value code="01" codeSystem="1.2.36.1.2001.1001.101.104.16299" codeSystemName="NCTIS Global Statement Values" displayName="None known" xsi:type="CD" />
     </observation>
    </entry>
    <!-- Exclusion Statement - Medications -->

   </section>
   </component>
   <!-- End Reviewed Medications -->

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.3 MEDICAL HISTORY

Identification

Name	MEDICAL HISTORY
Metadata Type	Section
Identifier	S-16117

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	PROBLEM/DIAGNOSIS	Optional	0..*
	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Optional	0..1
	PROCEDURE	Optional	0..*
	EXCLUSION STATEMENT - PROCEDURES	Optional	0..1
	OTHER MEDICAL HISTORY ITEM	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.8, “Medical History” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Medical History section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

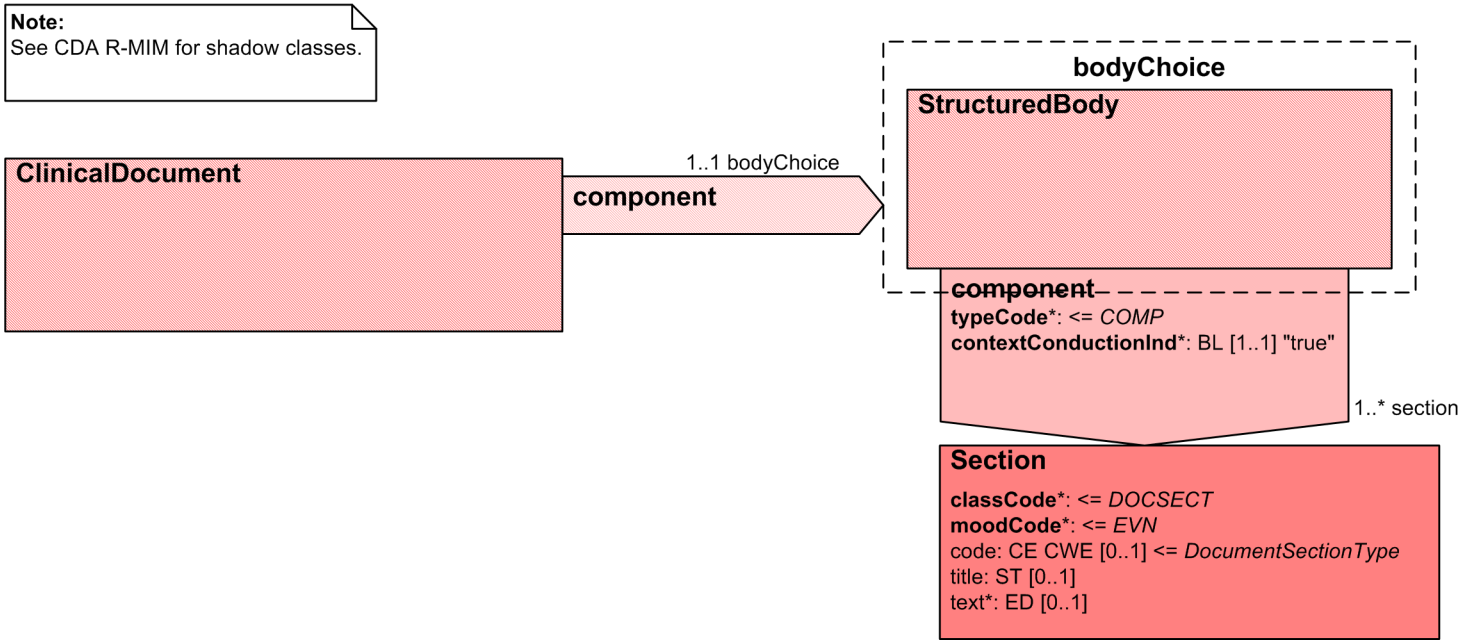


Figure 7.8. Medical History

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody		
Medical History	The past and current medical history of the subject of care which is relevant to the clinical event, this includes problem/diagnosis and medical or surgical procedures performed.	1..1	component[med_hist]/**section**		
			component[med_hist]/section/**code**		
			component[med_hist]/section/code/**@code="101.16117"**		
			component[med_hist]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[med_hist]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[med_hist]/section/code/**@displayName="Medical History"**		
			component[med_hist]/section/**title="Medical History"**		
			component[med_hist]/section/**text**		See Appendix A, *CDA Narratives*
Medical History > **Problem/Diagnosis**	The problems and/or diagnoses that form part of the past and current medical history of the subject of care.	0..*	See: PROBLEM/DIAGNOSIS		
Medical History > **Exclusion Statement - Problems And Diagnoses**	Statements that positively assert that the patient does not have the problem or diagnosis.	0..1	See: EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES		
Medical History > **Procedure**	A clinical activity carried out for therapeutic, evaluative, investigative, screening or diagnostic purposes.	0..*	See: PROCEDURE		
Medical History > **Exclusion Statement - Procedures**	Statements to positively assert that a certain procedure has not been performed on the patient.	0..1	See: EXCLUSION STATEMENT - PROCEDURES		
Medical History > **Other Medical History Item**	A medical history entry which cannot be categorised into one of the categories such as Procedure and Problem/Diagnosis.	0..*	See: OTHER MEDICAL HISTORY ITEM		

Example 7.8. Medical History XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    …

     <!-- Start Medical History -->
   <component>
    <section>
     <code code="101.16117" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Medical History" />
     <title>Medical History</title>
     <text>Medical history narrative goes here.</text>

     ...

    </section>
   </component>
   <!-- End Medical History -->

  ...

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.3.1 PROBLEM/DIAGNOSIS

Identification

Name	Problem/Diagnosis
Metadata Type	Data Group
Identifier	DG-15530

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICAL HISTORY	Optional	0..*

CDA R-MIM Representation

Figure 7.9, “Problem/Diagnosis” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

Each Problem/Diagnosis data group is represented by an Observation related to its containing Section class by an entry relationship. Problem/Diagnosis Identification is mapped to the value on the Observation and the Date of Onset it mapped to effectiveTime on the Observation. The Date of Resolution/Remission is a subject Observation of the Problem/Diagnosis Observation and the Problem/Diagnosis Comment is a component Act to the same Observation.

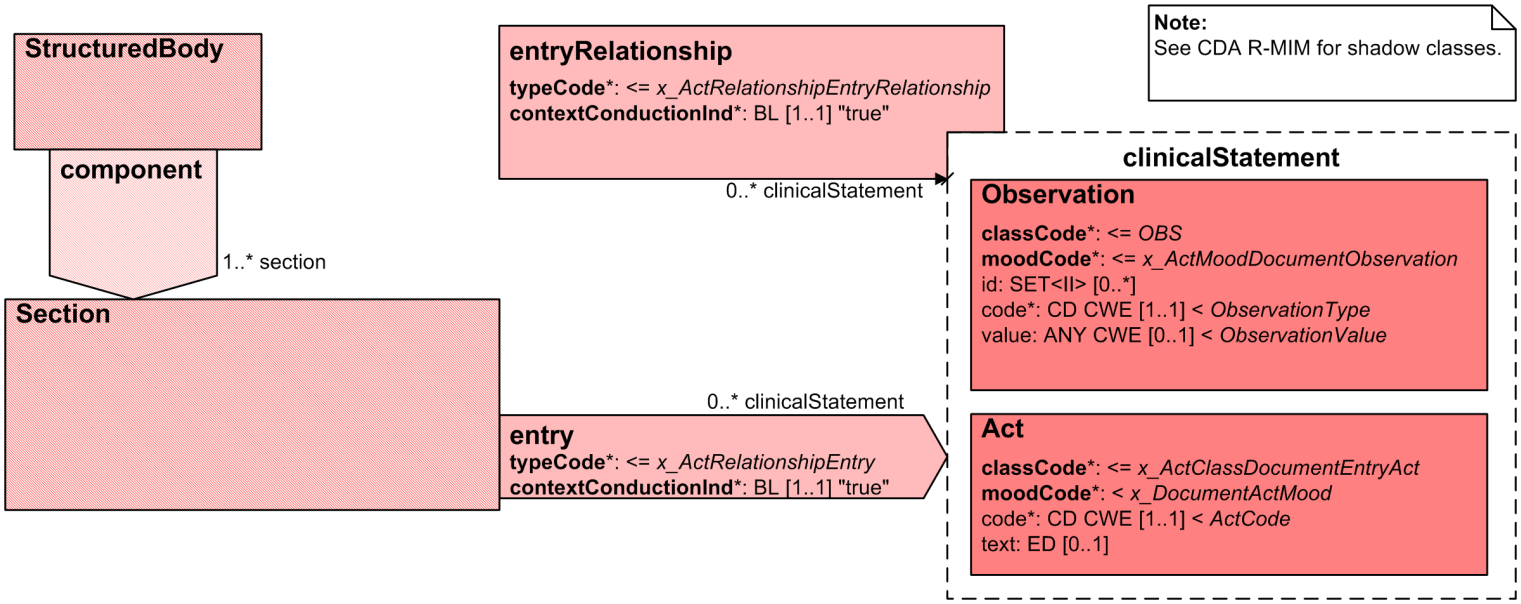


Figure 7.9. Problem/Diagnosis

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[3] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[med_hist]/section		
Problem/Diagnosis	The problems and/or diagnoses that form part of the current and past medical history of the subject of care.	0..*	**entry[prob]**		
			entry[prob]/**observation**		
			entry[prob]/observation/**@classCode="OBS"**		
			entry[prob]/observation/**@moodCode="EVN"**		
			entry[prob]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[prob]/observation/**code**		
			entry[prob]/observation/**@code="282291009"**		
			entry[prob]/observation/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[prob]/observation/**@codeSystemName="SNOMED CT-AU"**		
			entry[prob]/observation/**@displayName="Diagnosis interpretation"**		
Problem/Diagnosis > **Problem/Diagnosis Identification**	Identification of the problem or diagnosis.	1..1	entry[prob]/observation/**value:CD**	SNOMED CT-AU Problem/Diagnosis Reference Set	See <code> for available attributes.
Problem/Diagnosis > **Date of Onset**	Estimated or actual date the Problem/Diagnosis began, in the opinion of the clinician.	0..1	entry[prob]/observation/**effectiveTime**		See <time> for available attributes.

[3] http://www.hl7.org/oid/index.cfm?ref=footer

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Problem/Diagnosis > **Date of Resolution/Remission**	The date or estimated date that the problem/diagnosis resolved or went into remission, as indicated/identified by the clinician.	0..1	entry[prob]/observation/**entryRelationship[crt]/@typeCode="SUBJ"**		
			entry[prob]/observation/entryRelationship[crt]/observation/**@classCode="OBS"**		
			entry[prob]/observation/entryRelationship[crt]/observation/**@moodCode="EVN"**		
			entry[prob]/observation/entryRelationship[crt]/observation/code/**@code="103.15510"**		
			entry[prob]/observation/entryRelationship[crt]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[prob]/observation/entryRelationship[crt]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[prob]/observation/entryRelationship[crt]/observation/code/**@displayName="Date of Resolution/Remission"**		
			entry[prob]/observation/entryRelationship[crt]/observation/code/**value:IVL_TS**		See <time> for available attributes.
Problem/Diagnosis > **Problem/Diagnosis Comment**	Additional narrative about the problem or diagnosis not captured in other fields.	0..1	entry[prob]/observation/**entryRelationship[cmt]/@typeCode="COMP"**		
			entry[prob]/observation/entryRelationship[cmt]/**act**		
			entry[prob]/observation/entryRelationship[cmt]/act/**@classCode="INFRM"**		
			entry[prob]/observation/entryRelationship[cmt]/act/**@moodCode="EVN"**		
			entry[prob]/observation/entryRelationship[cmt]/act/**code**		
			entry[prob]/observation/entryRelationship[cmt]/act/code/**@code="103.16545"**		
			entry[prob]/observation/entryRelationship[cmt]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[prob]/observation/entryRelationship[cmt]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[prob]/observation/entryRelationship[cmt]/act/code/**@displayName="Problem/Diagnosis Comment"**		
			entry[prob]/observation/entryRelationship[cmt]/act/**text:ST**		

Example 7.9. Problem/Diagnosis XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     …

     <!-- Start Medical History -->
   <component>
    <section>

     ...

     <!-- Problem/Diagnosis -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <id root="74D29C88-706E-11E0-9726-5ABE4824019B" />
       <code code="282291009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU" displayName="Diagnosis interpretation" />
       <!-- Date of Onset -->
       <effectiveTime value="20110410" />

       <!-- Problem/Diagnosis Identification -->
       <value code="116223007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
        codeSystemVersion="20090731" displayName="Comorbidity" xsi:type="CD" />

       <!-- Date of Resolution/Remission -->
       <entryRelationship typeCode="SUBJ">
        <observation classCode="OBS" moodCode="EVN">
         <code code="103.15510" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Date of Resolution/Remission" />
         <value value="27042011" xsi:type="IVL_TS" />
        </observation>
       </entryRelationship>

       <!-- Problem/Diagnosis Comment -->
       <entryRelationship typeCode="COMP">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.16545" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Problem/Diagnosis Comment" />
         <text>Problem/Diagnosis Comment Comment goes here.</text>
        </act>
       </entryRelationship>
      </observation>
     </entry>
     <!-- End Problem/Diagnosis -->

     ...
```

```
        </section>
      </component>
      <!-- End Medical History -->

      ...

        </structuredBody>
      <component>
      <!-- End CDA Body -->

</ClinicalDocument>
```

7.1.3.2 EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES

Identification

Name	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES
Metadata Type	Data Group
Identifier	DG-16138

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICAL HISTORY	Optional	0..1

CDA R-MIM Representation

Figure 7.10, “Exclusion Statement - Problems and Diagnoses” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Exclusion Statement - Problems and Diagnoses data group is represented by an observation class and is related to its containing section by an entry relationship.

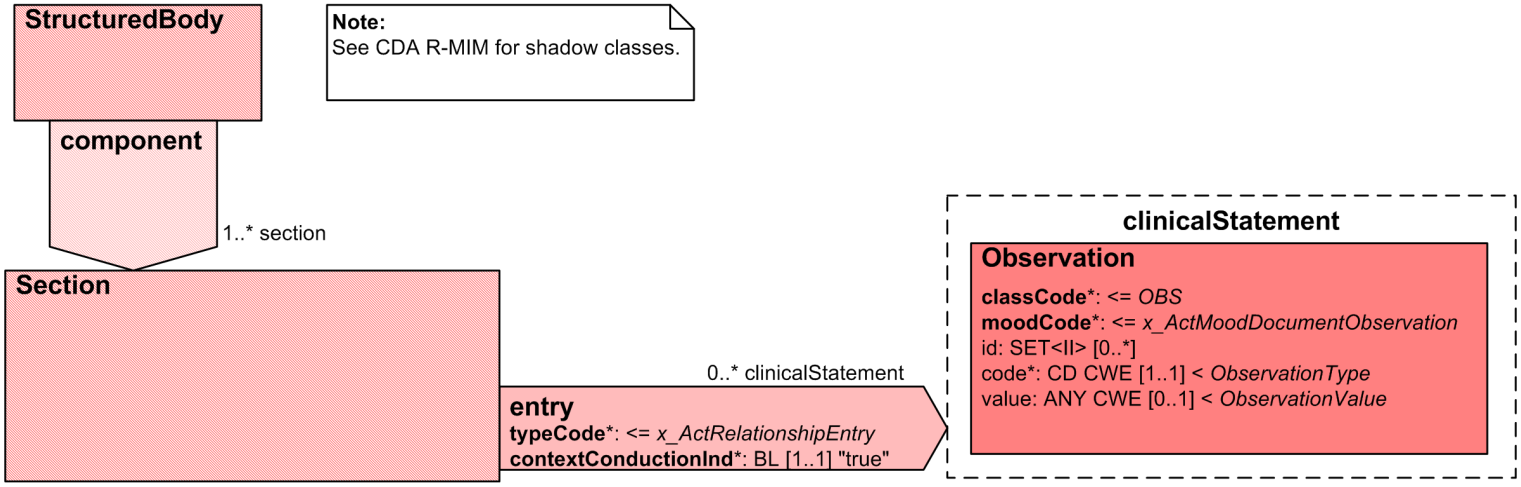


Figure 7.10. Exclusion Statement - Problems and Diagnoses

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[4] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[med_hist]/section		
Exclusion Statement - Problems and Diagnoses	Statements that positively assert that the patient does not have the problem or diagnosis.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Problems and Diagnoses > **Global Statement**	The statement about the absence or exclusion.	1..1	**entry[gbl_prob]**		
			entry[gbl_prob]/**observation**		
			entry[gbl_prob]/observation/**@classCode="OBS"**		
			entry[gbl_prob]/observation/**@moodCode="EVN"**		
			entry[gbl_prob]/observation/**code**		
			entry[gbl_prob]/observation/code/**@code="103.16302.120.1.3"**		
			entry[gbl_prob]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_prob]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_prob]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_prob]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

[4] http://www.hl7.org/oid/index.cfm?ref=footer

Example 7.10. Exclusion Statement - Problems and Diagnoses XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
  <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     ...

     <!-- Start Medical History -->
   <component>
    <section>

     ...

     <!-- Exclusion Statement - Problem/Diagnoses -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16302.120.1.3" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Global Statement" />
       <value code="01" codeSystem="1.2.36.1.2001.1001.101.104.16299" codeSystemName="NCTIS Global Statement Values"
        displayName="None known" xsi:type="CD" />
      </observation>
     </entry>
     <!-- End Exclusion Statement - Problem/Diagnoses -->

     ...

    </section>
   </component>
   <!-- End Medical History -->

   ...

    </structuredBody>
   <component>
   <!-- End CDA Body -->

</ClinicalDocument>
```

7.1.3.3 PROCEDURE

Identification

Name	Procedure
Metadata Type	Data Group
Identifier	DG-15514

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICAL HISTORY	Optional	0..*

CDA R-MIM Representation

Figure 7.11, “Procedure” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Procedure data group is described by a Procedure which is related to its containing section by an entry. Procedure has one related clinicalStatement, an Act to represent Procedure Comment.

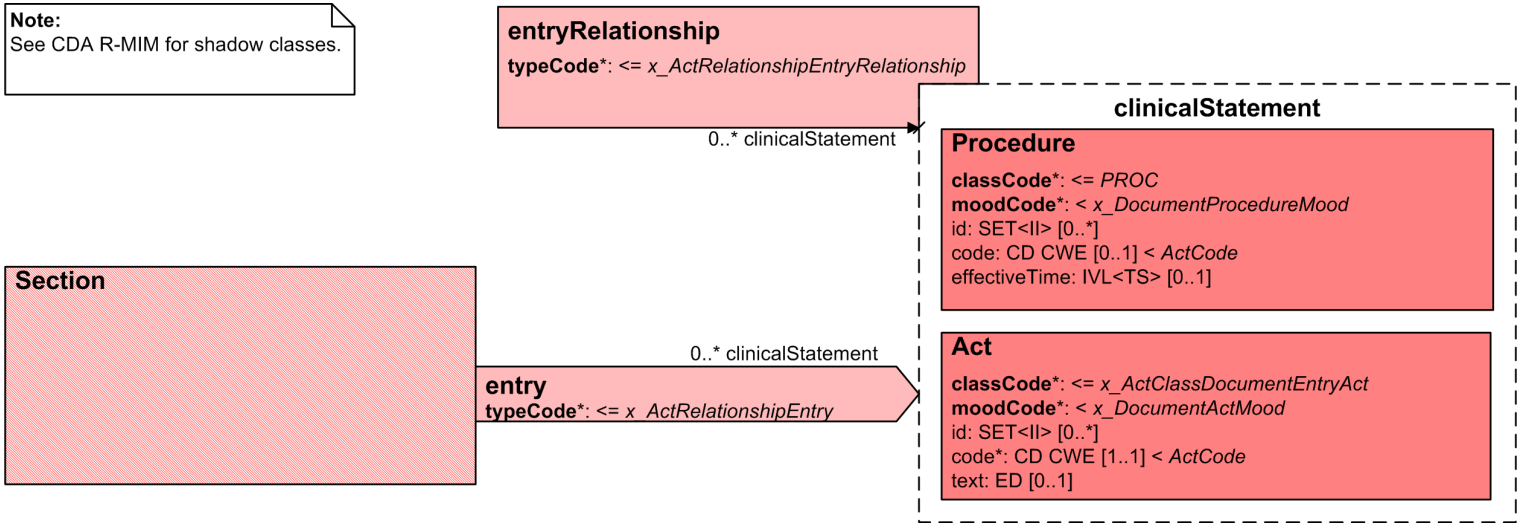


Figure 7.11. Procedure

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[med_hist]/section/		
Procedure	A clinical activity carried out for therapeutic, evaluative, investigative, screening or diagnostic purposes.	0..*	**entry[proc]**		
			entry[proc]/procedure		
			entry[proc]/procedure/**@classCode="PROC"**		
			entry[proc]/procedure/**@moodCode="EVN"**		
			entry[proc]/procedure/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Procedure > **Procedure Name**	The name of the procedure (to be) performed.	1..1	entry[proc]/procedure/**code**	SNOMED CT-AU Procedure foundation reference set	See <code> for available attributes.
Procedure > **Procedure Comment**	Additional narrative about the procedure not captured in other fields.	0..1	entry[proc]/procedure/entryRelationship[proc_cmt]/**@typeCode="COMP"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/**act**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/**@classCode="INFRM"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/**@moodCode="EVN"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/**code**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/code/**@code="103.15595"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/code/**@displayName="Procedure Comment"**		
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/**text:ST**		
Procedure > **DateTime Started**	The start date and/or time for the procedure.	0..1	entry[proc]/procedure/**effectiveTime**		See <time> for available attributes.

Example 7.11. Procedure XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"

 <!-- Begin CDA Header -->

 ...

 <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
  <structuredBody>

   ...

   <!-- Start Medical History -->
   <component>
    <section>

     ...

     <!-- Procedure -->
     <entry>
      <procedure classCode="PROC" moodCode="EVN">
       <id root="B96A38C6-706C-11E0-AD2E-42BC4824019B" />
       <!-- Procedure Name -->
       <code code="397956004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
        displayName="hip replacement" />
       <!-- DateTime Started -->
       <effectiveTime value="20110427" />

       <!-- Procedure Comment -->
       <entryRelationship typeCode="COMP">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.15595" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Procedure Comment" />
         <text>Procedure Comment goes here.</text>
        </act>
       </entryRelationship>
      </procedure>
     </entry>
     <!-- End Procedure -->

     ...

    </section>
   </component>
   <!-- End Medical History -->

   ...

  </structuredBody>
 </component>
 <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.3.4 EXCLUSION STATEMENT - PROCEDURES

Identification

Name	EXCLUSION STATEMENT - PROCEDURES
Metadata Type	Data Group
Identifier	DG-16603

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICAL HISTORY	Optional	0..1

CDA R-MIM Representation

Figure 7.12, “Exclusion Statement - Procedures” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Exclusion Statement - Procedures data group is represented by an observation class and is related to its containing section by an entry relationship.

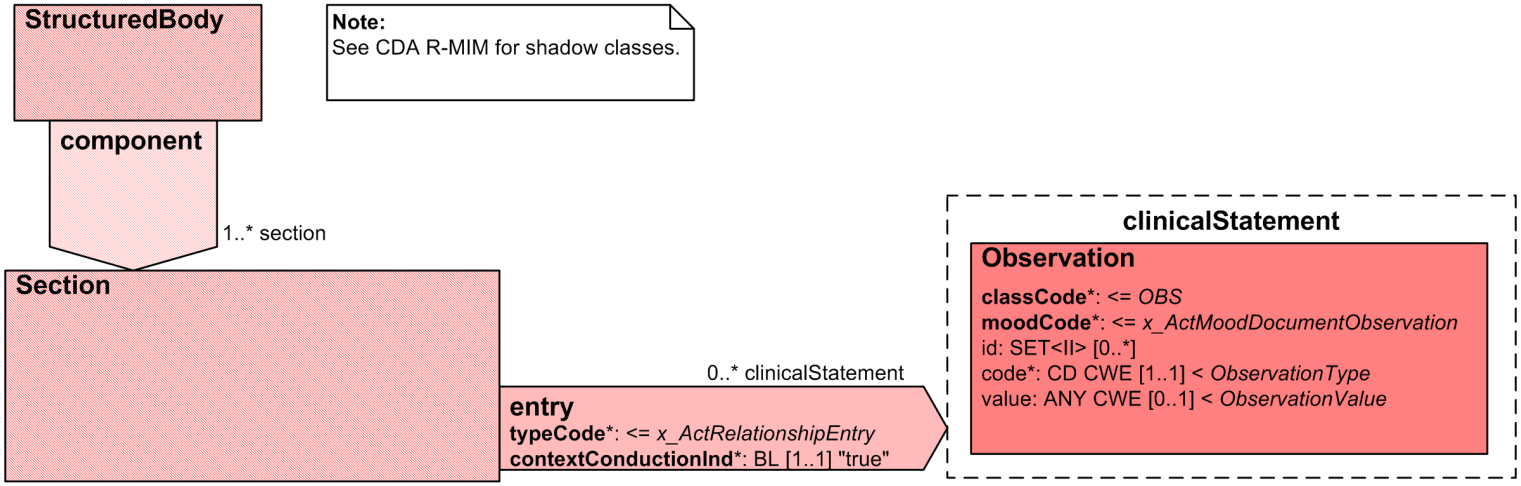


Figure 7.12. Exclusion Statement - Procedures

Exclusion Statement - Procedures CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[5] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[med_hist]/section		
Exclusion Statement - Procedures	Statements to positively assert that a certain procedure has not been performed on the patient.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Procedures > **Global Statement**	The statement about the absence or exclusion of procedure performed on the patient.	1..1	**entry[gbl_pro]**		
			entry[gbl_pro]/**observation**		
			entry[gbl_pro]/observation/**classCode="OBS"**		
			entry[gbl_pro]/observation/**moodCode="EVN"**		
			entry[gbl_pro]/observation/**code**		
			entry[gbl_pro]/observation/code/**@code="103.16302.120.1.4"**		
			entry[gbl_pro]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_pro]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_pro]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_pro]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

[5] http://www.hl7.org/oid/index.cfm?ref=footer

Example 7.12. Exclusion Statement - Procedures XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
  <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     ...

     <!-- Start Medical History -->
   <component>
    <section>

     ...

     <!-- Exclusion Statement - Procedures -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16302.120.1.4" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Global Statement" />
       <value code="01" codeSystem="1.2.36.1.2001.1001.101.104.16299" codeSystemName="NCTIS Global Statement Values"
        displayName="None known" xsi:type="CD" />
      </observation>
     </entry>
     <!-- End Exclusion Statement - Procedures -->

     ...

    </section>
   </component>
   <!-- End Medical History -->

   ...

    </structuredBody>
   <component>
   <!-- End CDA Body -->

</ClinicalDocument>
```

7.1.3.5 OTHER MEDICAL HISTORY ITEM

Identification

Name	OTHER MEDICAL HISTORY ITEM
Metadata Type	Data Group
Identifier	DG-16627

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICAL HISTORY	Optional	0..*

CDA R-MIM Representation

Figure 7.13, “Other Medical History Item” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Other Medical History Data Group is represented by an Act related to the Section class by an entry relationship.

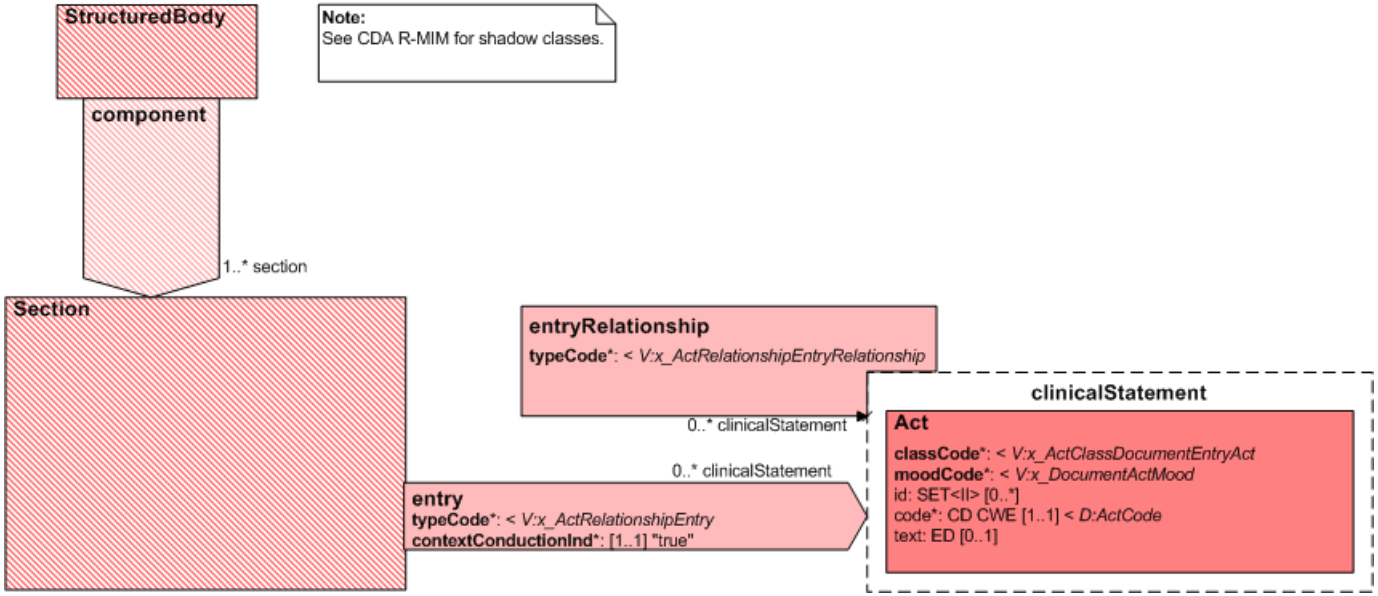


Figure 7.13. Other Medical History Item

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[med_hist]/section		
Other Medical History Item	A medical history entry which cannot be categorised into one of the categories such as Procedure and Problem/Diagnosis.	0..*	**entry**		
			entry/**act**		
			entry/act/**@classCode="ACT"**		
			entry/act/**@moodCode="EVN"**		
			entry/act/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry/act/**code**		
			entry/act/code/**@code="102.16627 "**		
			entry/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry/act/code/**@displayName="Other Medical History Item"**		
Other Medical History Item > **Medical History Item Description**	A description of the problem, diagnosis, intervention or other medical history item.	1..1	entry/act/**text:ST**		
Other Medical History Item > **Medical History Item Time Interval**	The date range during which the item applied or occurred.	0..1	entry/act/**effectiveTime**		See <time> for available attributes.
Other Medical History Item > **Medical History Item Comment**	Free text comments providing additional information relevant to the item in question	0..1	entry/act/**entryRelationship**		
			entry/act/entryRelationship/**@typeCode="COMP"**		
			entry/act/entryRelationship/**act**		
			entry/act/entryRelationship/act/**@classCode="INFRM"**		
			entry/act/entryRelationship/act/**@moodCode="EVN"**		
			entry/act/entryRelationship/act/**code**		
			entry/act/entryRelationship/act/code/**@code="103.16630"**		
			entry/act/entryRelationship/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/act/entryRelationship/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry/act/entryRelationship/act/code/**@displayName="Medical History Item Comment"**		
			entry/act/entryRelationship/act/**text:ST**		

Example 7.13. Other Medical History Item XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     <!-- Start Reviewed Medical History -->
   <component>
    <section>

     ...

     <!-- Other Medical History Item -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <id root="0CBE0B42-7072-11E0-94B1-26C24824019B" />
       <code code="102.16627" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Other Medical History Item" />

       <!-- Begin Medical History Item Time Interval -->
       <effectiveTime>
        <low value="201010131000+1000"/>
        <high value="201010131030+1000"/>
       </effectiveTime>
       <!-- End Medical History Item Time Interval -->

       <!-- Begin Medical History Item Description -->
       <text xsi:type="ST">Other Medical History Item Description goes here.</text>
       <!-- End Medical History Item Description -->

       <!-- Begin Medical History Item Comment -->
       <entryRelationship typeCode="COMP">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.16630" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Medical History Item Comment"/>
         <text xsi:type="ST">Medical History Item Comment goes here.</text>
        </act>
       </entryRelationship>
       <!-- End Medical History Item Comment -->

      </act>
     </entry>
     <!-- End Other Medical History Item -->

    </section>
   </component>
   <!-- End Reviewed Medical History -->
```

```
    </structuredBody>
  </component>
    <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.4 IMMUNISATIONS

Identification

Name	Immunisations
Metadata Type	Section
Identifier	S-16638

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	ADMINISTERED IMMUNISATION	Optional	0..*
	EXCLUSION STATEMENT - IMMUNISATIONS	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	Shared Health Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.14, “Immunisations” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Immunisations section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

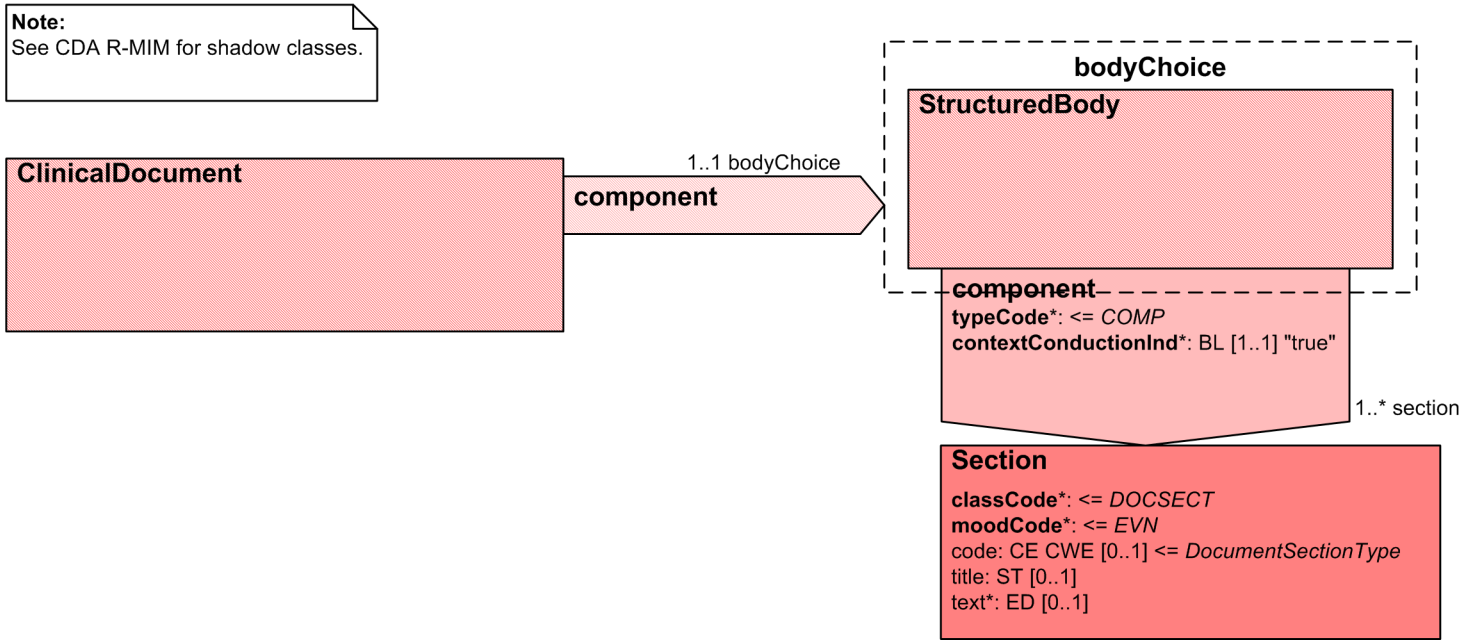


Figure 7.14. Immunisations

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Immunisations	Information about the immunisation history of the subject of care.	1..1	component[imms]/**section**		
			component[imms]/section/**code**		
			component[imms]/section/code/**@code="101.16638"**		
			component[imms]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[imms]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[imms]/section/code/**@displayName="Immunisations"**		
			component[imms]/section/**title="Immunisations"**		
			component[imms]/section/**text**		See Appendix A, *CDA Narratives*
Immunisations > **Administered Immunisation**	The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult.	0..*	See: ADMINISTERED IMMUNISATION		
Immunisations > **Exclusion Statement - Immunisations**	Statements that positively assert that the patient has not received immunisations.	0..1	See: EXCLUSION STATEMENT - IMMUNISATIONS		

Example 7.14. Immunisations XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >

 <!-- Begin CDA Header -->

 …

 <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
  <structuredBody>

   …

   <!-- Immunisations Section -->
   <component>
    <section>
     <code code="101.16638" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Immunisations" />
     <title>Immunisations</title>
     <text>
      <table>
       <thead>
        <tr>
         <th>Vaccine Name</th>
        </tr>
       </thead>
       <tbody>
        <tr>
         <td>Boostrix(DTPa)</td>
        </tr>
       </tbody>
      </table>
     </text>

     ...

    </section>
   </component>
   <!-- End Immunisations Section -->

   …

  </structuredBody>
 </component>
 <!-- End CDA Body -->

</ClinicalDocument>
```

7.1.4.1 ADMINISTERED IMMUNISATION

Identification

Name	Administered Immunisation
Metadata Type	Data Group
Identifier	DG-16210

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	IMMUNISATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.15, “Administered Immunisation” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Administered Immunisation data group is described by a SubstanceAdministration which is related to the containing section by an entry..

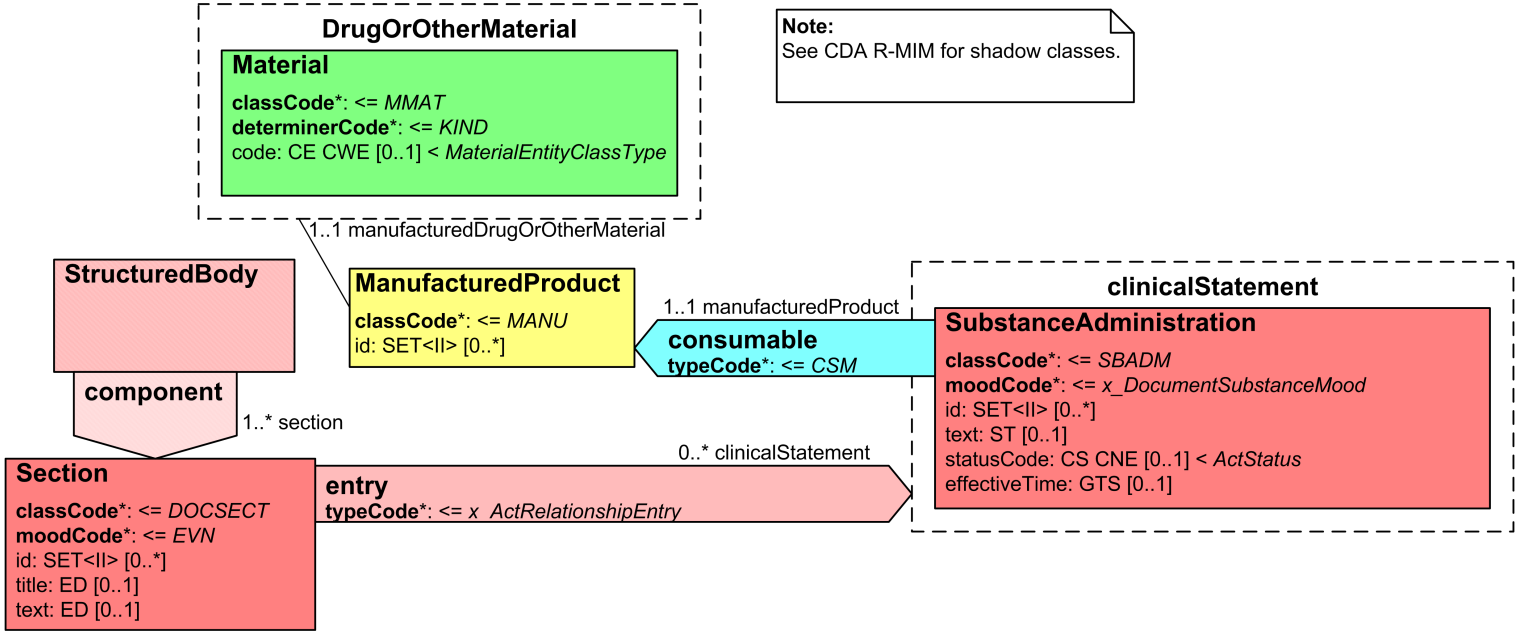


Figure 7.15. Administered Immunisation

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[imms]/section		
Administered Immunisation	The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult.	0..*	entry[med_act]		
			entry[med_act]/**substanceAdministration**		
			entry[med_act]/substanceAdministration/**@moodCode="EVN"**		
			entry[med_act]/substanceAdministration/**@classCode="SBADM"**		
			entry[med_act]/substanceAdministration/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Administered Immunisation > **Therapeutic Good Identification**	The vaccine which was the focus of the action.	1..1	entry[med_act]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code**	Australian Medicines Terminology The permissible values are the members of the following AMT reference sets: • 929360061000036106 Medicinal product reference set • 929360081000036101 Medicinal product pack reference set • 929360021000036102 Trade product reference set • 929360041000036105 Trade product pack reference set	See <code> for available attributes.
Administered Immunisation > **Vaccine Sequence Number**	The sequence number specific to the action being recorded.	0..1	entry[med_act]/substanceAdministration/**entryRelationship[sply]/@typeCode="COMP"**		
			entry[med_act]/substanceAdministration/entryRelationship[sply]/**sequenceNumber/@value**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/**supply**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**@classCode="SPLY"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**independentInd/@value="false"**		
Administered Immunisation > **Medication Action DateTime**	The point in time at which the Medication Action is completed.	1..1	entry[med_act]/substanceAdministration/**effectiveTime**		See <time> for available attributes.

Example 7.15. Administered Immunisation XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

     …

     <!-- Reviewed Immunisations Section -->
   <component>
    <section>

     ...

     <!-- Administered Immunisation -->
     <entry>
      <substanceAdministration classCode="SBADM" moodCode="EVN">
       <!-- id for systems purposes -->
       <id root="C2F9D7BA-A2B3-11E0-9C5E-5D194924019B" />

       <!-- Medication Action DateTime -->
       <effectiveTime value="20110427" />

       <!-- Therapeutic Good Identification -->
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <code code="74993011000036102"
           codeSystem="1.2.36.1.2001.1004.100"
           codeSystemName="Australian Medicinces Terminology (AMT)"
           displayName="measles virus (Schwarz) live attenuated vaccine + mumps virus (Jeryl Lynn, strain RIT 4385)
           live attenuated vaccine + rubella virus (Wistar RA 27/3) live attenuated vaccine" />
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>

       <!-- Vaccine sequence Number -->
       <entryRelationship typeCode="COMP">
        <sequenceNumber value="123456" />
        <supply classCode="SPLY" moodCode="EVN">
         <independentInd value="false"/>
        </supply>
       </entryRelationship>

      </substanceAdministration>
     </entry>
     <!-- End Administered Immunisation -->
```

```
      ...

     </section>
    </component>
    <!-- End Reviewed Immunisations Section -->

     </structuredBody>
  <component>
    <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.4.2 EXCLUSION STATEMENT - IMMUNISATIONS

Identification

Name	Exclusion Statement - Immunisations
Metadata Type	Data Group
Identifier	DG-16136

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	IMMUNISATIONS	Optional	0..1

CDA R-MIM Representation

Figure 7.16, “Exclusion Statement - Immunisations” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Exclusion Statement - Immunisations data group is represented by an observation class and is related to its containing section by an entry relationship.

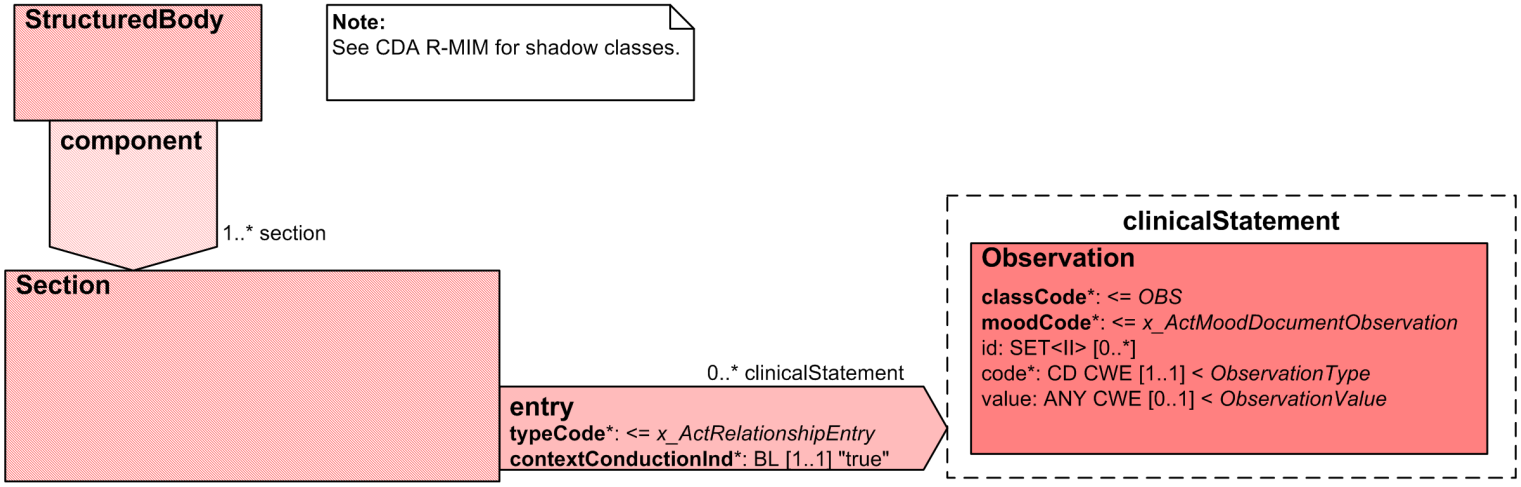


Figure 7.16. Exclusion Statement - Immunisations

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[imms]/section		
Exclusion Statement - Immunisations	Statements that positively assert that the patient has not received immunisations.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Immunisations > **Global Statement**	The statement about the absence or exclusion of certain medication.	1..1	**entry[gbl_meds]**		
			entry[gbl_meds]/**observation**		
			entry[gbl_meds]/observation/**@classCode="OBS"**		
			entry[gbl_meds]/observation/**@moodCode="EVN"**		
			entry[gbl_meds]/observation/**code**		
			entry[gbl_meds]/observation/code/**@code="103.16302.120.1.5"**		
			entry[gbl_meds]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_meds]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_meds]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_meds]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.16. Exclusion Statement - Immunisations XML Fragment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
 …
 >
   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->
 <component>
    <structuredBody>

    …

    <!-- Immunisations Section -->
   <component>
    <section>

     ...

     <!-- Exclusion Statement - Immunisations -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16302.120.1.5" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Global Statement" />
       <value code="01" codeSystem="1.2.36.1.2001.1001.101.104.16299" codeSystemName="NCTIS Global Statement Values"
        displayName="None known" xsi:type="CD" />
      </observation>
     </entry>
     <!-- End Exclusion Statement - Immunisations -->

    </section>
   </component>
   <!-- End Immunisations Section -->

    </structuredBody>
 <component>
   <!-- End CDA Body -->
</ClinicalDocument>
```

8 Common Patterns

8.1 code

The <code> element pattern refines the kind of act being recorded. It is of data type CD CWE (Concept Descriptor, Coded With Extensibility). It may have:

- a null attribute (*nullFlavor*)
- *originalText*
- *code* and *codeSystem*
- *translation* (CD)
- any combination of the above.

A *displayName* is highly recommended.

Where used, the *code* attribute **SHALL** contain a code from the relevant vocabulary.

Where used, the *codeSystem* attribute **SHALL** contain the OID for the relevant vocabulary. Values for coding systems can be obtained from the HL7 OID registry accessible from the HL7 home web page at *www.hl7.org*[1].

Where used, the *displayName* attribute **SHALL** contain a human readable description of the code value.

The *codeSystemName* **MAY** be present, and, where used **SHALL** contain a human readable name for the coding system.

Where used, the *originalText* element **SHALL** be used to carry the full text associated with this code as selected, typed or seen by the author of this statement.

Codes can be obtained from a variety of sources. Additional vocabularies are also available from the HL7 Version 3 Vocabulary tables, available to HL7 members through the HL7 web site. In some cases, the vocabularies have been specified; in others, a particular code has been fixed or there is no vocabulary specified.

If a vocabulary is specified in this guide and no suitable code can be found the *originalText* element **SHALL** be used to carry the full text as selected, typed or seen by the author of this statement.

[1] http://www.hl7.org

If a vocabulary is specified in this guide and it is not possible to use this vocabulary, but an alternate vocabulary is in use, the *originalText* element **SHALL** be used to carry the full text as selected, typed or seen by the author of this statement. The *code* element **SHALL** be used to carry the relevant information from the alternate vocabulary and the alternate vocabulary shall be registered with HL7 and allocated an appropriate OID.

If an alternate vocabulary is in use and a translation into the specified code system is available, the *originalText* element **SHALL** be used to carry the full text as selected, typed or seen by the author of this statement. The *code* element **SHALL** be used to carry the relevant information from the alternate vocabulary and the alternate vocabulary must be registered with HL7 and allocated an appropriate OID. The *translation* element **SHALL** be used to indicate the translation code from the specified vocabulary.

Example 8.1. code

```
<!-- Specified code system in use -->
<code
   code="271807003"
   codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU"
   codeSystemVersion="20101130"
   displayName="skin rash" />


<!-- Alternate code system in use and a translation into the specified code system is available -->
<code
   code='49390'
   codeSystem='2.16.840.1.113883.19.6.2'
   codeSystemName='ICD9CM'
   displayName='ASTHMA W/O STATUS ASTHMATICUS'>
   <orignalText>Patient is Asthmatic</originalText>
   <translation
      code='195967001'
      codeSystem='2.16.840.1.113883.19.6.96'
      codeSystemName='SNOMED CT'
      displayName='Asthma'/>
</code>


<!-- Alternate code system in use and no translation into the specified code system is available -->
<code
   code='49390'
   codeSystem='2.16.840.1.113883.19.6.2'
   codeSystemName='ICD9CM'
   displayName='ASTHMA W/O STATUS ASTHMATICUS'>
   <orignalText>Patient is Asthmatic</originalText>
</code>



<!-- No suitable code can be found or there is no code system in use -->
<code
    <orignalText>Patient is Asthmatic</originalText>
</code>
```

8.2 id

The <id> element pattern is of data type II (Instance Identifier). The II data type may have:

- a null attribute (*nullFlavor*)
- a *root*
- a *root* and an *extension*
- a *root* and an *extension* and an *assigningScopingEntity*
- a *root* and an *assigningScopingEntity*

The root attribute is required and is a unique identifier that guarantees the global uniqueness of the instance identifier. The root alone may be the entire instance identifier. The root attribute may be a UUID or OID.

The extension attribute may be present, and is a character string as a unique identifier within the scope of the identifier root.

In the case of Entity Identifier, assigningAuthorityName is required, otherwise it is optional.

Identifiers appear in this implementation guide for two different reasons. The first is that the identifier has been identified in the business requirements as relevant to the business process. These identifiers are documented in the Structured Content Specifications which make clear the meaning of this identifier.

In addition, the implementation makes clear that identifiers may also be found on many other parts of the CDA content model. These identifiers are allowed to facilitate record matching across multiple versions of related documents, so that the same record can consistently be identified, in spite of variations in the information as the record passes through time or between systems. These identifiers have no meaning in the business specification. If senders provide one of these identifiers, it must always be the same identifier in all versions of the record, and it must be globally unique per the rules of the II data type.

Throughout the specification, these identifiers are labeled with the following text: "This is a technical identifier that is used for system purposes such as matching."

Example 8.2. id

```
<id root="2.16.840.1.113883.19" extension="123A45" />
<ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621234567890" />
```

8.3 time

The <time> element pattern is of data type TS (Point in Time) and can also be an interval between two times (IVL_TS), representing a period of time. Both forms may either have a nullFlavor attribute or child components following allowed patterns.

Any time that is more specific than a day SHALL include a timezone.

A simple timestamp (point in time) will only contain a value attribute containing the time value, expressed as a series of digits as long as required or available.

Example 8.3. Simple timestamp

```
<time value="20091030" />
```

This represents "October 30, 2009" to calendar day precision. In cases where the containing element is defined in the CDA schema as "ANY" data type, it is useful to provide an xsi:type attribute, set to the value "TS".

The period of time pattern is defined in terms of one or both of its lowest and highest values. The low and high elements are instances of the timestamp pattern described above. More complex time period concepts can be expressed by combining a high, low, or centre element with a width element.

Example 8.4. Low time

```
<period>
   <low value="20091030" />
</period>
```

This represents "a period after October 30, 2009". In cases where the containing element is defined in the CDA schema as "ANY" data type, it is useful to provide an xsi:type attribute, set to the value "IVL_TS", as in the next example.

Example 8.5. Interval timestamp 1

```
<period xsi:type="IVL_TS">
   <high value="200910301030+1000" />
</period>
```

This represents "a period before 10:30 a.m. UTC+10, October 30, 2009". A discretionary xsi:type attribute has been provided to explicitly cast the pattern to "IVL_TS".

Example 8.6. Interval timestamp 2

```
<period xsi:type="IVL_TS">
   <low value="2007" />
   <high value="2009" />
</period>
```

This represents "the calendar years between 2007 and 2009". The low element **SHALL** precede the high element. As per the previous example, a discretionary xsi:type attribute has been provided to explicitly cast the pattern to "IVL_TS".

Example 8.7. Width time

```
<period>
   <high value="20091017" />
   <width value="2" unit="week" />
</period>
```

This expresses "two weeks before October 17th, 2009". A low value can be derived from this.

8.4 Entity Identifier

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Data Elements					
Entity Identifier	A number or code issued for the purpose of identifying an entity (person, organisation or organisation sub-unit) within a healthcare context.	The cardinality of the group comes from the linking parent and the cardinality of the children data elements comes from the R-MIM diagram.	**ext:asEntityIdentifier**		See Australian CDA extension: Entity-Identifier.
			ext:asEntityIdentifier/**@classCode="IDENT"**		
			ext:asEntityIdentifier/**ext:id**		
			ext:asEntityIdentifier/ext:id/**@root**	Attribute @root **SHALL** be used, **SHALL** be an OID and **SHALL NOT** be a UUID. Attribute @root **SHALL** be a globally unique object identifier (OID) that identifies the combination of geographic area, issuer and type. If no such OID exists, it **SHALL** be defined before any identifiers can be created.	
			ext:asEntityIdentifier/ext:id/**@extension**	Attribute @extension **MAY** be used and if it is used, **SHALL** be a unique identifier within the scope of the root that is populated directly from the designation.	
			ext:asEntityIdentifier/ext:id/**@assigningAuthorityName**	Attribute @assigningAuthorityName **MAY** be used and if it is used, is a human readable name for the namespace represented in the root that is populated with the issuer, or identifier type, or a concatenation of both as appropriate. This **SHOULD NOT** be used for machine readability purposes.	
			ext:asEntityIdentifier/**ext:code**		See <code> for available attributes.
			ext:asEntityIdentifier/**ext:assigningGeographicArea**		
			ext:asEntityIdentifier/ext:assigningGeographicArea/**@classCode="PLC"**		
			ext:asEntityIdentifier/ext:assigningGeographicArea/**ext:name**	Element ext:name **MAY** be used and if it is used, is the range and extent that the identifier applies to the object with which it is associated that is populated directly from the geographic area. This **SHOULD NOT** be used for machine readability purposes. For details see: AS 5017-2006: Health Care Client Identifier Geographic Area	

Example 8.8. Entity Identifier

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<!-- person -->
<xs:asEntityIdentifier classCode="IDENT">
 <xs:id root="1.2.36.1.2001.1003.0.8003600000022222" assigningAuthorityName="IHI" />
  <xs:assigningGeographicArea classCode="PLC">
       <xs:name>National Identifier</xs:name>
      </xs:assigningGeographicArea>
</xs:asEntityIdentifier>

<xs:asEntityIdentifier classCode="IDENT">
 <xs:id root="1.2.36.1.2001.1003.0.8003620000000541" extension="542181" assigningAuthorityName="Croydon GP Centre" />
   <xs:code code="MR" codeSystem="2.16.840.1.113883.12.203" codeSystemName="Identifier Type (HL7)" />
</xs:asEntityIdentifier>



<!-- organisation -->
<ext:asEntityIdentifier classCode="IDENT">
   <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621234567890" />
   <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
   </ext:assigningGeographicArea>
</ext:asEntityIdentifier>
```

8.5 Person Name

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Data Elements					
Person Name	The appellation by which an individual may be identified separately from any other within a social context.	Cardinality comes from linking parent.	**name**		
Person Name > **Name Title**	An honorific form of address commencing a name.	0..*	name/**prefix**		
Person Name > **Family Name**	That part of a name a person usually has in common with some other members of his/her family, as distinguished from his/her given names.	1..1	name/**family**		
Person Name > **Given Name**	The person's identifying names within the family group or by which the person is uniquely socially identified.	0..*	name/**given**		
Person Name > **Name Suffix**	The additional term used following a person's name to identify that person.	0..*	name/**suffix**		
Person Name > **Preferred Name Indicator**	A flag to indicate that this is the name a person has selected for use.	0..1	name/**@use**		Space separated list of codes. true='L' false=blank
Person Name > **Person Name Usage**	The classification that enables differentiation between recorded names for a person.	0..1	name/**@use**	AS 5017-2006: Health Care Client Name Usage	Space separated list of codes.

Example 8.9. Person Name

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<!-- preferred name -->
<name use="L">
   <prefix>Ms</prefix>
   <given>Sally</given>
   <family>Grant</family>
</name>
```

8.6 Address

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Data Elements					
Address	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	Cardinality comes from linking parent.	**addr**		
Address > **No Fixed Address Indicator**	A flag to indicate whether or not the participant has no fixed address.	1..1	addr/**@nullFlavor**	If true, nullFlavor="NA". If false omit nullFlavor and fill in address.	
Address > **Australian or International Address**	Represents a choice to be made at run-time between an AUSTRALIAN ADDRESS and an INTERNATIONAL ADDRESS.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Address > Australian or International Address > **International Address**	The description of a non-Australian location where an entity is located or can be otherwise reached or found.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Address > Australian or International Address > International Address > **International Address Line**	A composite of address details comprising a low level geographical/physical description of a location that, used in conjunction with the other high level address components, i.e. international state/province, international postcode and country, forms a complete geographic/physical address	0..*	addr/**streetAddressLine**		
Address > Australian or International Address > International Address > **International State/Province**	The designation applied to an internal, political or geographic division of a country other than Australia that is officially recognised by that country	0..1	addr/**state**		
Address > Australian or International Address > International Address > **International Postcode**	The alphanumeric descriptor for a postal delivery area (as defined by the postal service of a country other than Australia) aligned with locality, suburb or place for an address	0..1	addr/**postalCode**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Address > Australian or International Address > International Address > **Country**	The country component of the address.	0..1	addr/**country**	Australia Bureau of Statistics, Standard Australian Classification of Countries (SACC) Cat. No. 1269 [ABS2008]	Use the name, not the numbered code.
Address > Australian or International Address > **Australian Address**	The description of an Australian location where an entity is located or can be otherwise reached or found.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Address > Australian or International Address > Australian Address > **Unstructured Australian Address Line**	A composite of one or more low level standard address components describing a geographical/physical location that, used in conjunction with the other high level address components, e.g. Australian suburb/town/locality name, Australian postcode and Australian State/Territory, forms a complete geographical/physical address.	0..*	addr/**streetAddressLine**		
Address > Australian or International Address > Australian Address > **Structured Australian Address Line**	The standard low level address components describing a geographical/physical location that, used in conjunction with the other high level address components, i.e. Australian suburb/ town/locality name, Australian postcode and Australian State/Territory, form a complete geographical/physical address.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Unit Type**	The specification of the type of a separately identifiable portion within a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/**unitType**	AS 5017 (2006) - Healthcare Client Identification: Australian Unit Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Unit Type [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Unit Number**	The specification of the number or identifier of a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/**unitID**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Address Site Name**	The full name used to identify the physical building or property as part of its location.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Level Type**	Descriptor used to classify the type of floor or level of a multistorey building/complex.	0..1	addr/**additionalLocator**	AS 5017 (2006) - Healthcare Client Identification: Australian Level Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Level Type [SA2006b]	

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Level Number**	Descriptor used to identify the floor or level of a multi-storey building/complex.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Number**	The numeric or alphanumeric reference number of a house or property that is unique within a street name.	0..1	addr/**houseNumber**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Lot Number**	The Australian Lot reference allocated to an address in the absence of street numbering.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Name**	The name that identifies a public thoroughfare and differentiates it from others in the same suburb/town/locality.	0..1	addr/**streetName**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Type**	A code that identifies the type of public thoroughfare.	0..1	addr/**streetNameType**	AS 5017 (2006) - Healthcare Client Identification: Australian Street Type Code [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Street Type Code [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Suffix**	Term used to qualify Australian Street Name used for directional references.	0..1	addr/**direction**	AS 5017 (2006) - Healthcare Client Identification: Australian Street Suffix [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Street Suffix [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Postal Delivery Type**	Identification for the channel of postal delivery.	0..1	addr/**deliveryAddressLine**	AS 5017 (2006) - Healthcare Client Identification: Australian Postal Delivery Type Code [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Postal Delivery Type Code [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Postal Delivery Number**	Identification number for the channel of postal delivery.	0..1	addr/**deliveryAddressLine**		
Address > Australian or International Address > Australian Address > **Australian Suburb/Town/Locality**	The full name of the general locality contained within the specific address.	0..1	addr/**city**	Values in this data element should comply with descriptions in the Australia Post Postcode File (see *www.auspost.com.au/postcodes*)	
Address > Australian or International Address > Australian Address > **Australian State/Territory**	The identifier of the Australian state or territory.	0..1	addr/**state**	AS 5017-2006 Australian State/Territory Identifier - Postal	
Address > Australian or International Address > Australian Address > **Australian Postcode**	The numeric descriptor for a postal delivery area (as defined by Australia Post), aligned with locality, suburb or place for the address.	0..1	addr/**postalCode**	Values in this data element should comply with descriptions in the Australia Post Postcode File (see *www.auspost.com.au/postcodes*)	

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Address > Australian or International Address > Australian Address > **Australian Delivery Point Identifier**	A unique number assigned to a postal delivery point as recorded on the Australia Post Postal Address File.	0..1	addr/**additionalLocator**		
Address > **Address Purpose**	The purpose for which the address is being used by the entity.	1..1	addr/**@use**	AS 5017-2006: Health Care Client Identifier Address Purpose	Space separated list of codes.

Example 8.10. Address

```
<!-- These examples are provided for illustrative purposes only. They have had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<!— no fixed address -->
<addr nullFlavor="NA" />


<!—Australian home address (unstructured) -->
<addr use="H">
   <streetAddressLine>1 Clinician Street</streetAddressLine>
   <city>Nehtaville</city>
   <state>QLD</state>
   <postalCode>5555</postalCode>
   <additionalLocator>32568931</additionalLocator>
</addr>

<!—Australian business address (structured) -->
<addr use="WP">
   <houseNumber>1</houseNumber>
   <streetName>Clinician</streetName>
   <streetNameType>St</streetNameType>
   <city>Nehtaville</city>
   <state>QLD</state>
   <postalCode>5555</postalCode>
   <additionalLocator>32568931</additionalLocator>
</addr>

<!—international postal address -->
<addr use="PST">
   <streetAddressLine>51 Clinician Bay</streetAddressLine>
   <city>Healthville</city>
   <state>Manitoba</state>
   <postalCode>R3T 3C6</postalCode>
   <country>Canada</country>
</addr>
```

8.7 Electronic Communication Detail

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Data Elements					
Electronic Communication Detail	The electronic communication details of entities.	Cardinality comes from linking parent.	**telecom**		
Electronic Communication Detail > **Electronic Communication Medium**	A code representing a type of communication mechanism.	1..1	telecom/**@value**	AS 5017-2006: Health Care Client Electronic Communication Medium > HL7:URLScheme	Makes up part of the value attribute as 'tel:phone number', 'mailto:email address', http:URL', etc.
			telecom/**@use**	HL7 v3: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse	Space separated list of codes. The section AS 5017-2006: Health Care Client Electronic Communication Usage Code explains how to map AS 5017-2006 to HL7 TelecommunicationAddressUse (HL7 TAU) code
Electronic Communication Detail > **Electronic Communication Usage Code**	The manner of use that is applied to an electronic communication medium.	0..1	telecom/**@use**	HL7 v3: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse	Space separated list of codes. The section AS 5017-2006: Health Care Client Electronic Communication Usage Code explains how to map AS 5017-2006 to HL7 TelecommunicationAddressUse (HL7 TAU) code
Electronic Communication Detail > **Electronic Communication Address**	A unique combination of characters used as input to electronic telecommunication equipment for the purpose of contacting an entity.	1..1	telecom/**@value**		

Example 8.11. Electronic Communication Detail

```
<!-- These examples are provided for illustrative purposes only. They have had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<!—home telephone number -->
<telecom value="tel:0499999999" use="H" />


<!—pager -->
<telecom value="tel:0499999999" use="PG" />


<!—home email address -->
<telecom value="mailto:clinicial@clinician.com" use="H" />
```

8.8 Employment

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[2] with an appropriate object identifier (OID), and **SHALL** be publicly available.

When national standard code sets become available, they **SHALL** be used and the non-standard code sets **SHALL** be deprecated.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Data Elements					
Employment Detail	A person's occupation and employer.	Cardinality comes from linking parent.	n/a		This logical NEHTA data component has no mapping to CDA.
Employment Detail > **Employer Organisation**	The organisation that the individual is working for in respect to the role they are playing in the nominated participation.	0..*	**ext:asEmployment/ext:employerOrganization**		There is a known issue in NEHTA Participation Data Specification for this logical Data Component's cardinality. Furthermore the corresponding CDA elements ext:asEmployment and ext:employerOrganization doesn't allow the cardinality to be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.
			ext:asEmployment/**@classCode="EMP"**		

[2] http://www.hl7.org/oid/index.cfm?ref=footer

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Employment Detail > Employer Organisation > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Employment Detail > Employer Organisation > **Organisation**	Any organisation of interest to, or involved in, the business of healthcare service provision.	1..1	n/a		Not mapped directly, encompassed implicitly in assignedAuthor/ext:asEmployment/employerOrganization.
Employment Detail > Employer Organisation > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	ext:asEmployment/ext:employerOrganization/**asOrganizationPartOf/wholeOrganization/name**		
Employment Detail > Employer Organisation > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	ext:asEmployment/ext:employerOrganization/**name**		
Employment Detail > Employer Organisation > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	
Employment Detail > **Employment Type**	The basis on which the person is employed by the employer organisation.	0..1	ext:asEmployment/**ext:jobClassCode**	NS	
Employment Detail > **Occupation**	A descriptor of the class of job based on similarities in the tasks undertaken.	0..*	ext:asEmployment/**ext:jobCode**	1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899 [ABS2006]	The corresponding CDA element ext:jobCode doesn't allow the cardinality be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.
Employment Detail > **Position In Organisation**	A descriptor of the job or the job role based on the management hierarchy of the organisation.	0..1	ext:asEmployment/**ext:code**	NS	

Example 8.12. Employment

```
<!-- This example is provided for illustrative purposes only. It has had no clinical validation.
While every effort has been taken to ensure that the examples are consistent with the message specification,
where there are conflicts with the written message specification or schema, the specification or schema shall be considered to take precedence -->

<!-- Employment Details -->
<ext:asEmployment classCode="EMP">
    <!-- Position In Organisation -->
    <ext:code>
        <originalText>Senior Medical Oncologist</originalText>
    </ext:code>
    <!-- Occupation -->
    <ext:jobCode code="253314" codeSystem="2.16.840.1.113883.13.62"
        codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
        displayName="Medical Oncologist"/>
    <!-- Employment Type -->
    <ext:jobClassCode code="FT" codeSystem="2.16.840.1.113883.5.1059"
        codeSystemName="HL7:EmployeeJobClass" displayName="full-time"/>
    <!-- Employer Organisation -->
    <ext:employerOrganization>
        <!-- Department/Unit -->
        <name>GP Clinic</name>
        <asOrganizationPartOf>
            <wholeOrganization>
                <!-- Organisation Name -->
                <name use="ORGB">GP Clinics</name>
                <!-- Entity Identifier -->
                <ext:asEntityIdentifier classCode="IDENT">
                    <ext:id assigningAuthorityName="HPI-O"
                        root="1.2.36.1.2001.1003.0.8003621231167899"/>
                    <ext:assigningGeographicArea classCode="PLC">
                        <ext:name>National Identifier</ext:name>
                    </ext:assigningGeographicArea>
                </ext:asEntityIdentifier>
            </wholeOrganization>
        </asOrganizationPartOf>
    </ext:employerOrganization>
</ext:asEmployment>
```

9 Australian CDA Extensions

As part of the CDA, standard extensions are allowed as follows:

> Locally-defined markup may be used when local semantics have no corresponding representation in the CDA specification. CDA seeks to standardize the highest level of shared meaning while providing a clean and standard mechanism for tagging meaning that is not shared. In order to support local extensibility requirements, it is permitted to include additional XML elements and attributes that are not included in the CDA schema. These extensions should not change the meaning of any of the standard data items, and receivers must be able to safely ignore these elements. Document recipients must be able to faithfully render the CDA document while ignoring extensions.
>
> Extensions may be included in the instance in a namespace other than the HL7v3 namespace, but must not be included within an element of type ED (e.g., <text> within <procedure>) since the contents of an ED datatype within the conformant document may be in a different namespace. Since all conformant content (outside of elements of type ED) is in the HL7 namespace, the sender can put any extension content into a foreign namespace (any namespace other than the HL7 namespace). Receiving systems must not report an error if such extensions are present. "HL7 Clinical Document Architecture, Release 2" [HL7CDAR2]

As such the following extensions have been defined where Australian concepts were not represented in CDA.

This section is provided for clarity only. Please see the relevant mappings section where these extensions have been used for actual mapping details.

9.1 ClinicalDocument.completionCode

Figure 9.1, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

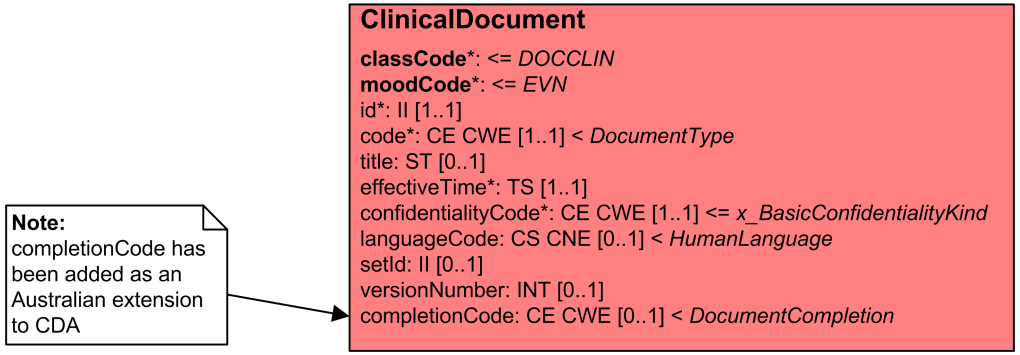


Figure 9.1. CDA R-MIM Representation

9.2 EntityIdentifier

Figure 9.2, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

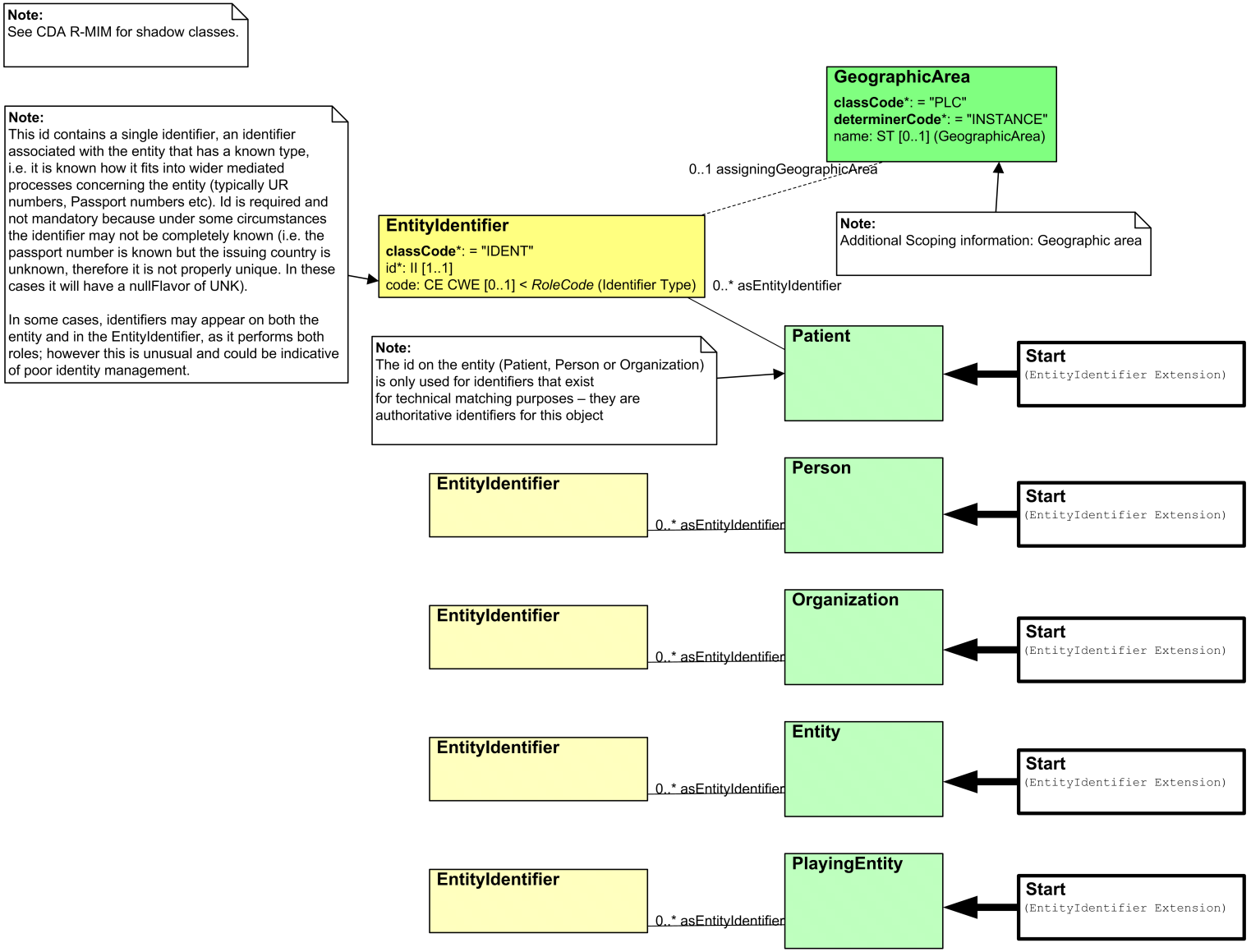


Figure 9.2. CDA R-MIM Representation

9.3 Entitlement

Figure 9.3, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

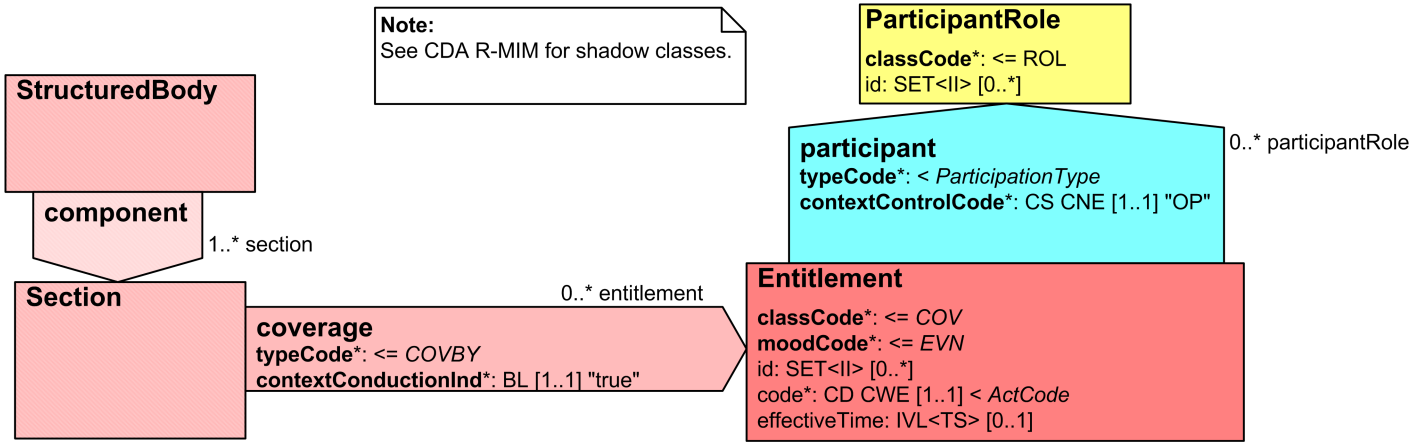


Figure 9.3. CDA R-MIM Representation

9.4 Multiple Birth

Figure 9.4, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

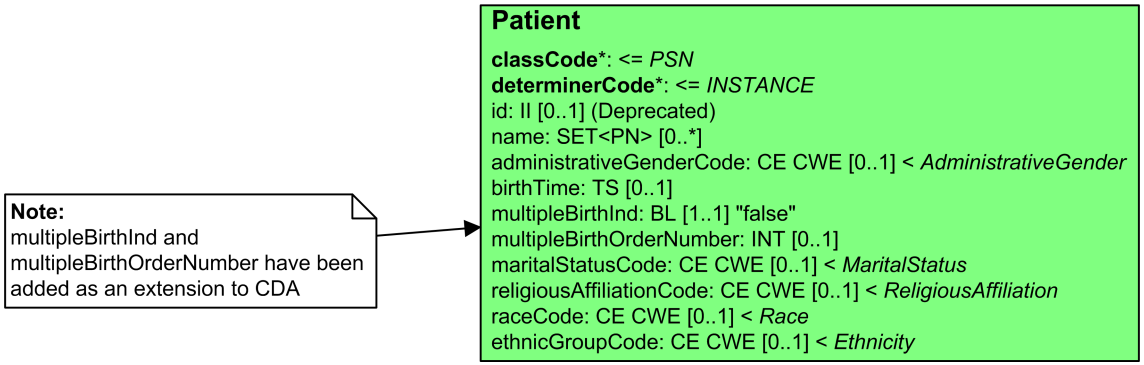


Figure 9.4. CDA R-MIM Representation

9.5 Administrative Gender Code

Figure 9.5, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

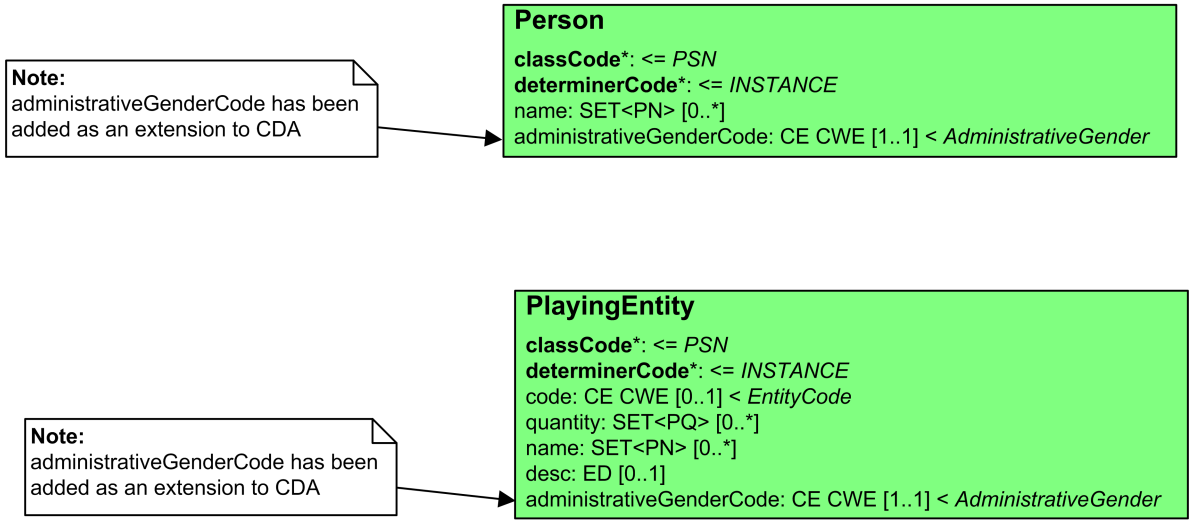


Figure 9.5. CDA R-MIM Representation

9.6 Birth Time

Figure 9.6, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

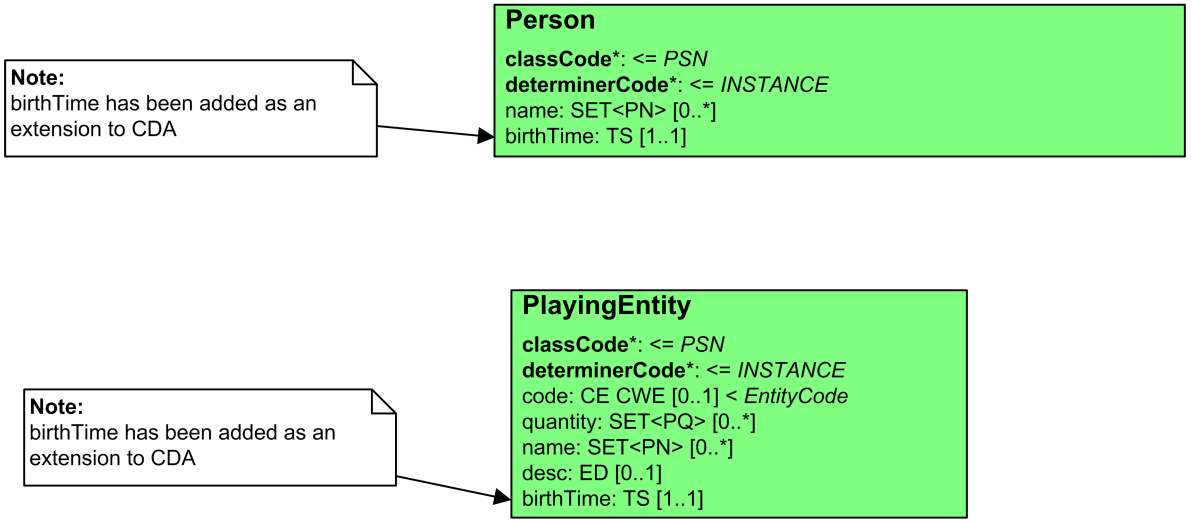


Figure 9.6. CDA R-MIM Representation

9.7 Deceased Time

Figure 9.7, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

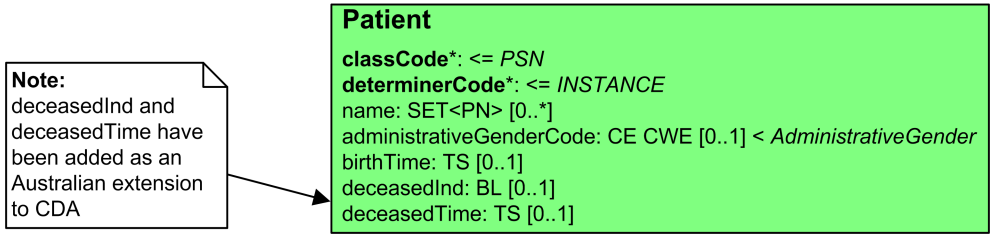


Figure 9.7. CDA R-MIM Representation

9.8 Employment

Figure 9.8, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

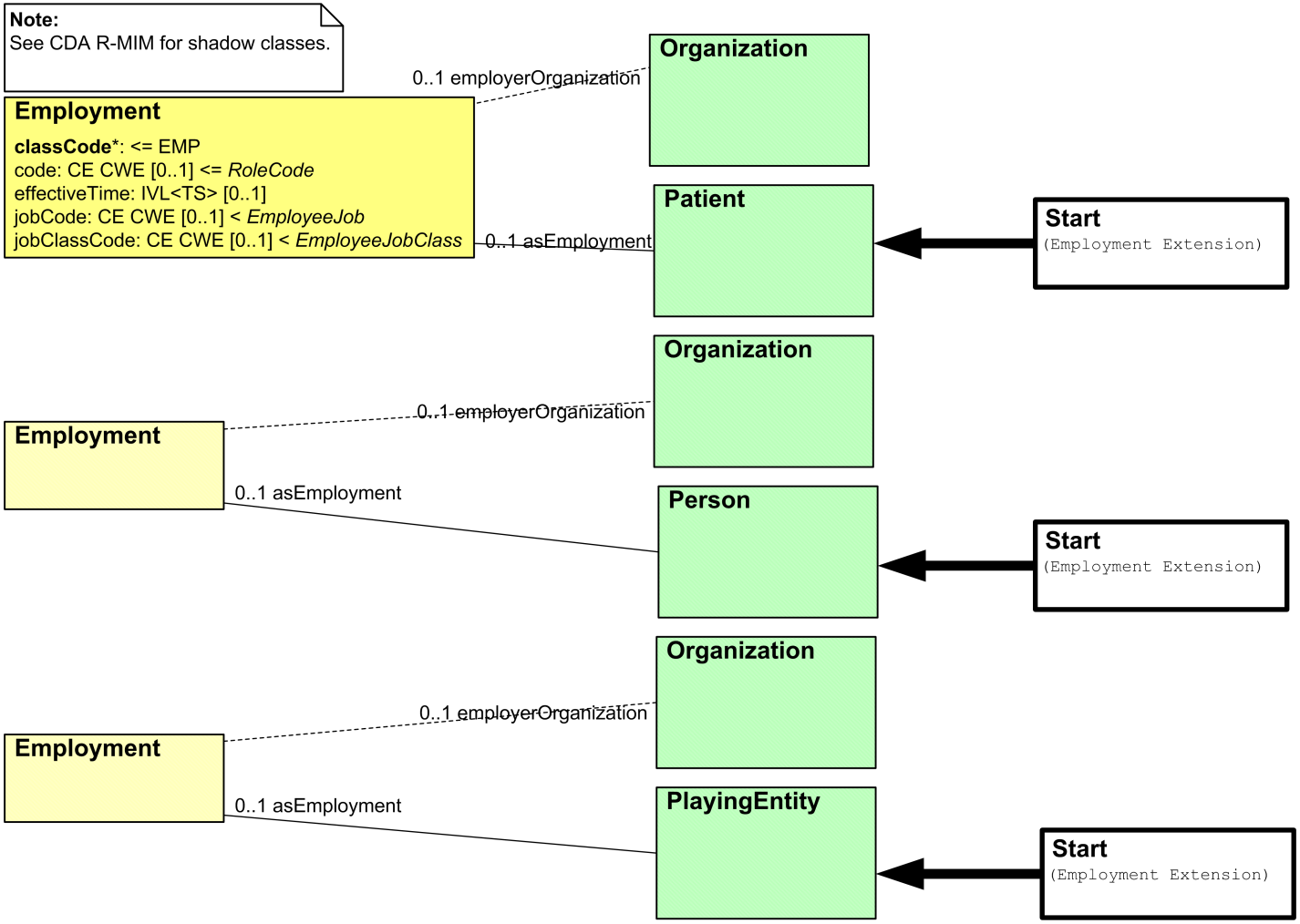


Figure 9.8. CDA R-MIM Representation

9.9 Qualifications

Figure 9.9, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

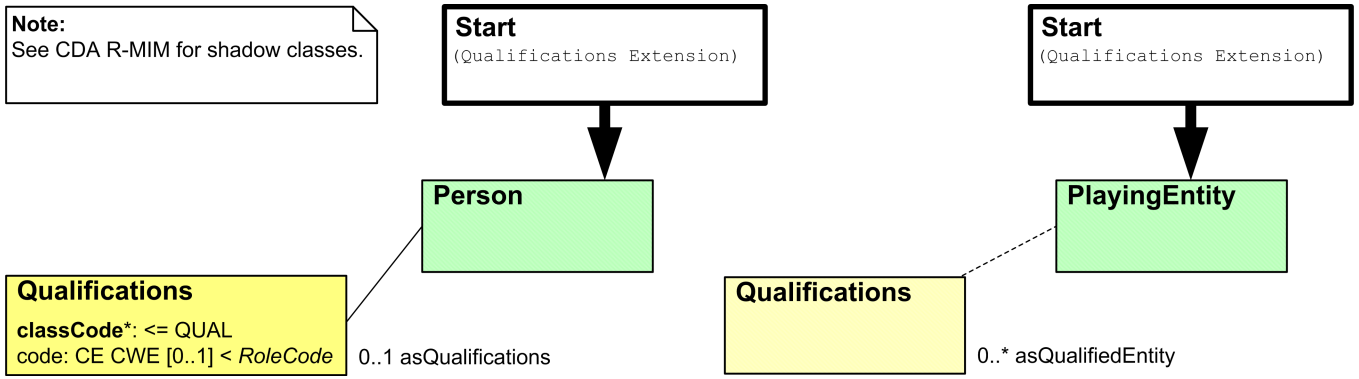


Figure 9.9. CDA R-MIM Representation

10 Vocabularies/Code Sets

When referencing the following vocabulary tables, if one column in the code set table is bolded, use the code in that column, otherwise use the values in all columns.

Example 10.1. All values

```
<code
   code="103.16044.4.1.1"
   codeSystem="1.2.36.1.2001.1001"
   codeSystemName="&NCTIS_CODE_SYSTEM_NAME;"
   displayName="Additional Comments" />
```

Example 10.2. One value

```
<name use="L">
   {name}
</name>
```

10.1 HL7 v3: TelecommunicationAddressUse

Code	Value
H	Home
HP	Primary Home
HV	Vacation Home
WP	Workplace
AS	Answering Service
EC	Emergency Contact
MC	Mobile Contact
PG	Pager

10.2 AS 5017-2006 Health Care Client Identifier Sex

displayName	code	codeSystemName	codeSystem
Male	M	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Female	F	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Intersex or Indeterminate	I	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Not Stated/Inadequately Described	N	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68

10.3 AS 5017-2006: Health Care Client Name Usage

Code Set AS 5017-2006 mapped to HL7 Name Use Code

Note

CDA Release 2 uses HL7 Data Types Release 1. For some of the AS 5017-2006 values there are no satisfactory equivalents in the HL7 Name Use R1 code set. In these cases (marked R2) an HL7 Name Use R2 code has been used.

Note

In cases (marked EXT) where there are no suitable HL7 codes, extension codes have been created.

AS 5017-2006 Code	AS 5017-2006 Alternative Code	AS 5017-2006 Descriptor	HL7 Name Use Code	HL7 Name Use Name	HL7 Name Use Definition
1	L	Registered Name (Legal Name)	**L**	(R1) Legal	(R1) Known as/conventional/the one you use
2	R	Reporting Name	**C**	(R1) License	(R1) As recorded on a license, record, certificate, etc. (only if different from legal name)
3	N	Newborn Name	**NB**	(EXT)	(EXT)
4	B	Professional or Business Name	**A**	(R1) Artist/Stage	(R1) Includes writer's pseudonym, stage name, etc
5	M	Maiden Name (Name at birth)	**M**	(R2) Maiden Name	A name used prior to marriage.
8	O	Other Name (Alias)	**P**	(R1) Pseudonym	(R1) A self asserted name that the person is using or has used

10.4 AS 4846-2006: Health Care Provider Organisation Name Usage

Code Set AS 5017-2006 Organisation Name Usage mapped to HL7 Name Use Code

Note

There are no suitable HL7 codes so extension codes have been created.

AS 4846-2006 Code	AS 4846-2006 Alternative Code	AS 4846-2006 Descriptor	HL7 Name Use Code	HL7 Name Use Name	HL7 Name Use Definition
1	U	Organizational unit/section/division name	**ORGU**	(EXT)	(EXT)
2	S	Service location name	**ORGS**	(EXT)	(EXT)
3	B	Business name	**ORGB**	(EXT)	(EXT)
4	L	Locally used name	**ORGL**	(EXT)	(EXT)
5	A	Abbreviated name	**ORGA**	(EXT)	(EXT)
6	E	Enterprise name	**ORGE**	(EXT)	(EXT)
8	X	Other	**ORGX**	(EXT)	(EXT)
9	Y	Unknown	**ORGY**	(EXT)	(EXT)

10.5 AS 5017-2006: Health Care Client Source of Death Notification

displayName	code	codeSystemName	codeSystem
Official death certificate or death register	D	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Health Care Provider	H	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Relative	R	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Other	O	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Unknown	U	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64

10.6 AS 5017-2006: Health Care Client Identifier Address Purpose

AS 5017-2006 mapped to HL7 Address Use Code

AS 5017-2006 Code	AS 5017-2006 Alternative Code	AS 5017-2006 Descriptor	HL7 Address Use Code	HL7 Address Use Name	HL7 Address Use Definition
1	B	Business	**WP**	Work Place	An office address. First choice for business related contacts during business hours.
2	M	Mailing or Postal	**PST**	Postal Address	Used to send mail.
3	T	Temporary Accommodation (individual provider only)	**TMP**	Temporary Address	A temporary address, may be good for visit or mailing.
4	R	Residential (permanent) (individual provider only)	**H**	Home Address	A communication address at a home.
9	U	Not Stated/Unknown/Inadequately Described	**In this case simply omit the Address Use Code**		

10.7 AS 5017-2006: Health Care Client Identifier Geographic Area

displayName	code	codeSystemName	codeSystem
Local Client (Unit Record) Identifier	L	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
Area/Region/District Identifier	A	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
State or Territory Identifier	S	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
National Identifier	N	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63

10.8 AS 5017-2006: Health Care Client Electronic Communication Medium

AS 5017-2006 Code	AS 5017-2006 Descriptor	AS 5017-2006 Alternative Code	HL7 URLScheme Code	HL7 URLScheme Name	HL7 URLScheme Definition
1	Telephone (excluding mobile telephone)	T	**tel**	Telephone	A voice telephone number.
2	Mobile (cellular) telephone NOTE: Mobile will also need a TelecommunicationAddress Use code of MC (Mobile Contact) (see HL7 v3: TelecommunicationAddressUse)	M	**tel**	Telephone	A voice telephone number.
3	Facsimile machine	F	**fax**	Fax	A telephone number served by a fax device.
4	Pager NOTE: Pager will also need a TelecommunicationAddress Use code of PG (Pager) (see HL7 v3: TelecommunicationAddressUse)	P	**tel**	Telephone	A voice telephone number
5	Email	E	**mailto**	Mailto	Electronic mail address.

AS 5017-2006 Code	AS 5017-2006 Descriptor	AS 5017-2006 Alternative Code	HL7 URLScheme Code	HL7 URLScheme Name	HL7 URLScheme Definition
6	URL	U	Use the most appropriate code from the list below:		
			file	File	Host-specific local file names [RCF 1738]. Note that the file scheme works only for local files. There is little use for exchanging local file names between systems, since the receiving system likely will not be able to access the file.
			ftp	FTP	The File Transfer Protocol (FTP).
			http	HTTP	Hypertext Transfer Protocol.
			mllp	MLLP	The traditional HL7 Minimal Lower Layer Protocol. The URL has the form of a common IP URL e.g., mllp://<host>:<port>/ with <host> being the IP address or DNS hostname and <port> being a port number on which the MLLP protocol is served.
			modem	Modem	A telephone number served by a modem device.
			nfs	NFS	Network File System protocol. Some sites use NFS servers to share data files.
			telnet	Telnet	Reference to interactive sessions. Some sites, (e.g., laboratories) have TTY based remote query sessions that can be accessed through telnet.

10.9 AS 5017-2006: Health Care Client Electronic Communication Usage Code

AS 5017-2006 mapped to HL7 TelecommunicationAddressUse (HL7 TAU) Code

Code	Descriptor	Alternative Code	HL7 TAU Code	HL7 TAU Name	HL7 TAU Description
1	Business	B	**WP**	Work place	An office address. First choice for business related contacts during business hours.
2	Personal	P	**H**	Home address	A communication address at a home, attempted contacts for business purposes might intrude privacy and chances are one will contact family or other household members instead of the person one wishes to call. Typically used with urgent cases, or if no other contacts are available.
3	Both business and personal use	A	**WP H**	Both Work place and Home address	

10.10 AS 5017-2006 Australian State/Territory Identifier - Postal

Code	Descriptor
NSW	New South Wales
VIC	Victoria
QLD	Queensland
SA	South Australia
WA	Western Australia
TAS	Tasmania
NT	Northern Territory
ACT	Australian Capital Territory
U	Unknown

10.11 AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator

The data elements that use this value set consist of a combination of three codes, each of which denotes the accuracy of one date component:

A – The referred date component is ‘accurately known’.

E – The referred date component is an ‘estimate’.

U – The referred date component is ‘unknown’.

This data elements that use this value set contains positional fields (DMY).

Field 1 (D) – refers to the accuracy of the ‘day component’.

Field 2 (M) – refers to the accuracy of the ‘month component’.

Field 3 (Y) – refers to the accuracy of the ‘year component’.

Note
The order of the date components in the HL7 date and time datatypes (YYYYMMDD) is the reverse of that specified above.

The possible combinations are as follows:

code	descriptor
AAA	Accurate date
AAE	Accurate day and month, estimated year
AEA	Accurate day, estimated month, accurate year
AAU	Accurate day and month, unknown year
AUA	Accurate day, unknown month, accurate year
AEE	Accurate day, estimated month and year
AUU	Accurate day, unknown month and year
AEU	Accurate day, estimated month, unknown year
AUE	Accurate day, unknown month

code	descriptor
EEE	Estimated date
EEA	Estimated day and month, accurate year
EAE	Estimated day, accurate month
EEU	Estimated day and month, unknown year
EUE	Estimated day, unknown month, estimated year
EAA	Estimated day, accurate month and year
EUU	Estimated day, unknown month and year
EAU	Estimated day, accurate month, unknown year
EUA	Estimated day, unknown month, accurate year
UUU	Unknown date
UUA	Unknown day and month, accurate year
UAU	Unknown day, accurate month, unknown year
UUE	Unknown day and month, estimated year
UEU	Unknown day, estimated month, unknown year
UAA	Unknown day, accurate month and year
UEE	Unknown day, estimated month and year
UAE	Unknown day, accurate month, estimated year
UEA	Unknown day, estimated month, accurate year

10.12 NCTIS: Admin Codes - Document Status

displayName	code	codeSystemName	codeSystem
Interim	I	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104
Final	F	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104
Withdrawn	W	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104

10.13 NCTIS: Admin Codes - Global Statement Values

displayName	code	codeSystemName	codeSystem
None known	01	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299
Not asked	02	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299
None supplied	03	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299

10.14 NCTIS: Admin Codes - Entitlement Type

displayName	code	codeSystemName	codeSystem
Medicare Benefits	1	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Pensioner Concession	2	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Commonwealth Seniors Health Concession	3	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Health Care Concession	4	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health Gold Benefits	5	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health White Benefits	6	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health Orange Benefits	7	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Safety Net Concession	8	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Safety Net Entitlement	9	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Medicare Prescriber Number	10	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Medicare Pharmacy Approval Number	11	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047

10.15 HL7 v3 CDA: Act.moodCode

Code	Value	Definition
EVN	Event	The entry defines an actual occurrence of an event.
INT	Intent	The entry is intended or planned.
APT	Appointment	The entry is planned for a specific time and place.
ARQ	Appointment Request	The entry is a request for the booking of an appointment.
PRMS	Promise	A commitment to perform the stated entry.
PRP	Proposal	A proposal that the stated entry be performed.
RQO	Request	A request or order to perform the stated entry.
DEF	Definition	The entry defines a service (master).

10.16 HL7 v3 CDA: RelatedDocument.typeCode

Code	Value	Definition
APND	Append	The current document is an addendum to the ParentDocument.
RPLC	Replace	The current document is a replacement of the ParentDocument.
XFRM	Transform	The current document is a transformation of the ParentDocument.

10.17 METeOR 291036: Indigenous Status

displayName	code	codeSystemName	codeSystem
Aboriginal but not Torres Strait Islander origin	1	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Torres Strait Islander but not Aboriginal origin	2	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Both Aboriginal and Torres Strait Islander origin	3	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Neither Aboriginal nor Torres Strait Islander origin	4	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Not stated/inadequately described	9	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036

10.18 NCTIS: Admin Codes - Result Status

displayName	code	codeSystemName	codeSystem
Registered [No result yet available.]	1	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Interim [This is an initial or interim result: data may be missing or verification not been performed.]	2	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Final [The result is complete and verified by the responsible practitioner.]	3	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Amended [The result has been modified subsequent to being Final, and is complete and verified by the practitioner.]	4	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Cancelled / Aborted [The result is not available because the examination was not started or completed.]	5	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501

10.19 OIDs

codeSystem (OID)	codeSystemName
2.16.840.1.113883.13.62	1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006
2.16.840.1.113883.13.65	AIHW Mode of Separation
2.16.840.1.113883.6.96	SNOMED CT-AU
1.2.36.1.2001.1004.100	Australian Medicines Terminology (AMT)
2.16.840.1.113883.6.1	LOINC

Appendix A. CDA Narratives

CDA requires that each Section in its Body include a narrative block, containing a complete version of the section's encoded content using custom hypertext markup defined by HL7. It is clinically significant that the narrative is the human-readable and attestable part of a CDA document.

There is no canonical markup for specific CDA components, but some conformance points apply:

- The narrative block **SHALL** be encapsulated within text component of the CDA Section. The Section's title component **SHOULD** contain the Section's label, and will form the heading for the Section's narrative rendering.
- The narrative contents **SHALL** be completely and accurately rendered in a standards-compliant web browser by the transformation provided by HL7. Producers **MAY** assume that consumers are able to apply HL7's transformation. Producers **MAY** distribute transformations for alternate or enhanced rendering, but **SHALL NOT** rely upon their use.
  - In accordance with the requirement to completely represent Section contents, coded type values **SHALL** include both originalText and displayName components where provided. The code component **SHOULD** be provided when a displayName is not available.
- It **SHALL** completely and accurately represent the information encoded in the Section. Content **SHALL NOT** be omitted from the narrative.
- It **SHALL** conform to the content requirements of the CDA specification [HL7CDAR2] and/or XML Schema.

CDA structured information generally takes the form of nested lists leading to either simple values or name-value pairs. It is usually marked up as either data tables or lists. Lists are often more attractive, particularly in automated generation, because they are more amenable to safe nesting. Also, HL7 narrative lists are well suited to name-value pairs because both the lists themselves and their items may have captions, which are well suited for labels (names). Style and formatting markup is often discarded by the default HL7 transformation.

Note

Implementers should test their chosen narrative markup early in the development process using the standard HL7 transformation in a web browser, to confirm that it renders completely.

The examples provided in sections of this document and the separate full example provide some guidance for narrative block markup. They may be easily adapted as boilerplate markup.

Appendix B. Log of Changes

This appendix lists the major changes and fixes applied to this CDA Implementation Guide resulting from public feedback and internal testing.

Changes Version 1.0 to Version 1.1 05 July 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	5	CDA Header	Cardinalities changed	ClinicalDocument/code cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	16 May 2011
2	5	CDA Header	Mapping Table changed	ClinicalDocument/code/@code changed to 60591-5 and ClinicalDocument/code/@displayName changed to "Patient Summary"	NEHTA	Feedback from Implementation workshop	20 June 2011
3	5.1.2	InformationRecipient	Cardinalities changed	InformationRecipient/id cardinality changed to 0..1	NEHTA	Document Review - not aligned with Relationships table	16 May 2011
4	5.1.2	Information Recipient	Cardinalities changed	InformationRecipient cardinality changed to 0..1	NEHTA	Document Review - not aligned with Relationships table	16 May 2011
5	5.1.2	Information Recipient	Cardinalities changed	InformationRecipient/intendedRecipient cardinality change to 1..1	NEHTA	Document Review - not aligned with Relationships table	16 May 2011
6	5.1.3	Custodian	Cardinalities changed	custodian/assignedCustodian/representedCustodianOrganization/name cardinality changed to 0..1	NEHTA	Document Review - not aligned with CDA R-MIM	16 May 2011
7	5.1.3	Custodian	Cardinalities changed	custodian/assignedCustodian/representedCustodianOrganization/<Electronic Communication Detail> cardinality changed to 0..1	NEHTA	Document Review - not aligned with CDA R-MIM	16 May 2011
8	5.1.3	Custodian	Cardinalities changed	custodian/assignedCustodian/representedCustodianOrganization/<Address> cardinality changed to 0..1	NEHTA	Document Review - not aligned with CDA R-MIM	16 May 2011
9	6.1.1	Document Author	XML example changed	Added @use to example xml under wholeOrganization/name	NEHTA	Document Review - not aligned with mapping table	16 May 2011
10	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Address cardinality change to 0..2	NEHTA	Document Review - not aligned with SCS	30 June 2011
11	6.1.1	Document Author	Definition changed	Document Author definition changed.	NEHTA	Document Review - not aligned with SCS	16 May 2011
12	6.1.2	Subject of Care	XML example changed	Age Accuracy Indicator code changed.	NEHTA	Document Review - not aligned with mapping table	16 May 2011
13	6.1.2	Subject of Care	Comment changed	Added comment about Medicare number being recorded in Entitlement rather than Entity Identifier	NEHTA	Document Review - guidance needed.	28 June 2011
14	7.1.1	Reviewed Adverse Substance Reactions	Mapping table code changed	component[adv_reacts]/section/code/@code changed to 101.16601	NEHTA	Document Review - vocab missing	16 May 2011
15	7.1.1.2	Adverse Substance Reaction	Mapping table changed	@inversionIndicator moved to entry/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/@inversionInd="true"	NEHTA	Document Review - not aligned with CDA.	16 May 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
16	7.1.1.2	Adverse Substance Reaction	XML example changed	@negationInd changed to @inversionInd	NEHTA	Document Review - not aligned with mapping table	16 May 2011
17	7.1.1.2	Adverse Substance Reaction	XML example changed	Added entry/act/id to XML example.	NEHTA	Document Review - not aligned with mapping table	16 May 2011
18	7.1.1.3	Exclusion Statement - Adverse Substance Reactions	Mapping table changed	Added mapping for entry/[gbl_adv]/observation/id	NEHTA	Document Review - missing mapping	29 June 2011
19	7.1.1.3	Exclusion Statement - Adverse Substance Reactions	XML example changed	Changed value of code in example.	NEHTA	Document Review - invalid code used.	17 May 2011
20	7.1.2.1	Medications Review	XML example changed	Changed value of code in example.	NEHTA	Document Review - not aligned with mapping table	17 May 2011
21	7.1.2.2	Used Medication	Identification table changed	Changed value of Identifier	NEHTA	Document Review - not aligned with SCS	17 May 2011
22	7.1.2.2	Used Medication	Cardinalities changed	Used Medication cardinality changed to 0..*	NEHTA	Document Review - not aligned with SCS	20 May 2011
23	7.1.2.3	Exclusion Statement - Medications	XML example changed	Changed code for Global statement to 103.16302.120.1.2	NEHTA	Document Review - not aligned with mapping table	17 May 2011
24	7.1.2.3	Exclusion Statement - Medications	XML example changed	Changed value of code in example.	NEHTA	Document Review - invalid code used.	17 May 2011
25	7.1.3	Reviewed Medical History	Mapping Table Changed	Medical History Review added to mapping table.	NEHTA	Document Review - not aligned with SCS	17 May 2011
26	7.1.3.1	Medical History Review	XML example changed	Changed Medical History Review Code to 102.16576.120.1.3	NEHTA	Document Review - not aligned with SCS	17 May 2011
27	7.1.3.2	Problem Diagnosis	XML example changed	Changed XML example to use SNOMED code rather than NCTIS code.	NEHTA	Document Review - not aligned with mapping table	17 May 2011
28	7.1.3.2	Problem Diagnosis	XML example changed	Removed id from Date of Resolution/Remission in XML example.	NEHTA	Document Review - not aligned with mapping table	17 May 2011
29	7.1.3.2	Problem Diagnosis	Mapping Table Changed	Changed SNOMED CT-AU Clinical finding foundation reference set to SNOMED CT-AU Problem/Diagnosis Reference Set	NEHTA	Document Review - not aligned with SCS	18 May 2011
30	7.1.3.3	Exclusion Statement - Problems and Diagnoses	XML example changed	Removed id from Exclusion Statement - Problem/Diagnoses in XML Example.	NEHTA	Document Review - not aligned with mapping table	17 May 2011
31	7.1.3.3	Exclusion Statement - Problems and Diagnoses	XML example changed	Changed code Exclusion Statement - Problem/Diagnoses in XML Example to 103.16302.102.1.3	NEHTA	Document Review - not aligned with mapping table	17 May 2011
32	7.1.3.4	Procedure	XML example changed	Added id to Procedure Comment in XML Example.	NEHTA	Document Review - not aligned with mapping table	17 May 2011
33	7.1.3.5	Exclusion Statement - Procedures	Mapping table changed	entry[gbl_pro]/observation/typeCode="OBS" changedtypeCode to classCode	NEHTA	Document Review - error	17 May 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
34	7.1.3.5	Exclusion Statement - Procedures	XML example changed	Changed Exclusion Statement - Procedures > Global statement code to 103.16302.120.1.4	NEHTA	Document Review - not aligned with mapping table	17 May 2011
35	7.1.3.5	Exclusion Statement - Procedures	XML example changed	Removed id from XML example	NEHTA	Document Review - not aligned with mapping table	17 May 2011
36	7.1.3.6	Other Medical History Item	XML example changed	Changed Other Medical History Item code to 102.15513.120.1.1	NEHTA	Document Review - not aligned with mapping table	17 May 2011
37	7.1.4.1	Immunisation History Review	XML example changed	Example replaced with proper example	NEHTA	Document Review - not aligned with mapping table	18 May 2011
38	7.1.4.2	Administered Immunisation	XML example changed	??? In XML example replaced with codes	NETHA	Document Review - incomplete example	19 May 2011
39	7.1.4.2	Administered Immunisation	Cardinalities changed	Changed Administered Immunisation cardinality to 0..*	NEHTA	Document Review - not aligned with SCS	20 May 2011
40	7.1.4.2	Administered Immunisation	Mapping table changed	Added mapping for SubstanceAdministration/id	NEHTA	Document Review - not aligned with CDA R-MIM	30 June 2011
41	7.1.4.3	Exclusion Statement - Immunisations	XML example changed	Changed Global Statement code to 103.16302.120.1.5	NEHTA	Document Review - not aligned with mapping table	18 May 2011
42	8.1	Code	Added information	Added direction on how to use translations and alternate code systems.	Feedback from Implementation workshop	Needed clarification	30 June 2011
43	8.4	Entity Identifier	XML example changed	Removed Medicare Number example from Entity Identifier in Common patterns and replaced with IHI example.		Document Review - example wrong	28 June 2011
44	10.14	Vocabularies/Code Sets	Added section	Added NCTIS: Admin Codes Entitlement Type	NEHTA	Document Review - vocab missing	28 June 2011
45	n/a	Sections	Mapping table changed	Where the component relationship between a section and an entry had been explicitly stated, this has been removed - it is the default and does not need to be stated. entry/typeCode="COMP" changed to entry	NEHTA	Document Review - not aligned with example.	30 June 2011

Changes Version 1.1 05 July 2011 date to Version 1.1 09 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	5.1.2	InformationRecipient	Removed	Removed.	NEHTA	Document Review - Consistency across specifications.	9 September 2011
2	6.1	Shared Health Summary	Cardinalities changed	Shared Health Summary > DateTime Attested cardinality changed to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
3	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Address cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
4	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
5	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Usage cardinality change to 0..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
6	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
7	6.1.1	Document Author	XML Example updated	Changed XML example of Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier.	NEHTA	Incorrect example of Entity Identifier.	9 September 2011
8	6.1.2	Subject Of Care	Cardinalities changed	Subject Of Care > Participant > Address cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
9	6.1.2	Subject Of Care	XML Example updated	Changed XML example of Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Age Detail > Age to use datatype PQ.	NEHTA	Incorrect use of INT datatype.	9 September 2011
10	6.1.2	Subject Of Care	Cardinalities changed	Subject Of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Indigenous Status cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
11	7.1.1	Reviewed Adverse Substance Reactions	Cardinalities changed	Reviewed Adverse Substance Reactions cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
12	7.1.1.2	Adverse Substance Reaction	Value domain changed	Adverse Substance Reaction > Substance/Agent value domain changed to NEHTA Substance/Agent Values.	NEHTA	Document Review - Consistency across specifications.	9 September 2011
13	7.1.1.2	Adverse Substance Reaction	Value domain added	Adverse Substance Reaction > Manifestation value domain: SNOMED CT-AU Clinical Finding Foundation Reference Set.	NEHTA	Document Review - Consistency across specifications.	9 September 2011
14	7.1.1.2	Adverse Substance Reaction	Cardinalities changed	Adverse Substance Reaction > Reaction Event > Manifestation cardinality change to 0..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
15	7.1.2	Reviewed Medications	Cardinalities changed	Reviewed Medications cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
16	7.1.3	Reviewed Medical History	Cardinalities changed	Reviewed Medical History cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
17	7.1.3.6	Other Medical History Item	Cardinalities changed	Other Medical History Item cardinality change to 0..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
18	7.1.4	Reviewed Immunisations	Cardinalities changed	Reviewed Immunisations cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
19	10.13	NCTIS: Admin Codes - Global Statement Values	New value added	Added "None Supplied".	NEHTA	Values supplied insufficient for requirements.	9 September 2011
20	N/A	N/A	id comment.	Comment updated to: "This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used"	NEHTA	Updated definition to better explain the use of id's.	9 September 2011

Changes Version 1.1 09 September 2011 date to Version 1.1 18 November 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	7.1.1.1	Adverse Substance Reactions Review	Removed	Removed.	NEHTA	Revised SCS	13 October 2011
2	7.1.2.1	Medications Review	Removed	Removed.	NEHTA	Revised SCS	13 October 2011
3	7.1.3.1	Medical History Review	Removed	Removed.	NEHTA	Revised SCS	13 October 2011
4	7.1.4.1	Immunisations Review	Removed	Removed.	NEHTA	Revised SCS	13 October 2011
5	7.1.4.1 (formerly 7.1.4.2)	Administered Immunisations	Added component	Sequence Number Added.	NEHTA	Revised SCS	13 October 2011
6	7.1.1.1	Adverse Substance Reaction	Value domain changed.	Value domain for Manifestation changed to Clinical Manifestation Values Reference Set	NEHTA	Revised SCS	13 October 2011
7	6.1.1	Document Author	Removed data elements.	Demographic data (and children) removed.	NEHTA	Revised SCS	13 October 2011
8	7.1.3.5	Other Medical History Item	Changed mapping.	Changed to use Medical History Item DCM (previously Clinical Synopsis DCM). Includes additional mapping - Medical History Item Comment, Medical History Item Time Interval, changed identifiers for data elements. Removed mapping for DateTime Recorded.	NEHTA	Revised SCS	13 October 2011
9	6.1.2	Subject Of Care	Removed Vocab Comment.	Removed vocab comment that Address purpose must have value of "Residential" or "Temporary Accommodation".	NEHTA	Revised SCS	14 October 2011
10	7.1.3.1	Problem/Diagnosis	Revised Definition	Definition updated.	NEHTA	Revised SCS	14 October 2011
11	7.1.1	Reviewed Adverse Substance Reactions	Name change.	Name changed to Adverse Reactions.	NEHTA	Revised SCS	1 November 2011
12	7.1.1.1	Adverse Substance Reaction	Name change.	Name changed to Adverse Reaction.	NEHTA	Revised SCS	1 November 2011
13	7.1.1.2	Exclusion Statement - Adverse Substance Reactions	Name change.	Name changed to Exclusion Statement - Adverse Reactions.	NEHTA	Revised SCS	1 November 2011
14	7.1.1.1	Adverse Reaction	Cardinality change.	Reaction Event cardinality changed to 0..1.	NEHTA	Revised SCS	1 November 2011
15	7.1.2	Reviewed Medications	Name/code change.	Name/code changed to Medications section and 101.16146.	NEHTA	Revised SCS	2 November 2011
16	7.1.2.1 (Formerly 7.1.2.2)	Used Medication	Name change.	Name changed to Known Medication	NEHTA	Revised SCS	2 November 2011
17	7.1.2.1	Known Medication	Vocabulary changed.	Vocabulary has been updated for Medicine - AMT reference sets.	NEHTA	Revised SCS	2 November 2011
18	7.1.3	Reviewed Medical History	Name/code/mapping changes.	Name/code changed to Medical History section and 101.16117. Mappings changed to Clinical Synopsis DCM.	NEHTA	Revised SCS	3 November 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
19	7.1.3	Reviewed Immunisations	Name/code change.	Name/code changed to Immunisations section and 101.16638.	NEHTA	Revised SCS	3 November 2011
20	7.1.1.1	Adverse Reaction	Code change.	Code changed to 102.15517	NEHTA	Revised SCS	8 November 2011
21	Throughout Document	N/A	Definitions updated.	Definitions updated to correlate with revised SCS.	NEHTA	Revised SCS	8 November 2011
22	6.1.1	Document Author	Cardinality Change.	Person name changed to 1..*.	NEHTA	Revised SCS	8 November 2011
23	6.1.2	Subject of Care	Cardinality Change.	Person name changed to 1..*.	NEHTA	Revised SCS	8 November 2011
24	6.1.2	Subject of Care	Cardinality Change.	Electronic Communications Detail changed to 0..*.	NEHTA	Revised SCS	8 November 2011
25	7.1.4.3	Medical History Item	mapping Change.	Medical History Item Comment entry/act/entryRelationship/@typeCode changed to @typeCode="COMP"	NEHTA	Revised SCS	8 November 2011

Changes Version 1.1 18 November 2011 date to Version 1.1 02 December 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	N/A	N/A	Document Status	Updated to Final	NEHTA	Status Change	01 December 2011
2	7.1.1.1	Adverse Reaction	Cardinality Change	Manifestation cardianlity changed to 1..*	NEHTA	Change in SCS	01 December 2011
3	7.1.1.1	Adverse Reaction	Value Domain Change	Manifestation value domain name changed to "Clinical Manifestation Values".	NEHTA	Change in SCS	01 December 2011

Changes Version 1.1 09 September 2011 to Version 1.1 01 December 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1			Change of keyword	Document Author > Participant > Entity Identifier Change of keyword from "MUST" to "SHALL".	NEHTA	Alignment of specifications	2 Dec 2012
2	10.18	NCTIS: Admin Codes - Result Status	Code change	Section 10.18 NCTIS: Admin Codes - Result Status old spec: "1.2.36.1.2001.1001.101.104.16502" new spec: "1.2.36.1.2001.1001.101.104.16501"	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
3	10.19	OIDs	common pattern added codeSystemName	10.19 OIDs common pattern added "LOINC" old spec : <<nil>> new spec: codeSystem (OID): 2.16.840.1.113883.6.1 codeSystemName: LOINC	NEHTA	Alignment of specifications	2 Dec 2012
4	5.1	ClinicalDocument	Cardinality change	legalAuthenticator old spec: Essential 1..1 new spec: optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
5	5.1	ClinicalDocument	Deleted	ClinicalDocument/versionNumber/@value	NEHTA	Alignment of specifications	2 Dec 2012
6	6.1.1	DOCUMENT AUTHOR	Cardinality change	Document Author > Participation Period was 1..1 and now 0..1 TOCHECK:This is a required CDA element	NEHTA	Alignment of specifications	2 Dec 2012
7	6.1.1	DOCUMENT AUTHOR	Cardinality change	Document Author > Participant > Person or Organisation or Device > Person > Person Name Changed from 1..1 to 1..*	NEHTA	Alignment of specifications	2 Dec 2012
8	6.1.1	DOCUMENT AUTHOR	Common Pattern	Document Author > Participant > Person or Organisation or Device > Person > Employment Detail Is now defined as the common Pattern Employment and this removes the need for the previous requirement of assignedAuthor/representedOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
9	6.1.1	DOCUMENT AUTHOR	element removed	administrativeGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012
10	6.1.1	DOCUMENT AUTHOR	Additional vocab text	Document Author > Participation Type Vocab now has text, not present in original doc: "Participation Type SHALL have an implementation-specific fixed value equivalent to "Document Author"	NEHTA	Alignment of specifications	2 Dec 2012
11	6.1.1	DOCUMENT AUTHOR	Additional vocab text	Document Author > Role Vocab now has text, not present in original doc: "However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available MAY be used."	NEHTA	Alignment of specifications	2 Dec 2012
12	6.1.1	DOCUMENT AUTHOR	Additional vocab text	Document Author > Participant > Person or Organisation or Device Added text in vocab cell: "PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON."	NEHTA	Alignment of specifications	2 Dec 2012
13	6.1.1	DOCUMENT AUTHOR	Added link in Comments	Document Author > Participant > Entity Identifier The wording "See common pattern: Entity Identifier." has been added to the comments cell.	NEHTA	Alignment of specifications	2 Dec 2012
14	6.1.1	DOCUMENT AUTHOR	XML Fragment	Document Author/time value xml fragment value was "200910201235", now "200910201235+1000"	NEHTA	Alignment of specifications	2 Dec 2012
15	6.1.1	DOCUMENT AUTHOR	XML Fragment	Not updated for Employment	NEHTA	Alignment of specifications	2 Dec 2012
16	6.1.2	SUBJECT OF CARE	Cardinality change	Subject of Care > Participant > Person or Organisation or Device > Person > Person Name was 1..1 and now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
17	6.1.2	SUBJECT OF CARE	Additional vocab text	Subject of Care > Participation Type Text in vocab cell changed from: "...an implementation specific fixed value meaning "Subject"." TO "...an implementation specific fixed value equivalent to "Subject of Care"."	NEHTA	Alignment of specifications	2 Dec 2012
18	6.1.2	SUBJECT OF CARE	Vocab text added	Subject of Care > Participant > Person or Organisation or Device New doc has this text added: "PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON. "	NEHTA	Alignment of specifications	2 Dec 2012
19	6.1.2	SUBJECT OF CARE	Vocab text change	Subject of Care >Role Vocab text was: "The value of Role will be an implementation specific value with a meaning of "Patient", "Client" or similar." changed to: "Role SHALL have an implementationspecific fixed value equivalent to "Patient"."	NEHTA	Alignment of specifications	2 Dec 2012
20	6.1.2	SUBJECT OF CARE	Comment text removed	Subject of Care >Role Comments: removed "(optional, fixed value)" following "encompassed implicitly in recordTarget/ patientRole/ classCode = "PAT""	NEHTA	Alignment of specifications	2 Dec 2012
21	6.1.2	SUBJECT OF CARE	Added xml fragment	Example 6.3. Subject of Care XML Fragment now has fragment for Indigenous Status which looks to have been omitted from the original document	NEHTA	Alignment of specifications	2 Dec 2012
22	6.1.2	SUBJECT OF CARE	changed xml fragment	<!-- Country of Birth --> xml fragment Original doc has: <country>8104</country> Changed to: <country>Australia</country> <state>QLD</state>	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
23	7.1	Shared Health Summary	Section name change	ADVERSE REACTIONS new spec uses: "ADVERSE REACTIONS" old spec: "REVIEWED ADVERSE SUBSTANCE REACTIONS" This change cascades down to the lower levels	NEHTA	Alignment of specifications	2 Dec 2012
24	7.1.1	ADVERSE REACTIONS	Code change	Adverse Reactions (table and xml fragment) component[adv_reacts]/section/code/@code old spec: "101.16601" new spec: "101.20113"	NEHTA	Alignment of specifications	2 Dec 2012
25	7.1.1.1	ADVERSE REACTION	Cardinality change	Adverse Reactions old spec: "0..1" new spec: "0..*"	NEHTA	Alignment of specifications	2 Dec 2012
26	7.1.1.1	ADVERSE REACTION	Cardinality change	Adverse Reaction > Reaction Event old spec: "1..1" new spec: "0..1"	NEHTA	Alignment of specifications	2 Dec 2012
27	7.1.1.1	ADVERSE REACTION	Cardinality change	Adverse Reaction > Reaction Event > Manifestation old spec: "0..*" new spec: "1..*"	NEHTA	Alignment of specifications	2 Dec 2012
28	7.1.1.1	ADVERSE REACTION	Code change	Adverse Reaction - entry/act/code/@code old spec: "102.16473" new spec: "102.15517"	NEHTA	Alignment of specifications	2 Dec 2012
29	7.1.2	MEDICATIONS	Cardinality change	MEDICATIONS parent old spec: "Shared Health Summary Optional 0..1" new spec: "Shared Health Summary Essential 1..1"	NEHTA	Alignment of specifications	2 Dec 2012
30	7.1.2	MEDICATIONS	code change	Medications component[meds]/section/code/@code old spec: "101.16022" new spec: "101.16146" (reflected in xml fragment)	NEHTA	Alignment of specifications	2 Dec 2012
31	7.1.2	MEDICATIONS	Data group name change	KNOWN MEDICATION old spec: "USED MEDICATION" new spec uses: "KNOWN MEDICATION" This change cascades down to the lower levels	NEHTA	Alignment of specifications	2 Dec 2012
32	7.1.2	MEDICATIONS	Section name change	MEDICATIONS old spec: "REVIEWED MEDICATIONS" new spec uses: "MEDICATIONS" This change cascades down to the lower levels including xml fragment	NEHTA	Alignment of specifications	2 Dec 2012
33	7.1.2.1	KNOWN MEDICATION	element removed	Known Medication > Comment @id removed	NEHTA	Alignment of specifications	2 Dec 2012
34	7.1.2.1	KNOWN MEDICATION	xml fragmentchange	<!-- Known Medications --> <id root=/> old spec: <id root="C57A9F32-754B-11E0-A7E0-599F4824019B" /> new spec: <id root="361B6EF6-754C-11E0-A3C3-D19F4824019B" />	NEHTA	Alignment of specifications	2 Dec 2012
35	7.1.2.2	EXCLUSION STATEMENT - MEDICATIONS	Data Component Definition change	Exclusion Statement - Medications Definition old spec: "Statements about medications that need to be positively recorded as absent or excluded." new spec: "Statements that positively assert that the patient has not received immunisations."	NEHTA	Alignment of specifications	2 Dec 2012
36	7.1.2.2	EXCLUSION STATEMENT - MEDICATIONS	Data Component Definition change	Exclusion Statement - Medications > Global Statement Definition old spec: "The statement about the absence or exclusion." new spec: "The statement about the absence or exclusion of certain medication."	NEHTA	Alignment of specifications	2 Dec 2012
37	7.1.3	MEDICAL HISTORY	Cardinality change	MEDICAL HISTORY parent old spec: "Shared Health Summary Optional 0..1" new spec: "Shared Health Summary Essential 1..1"	NEHTA	Alignment of specifications	2 Dec 2012
38	7.1.3	MEDICAL HISTORY	section identifier changed	MEDICAL HISTORY Identifier old spec: "S-21003" new spec: "S-16117" (cascades to code in table pg 108 & xml fragment)	NEHTA	Alignment of specifications	2 Dec 2012
39	7.1.3	MEDICAL HISTORY	element added	Medical History - added element: component[med_hist]/section ie not found in old spec but is now in new one	NEHTA	Alignment of specifications	2 Dec 2012
40	7.1.3	MEDICAL HISTORY	Section name change	MEDICAL HISTORY old spec: "REVIEWED MEDICAL HISTORY" new spec uses: "MEDICAL HISTORY" This change cascades down to the lower levels including xml fragment	NEHTA	Alignment of specifications	2 Dec 2012
41	7.1.3	MEDICAL HISTORY	Data Component Definition change	Medical History definition old spec: "The current and past medical history of the subject of care, this includes problem/diagnosis and medical or surgical procedures performed." new spec: "The past and current medical history of the subject of care which is relevant to the clinical event, this includes problem/diagnosis and medical or surgical procedures performed."	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
42	7.1.3	MEDICAL HISTORY	Data Component Definition change	Medical History > Problem/Diagnosis definition old spec: "A grouping describing a diagnostic label or problem statement assigned by the healthcare provider to describe the principal diagnosis or health/medical problem pertaining to the subject of care during a healthcare event/visit. Diagnosis: a concise technical description of medical condition/problem or situation pertaining to a 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). A diagnosis represents the nature and identification of a disease. Problem: a description of a subject of care's condition for which a specific diagnosis has not yet been identified. " new spec: "The problems and/or diagnoses that form part of the past and current medical history of the subject of care."	NEHTA	Alignment of specifications	2 Dec 2012
43	7.1.3	MEDICAL HISTORY	Data Component Definition change	Medical History > Exclusion Statement - Problems And Diagnoses definition old spec: "Statements about problems and diagnoses that need to be positively recorded as absent or excluded." new spec: "Statements that positively assert that the patient does not have the problem or diagnosis."	NEHTA	Alignment of specifications	2 Dec 2012
44	7.1.3	MEDICAL HISTORY	Data Component Definition change	Medical History > Exclusion Statement - Procedures definition old spec: "Statements about procedures to positively record their non-performance." new spec: "Statements to positively assert that a certain procedure has not been performed on the patient."	NEHTA	Alignment of specifications	2 Dec 2012
45	7.1.3.1	PROBLEM/DIAGNOSIS	Data Component Definition change	Medical History > Other Medical History Item definition old spec: "A medical history entry which cannot be categorised as a procedure or a problem / diagnosis." new spec: "A medical history entry which cannot be categorised into one of the categories such as Procedure and Problem/Diagnosis."	NEHTA	Alignment of specifications	2 Dec 2012
46	7.1.3.1	PROBLEM/DIAGNOSIS	Data Component Definition change	Problem/Diagnosis > Date of Resolution/Remission definition old spec: "The date or estimated date that the Problem/Diagnosis is resolved or went into remission.." new spec: "The date or estimated date that the problem/diagnosis resolved or went into remission, as indicated/identified by the clinician."	NEHTA	Alignment of specifications	2 Dec 2012
47	7.1.3.2	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	xml fragment change	<!-- Exclusion Statement - Problem/Diagnoses --> entry/observation/code old spec: code="103.16302.102.1.3" new spec: code="103.16302.120.1.3"	NEHTA	Alignment of specifications	2 Dec 2012
48	7.1.3.2	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	xml fragment change	<!-- Exclusion Statement - Problem/Diagnoses --> entry/observation/value old spec: code="1" new spec: code="01"	NEHTA	Alignment of specifications	2 Dec 2012
49	7.1.3.5	OTHER MEDICAL HISTORY ITEM	Code change	OTHER MEDICAL HISTORY ITEM Identifier code old spec: "DG-15513 " new spec: "DG-16627 "	NEHTA	Alignment of specifications	2 Dec 2012
50	7.1.3.5	OTHER MEDICAL HISTORY ITEM	Code change	Other Medical History Item entry/act/code/@code old spec: "102.15513.120.1.1" new spec: "102.16627" (reflected in new doc's xml fragment)	NEHTA	Alignment of specifications	2 Dec 2012
51	7.1.3.5	OTHER MEDICAL HISTORY ITEM	data item added	Other Medical History Item > Medical History Item Time Interval has been added	NEHTA	Alignment of specifications	2 Dec 2012
52	7.1.3.5	OTHER MEDICAL HISTORY ITEM	data item added	Other Medical History Item > Medical History Item Comment has been added	NEHTA	Alignment of specifications	2 Dec 2012
53	7.1.3.5	OTHER MEDICAL HISTORY ITEM	data item removed	Other Medical History Item > DateTime Recorded has been removed	NEHTA	Alignment of specifications	2 Dec 2012
54	7.1.3.5	OTHER MEDICAL HISTORY ITEM	Data Component Definition change	Other Medical History Item definition old spec: "A medical history entry which cannot be categorised as a procedure or a problem/diagnosis." new spec: "A medical history entry which cannot be categorised into one of the categories such as Procedure and Problem/Diagnosis."	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
55	7.1.3.5	OTHER MEDICAL HISTORY ITEM	Data Component Definition change	Other Medical History Item > Medical History Item Description old spec: "The description of the Other Medical History Item." new spec: "A description of the problem, diagnosis, intervention or other medical history item."	NEHTA	Alignment of specifications	2 Dec 2012
56	7.1.3.5	OTHER MEDICAL HISTORY ITEM	xml fragment	fragment <!-- Other Medical History Item --> has more detail consistent with added items above	NEHTA	Alignment of specifications	2 Dec 2012
57	7.1.4	IMMUNISATIONS	Code change	IMMUNISATIONS section identifier code old spec: "S-16600 " new spec: "S-16638 " (also reflected in the	NEHTA	Alignment of specifications	2 Dec 2012
58	7.1.4	IMMUNISATIONS	context change	Immunisations old spec: "ClinicalDocument/component/structuredBody/component[med_hist]/section" new spec: "ClinicalDocument/component/structuredBody/component[imms]/section"	NEHTA	Alignment of specifications	2 Dec 2012
59	7.1.4	IMMUNISATIONS	Section name change	IMMUNISATIONS old spec: "REVIEWED IMMUNISATIONS" new spec uses: "IMMUNISATIONS" This change cascades down to the lower levels including xml fragment	NEHTA	Alignment of specifications	2 Dec 2012
60	7.1.4	IMMUNISATIONS	Data Component Definition change	Immunisations > Administered Immunisation definition old spec: "Details of use, administration, dispensing or other care step relating to a medicine, vaccine or other therapeutic good which may arise from an instruction from a clinician." new spec: "The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult."	NEHTA	Alignment of specifications	2 Dec 2012
61	7.1.4	IMMUNISATIONS	Data Component Definition change	Immunisations > Exclusion Statement - Immunisations definition old spec: "Statements about medications that need to be positively recorded as absent or excluded." new spec: "Statements that positively assert that the patient has not received immunisations."	NEHTA	Alignment of specifications	2 Dec 2012
62	7.1.4	IMMUNISATIONS	xml fragment	<!-- Immunisations Section --> added narrative example: old spec: "<text>Reviewed Immunisations narrative goes here.</text>" new spec: "<text> <table> <thead> <tr> <th>Vaccine Name</th>" etc	NEHTA	Alignment of specifications	2 Dec 2012
63	7.1.4.1	ADMINISTERED IMMUNISATION	Vocab change	Administered Immunisation > Therapeutic Good Identification vocab change old spec: "The set of values is ConceptIDs and Preferred Terms from AMT (Australian Medicines Terminology) concepts which have one of the following modelled relationships: • IS A Medicinal Product Unit of Use (MPUU); • IS A Medicinal Product Pack (MPP); • IS A Trade Product Unit of Use (TPUU); • IS A Trade Product Pack (TPP); • IS A Containered Trade Product Pack (CTPP). Specifically for MPUU: only MPUU concepts that have no child MPUUs are to be included. Where an MPUU concept is a parent of another MPUU, the parent MPUU is to be omitted." new spec: "Australian Medicines Terminology The permissible values are the members of the following AMT reference sets: • 929360061000036106 Medicinal product reference set • 929360081000036101 Medicinal product pack reference set • 929360021000036102 Trade product reference set • 929360041000036105 Trade product pack reference set"	NEHTA	Alignment of specifications	2 Dec 2012
64	7.1.4.1	ADMINISTERED IMMUNISATION	RIM description text	Administered Immunisation RIM Representation text old spec: "The Administered Immunisation data group is described by a SubstanceAdministration which is related to the containing section by an entry. Administered Immunisation Description maps to consumable.manufacturedProduct.manufacturedMaterial.code." new spec: "The Administered Immunisation data group is described by a SubstanceAdministration which is related to the containing section by an entry.."	NEHTA	Alignment of specifications	2 Dec 2012
65	7.1.4.1	ADMINISTERED IMMUNISATION	Data Component Definition change	Administered Immunisation definition old spec: "Details of use, administration, dispensing or other care step relating to a medicine, vaccine or other therapeutic good which may arise from an instruction from a clinician." new spec: "The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult."	NEHTA	Alignment of specifications	2 Dec 2012
66	7.1.4.1	ADMINISTERED IMMUNISATION	Data Component Definition change	Administered Immunisation > Therapeutic Good Identification definition old spec: "The medicine, vaccine or other therapeutic good which was the focus of the action." new spec: "The vaccine which was the focus of the action."	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
67	7.1.4.2	EXCLUSION STATEMENT - IMMUNISATIONS	context added	Section 7.1.4.2 EXCLUSION STATEMENT - IMMUNISATIONS, context has been added old spec: <<nil>> new spec: "Context: ClinicalDocument/component/structuredBody/component[imms]/section "	NEHTA	Alignment of specifications	2 Dec 2012
68	7.1.4.2	EXCLUSION STATEMENT - IMMUNISATIONS	Data Component Definition change	Exclusion Statement - Immunisations definition old spec: "The statement about the absence or exclusion." new spec: "The statement about the absence or exclusion of certain medication."	NEHTA	Alignment of specifications	2 Dec 2012
69	7.1.4.2	EXCLUSION STATEMENT - IMMUNISATIONS	Data Component Definition change	Exclusion Statement - Immunisations > Global Statement definition old spec: "Statements about medications that need to be positively recorded as absent or excluded." new spec: "Statements that positively assert that the patient has not received immunisations."	NEHTA	Alignment of specifications	2 Dec 2012
70	8.4	Entity Identifier	common pattern element added	Entity Identifier - element added old spec: <<nil>> new spec: "ext:asEntityIdentifier/ext:code" & "See <code> for available attributes."	NEHTA	Alignment of specifications	2 Dec 2012

Changes Version 1.1 02 December 2011 date to Version 1.3 02 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. This document describes how an SHS SCS is implemented as a CDA document. Conformance can be claimed to this Implementation Guide, either with regard to instances of Shared Health Summary CDA XML documents, or to systems that consume or produce Shared Health Summary CDA XML documents. When a conformance claim is made, it is made against this document, i.e. 'Shared Health Summary: CDA Implementation Guide v1.3'. to This document describes how a Shared Health Summary SCS is implemented as a CDA document. Conformance claims are not made against this Implementation Guide directly; rather, they are made against additional conformance profiles documented elsewhere. Any document that claims conformance to any derived conformance profile must meet these base requirements.	NEHTA	Document Feedback	02 March 2012
2	1.8	Conformance	Updated Conformance statement	Removed the following statements from the Conformance section. 1. A conformant document has the following properties. 2. It SHALL adhere to all cardinalities as specified in the mappings in this guide. 3. It SHOULD ensure that all the information in the CDA narrative sections is also present as coded entries. Note: it is a base CDA requirement that all data in the entries SHALL be represented in the narrative. 4. A system that produces Shared Health Summary CDA documents may claim conformance if all the documents it produces are conformant to this guide.	NEHTA	Document Feedback	02 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
3	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. It SHALL be valid against the additional conformance requirements that are established in this document. to It SHALL be valid against the additional conformance requirements that are established in this document (i.e. any use of the word “SHALL” in uppercase and bold typeface).	NEHTA	Document Feedback	02 March 2012
4	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. The document SHALL conform to the requirements specified in the CDA Rendering Guide. to The document SHALL conform to the requirements specified in the CDA Rendering Specification.	NEHTA	Document Feedback	02 March 2012
5	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. Any additional content included in the CDA document that is not described by this implementation guide SHALL not qualify or negate content described by this guide and it SHALL be clinically safe for receivers of the document to ignore the non-narrative additions. to Any additional content included in the CDA document that is not described by this implementation guide SHALL not qualify or negate content described by this guide and it SHALL be clinically safe for receivers of the document to ignore the non-narrative additions when interpreting the existing content.	NEHTA	Document Feedback	02 March 2012
6	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. A system that consumes Shared Health Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Note: conformant systems that consume Shared Health Summary CDA documents are not required to process all the structured data entries in the CDA document but they SHALL be able to correctly render the document for endusers when appropriate (see 2.1 Clinical Document Architecture Release 2). to A system that consumes Shared Health Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Conformant systems that consume Shared Health Summary CDA documents are not required to process any or all of the structured data entries in the CDA document but they SHALL be able to correctly render the document for end-users when appropriate (see 2.1 Clinical Document Architecture Release 2).	NEHTA	Document Feedback	02 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
7	1.8	Conformance	Updated Conformance statement	Added the following statements to the conformance section. Conformance Profiles of this document may make additional rules that override this document in regard to 1. Allowing the use of alternative value sets in place of the value sets specified in this document 2. Allowing the use of alternative identifiers in place of the HI Service identifiers 3. Making required data elements and/or section divisions optional	NEHTA	Document Feedback	02 March 2012
8	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. It **SHALL** use vocabularies and codes sets as specified in the mappings, unless the vocabulary has been explicitly stated as: to If the vocabulary has been explicitly stated as 'NS' it must be interpreted as:	NEHTA	Document Feedback	02 March 2012
9	1.9	Known Issues	Removed Known Issue	Removed the following Known Issue 5 CDA Header CDA Header concepts relevant to the creation of a valid CDA document are not defined with clear instruction and guidance on their intended use. i.e. Custodian is mandatory in CDA - what would this be in this document?	NEHTA	Document Feedback	02 March 2012
10	1.9	Known Issues	Added Known Issue	Added the following Known Issue Throughout document While every effort has been taken to ensure that the examples are consistent with consistent with the normative mappings in this message specification, care need to be taken when copying XML examples for implementation and validation.	NEHTA	Document Feedback	02 March 2012
11	10.17	METeOR 291036: Indigenous Status	Updated CodeSystem	Updated CodeSystem from '2.16.840.1.113883.3.879' to '2.16.840.1.113883.3.879.291036' in the Indigenous Status CodeSet table.	NEHTA	Document Feedback	02 March 2012
12	5.1	ClinicalDocument	Updated Example	Removed 'setId' and 'versionNumber' examples from the XML example.	NEHTA	Document Feedback	10 February 2012
13	5.1	ClinicalDocument	Updated mapping and XML example	Updated mapping and XML example from: templateId/@extension="1.1" to: templateId/@extension="1.3"	NEHTA	Document Feedback	21 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
14	5.1	ClinicalDocument	Updated Mapping and XML example fragment	Changed templateId/@root and XML example from. 1.2.36.1.2001.1001.101.100.16565 to 1.2.36.1.2001.1001.101.100.1002.120	NEHTA	Document Feedback	02 March 2012
15	5.1	ClinicalDocument	Updated Mapping table	Changed templateId/@root 'Comments' column from. The healthcare context-specific name of the published Structured Content Specification. to The healthcare context-specific name of the published Shared Health Summary CDA Implementation Guide.	NEHTA	Document Feedback	02 March 2012
16	5.1	ClinicalDocument	Updated Cardinality and comment	Changed ClinicalDocument/templateId cardinality from 1..1 to 1..* in the mapping table. Added the following comment to the mapping table 'Comments' column. One or more template identifiers that indicate constraints on the CDA document that this document conforms to. One of the identifiers must be the templateId that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA Rendering Specification. Systems are not required to recognise any other the template identifiers than the one below in order to understand the document as a [type] but these identifiers may influence how the document must be handled.	NEHTA	Document Feedback	02 March 2012
17	5.1.1	LegalAuthenticator	Updated Mapping reference	Changed all occurrences of 'LegalAuthenticator' in the mapping table to 'legalAuthenticator'.	NEHTA	Document Feedback	02 March 2012
18	6.1.1	DOCUMENT AUTHOR	Updated Mapping	Added the missing Employment element to the mapping table.	NEHTA	Document Feedback	10 February 2012
19	6.1.1	DOCUMENT AUTHOR; Example 6.2	Updated Example	Aligned the Employment XML fragment with the common pattern.	NEHTA	Document Feedback	10 February 2012
20	6.1.1	DOCUMENT AUTHOR	Updated Mapping table	Added 'See common pattern:Entity Identifier' to the 'Document Author > Participant > Entity Identifier' Comments column.	NEHTA	Document Feedback	02 March 2012
21	6.1.2	SUBJECT OF CARE	Updated R-MIM representation	Added 0..1 as cardinality for assignedGeographicArea association.	NEHTA	Document Feedback	02 March 2012
22	7.1.1.1	ADVERSE REACTION	Updated Context	Replaced all occurrences of 'entry/act/code/entryRelationship[rct_evnt]/observation/@code' to 'entry/act/entryRelationship[rct_evnt]/observation/@code'.	NEHTA	Document Feedback	10 February 2012
23	7.1.2.1	KNOWN MEDICATION	Updated definition	Updated definition for 'Known Medication > Clinical Indication' from A reason for ordering the medicine or other therapeutic good. to A reason for ordering the medicine, vaccine or other therapeutic good.	NEHTA	Document Feedback	02 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
24	7.1.2.2	EXCLUSION STATEMENT - MEDICATIONS	Updated definition	Updated definition for 'Exclusion Statement - Medications' from Statement positively asserting that the patient has not been prescribed or is not taking any medication. to Statement positively asserting that the subject of care has not been prescribed or is not taking any medication.	NEHTA	Document Feedback	02 March 2012
25	7.1.3.5	OTHER MEDICAL HISTORY ITEM	Updated R-MIM representation	Added entryRelationship class to the R-MIM diagram.	NEHTA	Document Feedback	10 February 2012
26	7.1.4.1	ADMINISTERED IMMUNISATION	Updated SCS Data component mapping	Renamed 'Sequence Number' to 'Vaccine Sequence Number	NEHTA	Document Feedback	10 February 2012
27	7.1.4.1	ADMINISTERED IMMUNISATION	Updated XML example	Changed <!-- Sequence Number--> to <!-- Vaccine Sequence Number --> in XML example.	NEHTA	Document Feedback	10 February 2012
28	8.4	Entity Identifier	Updated Cardinality	Updated card column text from Cardinality comes from linking parent. to The cardinality of the group comes from the linking parent. The cardinality of the children data elements comes from the R-MIM diagram.	NEHTA	Document Feedback	02 March 2012
29	8.7	Electronic Communication Detail	Updated Vocabulary reference	Updated Vocab column text for 'Electronic Communication Medium' and 'Electronic Communication Usage Code' from AS 5017-2006: Health Care Client Electronic Communication Usage Code> HL7:TelecommunicationAddressUse. to HL7 v3: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse.	NEHTA	Document Feedback	02 March 2012
30	8.7	Electronic Communication Detail	Updated Mapping comments	Added the following text to 'Electronic Communication Medium' and 'Electronic Communication Usage Code' comments column The 'AS 5017-2006: Health Care Client Electronic Communication Usage Code' section explains how to map AS 5017-2006 to HL7 TelecommunicationAddressUse (HL7 TAU) code.	NEHTA	Document Feedback	02 March 2012
31	8.8	Common Pattern; Employment	Added Employment section	Added the missing 'Employment' section.	NEHTA	Document Feedback	10 February 2012
32	8.8	Employment	Added Mapping	Added ext:asEmployment/@classCode mapping to the mapping table.	NEHTA	Document Feedback	02 March 2012
33	8.8	Employment	Updated Mapping	Changed employerOrganization to ext:employerOrganization in the mapping table.	NEHTA	Document Feedback	02 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
34	8.8	Employment	Added Mapping	Added the following statement to the 'Employment Detail > Employer Organisation' row. There is a known issue in NEHTA Participation Data Specification for this logical Data Component's cardinality. Furthermore the corresponding CDA elements ext:asEmployment and ext:employerOrganization doesn't allow the cardinality to be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.	NEHTA	Document Feedback	02 March 2012
35	8.8	Employment	Added Mapping	Added the following statement to the 'Employment Detail > Occupation' row. The corresponding CDA element ext:jobCode doesn't allow the cardinality be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.	NEHTA	Document Feedback	02 March 2012
36	8.8	Employment	Added Mapping	Added mapping for 'Employment' NEHTA logical data component with cardinality as mentioned below Cardinality comes from linking parent.	NEHTA	Document Feedback	02 March 2012
37	8.8	Employment	Updated Mapping	Added the 'Note' text above the Employment Mapping table.	NEHTA	Document Feedback	02 March 2012
38	8.8	Employment	Updated cardinality	Changed cardinality for 'Employment Detail > Employer Organisation' from '1..*' to'0..*'	NEHTA	Document Feedback	02 March 2012
39	Document Version	Throughout the document.	Incremented version number	Incremented version number from 1.1 to 1.3	NEHTA	Bug fix	10 February 2012
40	Page ii	Copyright	Updated Copyright year	Changed year from '2011' to '2012'.	NEHTA	Document Feedback	02 March 2012

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