nehta

e-Referral

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
e-Referral Structured Content Specification	Version 2.1, Issued 09 December 2011
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 e-Referral Structured Content Specification (e-RF SCS) as an HL7 Clinical Document Architecture Release 2 (CDA) XML document. This guide is based on Version 2.1 of the e-RF SCS [NEHT2011bj]. The primary aim of the guide is to take implementers step by step through mapping each data component of the e-RF 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 an e-Referral. The resulting CDA document would be used for the electronic exchange of e-Referrals 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 e-Referral Definition

An e-Referral is defined in the e-RF SCS [NEHT2011bj] as:

> A referral of a subject of care from one health care provider to another.

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]
- It supports legal attestation by the clinician (requiring that a document has been signed manually or electronically by the responsible individual).

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

- 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).

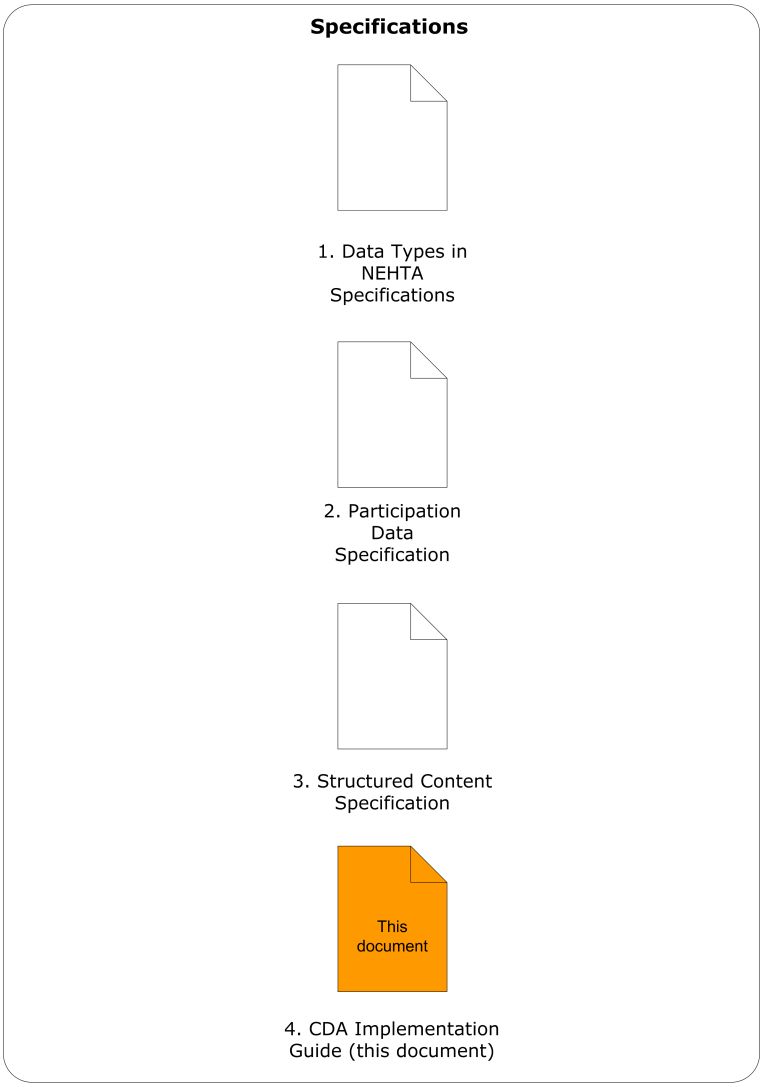
1.4 Intended Audience

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. e-Referral – Structured Content Specification [NEHT2011bj] – clinical content specification describing the logical data structures, data components, and value domains which constitute an e-Referral.

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 an e-Referral 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* e-Referral 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 e-Referral 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
- Making required data elements and/or section divisions optional

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

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.
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.
See the section called “CDA Mapping” for Patient Nominated Contacts - Person > Relationship to Subject of Care	Relationship to Subject of Care is not mapped to CDA.
<code>	The explanation of how to use the code element in the Common Patterns chapter needs to be revisited.
Throughout document	The ids on roles are not clearly explained. The following guidance is given in the comments field of the mapping table: 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. This explanation needs to be clarified.
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.
<time>	Need to give guidance on timezones for time values. This may be something that should be enforced for all time values.
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 e-RF SCS as a conformant HL7 CDA XML document. The e-Referral is built in two parts:

1. A *Structured Content Specification* (SCS), which, in conjunction with its related documents (see Document Map), describes the e-Referral, 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 e-Referral 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 e-RF 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 e-RF 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.

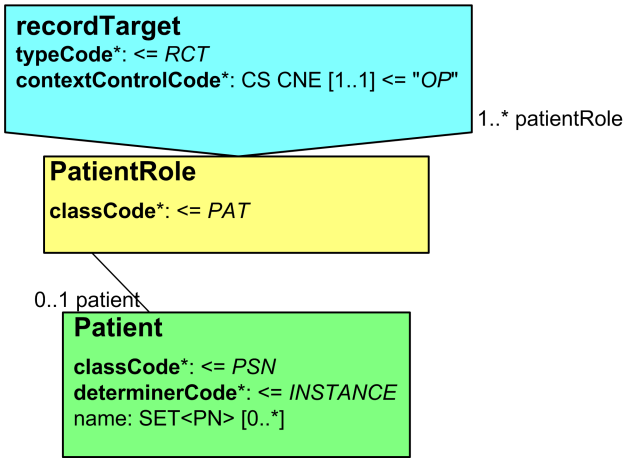


Figure 2.1. Example - Header Part

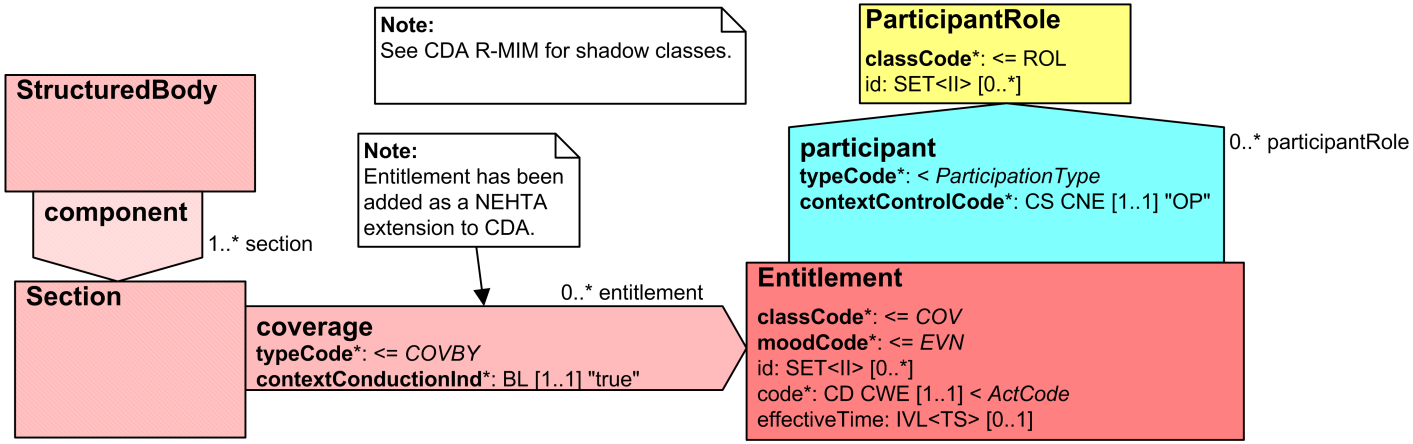


Figure 2.2. Example - Body Part

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	The person the referral is for.	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 3.0 of these extensions are incorporated in the namespace <http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0> 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/4.0>

2.4 W3C XML Schema

This document refers to an accompanying e-Referral CDA W3C XML Schema (referred to in this document as the e-RF 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 e-RF CDA Schema; and
- Australian CDA extensions have been added to the e-RF CDA Schema.

The modified e-RF 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.

e-Referrals that conform to this specification **SHALL** validate against the e-RF 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 e-RF 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 e-Referral Data Hierarchy

The data hierarchy below provides a logical representation of the data structure of the e-RF SCS data components.

The data hierarchy is a logical representation of the data components of an e-Referral, and is not intended to represent how the data contents are represented in a CDA document.

	e-Referral				
CONTEXT					
		SUBJECT OF CARE			1..1
		DOCUMENT AUTHOR			1..1
		DateTime Authored			1..1
		PATIENT NOMINATED CONTACTS			0..*
		DateTime Attested			1..1
CONTENT					
		REFERRAL DETAIL			1..1
			Referral DateTime		1..1
			Referral Reason		1..1
			Referral Validity Duration		1..1
			USUAL GP		0..1
			REFEREE		1..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
			PROCEDURE		0..*
				Procedure Name	1..1
				Comment (Procedure Comment)	0..1

				Start Date/Time (DateTime Started)		0..1
			OTHER MEDICAL HISTORY ITEM			0..*
				Medical History Item Description		1..1
				Medical History Item Time Interval		0..1
				Medical History Item Comment		0..1
		MEDICATIONS				1..1
			EXCLUSION STATEMENT - MEDICATIONS			0..1
				Global Statement		1..1
			MEDICATION INSTRUCTION			0..*
				Medicine (Therapeutic Good Identification)		1..1
				Directions		1..1
		ADVERSE REACTIONS				1..1
			EXCLUSION STATEMENT - ADVERSE REACTIONS			0..1
				Global Statement		1..1
			ADVERSE REACTION			0..*
				Substance/Agent		1..1
				Reaction Event		0..1
					Manifestation	1..*
		DIAGNOSTIC INVESTIGATIONS				0..1
			PATHOLOGY TEST RESULT			0..*
				Test Result Name (Pathology Test Result Name)		1..1
				Diagnostic Service		0..1
				TEST SPECIMEN DETAIL		1..*
					Specimen Tissue Type	0..1
					Collection Procedure	0..1

					ANATOMICAL SITE (Anatomical Location)			0..*
						SPECIFIC LOCATION		0..1
							Name of Location (Anatomical Location Name)	0..1
							Side	0..1
						Description (Anatomical Location Description)		0..1
						Image (Anatomical Location Image)		0..*
					PHYSICAL DETAILS (Physical Properties of an Object)			0..*
						Weight		0..1
						DIMENSIONS		0..1
							Volume	0..1
						Description (Object Description)		0..1
						Image		0..1
					COLLECTION AND HANDLING			0..1
						Sampling Preconditions		0..1
					HANDLING AND PROCESSING			1..1
						Date and Time of Collection (Collection DateTime)		1..1
						Collection Setting		0..1
						Date and Time of Receipt (DateTime Received)		0..1
					IDENTIFIERS			0..1
						Specimen Identifier		0..1
						Parent Specimen Identifier		0..1
						Container Identifier		0..1
				Overall Test Result Status (Overall Pathology Test Result Status)				1..1
				Clinical Information Provided				0..1
				PATHOLOGY TEST RESULT GROUP				0..*

					Result Group Name (Pathology Test Result Group Name)				1..1
					RESULT (INDIVIDUAL PATHOLOGY TEST RESULT)				1..*
						Result Name (Individual Pathology Test Result Name)			1..1
						Result Value (Individual Pathology Test Result Value)			0..1
						Result Value Normal Status (Individual Pathology Test Result Value Normal Status)			0..1
						RESULT VALUE REFERENCE RANGE DETAILS (Individual Pathology Test Result Value Reference Range Details)			0..*
							Result Value Reference Range Meaning (Individual Pathology Test Result Reference Range Meaning)		1..1
							Result Value Reference Range (Individual Pathology Test Result Reference Range)		1..1
						Result Comment (Individual Pathology Test Result Comment)			0..*
						Reference Range Guidance (Individual Pathology Test Result Reference Range Guidance)			0..1
						Result Status (Individual Pathology Test Result Status)			1..1
					RESULT GROUP SPECIMEN DETAIL				0..1
						Specimen Tissue Type			0..1
						Collection Procedure			0..1
						ANATOMICAL SITE (Anatomical Location)			0..*
							SPECIFIC LOCATION		0..1
								Name of Location (Anatomical Location name)	0..1
								Side	0..1
							Description (Anatomical Location Description)		0..1
							Image (Anatomical Location Image)		0..*
						PHYSICAL DETAILS (Physical Properties of an Object)			0..*
							Weight		0..1
							DIMENSIONS		0..1

								Volume	0..1
							Description (Object Description)		0..1
							Image		0..1
						COLLECTION AND HANDLING			0..1
							Sampling Preconditions		0..1
						HANDLING AND PROCESSING			1..1
							Date and Time of Collection (Collection DateTime)		1..1
							Collection Setting		0..1
							Date and Time of Receipt (DateTime Received)		0..1
						IDENTIFIERS			0..1
							Specimen Identifier		0..1
							Parent Specimen Identifier		0..1
							Container Identifier		0..1
				Pathological Diagnosis					0..*
				Conclusion (Pathology Test Conclusion)					0..1
				Test Result Representation					0..1
				Test Comment					0..1
				TEST REQUEST DETAILS					0..*
					Test Requested Name				0..*
					Laboratory Test Result Identifier				0..1
				Pathology Test Result DateTime					1..1
			IMAGING EXAMINATION RESULT						0..*
				Examination Result Name (Imaging Examination Result Name)					1..1
				Modality (Imaging Modality)					0..1
				ANATOMICAL SITE (Anatomical Location)					0..*

					SPECIFIC LOCATION		0..1
					Name of Location (Anatomical Location Name)		0..1
					Side		0..1
					Description (Anatomical Location Description)		0..1
					Image (Anatomical Location Image)		0..*
				Overall Result Status (Imaging Examination Result Status)			1..1
				Clinical Information Provided			0..1
				Findings			0..1
				IMAGING EXAMINATION RESULT GROUP			0..*
					Result Group Name (Imaging Examination Result Group Name)		1..1
					RESULT (Individual Imaging Examination Result)		1..*
						Result Name (Individual Imaging Examination Result Name)	1..1
						Result Value (Imaging Examination Result Value)	0..1
						Result Value Normal Status (Imaging Examination Result Normal Status)	0..1
						RESULT VALUE REFERENCE RANGE DETAILS (Imaging Examination Result Value Reference Range Details)	0..*
						Result Value Reference Range Meaning (Imaging Examination Result Value Reference Range Meaning)	1..1
						Result Value Reference Range (Imaging Examination Result Value Reference Range)	1..1
						Result Comment	0..*
					RESULT GROUP ANATOMICAL SITE (Anatomical Location)		0..1
						SPECIFIC LOCATION	0..1
						Name of Location (Anatomical Location Name)	0..1
						Side	0..1
						Description (Anatomical Location Description)	0..1
						Image (Anatomical Location Image)	0..*

				Examination Result Representation			0..1
				EXAMINATION REQUEST DETAILS			0..*
					Examination Requested Name		0..*
					DICOM Study Identifier		0..1
					Report Identifier		0..1
					Image Details		0..*
						Image Identifier	0..1
						DICOM Series Identifier	0..1
						View (Image View name)	0..1
						Postion (Subject Position)	0..1
						Image DateTime	0..1
						Image	0..1
				Imaging Examination Result DateTime			1..1
			REQUESTED SERVICE				0..*
				Requested Service Description			1..1
				DateTime Service Scheduled			0..1
				Service Commencement Window			0..1
				Service Booking Status			1..1
				Subject of Care Instruction Description			0..1
				SERVICE PROVIDER			0..1
				Requested Service DateTime			1..1

4 Administrative Observations

The e-RF 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.

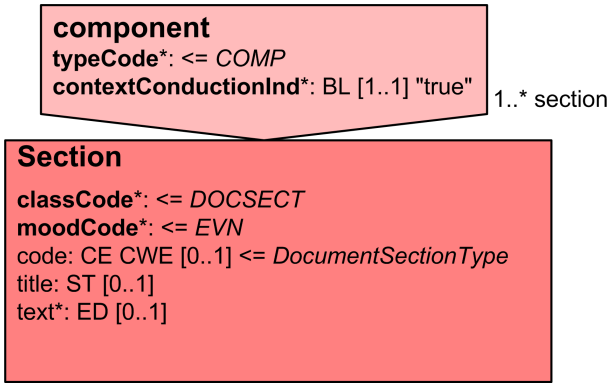


Figure 4.1. Administrative Observations

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 e-RF 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
InformationRecipient	Optional	0..*
Custodian	Essential	1..1

CDA R-MIM Representation

Figure 5.1, “ClinicalDocument”

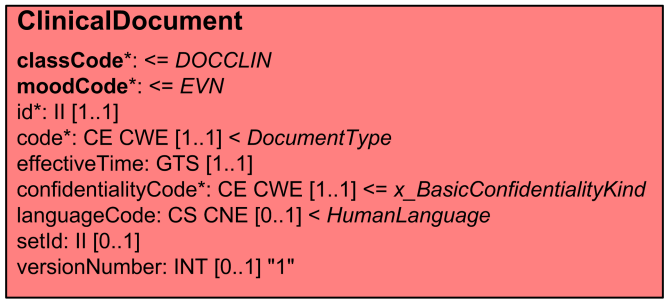


Figure 5.1. ClinicalDocument

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="1.2.36.1.2001.1001.101.100.1002.2"**		1..1		docType	The healthcare context-specific name of the published e-Referral CDA Implementaion Guide.
ClinicalDocument/templateId/**@extension="2.2"**		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 referral of a subject of care from one health care provider to another.
ClinicalDocument/code/**@code="57133-1"**					
ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**					
ClinicalDocument/code/**@codeSystemName="LOINC"**					
ClinicalDocument/code/**@displayName="Referral note"**					
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 Clinical-Document.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/**setId**	Represents an identifier that is common across all document revisions.	0..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.		
ClinicalDocument/**versionNumber/@value**	An integer value used to version successive replacement documents.	0..1			
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="1.2.36.1.2001.1001.101.100.1002.2" extension="2.2"/>
 <id root="8BC3406A-B93F-11DE-8A2B-6A1C56D89593"/>
 <code code="57133-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Referral note" />
 <effectiveTime value="200910201235"/>
 <confidentialityCode nullFlavor="NA"/>
 <languageCode code="en-AU"/>
 <setId root="6C6BA56C-BC92-11DE-A170-D85556D89593"/>
 <versionNumber value="1"/>
 <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.

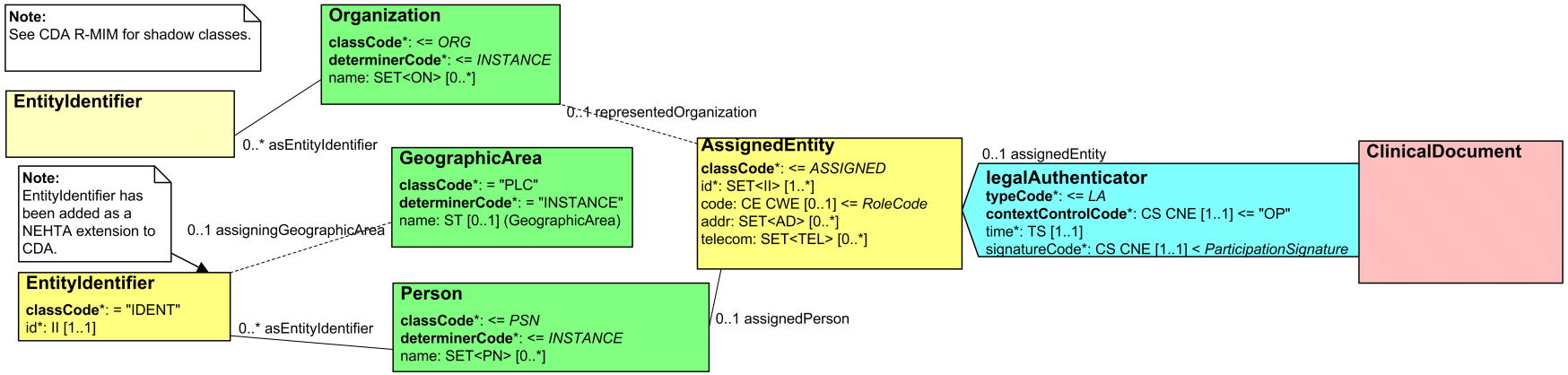


Figure 5.2. LegalAuthenticator

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 InformationRecipient

Identification

Name	Information Recipient
Definition	Represents a recipient who should receive a copy of the document.

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Optional	0..*

CDA R-MIM Representation

Figure 5.3, “InformationRecipient”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 INFORMATION RECIPIENT data group maps to the CDA Header element informationRecipient. The informationRecipient participation class represents who should receive a copy of the document. The role is IntendedRecipient and is represented by the Person and/or Organization entities.

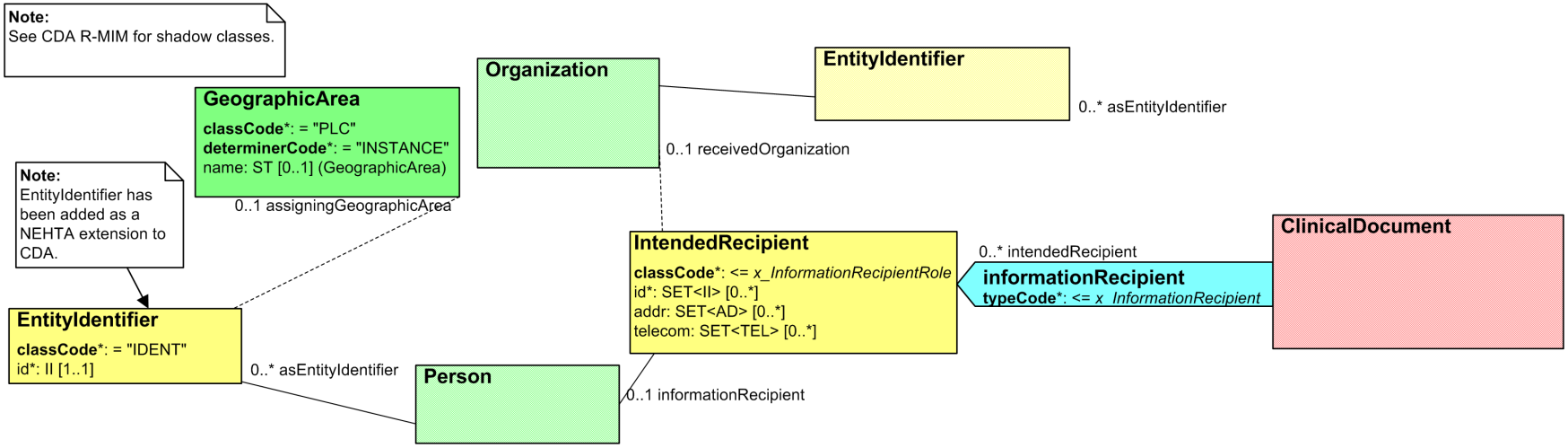


Figure 5.3. InformationRecipient

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.

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
informationRecipient	Represents a recipient who should receive a copy of the document.	0..*		
informationRecipient/**@typeCode**	Type of recipient	1..1	**PRCP** (primary recipient) [default]: Recipient to whom the document is primarily directed. **TRC** (secondary recipient): A secondary recipient to whom the document is directed.	
informationRecipient/intendedRecipient/**id**	A unique identifier for the player entity in this role.	0..*	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.	
informationRecipient/**intendedRecipient**	A informationRecipient 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		
informationRecipient/intendedRecipient/**informationRecipient**	The entity playing the role (intendedRecipient) is a person.	0..1		
informationRecipient/intendedRecipient/informationRecipient/**<Entity Identifier>**	The entity identifier of the person.	0..*		See common pattern: Entity Identifier.
informationRecipient/intendedRecipient/**<Address>**	A postal address for the entity (informationRecipient) while in the role (intendedRecipient).	0..*		See common pattern: Address.
informationRecipient/intendedRecipient/**<Electronic Communication Detail>**	A telecommunication address for the entity (informationRecipient) while in the role (intendedRecipient).	0..*		See common pattern: Electronic Communication Detail.

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

CDA Schema Data Element	Definition	Card	Vocab	Comments
informationRecipient/intendedRecipient/informationRecipient/**<Person Name>**	A non-unique textual identifier or moniker for the entity (information-Recipient).	0..*		See common pattern: Person Name.
informationRecipient/intendedRecipient/**receivedOrganization**	The entity scoping the role (intendedRecipient).	0..1		
informationRecipient/intendedRecipient/receivedOrganization/**<Entity Identifier>**	A unique identifier for the scoping entity (represented organization) in this role (intendedRecipient).	0..*		See common pattern: Entity Identifier.
informationRecipient/intendedRecipient/receivedOrganization/**name**	A non-unique textual identifier or moniker for the entity (represente-dOrganization).	0..*		

Example

Example 5.3. InformationRecipient 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 -->

 …

 <!-- Start Information Recipient - Primary -->
 <informationRecipient typeCode="PRCP">
  <intendedRecipient>

   <!-- ID is used for system purposes such as matching -->
   <id root="8AF5F8F4-0CD0-11E0-AC48-9350DFD72085"/>

   <addr use="WP">
    <streetAddressLine>1 Primary Care Provider Street</streetAddressLine>
    <city>Nehtaville</city>
    <state>QLD</state>
    <postalCode>5555</postalCode>
    <additionalLocator>32568931</additionalLocator>
    <country>Australia</country>
   </addr>
   <telecom use="WP" value="tel:0712341245"/>
   <informationRecipient>

    <!-- Person Name -->
    <name>
     <prefix>Dr.</prefix>
     <given>Information</given>
     <family>Recipient</family>
    </name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003611222567890"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>

   </informationRecipient>

   <receivedOrganization>
    <name>Information Recipient Clinic Name</name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621771167888"/>
```

```
      <ext:assigningGeographicArea classCode="PLC">
       <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
     </ext:asEntityIdentifier>

   </receivedOrganization>
  </intendedRecipient>
 </informationRecipient>
 <!-- End Information Recipient - Primary -->

 …

 <!-- End CDA Header -->

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

 …

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

5.1.3 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 5.4, “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.

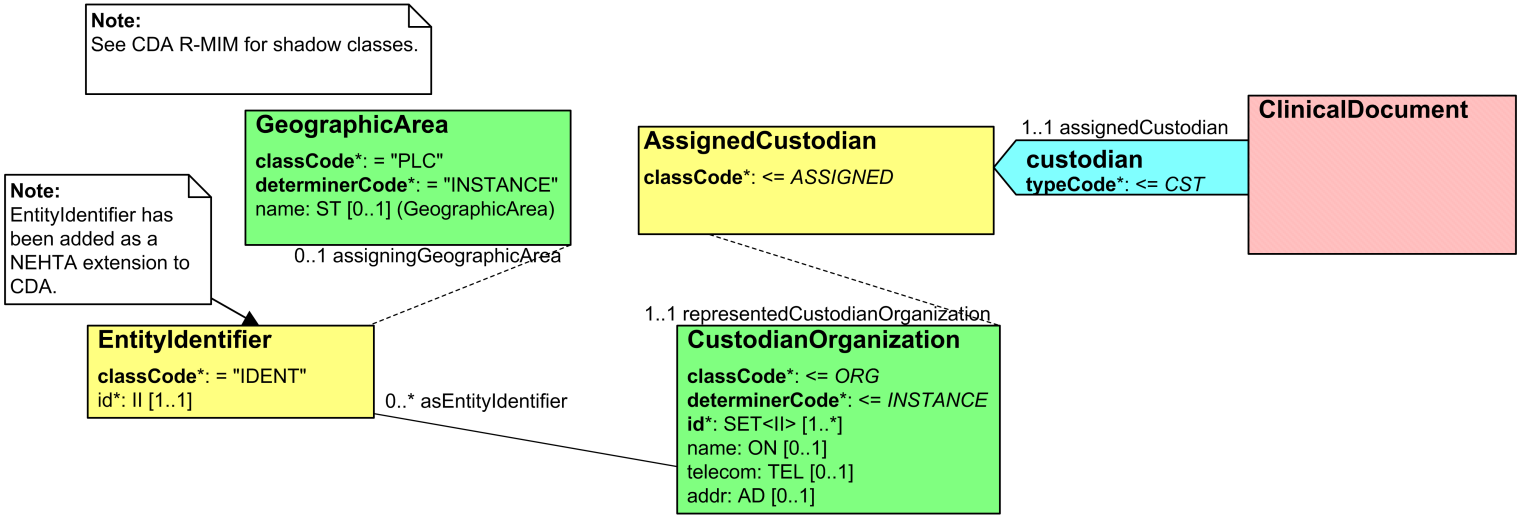


Figure 5.4. Custodian

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 5.4. 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 e-Referral

Identification

Name	e-Referral
Metadata Type	Structured Document
Identifier	SD-21000

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
	PATIENT NOMINATED CONTACTS	Optional	0..*

CDA R-MIM Representation

Figure 6.1, “CDA Header Model for e-Referral 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.

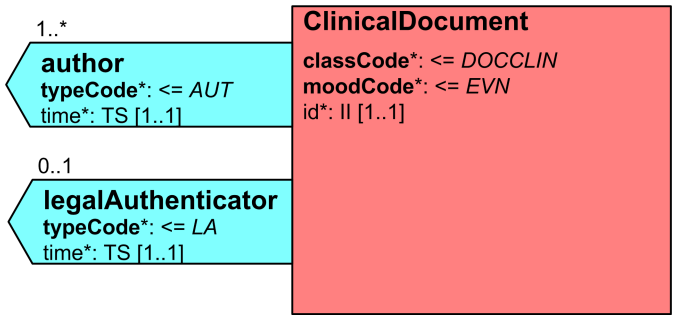


Figure 6.1. CDA Header Model for e-Referral Context

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
e-Referral	A referral of a subject of care from one health care provider to another.	1..1	ClinicalDocument/**code**		
			ClinicalDocument/code/**@code="57133-1"**		
			ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**		
			ClinicalDocument/code/**@codeSystemName="LOINC"**		
			ClinicalDocument/code/**@displayName="Referral note"**		
			ClinicalDocument/**effectiveTime**		Document creation time.
e-Referral > **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.
e-Referral > ***Subject of Care***	See: SUBJECT OF CARE				
e-Referral > ***Document Author***	See: DOCUMENT AUTHOR				
e-Referral > ***Patient Nominated Contacts***	See: PATIENT NOMINATED CONTACTS				
e-Referral > **DateTime Authored**	The date or date and time that authoring of the e-Referral by the authoring healthcare provider is started or done.	1..1	ClinicalDocument/**author/time/@value**		See <time> for available attributes.

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

Example 6.1. e-Referral 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="57133-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Referral Note" />
 <effectiveTime value="200910201235"/>

   …

   <!-- Begin CDA Header -->

   …

      <!-- Begin Author -->
 <author>

  <!-- DateTime Authored -->
  <time value="200910201235+10000"/>

 </author>
 <!-- End Author -->

   …

 <!-- 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
	e-Referral	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.

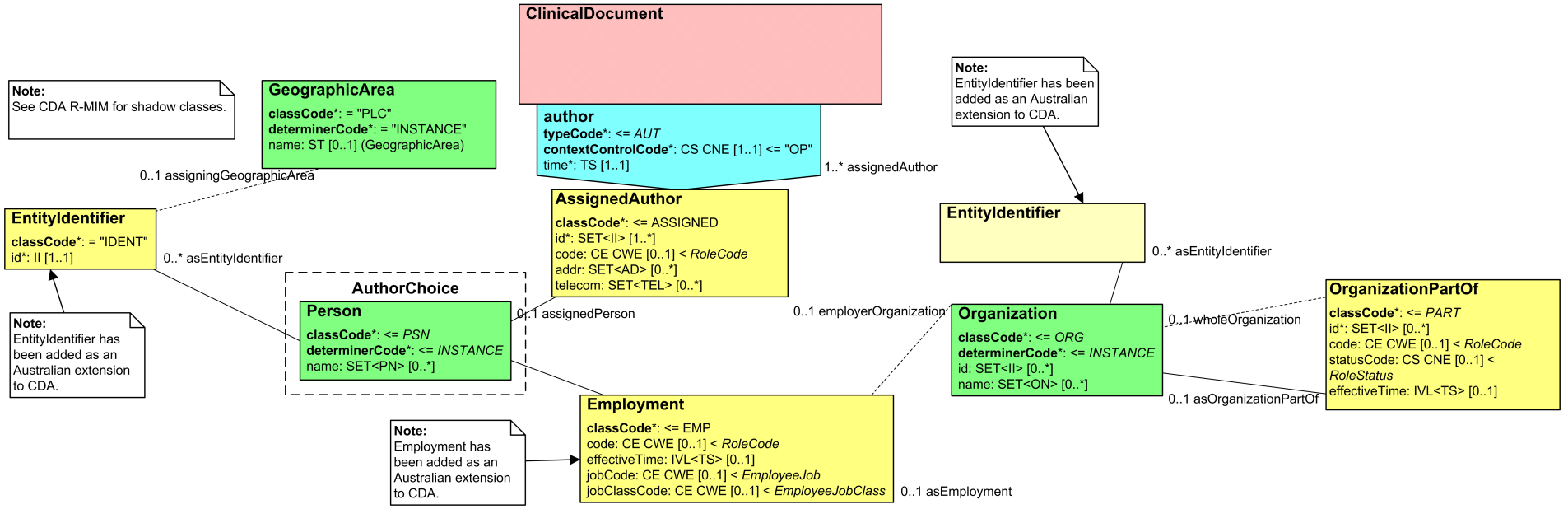


Figure 6.2. Document Author

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 made the referral.	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 e-Referral > DateTime 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 Document Author -->
 <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 Document Author -->

    …

    <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
	e-Referral	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 a SUBJECT OF CARE, Patient.deceasedTime has been added as an Australian CDA extension.

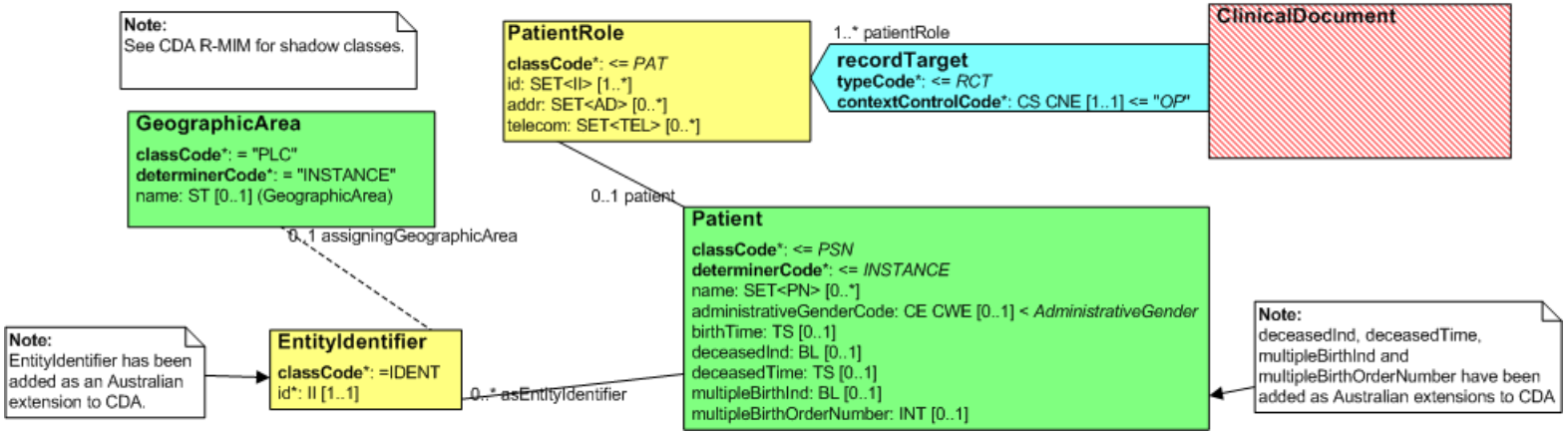


Figure 6.3. Subject of Care - Header Data Elements

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*).

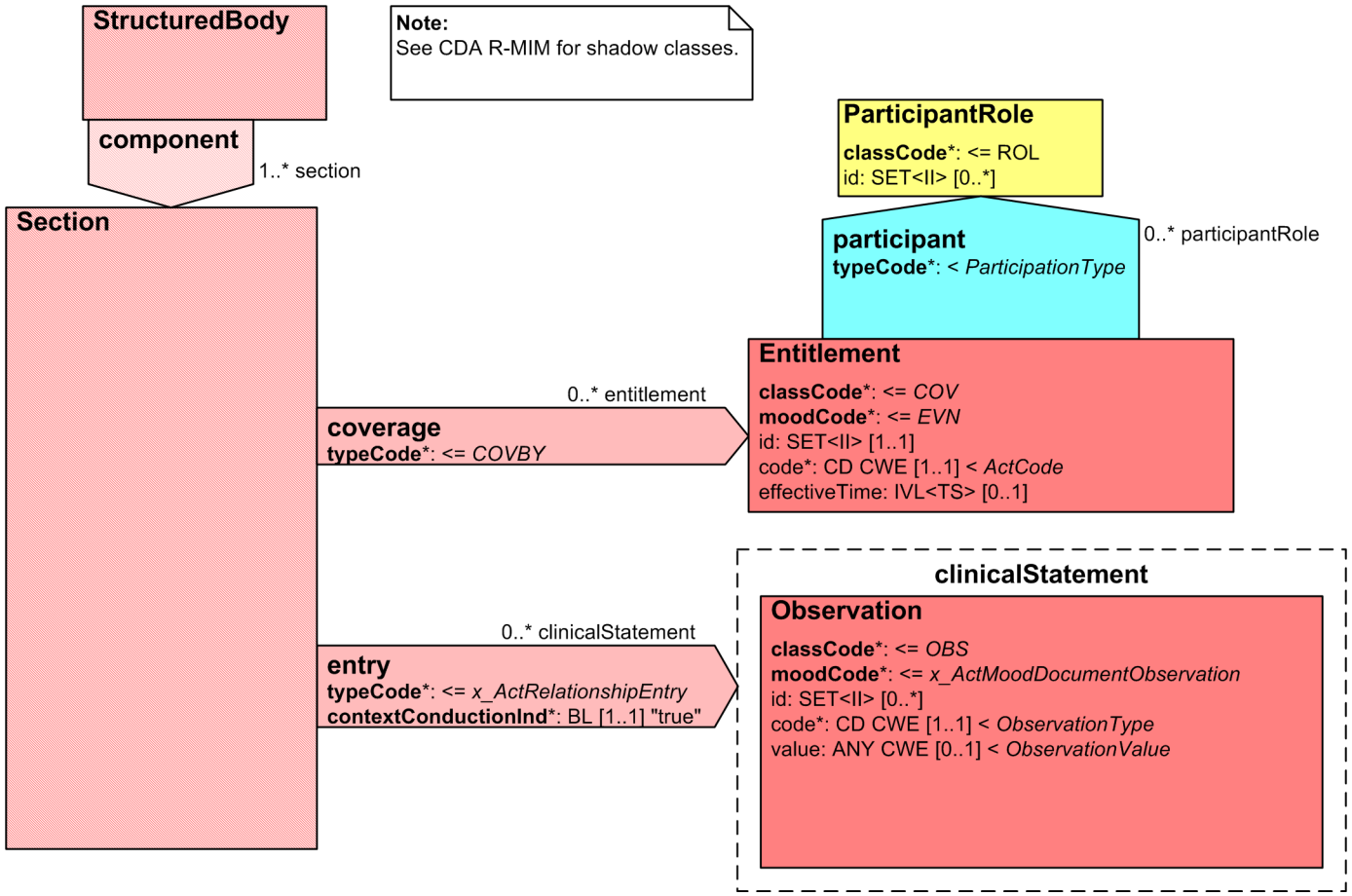


Figure 6.4. Subject of Care - Body Data Elements

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	The person the referral is for.	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).
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" .

[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 > **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.	1..*	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.
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	

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**	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/State/Territory 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 value="54" unit="a" xsi:type="PQ"/>
 </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>
```

6.1.3 PATIENT NOMINATED CONTACTS

Identification

Name	Patient's Nominated Contacts
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Optional	0..*

6.1.3.1 PATIENT NOMINATED CONTACTS - PERSON

CDA R-MIM Representation

Figure 6.5, “Patient's Nominated Contacts - Person” 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 PATIENT NOMINATED CONTACTS - PERSON data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (NEHTA CDA Extension) which is associated to the associatedEntity.

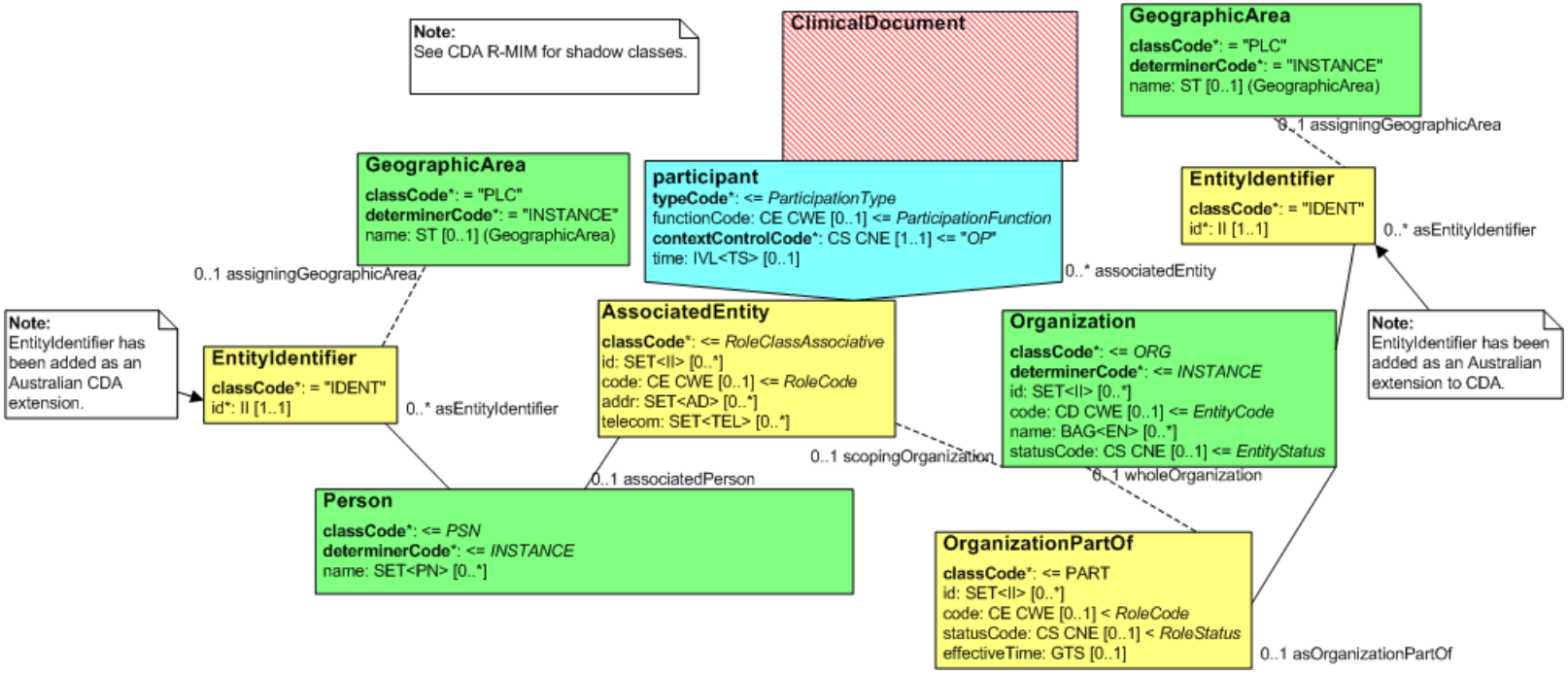


Figure 6.5. Patient's Nominated Contacts - Person

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Patient Nominated Contacts - Person	Details pertaining to the individual(s) nominated to act as the contact to receive information about the subject of care.	0..*	**participant**		
Patient Nominated Contacts - Person > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="IRCP"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to “Patient Nominated Contacts”.	
Patient Nominated Contacts - Person > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/@classCode="CON"**		See <code> for available attributes.
			participant/associatedEntity/**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.	
n/a	n/a	1..1	participant/associatedEntity/**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.
Patient Nominated Contacts - Person > **Participant**	n/a	1..1	participant/associatedEntity/**associatedPerson**		
Patient Nominated Contacts - Person > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	0..*	participant/associatedEntity/associatedPerson/**<Entity Identifier>**		See common pattern: Entity Identifier.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Patient Nominated Contacts - Person > 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.	0..*	participant/associatedEntity/**<Address>**		See common pattern: Address.
Patient Nominated Contacts - Person > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Patient Nominated Contacts - Person > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Patient Nominated Contacts - Person > 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.
Patient Nominated Contacts - Person > 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..*	participant/associatedEntity/associatedPerson/**<Person Name>**		See common pattern: Person Name.
Patient Nominated Contacts - Person > Participant > Person or Organisation or Device > Person > **Relationship to Subject of Care**	The relationship of a participant to a subject of care (patient).	1..1	See: Known Issues		

Example 6.4. Patient's Nominated Contacts Person 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 Patients Nominated Contact Person -->
<participant typeCode="IRCP">
  <associatedEntity classCode="CON">

   <!-- ID is used for system purposes such as matching -->
   <id root="8AAC64FA-42CC-11E0-8FC0-32D2DFD72085"/>

   <!-- Role -->
   <code code="133932002"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT"
    codeSystemVersion="20090731"
    displayName="Caregiver (Person)"/>

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>66 Caregiver 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:0733333333"/>

   <!-- Person Name -->
   <associatedPerson>
    <name>
     <prefix>Mr.</prefix>
     <family>Caregiver</family>
    </name>


    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I"
      root="1.2.36.1.2001.1003.0.800121123457755"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>

   </associatedPerson>
  </associatedEntity>
 </participant>
```

```
 <!-- End Patients Nominated Contact Person -->
 ...
  <!-- End CDA Header -->

</ClinicalDocument>
```

6.1.3.2 PATIENT NOMINATED CONTACTS - ORGANISATION

CDA R-MIM Representation

Figure 6.6, “Patient's Nominated Contacts - Organisation” 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 PATIENT NOMINATED CONTACTS - ORGANISATION data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (NEHTA CDA Extension) which is associated to the associatedEntity.

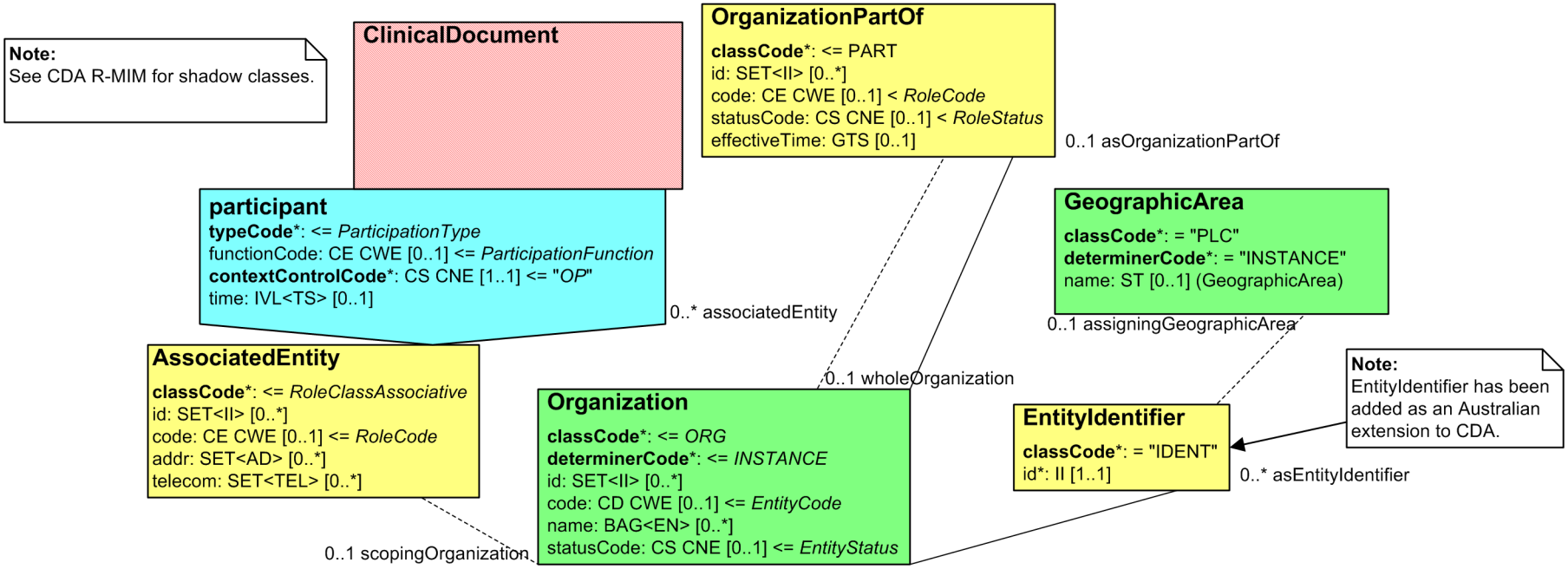


Figure 6.6. Patient's Nominated Contacts - Organisation

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Patient Nominated Contacts - Organisation	Details pertaining to the organisation nominated to act as the contact to receive information about the subject of care.	0..*	**participant**		
Patient Nominated Contacts - Organisation > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="IRCP"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to “Patient Nominated Contacts”.	
Patient Nominated Contacts - Organisation > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/@classCode="CON"**		
			participant/associatedEntity/**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	participant/associatedEntity/**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.
Patient Nominated Contacts - Organisation > **Participant**	n/a	1..1	participant/associatedEntity/**scopingOrganization**		
Patient Nominated Contacts - Organisation > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	0..*	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**		See common pattern: Entity Identifier.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Patient Nominated Contacts - Organisation > 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.	0..*	participant/associatedEntity/**<Address>**		See common pattern: Address.
Patient Nominated Contacts - Organisation > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Patient Nominated Contacts - Organisation > 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 an ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Patient Nominated Contacts - Organisation > Participant > Person or Organisation or Device > **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 participant/associatedEntity/associatedPerson.
Patient Nominated Contacts - Organisation > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..1	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/**name**		
Patient Nominated Contacts - Organisation > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	participant/associatedEntity/scopingOrganization/**name**		
Patient Nominated Contacts - Organisation > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 6.5. Patient's Nominated Contacts - Organisation 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 Patients Nominated Contact Organisation -->
 <participant typeCode="IRCP">
  <associatedEntity classCode="CON">

   <!-- ID is used for system purposes such as matching -->
   <id root="3C788150-42E1-11E0-B7D8-16E6DFD72085"/>

   <!-- Role -->
   <code code="42665001"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT"
    codeSystemVersion="20090731"
    displayName="Nursing Home"/>

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>66 Caregiver 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:0733333333"/>

   <!-- Organisation -->
   <scopingOrganization>

    <!-- Department/Unit -->
    <name>Nursing Home</name>

    <asOrganizationPartOf>
     <wholeOrganization>

      <!-- Organisation Name -->
      <name use="ORGB">Nursing Home Group</name>

      <!-- Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
       <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.800362123117734"/>
       <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
       </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
```

```
        </wholeOrganization>
       </asOrganizationPartOf>

      </scopingOrganization>

     </associatedEntity>
    </participant>
    <!-- End  Patients Nominated Contact Organisation -->

    ...

     <!-- End CDA Header -->


</ClinicalDocument>
```

7 Content Data Specification - CDA Mapping

7.1 e-Referral

Identification

Name	e-Referral
Metadata Type	Structured Document
Identifier	SD-21000

Relationships

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

Data Type	Name	Obligation	Occurrence
	REFERRAL DETAIL	Essential	1..1
	MEDICAL HISTORY	Essential	1..1
	MEDICATIONS	Essential	1..1
	ADVERSE REACTIONS	Essential	1..1
	DIAGNOSTIC INVESTIGATIONS	Optional	0..1

CDA R-MIM Representation

Figure 7.1, “e-Referral” 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 e-Referral 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.

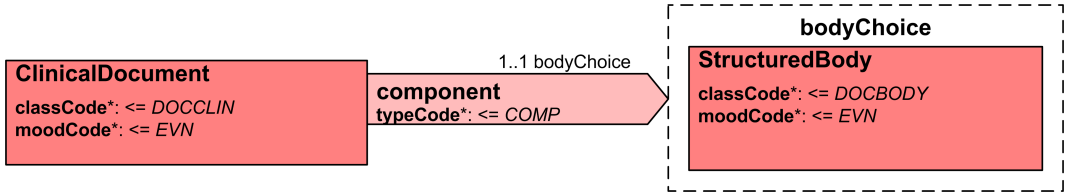


Figure 7.1. e-Referral

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
e-Referral	A referral of a subject of care from one health care provider to another.	1..1	**ClinicalDocument**		
CDA Body Level 2 Data Elements					
e-Referral (Body)	See above.	1..1	ClinicalDocument/**component/structuredBody**		

Example 7.1. e-Referral 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 REFERRAL DETAIL

Identification

Name	Referral Detail
Metadata Type	Data Group
Identifier	DG-16347

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	REFEREE	Essential	1..1
	USUAL GP	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Essential	1..1

CDA R-MIM Representation

Figure 7.2, “Referral Detail” 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 Referral Detail data group is mapped to a Section and then an Act, the Referral Validity Duration is mapped to the effective time of this Act. The Referral DateTime is mapped to the top level of the CDA document to ClinicalDocument.effectiveTime (not shown in model representation below). The Referral Reason is represented by a Reason observation related to the Referral Detail Act.

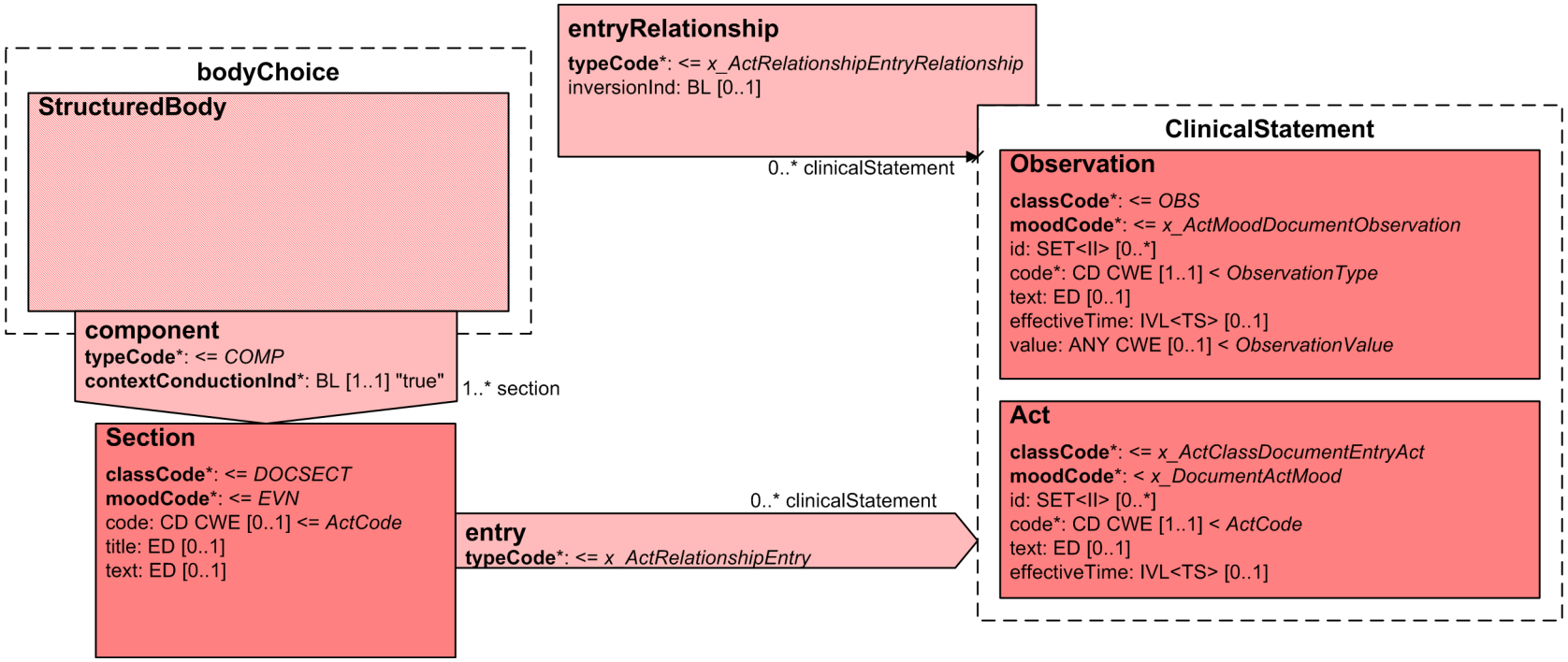


Figure 7.2. Referral Detail

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		
Referral Detail	This section captures detailed information about the clinical referral.	1..1	**component[ref_det]/section**		
			component/[ref_det]/section/**code**		
			component/[ref_det]/section/**@code="102.16347"**		
			component/[ref_det]/section/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component/[ref_det]/section/**@codeSystemName="NCTIS Data Components"**		
			component/[ref_det]/section/**@displayName="Referral Detail"**		
			component/[ref_det]/section/**title="Referral Detail"**		
			component/[ref_det]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[ref_det]/section		
Referral Detail > **Referral DateTime**	The date/time when the Referral document was sent.	1..1	**entry[ref_time]**		
			entry[ref_time]/**observation**		
			entry[ref_time]/observation/**@classCode="OBS"**		
			entry[ref_time]/observation/**@moodCode="EVN"**		
			entry[ref_time]/observation/**code**		
			entry[ref_time]/observation/code/**@code="103.16620"**		
			entry[ref_time]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[ref_time]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[ref_time]/observation/code/**@displayName="Referral DateTime"**		
			entry[ref_time]/observation/**value:TS**		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Referral Detail > **Referral Reason**	A narrative of the reasons for the referral, including the presenting problems, clinical presentation, etc.	1..1	**entry[ref_rea]**		
			entry[ref_rea]/**observation**		
			entry[ref_rea]/observation/**@classCode="OBS"**		
			entry[ref_rea]/observation/**@moodCode="EVN"**		
			entry[ref_rea]/observation/**code**		
			entry[ref_rea]/observation/code/**@code="42349-1"**		
			entry[ref_rea]/observation/code/**@codeSystem="2.16.840.1.113883.6.1"**		
			entry[ref_rea]/observation/code/**@codeSystemName="LOINC"**		
			entry[ref_rea]/observation/code/**@displayName="Reason for referral"**		
			entry[ref_rea]/observation/**value:ST**		
Referral Detail > **Referral Validity Duration**	The length of time the referral is valid from the date of the first patient/specialist encounter.	1..1	**entry[ref_val]**		
			entry[ref_val]/**observation**		
			entry[ref_val]/observation/**@classCode="OBS"**		
			entry[ref_val]/observation/**@moodCode="EVN"**		
			entry[ref_val]/observation/**code**		
			entry[ref_val]/observation/code/**@code="103.16622"**		
			entry[ref_val]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[ref_val]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[ref_val]/observation/code/**@displayName="Referral Validity Duration"**		
			entry[ref_val]/observation/**value:IVL_TS**		See <time> for available attributes.
Referral Detail > **Usual GP**	The medical practitioner nominated by the subject of care as his or her “usual GP”.	0..1	See: USUAL GP		Used only if author is not the patient's usual general practitioner.
Referral Detail > **Referee**	The specialist to whom the subject of care is being referred.	1..1	See: REFEREE		See REFEREE. Use only if different to information recipient.

Example 7.2. Referral Detail 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>

     ...

     <!-- Referral Detail -->
   <component>
    <section>
     <code code="102.16347" codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components" displayName="Referral Detail" />
     <title>Referral Detail</title>
     <text>Referral Detail narrative goes here.</text>

     <!-- Referral DateTime -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16620" codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components" displayName="Referral DateTime" />
       <value xsi:type="TS" value="201104271000+1000" />
      </observation>
     </entry>
     <!-- End Referral DateTime -->

     <!-- Referral Reason -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="42349-1" codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC" displayName="Reason for referral" />
       <value xsi:type="ST">Referral reason goes here.</value>
      </observation>
     </entry>
     <!-- End Referral Reason -->

     <!-- Referral validity Duration -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16622" codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components" displayName="Referral Validity Duration" />
       <value xsi:type="IVL_TS">
        <low value="20110427" />
        <high value="20110504" />
       </value>
      </observation>
     </entry>
     <!-- Referral validity Duration -->
```

```
    </section>
   </component>
   <!-- End Referral Detail -->

   ...

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

7.1.1.1 REFEREE

Identification

Name	REFEREE
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Essential	1..1

7.1.1.1.1 REFEREE - PERSON

CDA R-MIM Representation

Figure 7.3, “Referee” 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 Referee data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (NEHTA CDA Extension) which is associated to the associatedEntity. Employment detail is mapped to the NEHTA CDA Extension Employment.

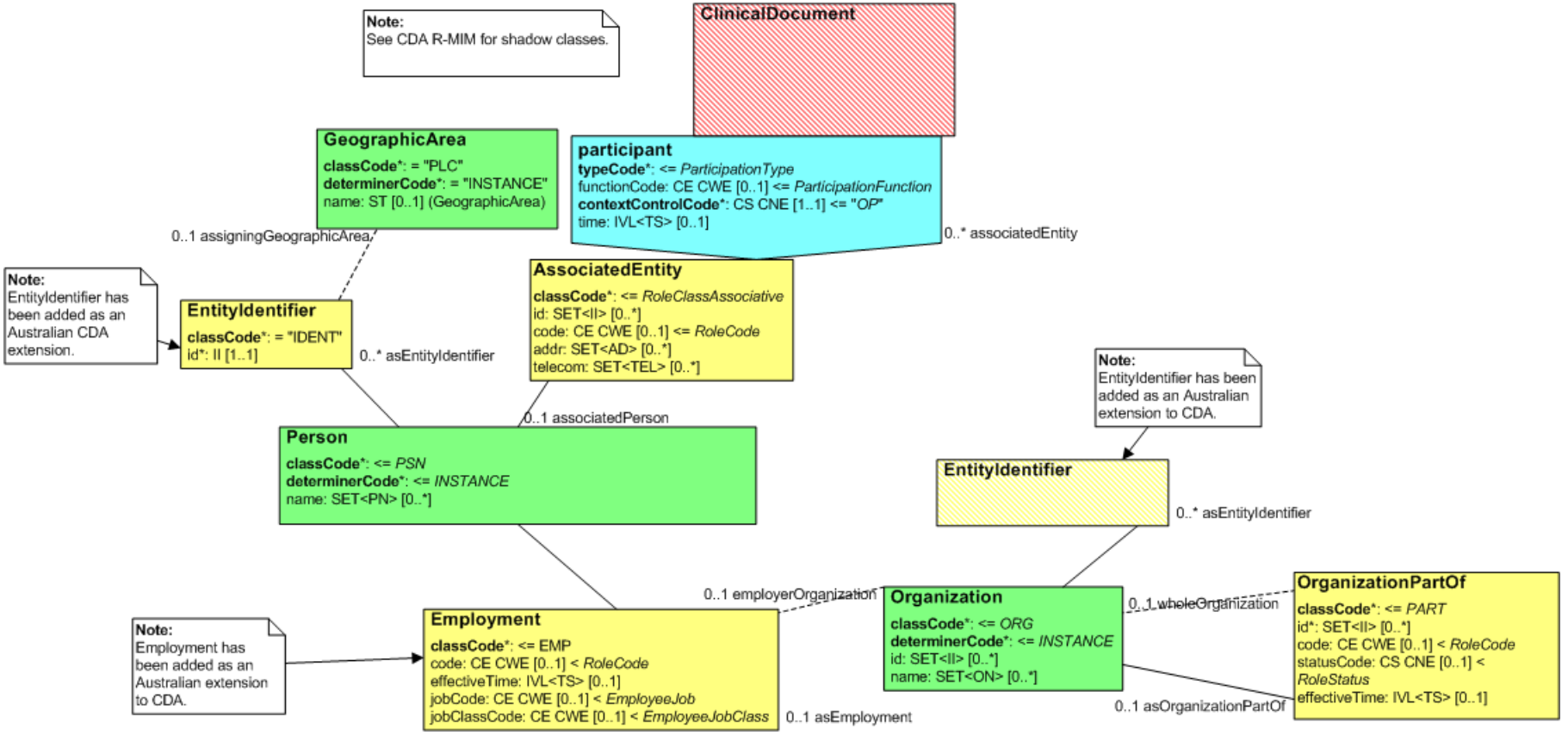


Figure 7.3. Referee

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Referee	The specialist to whom the subject of care is being referred.	1..1	**participant**		
Referee > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="REFT"**	Participation Type **SHALL** have an implementation-specific value equivalent to “Referee”.	Not mapped directly, encompassed implicitly in typeCode="REFB"
Referee > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
			participant/associatedEntity/**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	0..1	participant/associatedEntity/**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.	
Referee > **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	participant/associatedEntity/**associatedPerson**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Referee > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/associatedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Referee > 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..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Referee > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Referee > 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.
Referee > 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 participant/associatedEntity/assignedPerson.
Referee > 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..*	participant/associatedEntity/associatedPerson/**<Person Name>**		See common pattern: Person Name.
Referee > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	1..1	participant/associatedEntity/associatedPerson/**<Employment>**		See common pattern: Employment.

Example 7.3. Referee - Person 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 Referee (Person) -->
 <participant typeCode="REFT">
  <associatedEntity classCode="PROV">

   <!-- ID is used for system purposes such as matching -->
   <id root="7D5A62DE-40A6-11E0-B811-1B13E0D72085"/>

   <!-- Role -->
   <code code="253399"
     codeSystem="2.16.840.1.113883.13.62"
     codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations,
            First Edition, Revision 1"
     displayName="Specialist Physicians NEC" />

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>55 Specialist Road</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:0722222222"/>

   <associatedPerson>

    <!-- Person Name -->
    <name use="L">
     <prefix>Dr.</prefix>
     <family>Specialist</family>
    </name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003614444567890"/>
     <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>

   </associatedPerson>

  </associatedEntity>
 </participant>
 <!-- End Referee-->

 ...

  <!-- End CDA Header -->


</ClinicalDocument>
```

7.1.1.1.2 REFEREE - ORGANISATION

CDA R-MIM Representation

Figure 7.4, “Referee” 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 Referee (ORGANISATION) data group is related to its context of ClinicalDocument by the participant Participation class. A participant is an organisation in the role of associatedEntity (AssociatedEntity class). The entity playing the role is scopingOrganization (Organization class). The department/unit name is mapped to scopingOrganization.name and the organisation name is mapped to the wholeOrganization (Organization class) which represents a whole-part relationship using the OrganizationPartOf role. The organisation entity identifier is represented by the EntityIdentifier class (Australian CDA extension) which is associated to the wholeOrganization.

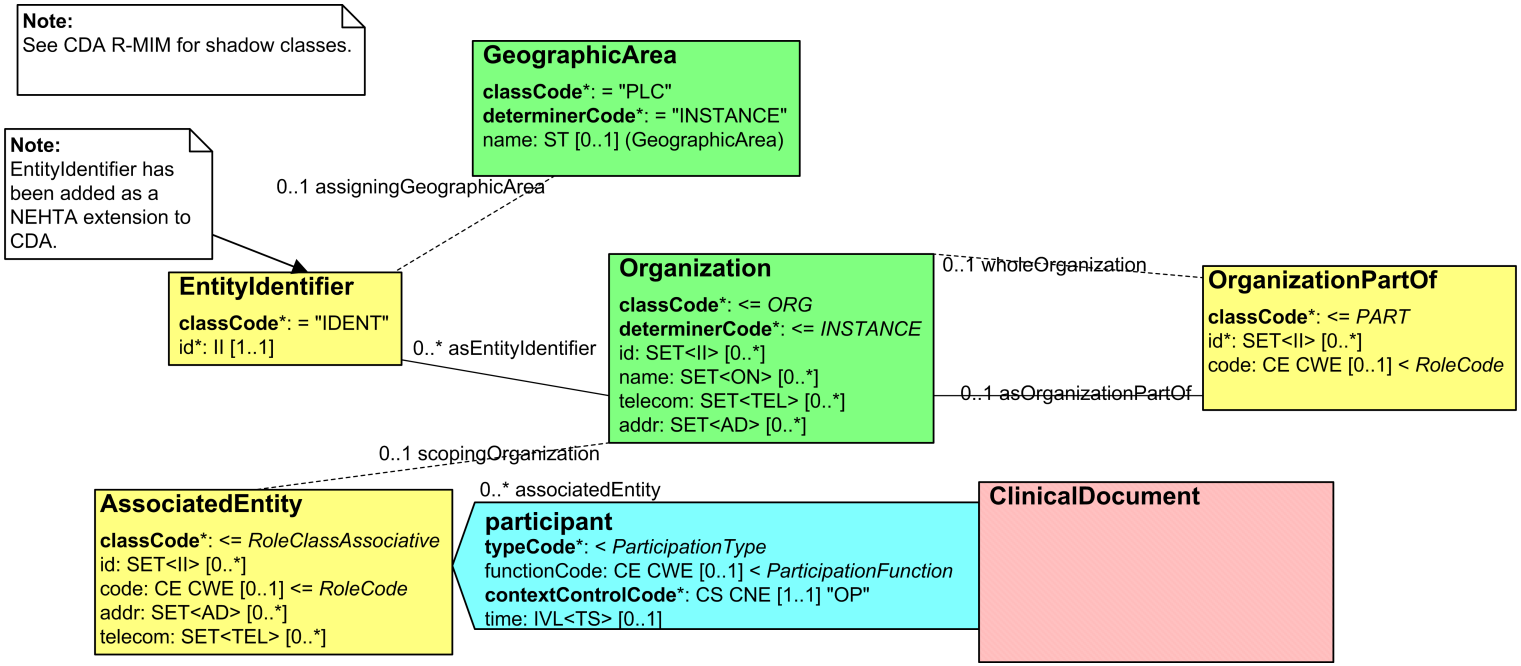


Figure 7.4. Referee

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Referee (Organisation)	The healthcare providers (Organisation) nominated by the patient as being primarily responsible for their ongoing healthcare.	0..1	**participant**		
Referee > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="REFT"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Referee".	
Referee > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	See <code> for available attributes.
			participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
n/a	n/a	1..1	participant/associatedEntity/**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.
Referee > **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	participant/associatedEntity/**scopingOrganization**		
Referee > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Referee > 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..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Referee > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Referee > 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 an ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Referee > Participant > Person or Organisation or Device > **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 participant/associatedEntity/associatedPerson.
Referee > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	participant/associatedEntity/scopingOrganization/**asOrganizationPartof/wholeOrganization/name**		
Referee > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	participant/associatedEntity/scopingOrganization/**name**		
Referee > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.4. Referee - Organisation 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 Referee (organisation) -->
 <participant typeCode="REFT">
  <associatedEntity classCode="PROV">

   <!-- ID is used for system purposes such as matching -->
   <id root="96ABEE3E-0CE8-11E0-B59B-6D69DFD72085"/>

   <!-- Role -->
   <code code="408443003"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT"
    codeSystemVersion="20090731"
    displayName="General medical practice"/>

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>55 GP 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:0788888888"/>

   <scopingOrganization>

    <!-- Department/Unit Name -->
    <name>GP Practice</name>

    <asOrganizationPartOf>
     <wholeOrganization>
      <!-- Organisation Name -->
      <name use="ORGB">Acme Hospital Group</name>
      <!-- Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
       <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621771137888" />
       <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
       </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
     </wholeOrganization>
    </asOrganizationPartOf>

   </scopingOrganization>
  </associatedEntity>
```

```
 </participant>
 <!-- End Referee (organisation) -->

   ...

   <!-- End CDA Header -->

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

    …

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

7.1.1.2 USUAL GP

Identification

Name	USUAL GP
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Optional	0..1

7.1.1.2.1 USUAL GP - PERSON

CDA R-MIM Representation

Figure 7.5, “Usual GP” 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 Usual GP data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (Australian CDA extension) which is associated to the associatedEntity. Employment detail is mapped to the NEHTA CDA Extension Employment.

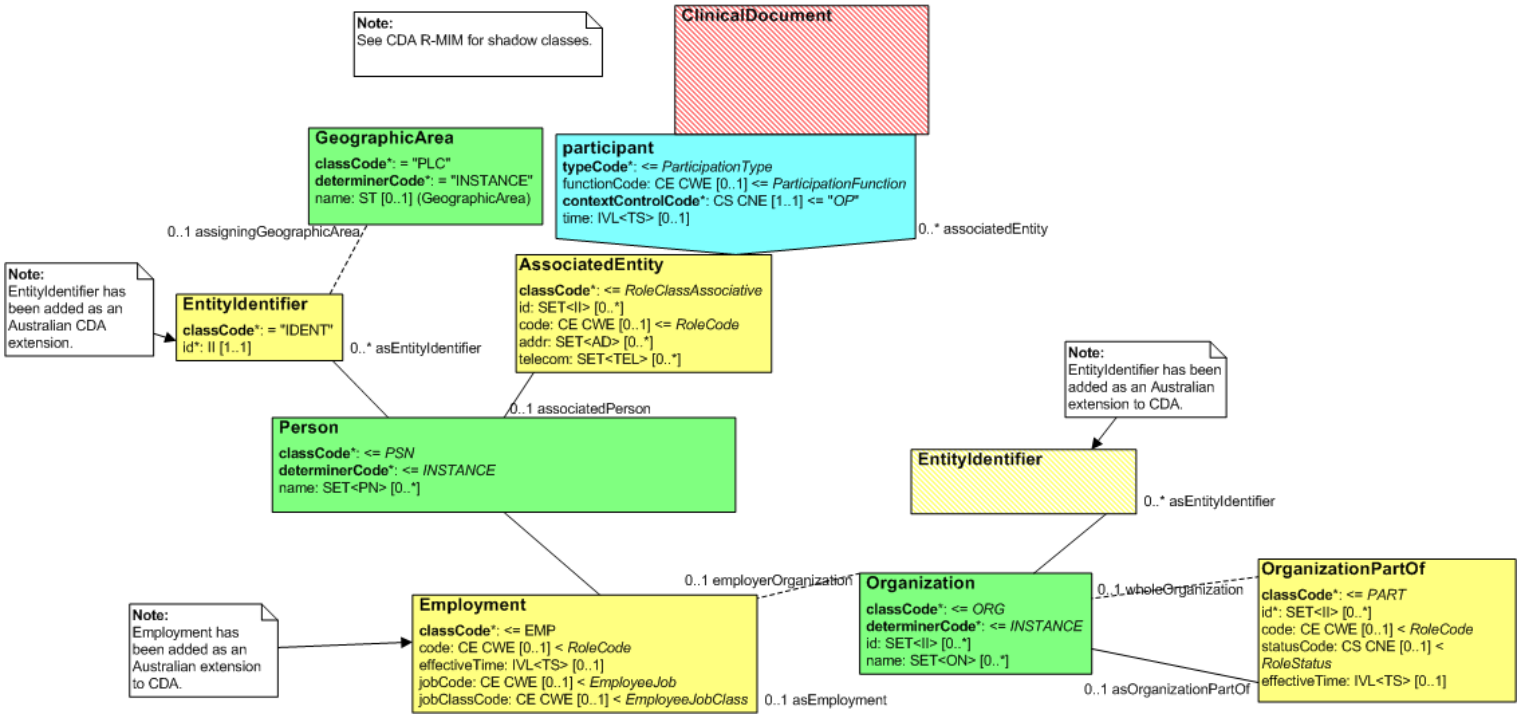


Figure 7.5. Usual GP

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Usual GP	The healthcare providers (person) nominated by the subject of care as being primarily responsible for their ongoing healthcare.	0..1	**participant**		
Usual GP > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="PART"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Usual GP".	
			participant/**functionCode/@code="PCP"**		
Usual GP > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/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.
			participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
n/a	n/a	1..1	participant/associatedEntity/**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.
Usual GP > **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	participant/associatedEntity/**associatedPerson**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Usual GP > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/associatedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Usual GP > 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.	0..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Usual GP > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Usual GP > 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.
Usual GP > 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 participant/associatedEntity/associatedPerson.
Usual GP > 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..*	participant/associatedEntity/associatedPerson/**<Person Name>**		See common pattern: Person Name.
Usual GP > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	1..1	participant/associatedEntity/associatedPerson/**<Employment>**		See common pattern: Employment.

Example 7.5. Usual GP - Person 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 Usual GP -->
 <participant typeCode="PART">
  <functionCode code="PCP" />
  <associatedEntity classCode="PROV">

   <!-- ID is used for system purposes such as matching -->
   <id root="3DF1E97C-42CD-11E0-A71E-FDD2DFD72085"/>

   <!-- Role -->
   <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, Revision 1"
     displayName="General Medical Practitioner" />

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>55 GP 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:0777777777"/>

    <!-- Person Name -->
   <associatedPerson>
    <name>
     <prefix>Dr.</prefix>
     <family>Generalist</family>
    </name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8001211234567890"/>
     <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>General Practitioner</originalText>
     </ext:code>

     <!-- Occupation -->
     <ext:jobCode 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" />

     <!-- 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>

   </associatedPerson>

  </associatedEntity>
 </participant>
 <!-- End Usual GP-->

 ...

  <!-- End CDA Header -->


</ClinicalDocument>
```

7.1.1.2.2 USUAL GP - ORGANISATION

CDA R-MIM Representation

Figure 7.6, “Usual GP” 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 USUAL GP (ORGANISATION) data group is related to its context of ClinicalDocument by the participant Participation class. A participant is an organisation in the role of associatedEntity (AssociatedEntity class). The entity playing the role is scopingOrganization (Organization class). The department/unit name is mapped to scopingOrganization.name and the organisation name is mapped to the wholeOrganization (Organization class) which represents a whole-part relationship using the OrganizationPartOf role. The organisation entity identifier is represented by the EntityIdentifier class (Australian CDA extension) which is associated to the wholeOrganization.

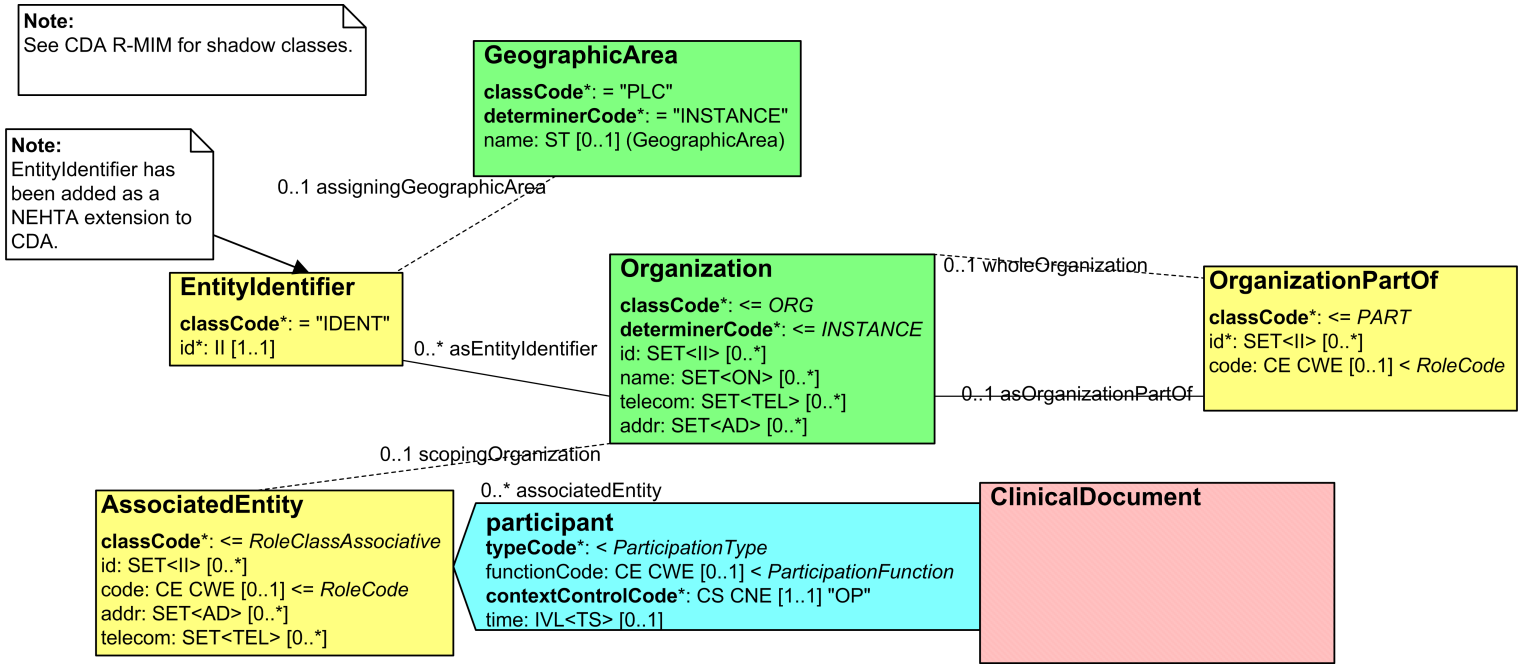


Figure 7.6. Usual GP

CDA Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Usual GP (Organisation)	The healthcare providers (Organisation) nominated by the patient as being primarily responsible for their ongoing healthcare.	0..1	**participant**		
Usual GP > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="PART"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Usual GP".	
			participant/**functionCode/@code="PCP"**		
Usual GP > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	See <code> for available attributes.
			participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
n/a	n/a	1..1	participant/associatedEntity/**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.
Usual GP > **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	participant/associatedEntity/**scopingOrganization**		
Usual GP > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Usual GP > 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.	0..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Usual GP > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Usual GP > 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 an ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Usual GP > Participant > Person or Organisation or Device > **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 participant/associatedEntity/associatedPerson.
Usual GP > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	participant/associatedEntity/scopingOrganization/**asOrganizationPartof/wholeOrganization/name**		
Usual GP > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	participant/associatedEntity/scopingOrganization/**name**		
Usual GP > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.6. Usual GP - Organisation 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 Usual GP (organisation) -->
 <participant typeCode="PART">
  <functionCode code="PCP"/>
  <associatedEntity classCode="PROV">

   <!-- ID is used for system purposes such as matching -->
   <id root="96ABEE3E-0CE8-11E0-B59B-6D69DFD72085"/>

   <!-- Role -->
   <code code="408443003"
     codeSystem="2.16.840.1.113883.6.96"
     codeSystemName="SNOMED-CT"
     codeSystemVersion="20090731"
     displayName="General medical practice"/>

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>55 GP 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:0788888888"/>

   <scopingOrganization>
    <!-- Department/Unit Name -->
    <name>Day Surgery</name>
    <asOrganizationPartOf>
     <wholeOrganization>
      <!-- Organisation Name -->
      <name use="ORGB">Logan Hospital</name>
      <!-- Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
       <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621771137888"/>
       <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
       </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
     </wholeOrganization>
    </asOrganizationPartOf>
   </scopingOrganization>
  </associatedEntity>
 </participant>
 <!-- End Usual GP (organisation) -->
```

```
    ...

    <!-- End CDA Header -->

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

     …

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

7.1.2 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..*
	PROCEDURE	Optional	0..*
	OTHER MEDICAL HISTORY ITEM	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Essential	1..1

CDA R-MIM Representation

Figure 7.7, “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.

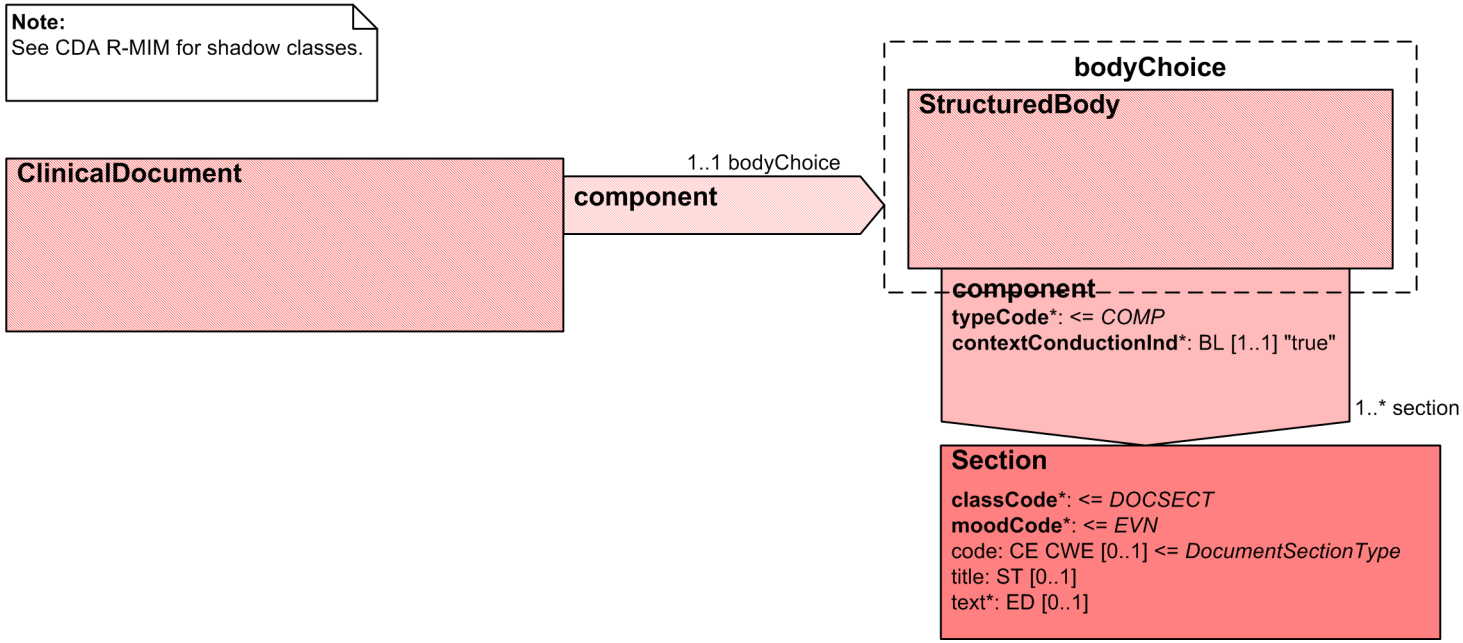


Figure 7.7. Medical History

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, 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 > **Procedure**	A clinical activity carried out for therapeutic, evaluative, investigative, screening or diagnostic purposes.	0..*	See: PROCEDURE		
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 7.7. 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>
```

7.1.2.1 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 7.8, “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. Observation.

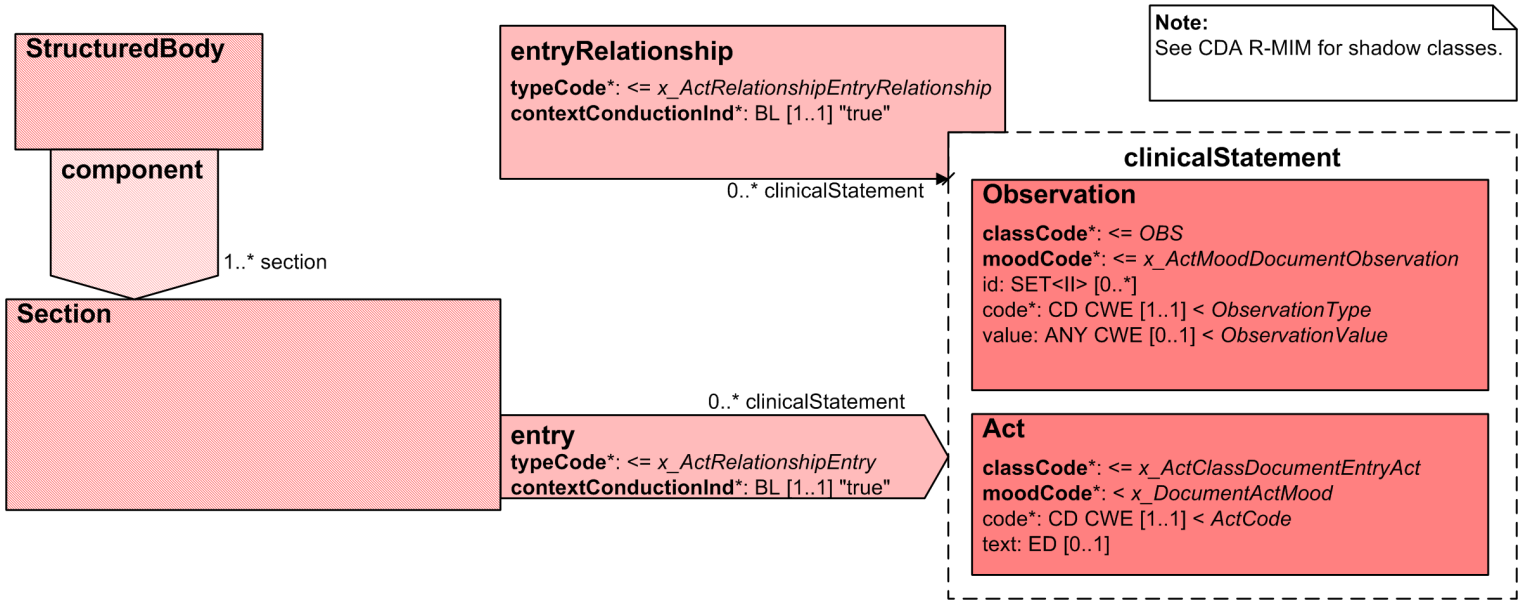


Figure 7.8. Problem/Diagnosis

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*[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[med_hist]/section		
Problem/Diagnosis	The problems and/or diagnoses that form part of the past and current 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.

[1] 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 7.8. 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>
```

7.1.2.2 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 7.9, “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.

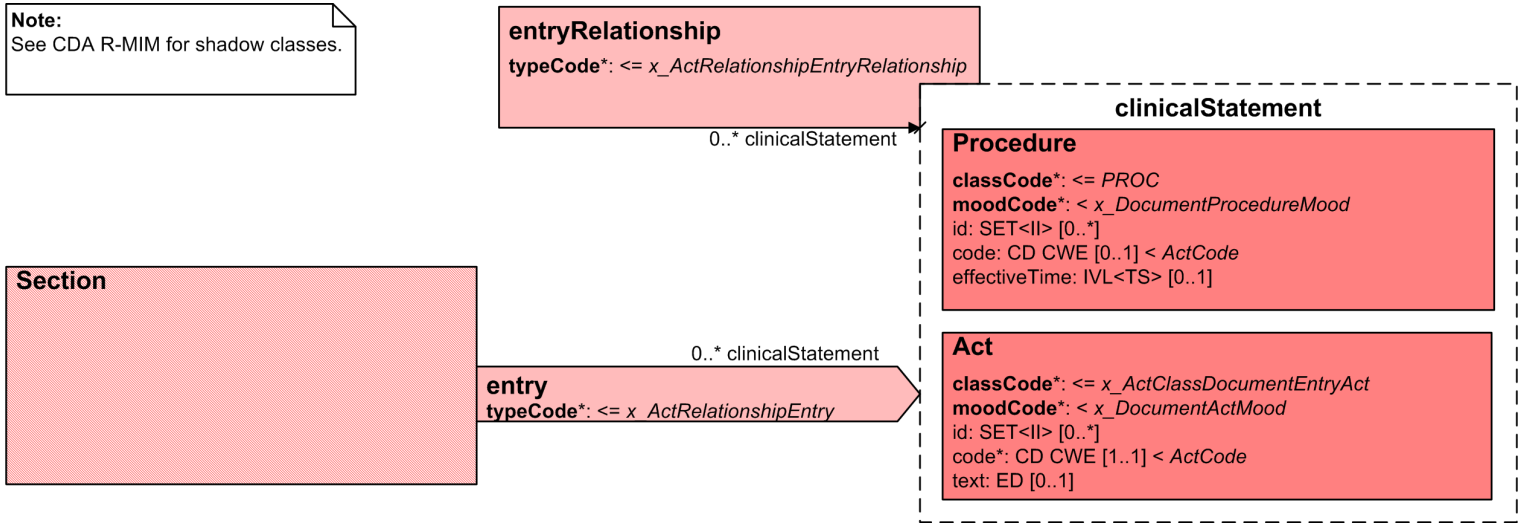


Figure 7.9. Procedure

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 7.9. 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>
```

7.1.2.3 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 7.10, “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.

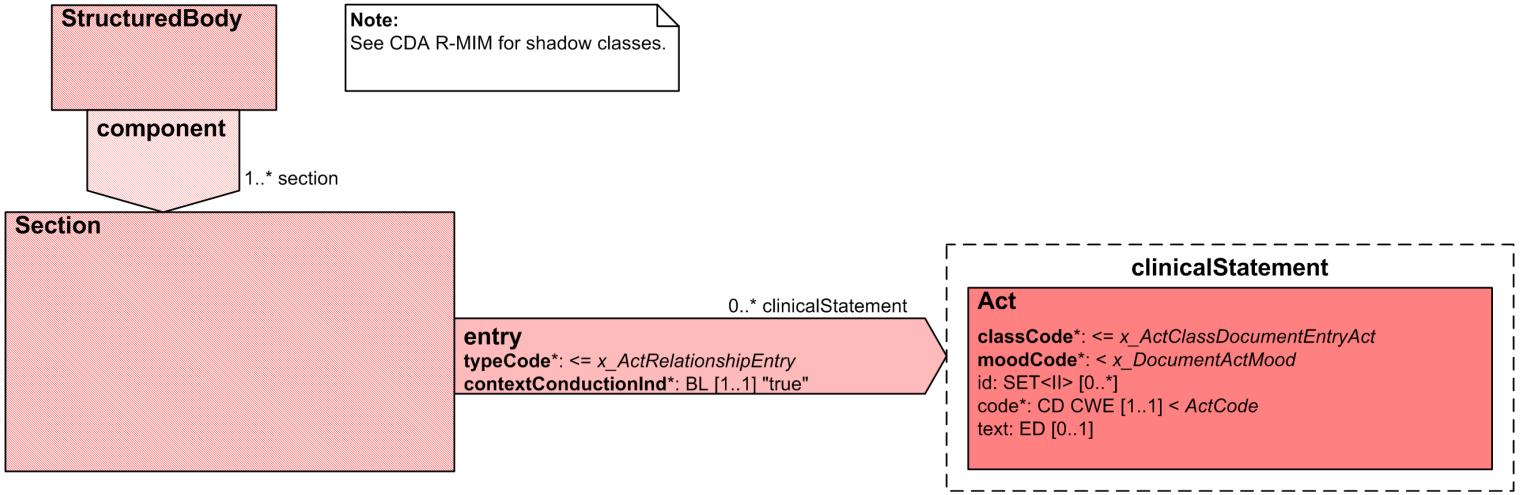


Figure 7.10. Other Medical History Item

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 7.10. 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>

    ...

   <!-- Begin Diagnoses/Interventions -->
   <component>
    <section>

     ...

     <!-- Begin Medical History Item -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <id root="CFAF920E-F2EC-11E0-A9EC-30C04824019B" />
       <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 Description -->
       <text>Sally asked for advice on treating depression.</text>
       <!-- End Medical History Item Description -->

       <!-- Begin Medical History Item Time Interval -->
       <effectiveTime>
        <low value="201112141100+1000"/>
        <high value="201112141120+1000"/>
       </effectiveTime>
       <!-- End Medical History Item Time Interval -->

       <!-- 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>Recommendation of psychologists was made.</text>
        </act>
       </entryRelationship>
       <!-- End Medical History Item Comment -->

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

     ...
```

```
    </section>
   </component>
   <!-- End Diagnoses/Interventions -->

   ...

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

7.1.3 MEDICATIONS

Identification

Name	Medications
Metadata Type	Section
Identifier	S-16146

Relationships

Children Not Included in Mapping for This Section

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

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Essential	1..1

CDA R-MIM Representation

Figure 7.11, “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.

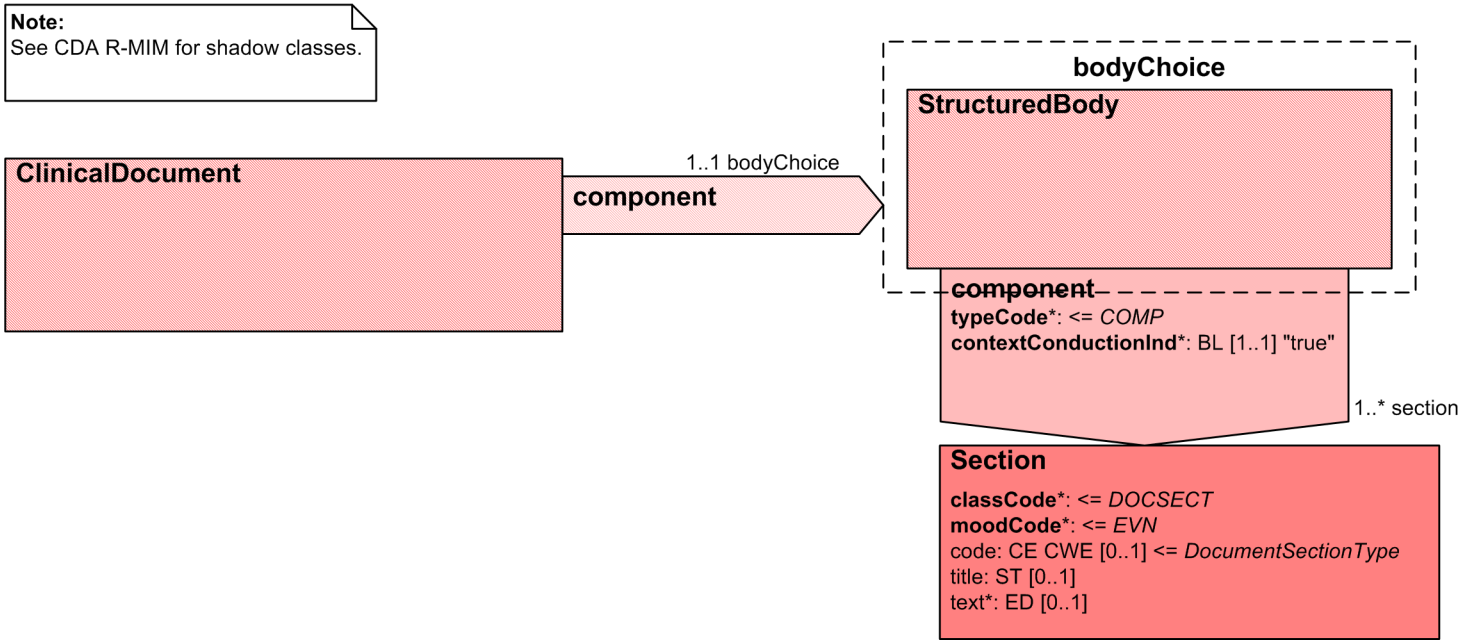


Figure 7.11. Medications

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	Therapeutic Goods which are/were prescribed for the subject of care or the subject of care has/had been taking.	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 > **Medication Instruction**	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: MEDICATION INSTRUCTION		
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 7.11. 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>

    …

     <!-- 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>Medications narrative goes here.</text>

     ...

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

  ...

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

7.1.3.1 MEDICATION INSTRUCTION

Identification

Name	Medication Instruction
Metadata Type	Data Group
Identifier	DG-16211

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	MEDICATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.12, “Medication Instruction” 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 Medication Instruction data group is described by a SubstanceAdministration which is related to the containing section by an entry. Medication Instruction Identification maps to consumable.manufacturedProduct.manufacturedMaterial.code and Directions maps to SubstanceAdministration.text.

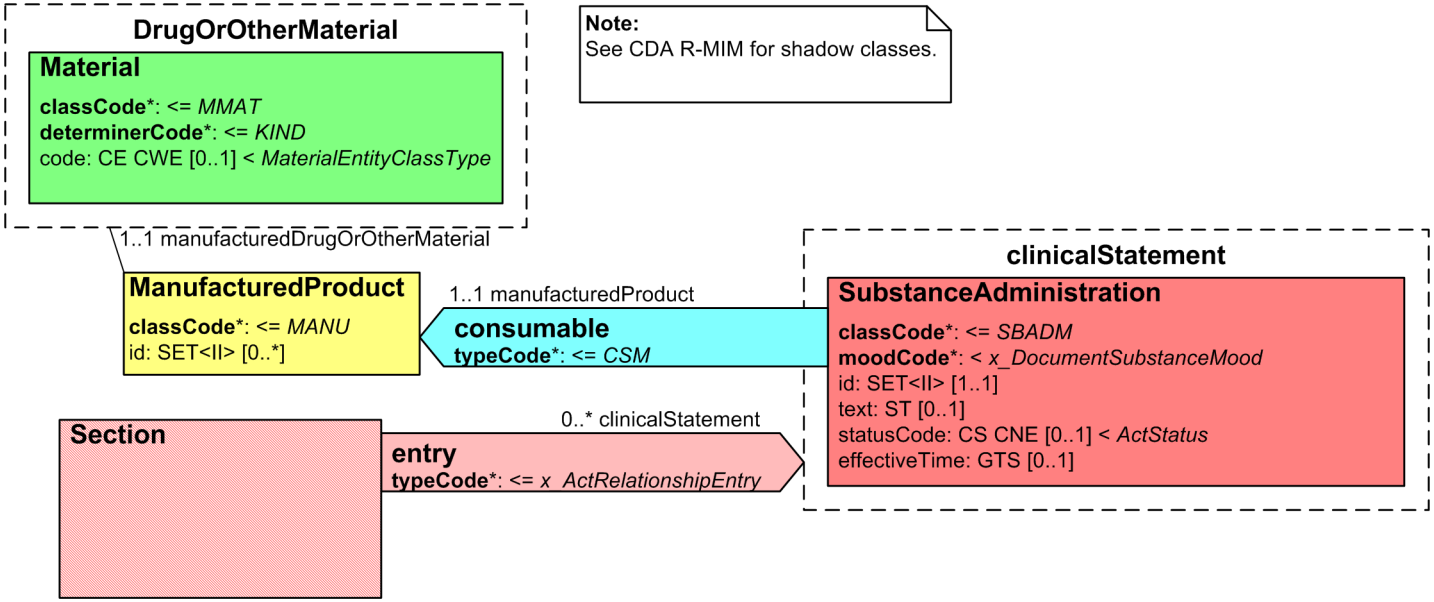


Figure 7.12. Medication Instruction

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		
Medication Instruction	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.
Medication Instruction > **Medicine**	The medicine, vaccine 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.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Medication Instruction > **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**		Dose Instruction and Instructions for Use are mutually exclusive - Dose Instruction is to be used for a medication and Instructions for Use is to be used for a therapeutic good other than a medication.

Example 7.12. Medication Instruction 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>

     ...

     <!-- Medication Instruction -->
     <entry>
      <substanceAdministration classCode="SBADM" moodCode="EVN">
       <id root="B53B4024-752B-11E0-B329-3C7C4824019B" />
       <!-- Directions -->
       <text>Directions for use goes here.</text>
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <!-- Therapeutic Good Identification -->
          <code code="23641011000036102" codeSystem="1.2.36.1.2001.1004.100"
           codeSystemName="Australian Medicines Terminology (AMT)"
           displayName="paracetamol 500 mg + codeine phosphate 30 mg tablet" />
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>
      </substanceAdministration>
     </entry>
     <!-- End Medication Instruction -->

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

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

7.1.3.2 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 7.13, “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.

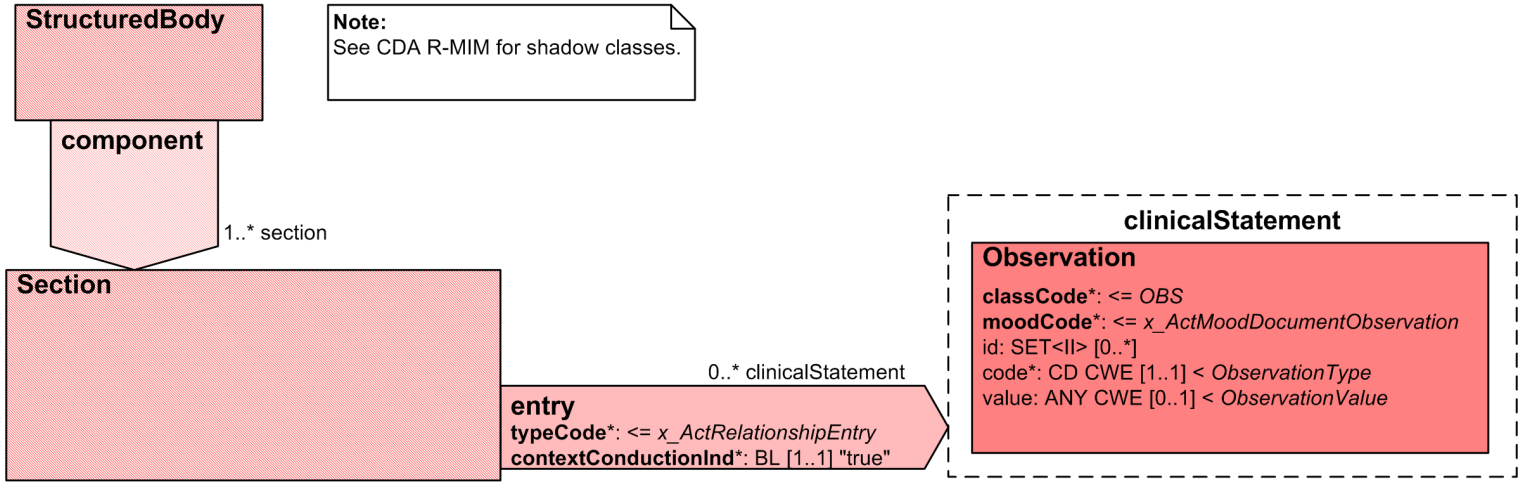


Figure 7.13. Exclusion Statement - Medications

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	Statement positively asserting that the subject of care has not been prescribed or is not taking any medication.	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="103.16302.2.2.1"**		
			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 7.13. 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>

    …

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

     ...

     <!-- Exclusion Statement - Medications -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16302.2.2.1" 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 - Medications -->

     ...

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

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

7.1.4 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 REACTIONS	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Essential	1..1

CDA R-MIM Representation

Figure 7.14, “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.

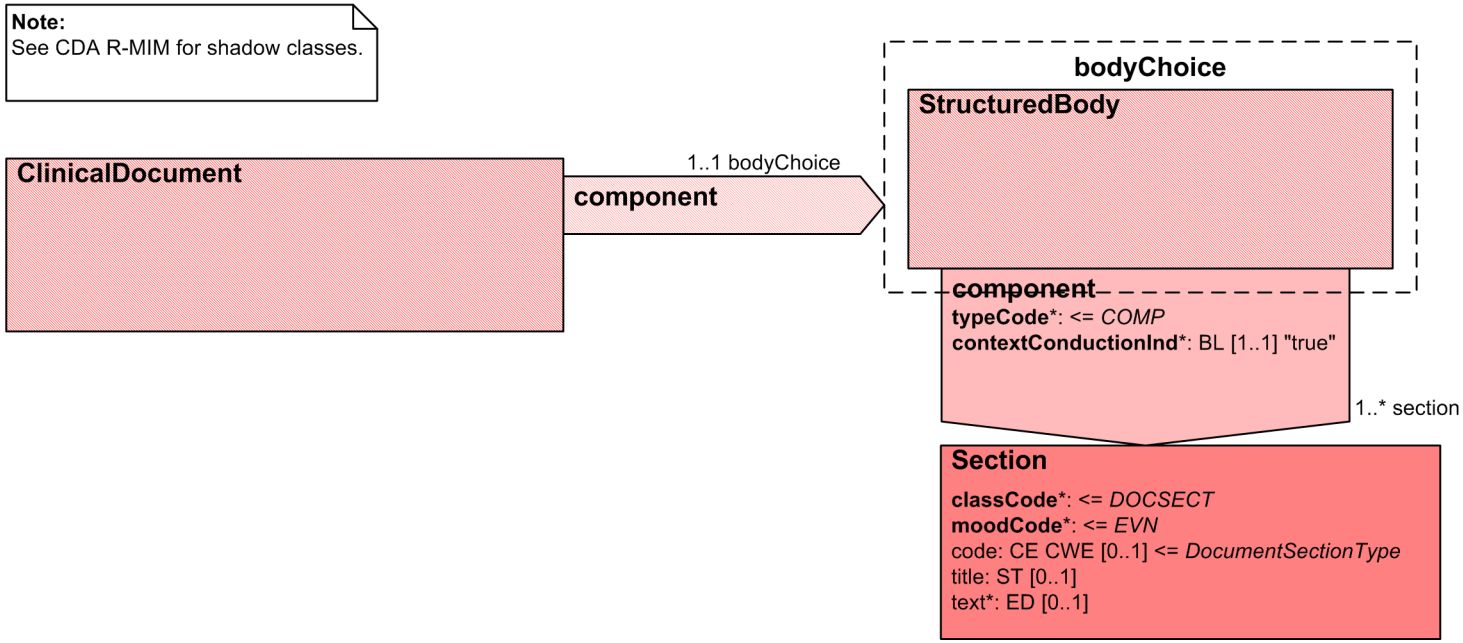


Figure 7.14. Adverse Reactions

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 subject of care(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 substance reactions that need to be positively recorded as absent or excluded.	0..1	See: EXCLUSION STATEMENT - ADVERSE REACTIONS		

Example 7.14. Adverse Substance 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 Substance 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>
```

7.1.4.1 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 7.15, “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.

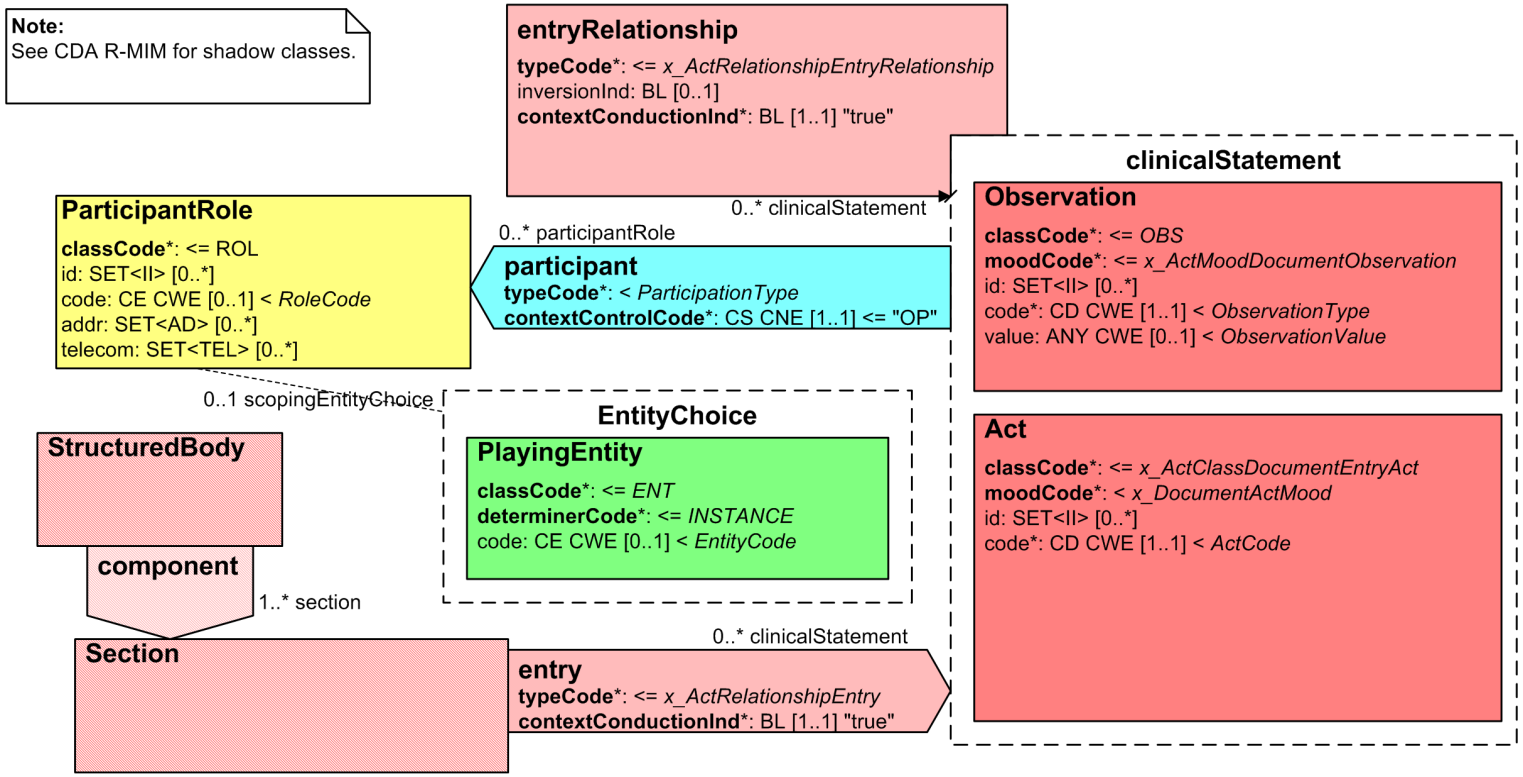


Figure 7.15. ADVERSE REACTION

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*[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_react]/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.

[2] 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/**@code="102.16474"**		
			entry/act/entryRelationship[rct_evnt]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/act/entryRelationship[rct_evnt]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry/act/entryRelationship[rct_evnt]/observation/code/**@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**	Clinical Manifestation Values	See <code> for available attributes.

Example 7.15. 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>

    …

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

     ...

     <!-- Adverse Reaction -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <id root="B8D7F8FC-7077-11E0-BFC8-5BC84824019B" />
       <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-AU"
           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 inversionInd="true" typeCode="MFST">
          <observation classCode="OBS" moodCode="EVN">
           <code code="271807003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
            displayName="skin rash" />
          </observation>
         </entryRelationship>

        </observation>
       </entryRelationship>
```

```
        </act>
       </entry>

       ...

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

       ...

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

7.1.4.2 EXCLUSION STATEMENT - ADVERSE REACTIONS

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.16, “Exclusion Statement - 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.

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

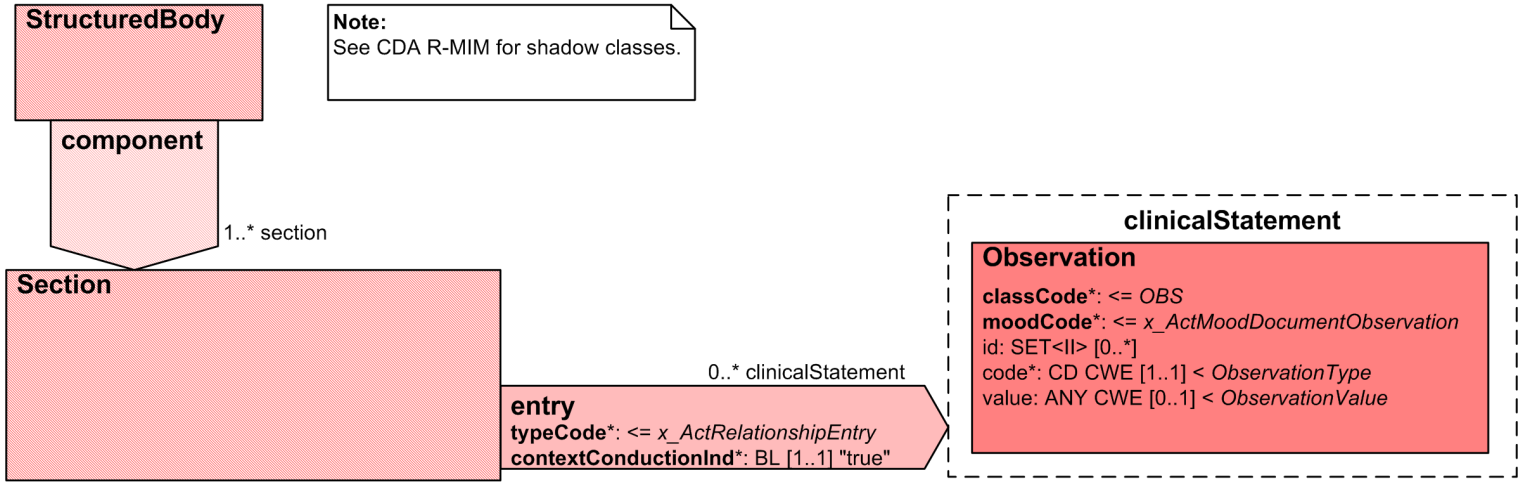


Figure 7.16. Exclusion Statement - Adverse Reaction

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*[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[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.

[3] 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="103.16302.2.2.2"**		
			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 7.16. 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>

     ...

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

     ...

     <!-- Exclusion Statement - Adverse Reaction -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <id root="D3BEC470-7531-11E0-846A-E2824824019B" />
       <code code="103.16302.2.2.2" 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 Reaction -->

     ...

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

    ...

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

7.1.5 DIAGNOSTIC INVESTIGATIONS

Identification

Name	Diagnostic Investigations
Metadata Type	Section
Identifier	S-20117

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	PATHOLOGY TEST RESULT	Optional	0..*
	IMAGING EXAMINATION RESULT	Optional	0..*
	REQUESTED SERVICE	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	e-Referral	Optional	0..1

CDA R-MIM Representation

Figure 7.17, “Diagnostic Investigations” 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 Diagnostic Investigations section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

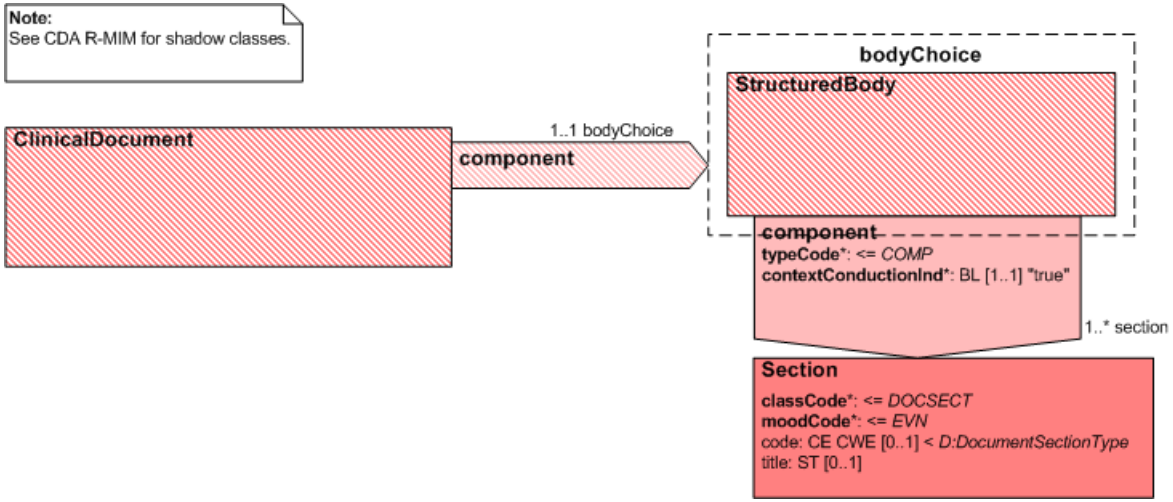


Figure 7.17. Diagnostic Investigations

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/		
Diagnostic Investigations	Describes the diagnostic tests or procedures performed on the subject of care during the healthcare event, that are considered to be relevant to the subject of care's ongoing care.	0..1	component[diag_inv]/**section**		
			component[diag_inv]/section/**code**		
			component[diag_inv]/section/code/**@code="101.20117"**		
			component[diag_inv]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[diag_inv]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[diag_inv]/section/code/**@displayName="Diagnostic Investigations"**		
			component[diag_inv]/section/**title="Diagnostic Investigations"**		
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/		
Diagnostic Investigations > **Pathology Test Result**	The result of a laboratory test which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	See: PATHOLOGY TEST RESULT		
Diagnostic Investigations > **Imaging Examination Result**	The result of an imaging examination which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	See: IMAGING EXAMINATION RESULT		
Diagnostic Investigations > **Requested Service**	A request for a diagnostic investigation of the subject of care.	0..*	See: REQUESTED SERVICE		

Example 7.17. Diagnostic Investigations 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>

    ...

     <!-- Diagnostic Investigations -->
   <component>
    <section>
     <code code="101.20117" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Diagnostic Investigations" />
     <title>Diagnostic Investigations</title>
     ...

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

  ...

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

7.1.5.1 PATHOLOGY TEST RESULT

Identification

Name	Pathology Test Result
Metadata Type	Data Group
Identifier	DG-16144

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	TEST SPECIMEN DETAIL	Essential	1..*
	PATHOLOGY TEST RESULT GROUP	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	DIAGNOSTIC INVESTIGATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.18, “Pathology Test Result” 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 Pathology Test Result data group is a component Section of its containing Section. Related to the Pathology Test Result Section by an entry relationship is an Observation. The Observation.id represents the Laboratory Test Result Identifier, the Observation.code represents the Pathology Test Result Name and Observation.value is the Test Result Representation.

There are five Observations related to the base Pathology Test Result Observation: Diagnostic Service, Overall Pathology Test Result Status, Pathological Diagnosis, Pathology Test Conclusion, Pathology Test Result DateTime.

There are three Acts related to the base Pathology Test Result Observation: Clinical Information Provided, Test Comment and Test Request Details.

The Test Request Details has two related Acts of its own which are Test Request Name and Received Order Identifier.

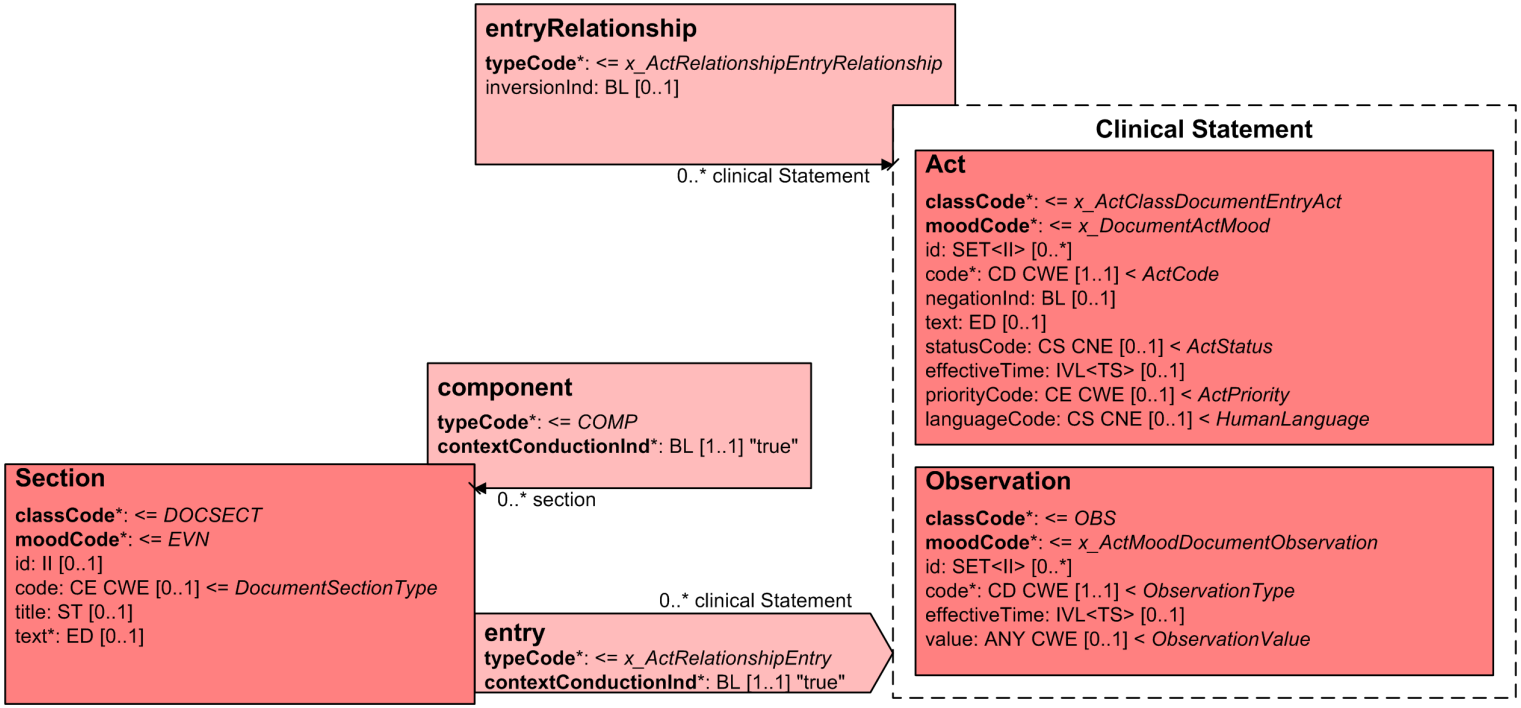


Figure 7.18. Pathology Test Result

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/component[diag_inv]/section/		
Pathology Test Result	The result of a laboratory test which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	**component[path_test]/section**		
			component[path_test]/section/**code**		
			component[path_test]/section/**@code="102.16144"**		
			component[path_test]/section/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[path_test]/section/**@codeSystemName="NCTIS Data Components"**		
			component[path_test]/section/**@displayName="Pathology Test Result"**		
			component[path_test]/section/**title="Pathology Test Result"**		
			component[path_test]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/		
Pathology Test Result > **Pathology Test Result Name**	Identification of the pathology test performed, sometimes including specimen type.	1..1	**entry[path_test_res]/observation**		
			entry[path_test_res]/observation**@classCode="OBS"**		
			entry[path_test_res]/observation**@moodCode="EVN"**		
			entry[path_test_res]/observation/**code**	NS	See <code> for available attributes.
Pathology Test Result > **Diagnostic Service**	The diagnostic service that performs the examination.	0..1	entry[path_test_res]/observation/**entryRelationship[diag_serv]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/**observation**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@code="310074003"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystemVersion="20110531"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@displayName="pathology service"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**value:CD**	HL7 Diagnositc Service Values (table 0074)	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Test Specimen Detail**	Details about specimens to which this test result refers.	1..*	See: TEST SPECIMEN DETAIL.		
Pathology Test Result > **Overall Pathology Test Result Status**	The status of the pathology test result as a whole.	1..1	entry[path_test_res]/observation/**entryRelationship/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/**observation**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/code/**@code="308552006"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemVersion="20110531"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/code/**@displayName="report status"**		
			entry[path_test_res]/observation/entryRelationship[res_stat]/observation/**value:CD**	NCTIS: Admin Codes - Result Status	See <code> for available attributes.
Pathology Test Result > **Clinical Information Provided**	Description of clinical information available at the time of interpretation of results, or a link to the original clinical information provided in the test request.	0..1	entry[path_test_res]/observation/**entryRelationship[clin_info_prov]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/**act**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/**@classCode="INFRM"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/**code**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/code/**@code="55752-0"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/code/**@codeSystem="2.16.840.1.113883.6.1"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/code/**@codeSystemName="LOINC"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/code/**@displayName="Clinical information"**		
			entry[path_test_res]/observation/entryRelationship[clin_info_prov]/act/**text:ST**		
Pathology Test Result > **Pathology Test Result Group**	A group of results.	0..*	See: PATHOLOGY TEST RESULT GROUP		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Pathological Diagnosis**	Single word, phrase or brief description representing the diagnostic statement as asserted by the reporting pathologist.	0..*	entry[path_test_res]/observation/**entryRelationship[path_diag]/@typeCode="REFR"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/**observation**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/code/**@code="88101002"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/code/**@codeSystem= "2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/code/**@codeSystemVersion= "20110531"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/code/**@codeSystemName= "SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/code/**@displayName= "pathology diagnosis"**		
			entry[path_test_res]/observation/entryRelationship[path_diag]/observation/**value:CD[LIST]**	NS	The cardinality (0..*) of this component is represented by a list of value:CD.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Pathology Test Conclusion**	Concise and clinically contextualised narrative interpretation of the pathology test results.	0..1	entry[path_test_res]/observation/**entryRelationship[path_conc]/@typeCode="REFR"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/**observation**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/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[path_test_res]/observation/entryRelationship[path_conc]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@code="386344002"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystemVersion="20110531"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@displayName="laboratory findings data interpretation"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**value:ST**		
Pathology Test Result > **Test Result Representation**	Rich text representation of the entire result as issued by the diagnostic service. Multiple formats are allowed but they must be semantically equivalent.	0..1	entry[path_test_res]/observation/**value:ED**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Test Comment**	Additional narrative about the test not captured in other fields.	0..1	entry[path_test_res]/observation/**entryRelationship[tst_cmt]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@classCode="INFRM"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**code**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@code="103.16468"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@displayName="Test Comment"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**text:ST**		
Pathology Test Result > **Test Request Details**	Details concerning a single pathology test requested.	0..*	entry[path_test_res]/observation/**entryRelationship[req_dets]/@typeCode="SUBJ"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/**@inversionInd="true"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/**act**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**@classCode="ACT"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**code**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@code="102.16160"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@displayName="Test Request Details"**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > Test Request Details > **Test Requested Name**	Identification of pathology test requested, where the test requested differs from the test actually performed.	0..*	entry[path_test_res]/observation/entryRelationship[req_dets]/act/**entryRelationship[req_name]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/**observation**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/**@moodCode="RQO"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/**@code="103.11017"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/**@displayName="Test Requested Name"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/**value:CD**	NS	
Pathology Test Result > Test Request Details > **Laboratory Test Result Identifier**	The identifier given to the laboratory test result of a pathology investigation.	0..1	entry[path_test_res]/observation/**id**		See <id> for available attributes.
Pathology Test Result > **Pathology Test Result DateTime**	The date and, optionally, time of the Pathology Test Result observation. If the Pathology Test Result Duration is non-zero, it is the time at which the Pathology Test Result observation was completed, i.e. the date (and time) of the trailing edge of the Pathology Test Result Duration.	1..1	entry[path_test_res]/observation/**entryRelationship[tst_date]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/**observation**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@code="103.16605"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@displayName="Pathology Test Result DateTime"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**effectiveTime**		See <time> for available attributes.

Example 7.18. Pathology Test Result 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>

    …

   <!-- Diagnostic Investigations -->
     <component>
      <section>

       ...

     <!-- Begin Pathology Test Result -->
     <component>
      <section>
       <code code="102.16144" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Pathology Test Result" />
       <title>Pathology Test Result</title>
       <text>
        <table>
         <thead>
          <tr>
           <th>Test</th>
           <th>Value</th>
           <th>Units</th>
           <th>Reference Range</th>
           <th>Interpretation</th>
          </tr>
         </thead>
         <tbody>
          <tr>
           <td>Serum Creatinine</td>
           <td>0.06</td>
           <td>mmol/L</td>
           <td>0.04-0.11</td>
           <td>N</td>
          </tr>
          <tr>
           <td>Serum Uric Acid</td>
           <td>0.41</td>
           <td>mmol/L</td>
           <td>0.14-0.35</td>
           <td>HH</td>
          </tr>
         </tbody>
        </table>
```

```
</text>
<entry>
 <observation classCode="OBS" moodCode="EVN">

  <!-- Begin Laboratory Result Identifier -->
  <id root="8FC201B4-F2FA-11E0-906B-E4D04824019B"/>
  <!-- End Laboratory Result Identifier -->

  <!-- Begin Pathology Test Result Name -->
  <code code="18719-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
   displayName="Chemistry studies (set)" />
  <!-- End Pathology Test Result Name -->

  <!-- Begin Test Result Representation -->
  <value xsi:type="ED" mediaType="application/pdf">
   <reference value="pathresult.pdf" />
  </value>
  <!-- End Test Result Representation -->

  <!-- Begin Diagnostic Service -->
  <entryRelationship typeCode="COMP">
   <observation classCode="OBS" moodCode="EVN">
    <code code="310074003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
     codeSystemVersion="20110531" displayName="pathology service" />
    <value code="CH" codeSystem="2.16.840.1.113883.12.74" displayName="Chemistry"
     xsi:type="CD" />
   </observation>
  </entryRelationship>
  <!-- End Diagnostic Service -->

  <!-- Test Specimen Details -->
  <entryRelationship typeCode="SUBJ">
   <observation classCode="OBS" moodCode="EVN">

    ...

   </observation>
  </entryRelationship>
  <!-- End Test Specimen Details -->

  <!-- Begin Overall Pathology Test Result Status -->
  <entryRelationship typeCode="COMP">
   <observation classCode="OBS" moodCode="EVN">
    <code code="308552006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
     codeSystemVersion="20110531" displayName="Report Status" />
    <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
     codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
   </observation>
  </entryRelationship>
  <!-- End Overall Pathology Test Result Status -->

  <!-- Begin Clinical Information Provided -->
  <entryRelationship typeCode="COMP">
   <act classCode="INFRM" moodCode="EVN">
    <code code="55752-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
     displayName="Clinical information" />
    <text>Bloods for evaluation.</text>
   </act>
  </entryRelationship>
  <!-- End Clinical Information Provided -->

  <!-- Pathology Test Result Group -->
  <entryRelationship typeCode="COMP">
   <organizer classCode="BATTERY" moodCode="EVN">
```

```
 ...

 </organizer>
</entryRelationship>
<!-- End Pathology Test Result Group -->

<!-- Begin Pathological Diagnosis -->
<entryRelationship typeCode="REFR">
 <observation classCode="OBS" moodCode="EVN">
  <code code="88101002" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531" displayName="pathology diagnosis" />
  <value code="236425005" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" displayName="chronic kidney disease" xsi:type="CD" />
 </observation>
</entryRelationship>
<!-- End Pathological Diagnosis -->

<!-- Begin Pathology Test Conclusion -->
<entryRelationship typeCode="REFR">
 <observation classCode="OBS" moodCode="EVN">
  <id root="060588DE-F2F9-11E0-ABE7-C7CE4824019B" />
  <code code="386344002" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531" displayName="laboratory findings data interpretation" />
  <value xsi:type="ST">Chronic Kidney Disease.</value>
 </observation>
</entryRelationship>
<!-- End Pathology Test Conclusion -->

<!-- Begin Test Comment -->
<entryRelationship typeCode="COMP">
 <act classCode="INFRM" moodCode="EVN">
  <code code="103.16468" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Test Comment" />
  <text>Known PKD</text>
 </act>
</entryRelationship>
<!-- End Test Comment -->

<!-- Begin Test Request Details -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
 <act classCode="ACT" moodCode="EVN">
  <code code="102.16160" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Test Request Details" />

  <!-- Begin Test Requested Name -->
  <entryRelationship typeCode="COMP">
   <observation classCode="OBS" moodCode="RQO">
    <code code="103.11017" codeSystem="1.2.36.1.2001.1001.101"
     codeSystemName="NCTIS Data Components" displayName="Test Requested Name" />
    <value code="275707000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
     displayName="blood serum tests" xsi:type="CD" />
   </observation>
  </entryRelationship>
  <!-- End Test Requested Name -->

 </act>
</entryRelationship>
<!-- End Test Request Details -->

<!-- Begin Pathology test Result DateTime -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="103.16605" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Pathology test Result DateTime" />
  <effectiveTime value="201112141120+1000"/>
```

```
          </observation>
         </entryRelationship>
         <!-- End Pathology test Result DateTime -->

        </observation>
       </entry>
      </section>
     </component>
     <!-- End Pathology Test Result -->

     ...

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

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

7.1.5.1.1 TEST SPECIMEN DETAIL

Identification

Name	Test Specimen Detail
Metadata Type	Data Group
Identifier	DG-16156.2.2.1

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	PATHOLOGY TEST RESULT	Essential	1..*

CDA R-MIM Representation

Figure 7.19, “Test Specimen Detail” 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 Test Specimen Detail data group is represented by an Observation related to its containing section by an entry relationship. The Collection Procedure is mapped to the methodCode of the Observation, the Anatomical Location is mapped to the targetSiteCode and the Collection DateTime is represented by the effectiveTime. There is a specimen.specimenRole.playingEntity that contains details about the specimen such as Specimen Tissue Type, Volume, Description and Specimen Identifier. The Container Identifier is mapped to the Container Australian CDA Extension.

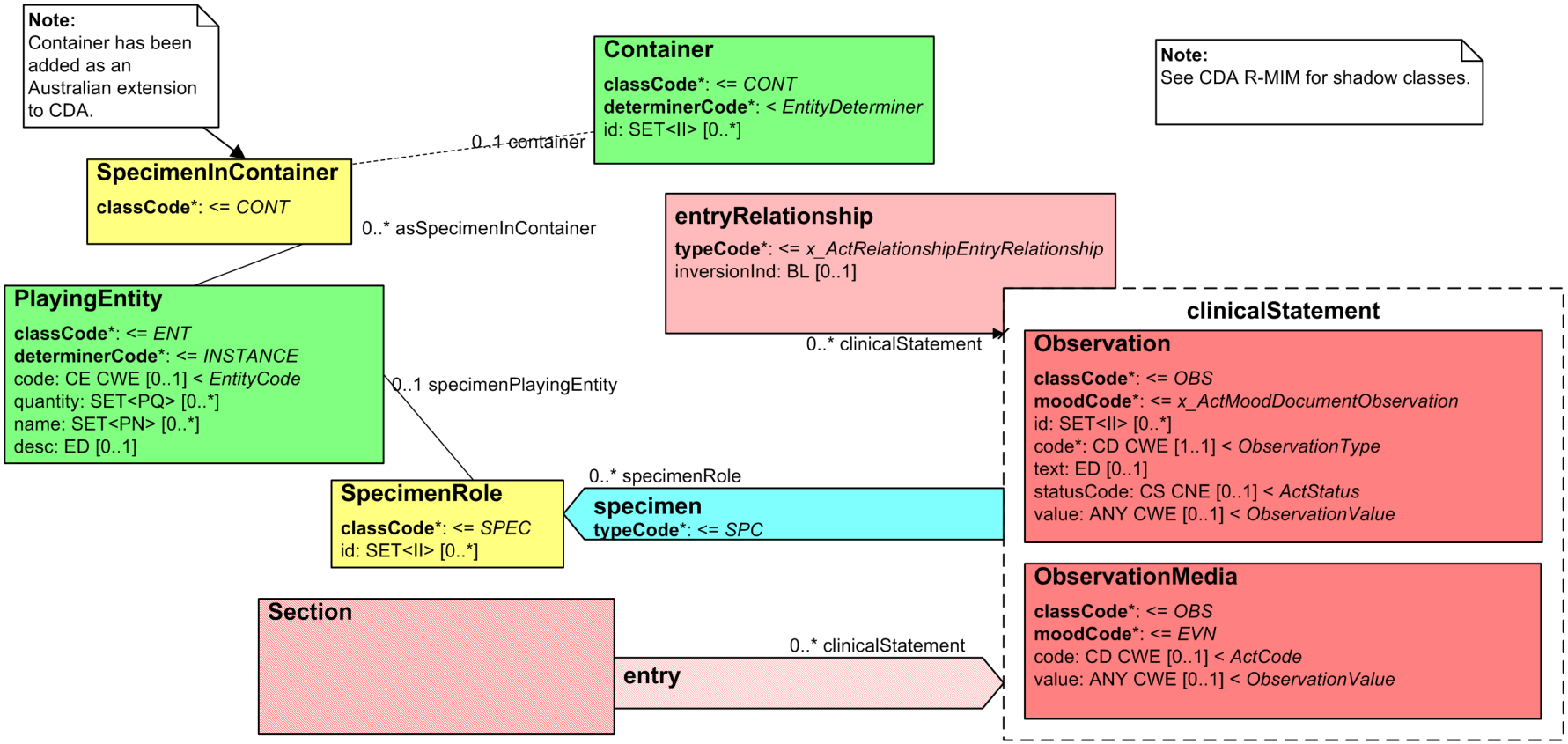


Figure 7.19. Test Specimen Detail

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[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/		
Test Specimen Detail	Details about specimens to which this test result refers.	1..*	**entryRelationship[spec]/@typeCode="SUBJ"**		
			entryRelationship[spec]/**observation**		
			entryRelationship[spec]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/**code**		
			entryRelationship[spec]/observation/code/**@code="102.16156.2.2.1"**		
			entryRelationship[spec]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[spec]/observation/code/**@displayName="Test Specimen Detail"**		
Test Specimen Detail > **Specimen Tissue Type**	The type of specimen to be collected.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**code**	NS	See <code> for available attributes.
Test Specimen Detail > **Collection Procedure**	The method of collection to be used.	0..1	entryRelationship[spec]/observation/**methodCode**	NS	See <code> for available attributes.
Test Specimen Detail > **Anatomical Site (Anatomical Location)**	The anatomical site(s) from where the specimen was taken.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Test Specimen Detail > Anatomical Site > **Specific Location**	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Test Specimen Detail > Anatomical Site > Specific Location > **Anatomical Location Name**	The name of an anatomical location.	0..1	entryRelationship[spec]/observation/**targetSiteCode**	SNOMED CT-AU Body Structure Foundation Reference Set	See <code> for available attributes.
Test Specimen Detail > Anatomical Site > Specific Location > **Side**	The lateraility of an anatomical location.	0..1	entryRelationship[spec]/observation/targetSiteCode/**qualifier**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/**name**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/name/**@code="78615007"**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/name/**@codeSystem= "2.16.840.1.113883.6.96"**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/name/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/name/**@codeSystemVersion="20110531"**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/name/**@displayName="with laterality"**		
			entryRelationship[spec]/observation/targetSiteCode/qualifier/**value**	SNOMED CT-AU Laterality Reference Set	See <code> for available attributes.
Test Specimen Detail > Anatomical Site > **Anatomical Location Description**	Description of the Anatomical location.	0..1	entryRelationship[spec]/observation/targetSiteCode/**originalText**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Test Specimen Detail > Anatomical Site > **Anatomical Location Image**	Image or images used to identify a location.	0..*	entryRelationship[spec]/observation/**entryRelationship[ana_im]/@typeCode="SPRT"**		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[spec]/observation/entryRelationship[ana_im]/**observationMedia**		
			entryRelationship[spec]/observation/entryRelationship[ana_im]/observationMedia/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[ana_im]/observationMedia/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[ana_imc]/observationMedia/**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.
			entryRelationship[spec]/observation/entryRelationship[ana_im]/observationMedia/**value**		
Test Specimen Detail > **Physical Details (Physical Properties of an Object)**	Record of physical details such as weight and dimenstions, of a body part, device, device, lesion or specimen.	0..*	entryRelationship[spec]/observation/**specimen/specimenRole/specimenPlayingEntity**		
Test Specimen Detail > Physical Details > **Weight**	Weight of the object.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**quantity:PQ**		Either Weight OR Volume may be used mutually exclusive.
Test Specimen Detail > Physical Details > **Dimensions**	The dimensions of the object.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Test Specimen Detail > Physical Details > Dimensions > **Volume**	Volume of the object.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**quantity:PQ**		Either Weight OR Volume may be used mutually exclusive.
Test Specimen Detail > Physical Details > **Description (Object Description)**	A general description of the specimen preparation.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**desc:ST**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Test Specimen Detail > Physical Details > **Image**	A picture of the specimen.	0..1	entryRelationship[spec]/observation/**entryRelationship[spec_im]/@typeCode="SPRT"**		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[spec]/observation/entryRelationship[spec_im]/**observationMedia**		
			entryRelationship[spec]/observation/entryRelationship[spec_im]/observationMedia/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[spec_im]/observationMedia/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[spe_imc]/observationMedia/**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.
			entryRelationship[spec]/observation/entryRelationship[spec_im]/observationMedia/**value**		
Test Specimen Detail > **Collection and handling**	Collection and handling requirements.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Test Specimen Detail > Collection and handling > **Sampling Preconditions**	Any conditions to be met before the sample should be taken.	0..1	entryRelationship[spec]/observation/**entryRelationship[smp_pre]/@typeCode="COMP"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/**observation**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/**code**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/code/**@code="103.16171"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/code/**@displayName="Sampling Preconditions"**		
			entryRelationship[spec]/observation/entryRelationship[smp_pre]/observation/**value:CD**	NS	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Test Specimen Detail > **Handling and Processing**	Workflow of specimen processing/handling.	1..1	N/A		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Test Specimen Detail > Handling and Processing > **Collection DateTime**	The date and time that collection has been ordered to take place or has taken place.	1..1	entryRelationship[spec]/observation/**effectiveTime**		See <time> for available attributes.
Test Specimen Detail > Handling and Processing > **Collection Setting**	Identification of the setting at which the specimen was collected from a subject of care.	0..1	entryRelationship[spec]/observation/**entryRelationship[coll_set]/@typeCode="COMP"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/**observation**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/**code**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/code/**@code="103.16529"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/code/**@codeSystemName= "NCTIS Data Components"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/code/**@displayName= "Collection Setting"**		
			entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/**value:ST**		
Test Specimen Detail > Handling and Processing > **DateTime Received**	The date and time that the sample was received at the laboratory.	0..1	entryRelationship[spec]/observation/entryRelationship[date_rec]/**@typeCode="COMP"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/**observation**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/**code**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/code/**@code="103.11014"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/code/**@codeSystemName= "NCTIS Data Components"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/code/**@displayName= "DateTime Received"**		
			entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/**value:TS**		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Test Specimen Detail > **Identifiers**	Sample identifications.	0..1	N/A		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Test Specimen Detail > Identifiers > **Specimen Identifier**	Unique identifier of the specimen, normally assigned by the laboratory.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/**id**		See <id> for available attributes.
Test Specimen Detail > Identifiers > **Parent Specimen Identifier**	Unique identifier of the parent specimen, where the specimen is split into sub-samples.	0..1	entryRelationship[spec]/observation/entryRelationship[prnt_id]/**@typeCode="COMP"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/**observation**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/**code**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/code/**@code="103.16187"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/code/**@displayName="Parent Specimen Identifier"**		
			entryRelationship[spec]/observation/entryRelationship[prnt_id]/observation/**specimen/specimenRole/id**		See <id> for available attributes.
Test Specimen Detail > Identifiers > **Container Identifier**	Unique identifier given to the container in which the specimen is transported or processed.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**ext:asSpecimenInContainer**		See Australian CDA extension: Container
			entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/**@classCode="CONT"**		
			entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/**ext:container**		
			entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/**ext:id**		See <id> for available attributes.

Example 7.19. Test Specimen Detail 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>

    …

   <!-- Diagnostic Investigations -->
   <component>
    <section>

     ...

     <!-- Pathology Test Result -->
     <component>
      <section>

       ...

       <entry>
          <observation>

           ...

         <!-- Begin Test Specimen Detail -->
         <entryRelationship typeCode="SUBJ">
          <observation classCode="OBS" moodCode="EVN">
           <code code="102.16156.2.2.1" codeSystem="1.2.36.1.2001.1001.101"
            codeSystemName="NCTIS Data Components" displayName="Test Specimen Detail" />

           <!-- Begin Collection DateTime -->
           <effectiveTime value="201112141120+1000" />
           <!-- End Collection DateTime -->

           <!-- Begin Collection Procedure -->
           <methodCode code="396540005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
            displayName="blood draw" />
           <!-- End Collection Procedure -->

           <!-- Begin Anatomical Location Name -->
           <targetSiteCode code="50496004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
            displayName="cubital fossa">

            <!-- Begin Anatomical Location Description -->
            <originalText>left cubital fossa</originalText>
            <!-- End Anatomical Location Description -->
```

```
 <!-- Begin Side -->
 <qualifier>
  <name code="78615007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
   codeSystemVersion="20110531" displayName="with laterality" />
  <value xsi:type="CD" code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
   displayName="left" />
 </qualifier>
 <!-- End Side -->

</targetSiteCode>
<!-- End Anatomical Location Name -->

<!-- Begin Physical Details -->
<specimen>
 <specimenRole>

  <!-- Begin Specimen Identifier -->
  <id root="1.2.3456.123" />
  <!--End Specimen Identifier -->

  <specimenPlayingEntity>
   <!-- Begin Specimen Tissue Type -->
   <code code="SER" codeSystem="2.16.840.1.113883.12.70" displayName="Serum" />
   <!-- End Specimen Tissue Type -->

   <!-- Begin Weight/Volume -->
   <quantity unit="mL" value="10" />
   <!-- End Weight/Volume -->

   <!-- Begin Description -->
   <desc xsi:type="ST">10 mL</desc>
   <!-- End Description -->

   <!-- Begin Continer Identifier -->
   <ext:asSpecimenInContainer classCode="CONT">
    <ext:container>
     <ext:id root="1.2.123.654321" />
    </ext:container>
   </ext:asSpecimenInContainer>
   <!-- End Continer Identifier -->

  </specimenPlayingEntity>
 </specimenRole>
</specimen>
<!-- End Physical Details -->

<!-- Begin Sampling Preconditions -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="103.16171" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Sampling Preconditions" />
  <value code="182923009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
   displayName="fasting patient" xsi:type="CD" />
 </observation>
</entryRelationship>
<!-- End Sampling Preconditions -->

<!-- Begin Collection Setting -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="103.16529" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Collection Setting" />
  <value xsi:type="ST">Pathology Clinic</value>
 </observation>
</entryRelationship>
```

```
        <!-- End Collection Setting -->

        <!-- Begin DateTime Received -->
        <entryRelationship typeCode="COMP">
         <observation classCode="OBS" moodCode="EVN">
          <code code="103.11014" codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components" displayName="DateTime Received" />
          <value value="201112141120+1000" xsi:type="TS" />
         </observation>
        </entryRelationship>
        <!-- End DateTime Received -->

        <!-- Begin Parent Specimen Identifier -->
        <entryRelationship typeCode="COMP">
         <observation classCode="OBS" moodCode="EVN">
          <code code="103.16187" codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components" displayName="Parent Specimen Identifier" />
          <specimen>
           <specimenRole>
            <id root="1.2.3456.321" />
           </specimenRole>
          </specimen>
         </observation>
        </entryRelationship>
        <!-- End Parent Specimen Identifier -->

        <!-- Begin Anatomical Location Image -->
        <entryRelationship typeCode="SPRT">
         <observationMedia classCode="OBS" moodCode="EVN">
          <id root="62C6AEDE-F08A-11E0-AA3F-10824824019B" />
          <value mediaType="image/jpeg">
           <reference value="location.jpeg" />
          </value>
         </observationMedia>
        </entryRelationship>
        <!-- End Anatomical Location Image -->

        <!-- Begin Image -->
        <entryRelationship typeCode="SPRT">
         <observationMedia classCode="OBS" moodCode="EVN">
          <id root="62C6AEDE-F08A-11E0-AA3F-10824824019B" />
          <value mediaType="image/jpeg">
           <reference value="specimen.jpeg" />
          </value>
         </observationMedia>
        </entryRelationship>
        <!-- End Image -->

       </observation>
      </entryRelationship>
      <!-- End Test Specimen Detail -->

      ...

     </observation>
    </entry>

    ...

   </section>
  </component>
  <!-- End Pathology Test Result -->

 </section>
</component>
```

```
    <!-- End Diagnostic Investigations -->

    ...

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

7.1.5.1.2 PATHOLOGY TEST RESULT GROUP

Identification

Name	Pathology Test Result Group
Metadata Type	Data Group
Identifier	DG-16469

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	RESULT GROUP SPECIMEN DETAIL	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	PATHOLOGY TEST RESULT	Optional	0..*

CDA R-MIM Representation

Figure 7.20, “Pathology Test Result Group” 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.

Pathology Test Result Group is represented by a Organizer related to an Observation by a component relationship. The code on the Organizer holds the Pathology Test Result Group Name. Each Individual Pathology Test Result is mapped to a component Observation whose code is the Individual Pathology Test Result Name, whose value is the Result Value and whose interpretationCode is the Result Value Normal Status. The Reference Range Details are mapped to an ObservationRange class related to the Observation by the ReferenceRange. Individual Pathology Test Result Status is mapped to component Observations off the Organizer.

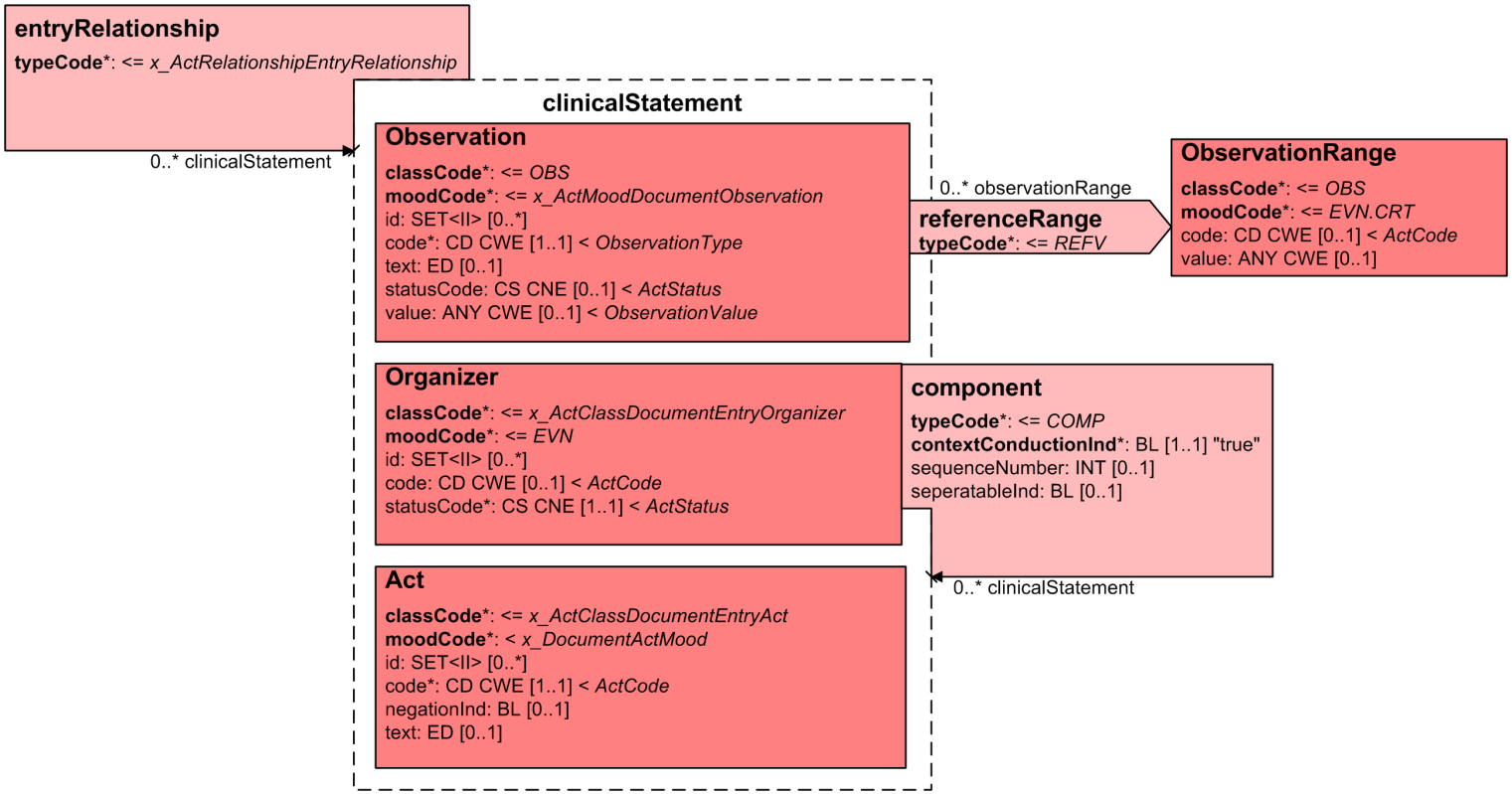


Figure 7.20. Pathology Test Result Group

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[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/		
Pathology Test Result Group	A group of results.	0..*	**entryRelationship[res_gp]/@typeCode="COMP"**		
			entryRelationship[res_gp]/**organizer**		
			entryRelationship[res_gp]/organizer/**@classCode="BATTERY"**		
			entryRelationship[res_gp]/organizer/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/**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.
			entryRelationship[res_gp]/organizer/**statusCode/@code="completed"**		Required CDA element.
Pathology Test Result Group > **Pathology Test Result Group Name**	The name of a group of pathology test results.	1..1	entryRelationship[res_gp]/organizer/**code**	NS	See <code> for available attributes.
Pathology Test Result Group > **Individual Pathology Test Result**	Specific detailed result, including both the value of the result item, and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[res_gp]/organizer/**component[ind_res]/**		
			entryRelationship[res_gp]/organizer/component[ind_res]/**observation**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/**@classCode="OBS"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/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.
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Name**	The name of an individual pathology test result.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**code**	NS	See <code> for available attributes.
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Value**	Actual value of the result.	0..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**value**		Although **value** is of datatype 'ANY', use only CD, PQ, BL, ST, INT, RTO, IVL_PQ or PPD.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Value Normal Status**	An interpretation of an observation to indicate whether the result is considered normal or abnormal.	0..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**interpretationCode**	HL7 V3: Observation-InterpretationNormality	See <code> for available attributes.
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Value Reference Range Details**	Tagged reference ranges for this value in its particular measurement context.	0..*	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**referenceRange/@typeCode="REFV"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/referenceRange/**observationRange**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/referenceRange/observationRange/**classCode="OBS"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/referenceRange/observationRange/**moodCode="EVN.CRT"**		
Pathology Test Result Group > Individual Pathology Test Result > Individual Result Value Reference Range Details >**Individual Pathology Test Result Value Reference Range Meaning**	Term whose value indicates the meaning of this range.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/referenceRange/observationRange/**code**	NS	See <code> for available attributes.
Pathology Test Result Group > Individual Pathology Test Result > Individual Result Value Reference Range Details >**Individual Pathology Test Result Value Reference Range**	The data range for the associated meaning.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/referenceRange/observationRange/**value:IVL_PQ**		
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Comment**	Comments that may include statements about significant, unexpected or unreliable values, or information about the source of the value where this may be relevant to the interpretation of the result.	0..*	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**entryRelationship[res_cmt]/@typeCode="COMP"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/**act**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/**@classCode="INFRM"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/**code**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/code/**@code="281296001"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/code/**@codeSystemVersion="20110531"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/code/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/code/**@displayName="result comments"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_cmt]/act/**text:ST**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Reference Range Guidance**	Additional advice on the applicability of the reference range.	0..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/**@typeCode="COMP"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/**act**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/**@classCode="INFRM"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/**code**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/code/**@code="281298000"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/code/**@codeSystemVersion="20110531"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/code/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/code/**@displayName="reference range comments"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[ref_guide]/act/**text:ST**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Status**	The status of the result value.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**entryRelationship[res_stat]/@typeCode="COMP"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/**observation**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/**@classCode="OBS"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/**code**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/code/**@code="308552006"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemVersion="20110531"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/code/**@displayName="report status"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/entryRelationship[res_stat]/observation/**value:CD**	NCTIS: Admin Codes - Result Status	See <code> for available attributes.
Pathology Test Result Group > **Result Group Specimen Detail**	Details about the individual specimen to which these 'Result group' test results refer, where testing of multiple specimens is required.	0..1	See: RESULT GROUP SPECIMEN DETAIL		

Example 7.20. Pathology Test Result Group 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>

    ...

   <!-- Diagnostic Investigations -->
     <component>
      <section>

       ...

       <!-- Pathology Test Result -->
       <component>
        <section>

        ...

        <!-- Pathology Result Observation -->
        <entry>
          <observation>

           ...

         <!-- Begin Pathology Test Result Group -->
         <entryRelationship typeCode="COMP">
          <organizer classCode="BATTERY" moodCode="EVN">
           <id root="9BE931D2-F085-11E0-9831-1E7C4824019B" />

           <!-- Begin Pathology Test Result Group Name -->
           <code code="18719-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
            displayName="Chemistry studies (set)" />
           <!-- End Pathology Test Result Group Name -->

           <statusCode code="completed" />

           <!-- Begin Individual Pathology Test Result -->
           <component>
            <observation classCode="OBS" moodCode="EVN">
             <id root="3802BA7A-F086-11E0-8A74-147D4824019B" />

             <!-- Begin Individual Pathology Test Result Name -->
             <code code="14682-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
              displayName="Serum Creatinine" />
             <!-- End Individual Pathology Test Result Name -->
```

```
<!-- Begin Individual Pathology Test Result Value -->
<value unit="mmol/L" value="0.06" xsi:type="PQ" />
<!-- End Individual Pathology Test Result Value -->

<!-- Begin Result Value Normal Status -->
<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality"
    codeSystem="2.16.840.1.113883.1.11.10206" displayName="Normal" />
<!-- End Result Value Normal Status -->

<!-- Begin  Result Comment -->
<entryRelationship typeCode="COMP">
 <act classCode="INFRM" moodCode="EVN">
  <code code="281296001" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
   displayName="result comments" />
  <text>Within normal range.</text>
 </act>
</entryRelationship>
<!-- End  Result Comment -->

<!-- Begin Reference Range Guidance -->
<entryRelationship typeCode="COMP">
 <act classCode="INFRM" moodCode="EVN">
  <code code="281298000" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
   displayName="reference range comments" />
  <text>Within normal range +/- 5% .</text>
 </act>
</entryRelationship>
<!-- End Reference Range Guidance -->

<!-- Begin Individual Pathology Test Result Status -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="308552006" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
   displayName="report status" />
  <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
   codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
 </observation>
</entryRelationship>
<!-- End Individual Pathology Test Result Status -->

<!-- Begin  Result Value Reference Range Details -->
<referenceRange typeCode="REFV">
 <observationRange classCode="OBS" moodCode="EVN.CRT">

  <!-- Begin Result Value Reference Range Meaning -->
  <code code="260395002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
   displayName="normal range" />
  <!-- End Result Value Reference Range Meaning -->

  <!-- Begin Result Value Reference Range -->
  <value xsi:type="IVL_PQ">
   <low value="0.04" />
   <high value="0.11" />
  </value>
  <!-- End Result Value Reference Range -->

 </observationRange>
</referenceRange>
<!-- End  Result Value Reference Range Details -->

</observation>
</component>
```

```
      <!-- Begin Individual Pathology Test Result -->

      <component>
       <observation classCode="OBS" moodCode="EVN">
        <id root="888FBD14-F089-11E0-8B47-D1804824019B" />
        <code code="14933-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
         displayName="Serum Uric Acid" />
        <value unit="mmol/L" value="0.41" xsi:type="PQ" />
        <interpretationCode code="HH" codeSystemName="HL7 ObservationInterpretationNormality"
           codeSystem="2.16.840.1.113883.5.83" displayName="High alert" />
        <entryRelationship typeCode="COMP">
         <act classCode="INFRM" moodCode="EVN">
          <code code="281296001" codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
           displayName="result comments" />
          <text>High alert.</text>
         </act>
        </entryRelationship>
        <entryRelationship typeCode="COMP">
         <act classCode="INFRM" moodCode="EVN">
          <code code="281298000" codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
           displayName="reference range comments" />
          <text>High alert.</text>
         </act>
        </entryRelationship>
        <entryRelationship typeCode="COMP">
         <observation classCode="OBS" moodCode="EVN">
          <code code="308552006" codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
           displayName="report status" />
          <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
           codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
         </observation>
        </entryRelationship>
        <referenceRange typeCode="REFV">
         <observationRange classCode="OBS" moodCode="EVN.CRT">
          <code code="260395002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
           displayName="normal range" />
          <value xsi:type="IVL_PQ">
           <low value="0.14" />
           <high value="0.35" />
          </value>
         </observationRange>
        </referenceRange>
       </observation>
      </component>

      ...

     </organizer>
    </entryRelationship>
    <!-- End Patholgy Test Result Group -->

      ...

   </observation>
  </entry>
  <!-- End Pathology Result Observation -->

  ...

 </section>
</component>
<!-- End Pathology Test Result -->
```

```
      ...

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

    ...

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

7.1.5.1.2.1 RESULT GROUP SPECIMEN DETAIL

Identification

Name	Result Group Specimen Detail
Metadata Type	Data Group
Identifier	DG-16156.2.2.2

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	PATHOLOGY TEST RESULT GROUP	Optional	0..1

CDA R-MIM Representation

Figure 7.21, “Result Group Specimen Detail” 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.

Result Group Specimen Detail is a data group is represented by an Observation related to its containing section by an entry relationship. The Collection Procedure is mapped to the methodCode of the Observation, the Anatomical Location is mapped to the targetSiteCode and the Collection DateTime is represented by the effectiveTime. There is a specimen.specimenRole.playingEntity that contains details about the specimen such as Specimen Tissue Type, Volume, Description and Specimen Identifier. The Container Identifier is mapped to the Container Australian CDA Extension.

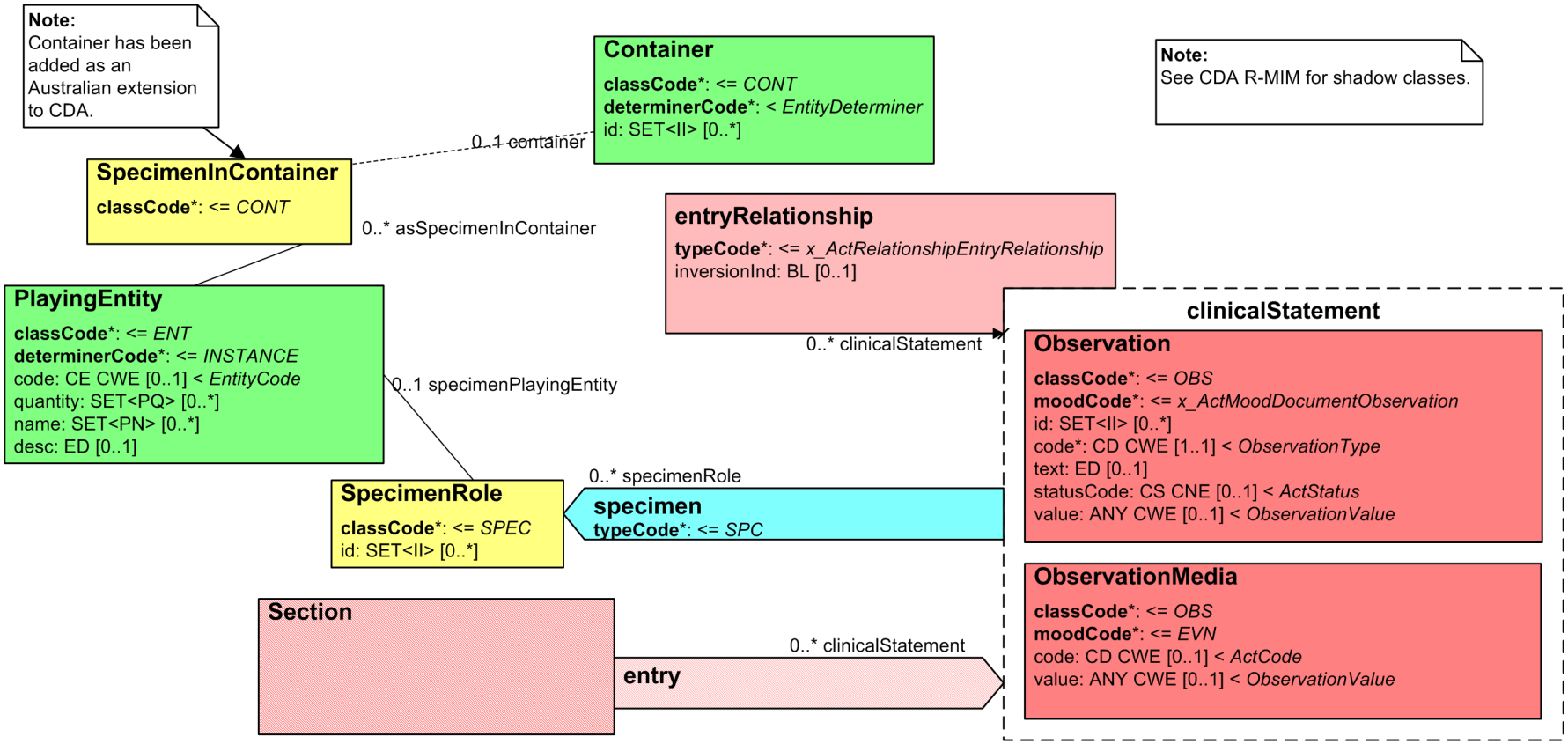


Figure 7.21. Result Group Specimen Detail

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[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer		
Result Group Specimen Detail	Details about the individual specimen to which these 'Result group' test results refer, where testing of multiple specimens is required.	0..1	**component**		
			component/**observation**		
			component/observation/**@classCode="OBS"**		
			component/observation/**@moodCode="EVN"**		
			component/observation/**code**		
			component/observation/code/**@code="102.16156.2.2.2"**		
			component/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/code/**@displayName="Result Group Specimen Detail"**		
Result Group Specimen Detail > **Specimen Tissue Type**	The type of specimen to be collected.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**code**	NS	See <code> for available attributes.
Result Group Specimen Detail > **Collection Procedure**	The method of collection to be used.	0..1	component/observation/**methodCode**	NS	See <code> for available attributes.
Result Group Specimen Detail > **Anatomical Site (Anatomical Location)**	The anatomical site(s) from where the specimen was taken.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Result Group Specimen Detail > Anatomical Site > **Specific Location**	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Result Group Specimen Detail > Anatomical Site > Specific Location > **Anatomical Location Name**	The name of an anatomical location.	0..1	component/observation/**targetSiteCode**	SNOMED CT-AU Body Structure Foundation Reference Set	See <code> for available attributes.
Result Group Specimen Detail > Anatomical Site > Specific Location > **Side**	The lateraility of an anatomical location.	0..1	component/observation/targetSiteCode/**qualifier**		
			component/observation/targetSiteCode/qualifier/**name**		
			component/observation/targetSiteCode/qualifier/name/**@code="78615007"**		
			component/observation/targetSiteCode/qualifier/name/**@codeSystem="2.16.840.1.113883.6.96"**		
			component/observation/targetSiteCode/qualifier/name/**@codeSystemName="SNOMED CT-AU"**		
			component/observation/targetSiteCode/qualifier/name/**@codeSystemVersion="20110531"**		
			component/observation/targetSiteCode/qualifier/name/**@displayName="with laterality"**		
			component/observation/targetSiteCode/qualifier/**value**	SNOMED CT-AU Laterality Reference Set	See <code> for available attributes.
Result Group Specimen Detail > Anatomical Site > **Anatomical Location Description**	Description of the Anatomical location.	0..1	component/observation/targetSiteCode/**originalText**		
Result Group Specimen Detail > Anatomical Site > **Anatomical Location Image**	Image or images used to identify a location.	0..*	component/observation/**entryRelationship[ana_im]/@typeCode="SPRT"**		The image may or may not be attested to and is therefore mapped to observationMedia.
			component/observation/entryRelationship[ana_im]/**observationMedia**		
			component/observation/entryRelationship[ana_im]/observationMedia/**@classCode="OBS"**		
			component/observation/entryRelationship[ana_im]/observationMedia/**@moodCode="EVN"**		
			component/observation/entryRelationship[ana_imc]/observationMedia/**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.
			component/observation/entryRelationship[ana_im]/observationMedia/**value**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Result Group Specimen Detail > **Physical Details (Physical Properties of an Object)**	Record of physical details such as weight and dimensions of a body part, device, lesion or specimen.	0..*	component/observation/**specimen/specimenRole/specimenPlayingEntity**		
Result Group Specimen Detail > Physical Details > **Weight**	Weight of the object.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**quantity:PQ**		Either Weight OR Volume may be used mutually exclusive.
Result Group Specimen Detail > Physical Details > **Dimensions**	The dimensions of the object.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Result Group Specimen Detail > Physical Details > Dimensions > **Volume**	Volume of the object.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**quantity:PQ**		Either Weight OR Volume may be used mutually exclusive.
Result Group Specimen Detail > Physical Details > **Description (Object Description)**	A general description of the specimen preparation.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**desc:ST**		
Result Group Specimen Detail > Physical Details > **Image**	A picture of the specimen.	0..1	component/observation/**entryRelationship[spec_im]/@typeCode="SPRT"**		The image may or may not be attested to and is therefore mapped to observationMedia.
			component/observation/entryRelationship[spec_im]/**observationMedia**		
			component/observation/entryRelationship[spec_im]/observationMedia/**@classCode="OBS"**		
			component/observation/entryRelationship[spec_im]/observationMedia/**@moodCode="EVN"**		
			component/observation/entryRelationship[spe_imc]/observationMedia/**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.
			component/observation/entryRelationship[spec_im]/observationMedia/**value**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Result Group Specimen Detail > **Collection and handling**	Collection and handling requirements.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Result Group Specimen Detail > Collection and handling > **Sampling Preconditions**	Any conditions to be met before the sample should be taken.	0..1	component/observation/**entryRelationship[smp_pre]/@typeCode="COMP"**		
			component/observation/entryRelationship[smp_pre]/**observation**		
			component/observation/entryRelationship[smp_pre]/observation/**@classCode="OBS"**		
			component/observation/entryRelationship[smp_pre]/observation/**@moodCode="EVN"**		
			component/observation/entryRelationship[smp_pre]/observation/**code**		
			component/observation/entryRelationship[smp_pre]/observation/code/**@code="103.16171"**		
			component/observation/entryRelationship[smp_pre]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component/observation/entryRelationship[smp_pre]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/entryRelationship[smp_pre]/observation/code/**@displayName="Sampling Preconditions"**		
			component/observation/entryRelationship[smp_pre]/observation/**value:CD**	NS	See <code> for available attributes.
Result Group Specimen Detail > **Handling and Processing**	Workflow of specimen processing/handling.	1..1	N/A		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Result Group Specimen Detail > Handling and Processing > **Collection DateTime**	The date and time that collection has been ordered to take place or has taken place.	1..1	component/observation/**effectiveTime**		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Result Group Specimen Detail > Handling and Processing > **Collection Setting**	Identification of the setting at which the specimen was collected from a subject of care.	0..1	component/observation/**entryRelationship[coll_set]/@typeCode="COMP"**		
			component/observation/entryRelationship[coll_set]/**observation**		
			component/observation/entryRelationship[coll_set]/observation/**@classCode="OBS"**		
			component/observation/entryRelationship[coll_set]/observation/**@moodCode="EVN"**		
			component/observation/entryRelationship[coll_set]/observation/**code**		
			component/observation/entryRelationship[coll_set]/observation/code/**@code="103.16529"**		
			component/observation/entryRelationship[coll_set]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			component/observation/entryRelationship[coll_set]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/entryRelationship[coll_set]/observation/code/**@displayName="Collection Setting"**		
			component/observation/entryRelationship[coll_set]/observation/**value:ST**		
Result Group Specimen Detail > Handling and Processing > **DateTime Received**	The date and time that the sample was received at the laboratory.	0..1	component/observation/entryRelationship[date_rec]/**@typeCode="COMP"**		
			component/observation/entryRelationship[date_rec]/**observation**		
			component/observation/entryRelationship[date_rec]/observation/**@classCode="OBS"**		
			component/observation/entryRelationship[date_rec]/observation/**@moodCode="EVN"**		
			component/observation/entryRelationship[date_rec]/observation/**code**		
			component/observation/entryRelationship[date_rec]/observation/code/**@code="103.11014"**		
			component/observation/entryRelationship[date_rec]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			component/observation/entryRelationship[date_rec]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/entryRelationship[date_rec]/observation/code/**@displayName="DateTime Received"**		
			component/observation/entryRelationship[date_rec]/observation/**value:TS**		See <time> for available attributes.
Result Group Specimen Detail > **Identifiers**	Sample identifications.	0..1	N/A		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Result Group Specimen Detail > Identifiers > **Specimen Identifier**	Unique identifier of the specimen, normally assigned by the laboratory.	0..1	component/observation/specimen/specimenRole/**id**		See <id> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Result Group Specimen Detail > Identifiers > **Parent Specimen Identifier**	Unique identifier of the parent specimen, where the specimen is split into sub-samples.	0..1	component/observation/entryRelationship[prnt_id]/**@typeCode="COMP"**		
			component/observation/entryRelationship[prnt_id]/**observation**		
			component/observation/entryRelationship[prnt_id]/observation/**@classCode="OBS"**		
			component/observation/entryRelationship[prnt_id]/observation/**@moodCode="EVN"**		
			component/observation/entryRelationship[prnt_id]/observation/**code**		
			component/observation/entryRelationship[prnt_id]/observation/code/**@code="103.16187"**		
			component/observation/entryRelationship[prnt_id]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			component/observation/entryRelationship[prnt_id]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/entryRelationship[prnt_id]/observation/code/**@displayName="Parent Specimen Identifier"**		
			component/observation/entryRelationship[prnt_id]/observation/**specimen/specimenRole/id**		See <id> for available attributes.
Result Group Specimen Detail > Identifiers > **Container Identifier**	Unique identifier given to the container in which the specimen is transported or processed.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**ext:asSpecimenInContainer**		See Australian CDA extension: Container
			component/observation/specimen/specimenRole/specimenPlayingEntity/ ext:asSpecimenInContainer/**@classCode="CONT"**		
			component/observation/specimen/specimenRole/specimenPlayingEntity/ ext:asSpecimenInContainer/**ext:container**		
			component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ ext:container/**ext:id**		See <id> for available attributes.

Example 7.21. Result Group Specimen Detail 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>

    …

     <!-- Diagnostic Investigations -->
     <component>
      <section>

       ...

       <!-- Pathology Test Result -->
       <component>
        <section>

         ...

         <entry>
           <observation>

              ...

           <!-- Pathology Result Group -->
           <entryRelationship typeCode="COMP">
            <organizer classCode="BATTERY" moodCode="EVN">

             ...

              <!-- Result Group Specimen Detail -->
             <component>
              <observation classCode="OBS" moodCode="EVN">
               <code code="102.16156.2.2.2" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Componenets"
                displayName="Result Group Specimen Detail" />

               <!-- Collection DateTime -->
               <effectiveTime value="20110427" />

               <!-- Collection Procedure -->
               <methodCode code="82078001" codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED-CT" displayName="blood draw" />

               <!-- Anatomical Location name -->
               <targetSiteCode code="50496004" codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED-CT" displayName="cubital fossa">
                <!-- Anatomical Location Description -->
```

```
 <originalText>left cubital fossa</originalText>
 <!-- Side -->
 <qualifier>
  <name code="78615007" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED-CT-AU" codeSystemVersion="20110531"
   displayName="with laterality" />
  <value code="7771000" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED-CT" codeSystemVersion="20110531"
   displayName="left" />
 </qualifier>
</targetSiteCode>

<!-- Specimen Tissue Type -->
<specimen>
 <specimenRole>
  <!-- Specimen Identifier -->
  <id root="1.2.3.41123" />
  <specimenPlayingEntity>
   <code code="87612001" codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED-CT" displayName="blood" />
   <!-- Volume/Weight -->
   <quantity unit="mL" value="10" />
   <!-- Description -->
   <desc xsi:type="ST">10 mL of Blood</desc>
   <!-- Container Identifier -->
   <ext:specimenInContainer classCode="CONT">
    <ext:container>
     <ext:id root="CNH45218964" />
    </ext:container>
   </ext:specimenInContainer>
  </specimenPlayingEntity>
 </specimenRole>
</specimen>

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="SPRT">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="62C6AEDE-F08A-11E0-AA3F-10824824019B" />
  <value mediaType="image/jpeg">
   <reference value="location.jpeg" />
  </value>
 </observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Image -->
<entryRelationship typeCode="SPRT">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="4C37EC20-7220-11E0-967C-A1C24724019B" />
  <value mediaType="image/jpeg">
   <reference value="specimen.jpg" />
  </value>
 </observationMedia>
</entryRelationship>

<!-- Sampling Preconditions -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="103.16171" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Sampling Preconditions" />
  <value code="16985007" codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED-CT" displayName="fasting" xsi:type="CD" />
 </observation>
</entryRelationship>
```

```
            <!-- Collection Setting -->
            <entryRelationship typeCode="COMP">
             <observation classCode="OBS" moodCode="EVN">
              <code code="103.16529" codeSystem="1.2.36.1.2001.1001.101"
               codeSystemName="NCTIS Data Components" displayName="Collection Setting" />
              <value xsi:type="ST">Ward 3B</value>
             </observation>
            </entryRelationship>

            <!-- DateTime Received -->
            <entryRelationship typeCode="COMP">
             <observation classCode="OBS" moodCode="EVN">
              <code code="103.11014" codeSystem="1.2.36.1.2001.1001.101"
               codeSystemName="NCTIS Data Components"
               displayName="DateTime Received" />
              <value xsi:type="TS" value="201104271000" />
             </observation>
            </entryRelationship>

            <!-- Parent Specimen Identifier -->
            <entryRelationship typeCode="COMP">
             <observation classCode="OBS" moodCode="EVN">
              <code code="103.16187" codeSystem="1.2.36.1.2001.1001.101"
               codeSystemName="NCTIS Data Components"
               displayName="Parent Specimen Identifier" />
              <specimen>
               <specimenRole>
                <id root="2.1.3.452812" />
               </specimenRole>
              </specimen>
             </observation>
            </entryRelationship>

           </observation>
          </component>
            </organizer>
       </entryRelationship>
       <!-- End Pathology Test Result Group -->

       ...

      </observation>
     </entry>
    ...
   </section>
  </component>
  <!-- End Pathology Test Result -->

  ...

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

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

7.1.5.2 IMAGING EXAMINATION RESULT

Identification

Name	Imaging Examination Result
Metadata Type	Data Group
Identifier	DG-16145

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	IMAGING EXAMINATION RESULT GROUP	Optional	0..*
	EXAMINATION REQUEST DETAILS	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	DIAGNOSTIC INVESTIGATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.22, “Imaging Examination Result” 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 Imaging Examination Result data group is a component Section of its containing Section. Related to the Imaging Examination Result Section by an entry relationship is an Observation. The Observation.code represents the Imaging Examination Result Name, the methodCode represents teh Imaging Modality and Observation.text is the Examination Result Representation.

There are three Observations related to the base Imaging Examination Result Observation: Imaging Examination Result DateTime, Findings, and Imaging Examination Result Status.

There are one Act for Clinical Information Provided related to the base Imaging Examination Result Observation.

The Anatomical Location details are contained in the targetSiteCode.

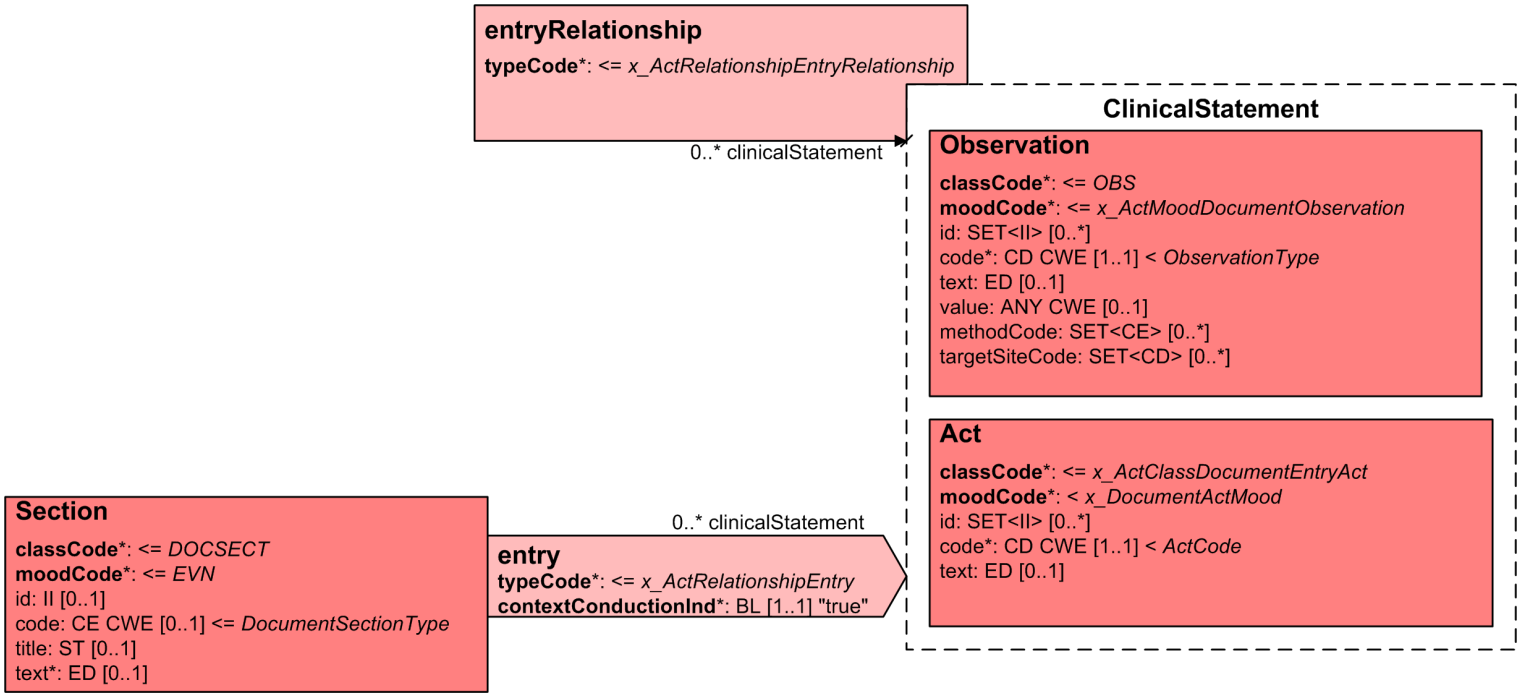


Figure 7.22. Imaging Examination Result

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*[6] 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 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/		
Imaging Examination Result	The result of an imaging examination which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	**component[img_exam]/section**		
			component[img_exam]/section/**code**		
			component[img_exam]/section/**@code="102.16145"**		
			component[img_exam]/section/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[img_exam]/section/**@codeSystemName="NCTIS Data Components"**		
			component[img_exam]/section/**@displayName="Imaging Examination Result"**		
			component[img_exam]/section/**title="Imaging Examination Result"**		
			component[img_exam]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[img_exam]/section/		
Imaging Examination Result > **Imaging Examination Result Name**	Identification of the imaging examination or procedure performed, typically including modality and anatomical location (including laterality).	1..1	entry[img_exam_res]/**observation**		
			entry[img_exam_res]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/**id**		
			entry[img_exam_res]/observation/**code**	NS	See <code> for available attributes.
Imaging Examination Result > **Imaging Modality**	The imaging method used to perform the examination.	0..1	entry[img_exam_res]/observation/**methodCode**	NS	See <code> for available attributes.

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result > **Anatomical Site (Anatomical Location)**	Details about the anatomical locations to which this examination result refers.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Imaging Examination Result > Anatomical Site > **Specific Location**	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Imaging Examination Result > Anatomical Site > Specific Location > **Anatomical Location Name**	The name of an anatomical location.	0..1	entry[img_exam_res]/observation/**targetSiteCode**	SNOMED CT-AU Body Structure Foundation Reference Set	See <code> for available attributes.
Imaging Examination Result > Anatomical Site > Specific Location > **Side**	The lateraility of an anatomical location.	0..1	entry[img_exam_res]/observation/targetSiteCode/**qualifier**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/**name**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/name/**@code="78615007"**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/name/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/name/**@codeSystemName="SNOMED CT-AU"**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/name/**@codeSystemVersion="20110531"**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/name/**@displayName="with laterality"**		
			entry[img_exam_res]/observation/targetSiteCode/qualifier/**value**	SNOMED CT-AU Laterality Reference Set	See <code> for available attributes.
Imaging Examination Result > Anatomical Site > **Anatomical Location Description**	Description of anatomical location.	0..1	entry[img_exam_res]/observation/targetSiteCode/**originalText**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result > Anatomical Site > **Anatomical Location Image**	Image or images used to identify a location.	0..*	entry[img_exam_res]/observation/entryRelationship[img]/**@typeCode="REFR"**		The image may or may not be attested to and is therefore mapped to observationMedia.
			entry[img_exam_res]/observation/entryRelationship[img]/observationMedia/**observationMedia**		
			entry[img_exam_res]/observation/entryRelationship[img]/observationMedia/**@classCode="OBS"**		
			entry[img_exam_res]/observation/entryRelationship[img]/observationMedia/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[img]/observationMedia/**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[img_exam_res]/observation/entryRelationship[img]/observationMedia/**value**		
Imaging Examination Result > **Imaging Examination Result Status**	The status of the examination result as a whole.	1..1	entry[img_exam_res]/observation/**entryRelationship[res_stat]/@typeCode="COMP"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/**observation**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/**code**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/code/**@code="308552006"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemVersion="20110531"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/code/**@displayName="report status"**		
			entry[img_exam_res]/observation/entryRelationship[res_stat]/observation/**value:CD**	NCTIS: Admin Codes - Result Status	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result > **Clinical Information Provided**	Description of clinical information available at the time of interpretation of results, or a link to the original clinical information provided in the examination request.	0..1	entry[img_exam_res]/observation/**entryRelationship[clin_inf]/@typeCode="COMP"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/**act**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**@classCode="INFRM"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**code**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@code="55752-0"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@codeSystem= "2.16.840.1.113883.6.1"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@codeSystemName="LOINC"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@displayName="Clinical information"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**text:ST**		
Imaging Examination Result > **Findings**	Narrative description of findings, including comparative findings.	0..1	entry[img_exam_res]/observation/**entryRelationship[find]/@typeCode="REFR"**		
			entry[img_exam_res]/observation/entryRelationship[find]/**observation**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[find]/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[img_exam_res]/observation/entryRelationship[find]/observation/**code**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@code="103.16503"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@displayName="Findings"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**text:ST**		
Imaging Examination Result > **Imaging Examination Result Group**	A group of structured results.	0..*	See: IMAGING EXAMINATION RESULT GROUP.		
Imaging Examination Result > **Examination Result Representation**	Rich text representation of the entire result as issued by the diagnostic service.	0..1	entry[img_exam_res]/observation/**text**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result > **Examination Request Details**	Details concerning a single examination requested.	0..*	See: EXAMINATION REQUEST DETAILS		
Imaging Examination Result > **Imaging Examination Result DateTime**	The date and, optionally, time when the Imaging Examination Result became available.	1..1	entry[img_exam_res]/observation/**entryRelationship[res_date]/@typeCode="COMP"**		See <time> for available attributes.
			entry[img_exam_res]/observation/entryRelationship[res_date]/**observation**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/**code**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/code/**@code="103.16589"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/code/**@displayName="Imaging Examination Result DateTime"**		
			entry[img_exam_res]/observation/entryRelationship[res_date]/observation/**effectiveTime**		See <time> for available attributes.

Example 7.22. Imaging Examination Result 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>

   ...

   <!-- Diagnostic Investigations -->
   <component>
    <section>

    ...

    <!-- Imaging Examination Result -->
     <component>
      <section>
       <code code="102.16145" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Imaging Examination Result" />
       <title>Imaging Examination Result</title>
       <text>Narrative about the imaging examination result goes here.</text>

       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <id root="D1C49518-5994-11E0-A72D-45FBDFD72085" />
         <!-- Imaging Examination Result Name -->
         <code code="16310003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
          displayName="ultrasound scan" />

         <!-- Examination Result Representation -->
         <text xsi:type="ST">Examination Result Representation goes here. This is an example string.</text>

         <!-- Imaging Modality -->
         <methodCode code="16310003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
          displayName="ultrasound" />

         <!-- Anatomical Location Name -->
         <targetSiteCode code="113345001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
          displayName="abdomen">
          <!-- Anatomical Location Description -->
          <originalText>Abdomen from left.</originalText>

          <!-- Side -->
          <qualifier>
           <name code="78615007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT-AU"
            codeSystemVersion="20110531" displayName="with laterality" />
           <value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
            displayName="left" xsi:type="CD" />
          </qualifier>
```

```
</targetSiteCode>

<!-- Imaging Examination Result Status -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="308552006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT-AU"
   codeSystemVersion="20110531" displayName="report status" />
  <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
   codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
 </observation>
</entryRelationship>
<!-- End Imaging Examination Result Status -->

<!-- Clinical Information Provided -->
<entryRelationship typeCode="COMP">
 <act classCode="INFRM" moodCode="EVN">
  <code code="55752-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
   displayName="Clinical information" />
  <text>Patient pregnant. Confirm dates. Estimate from LNMP 18 weeks.</text>
 </act>
</entryRelationship>
<!-- End Clinical Information Provided -->

<!-- Anatomical Location Image -->
<entryRelationship typeCode="REFR">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="060E2C54-7519-11E0-98E3-A5674824019B" />
  <value mediaType="image/jpeg">
   <reference value="abdomen.jpg" />
  </value>
 </observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Findings -->
<entryRelationship typeCode="REFR">
 <observation classCode="OBS" moodCode="EVN">
  <id root="1165EC16-599B-11E0-AFD0-DA01E0D72085" />
  <code code="103.16503" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
   displayName="Findings" />
  <text>Normal obstetric ultrasound with foetal biometry indicating getational age of 18W0D.</text>
 </observation>
</entryRelationship>
<!-- End Findings -->

<!-- Imaging Examination Result Group -->
<entryRelationship typeCode="COMP">

  ...

 </organizer>
</entryRelationship>
<!-- End Imaging Examination Result Group -->

<!-- Examination Request Details -->
<entryRelationship typeCode="SUBJ" inversionInd="true">

  ...

 </act>
</entryRelationship>
<!-- End Examination Request Details -->

<!-- Imaging Examination Result DateTime -->
<entryRelationship typeCode="COMP">
```

```
          <observation classCode="OBS" moodCode="EVN">
           <code code="103.16589" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
            displayName="Imaging Examination Result DateTime" />
           <effectiveTime value="201104271100" />
          </observation>
         </entryRelationship>
         <!-- End Imaging Examination Result DateTime -->

        </observation>
       </entry>

      </section>
     </component>
     <!-- End Imaging Examination Result -->

    ...

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

   ...

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

7.1.5.2.1 IMAGING EXAMINATION RESULT GROUP

Identification

Name	Imaging Examination Result Group
Metadata Type	Data Group
Identifier	DG-16504

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	IMAGING EXAMINATION RESULT	Optional	0..*

CDA R-MIM Representation

Figure 7.23, “Imaging Examination Result Group” 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 Imaging Examination Result Group is represented by a Organizer related to an Observation by a component relationship. The code on the Organizer holds the Imaging Examination Result Group Name. Each Individual Imaging Examination Result is mapped to a component Observation whose code is the Individual Imaging Examination Result Name, whose value is the Result Value and whose interpretationCode is the Result Value Normal Status. The Reference Range Details are mapped to an ObservationRange class related to the Observation by the ReferenceRange. The Anatomical Site details are mapped to the targetSiteCode of a component Organisation.

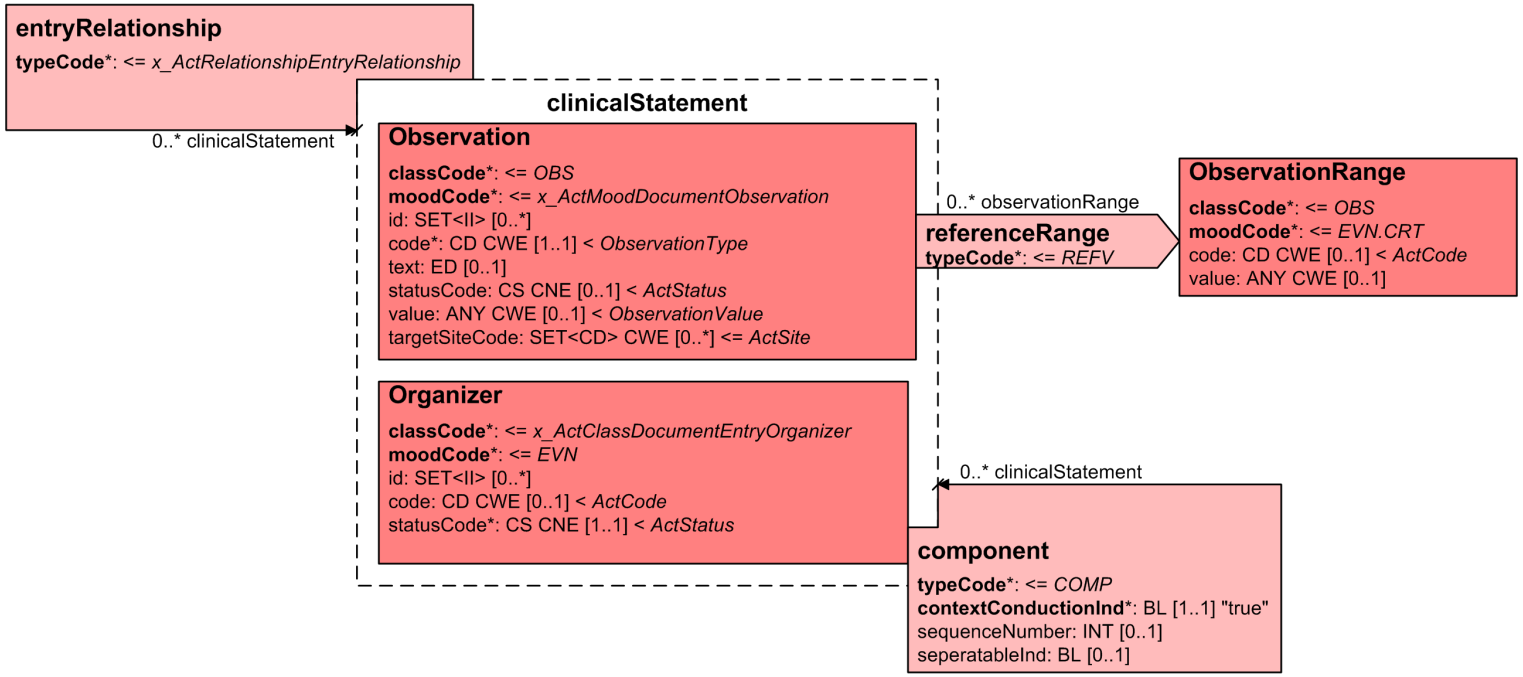


Figure 7.23. Imaging Examination Result Group

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*[7] 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[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/		
Imaging Examination Result Group	A group of structured results.	0..*	**entryRelationship[im_res_gp]/@typeCode="COMP"**		
			entryRelationship[im_res_gp]/**organizer**		
			entryRelationship[im_res_gp]/organizer/**@classCode="BATTERY"**		
			entryRelationship[im_res_gp]/organizer/**@moodCode="EVN"**		
			entryRelationship/[im_res_gp]/organizer/**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.
			entryRelationship/[im_res_gp]/organizer/**statusCode="completed"**		Required CDA element.
Imaging Examination Result Group > **Imaging Examination Result Group Name**	The name of a group of structured results.	1..1	entryRelationship[im_res_gp]/organizer/**code**	NS	See <code> for available attributes.

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result Group > **Individual Imaging Examination Result**	Specific detailed result, including both the value of the result item and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[im_res_gp]/organizer/**component[ind_im_res]**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**@classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**@moodCode="EVN"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/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.
Imaging Examination Result Group > Individual Imaging Examination Result > **Individual Imaging Examination Result Name**	The name of a specific detailed result.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**code**	NS	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value**	Actual value of the result.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**value**		Although **value** is datatype 'ANY', use only CD, PQ.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value Normal Status**	An interpretation of an observation to indicate whether the result is considered normal or abnormal.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**interpretationCode**	HL7 V3: Observation-InterpretationNormality	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value Reference Range Details**	Tagged reference ranges for this value in its particular measurement context.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**referenceRange/@typeCode= "REFV"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/**observationRange**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**moodCode="EVN.CRT"**		
Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details > **Imaging Examination Result Value Reference Range Meaning**	Term whose value indicates the meaning of this range.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**code**	NS	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details > **Imaging Examination Result Value Reference Range**	The data range for the associated meaning.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**value:IVL_PQ**		

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result Group > Individual Imaging Examination Result > **Result Comment**	May include statements about significant, unexpected or unreliable values, or information about the source of the value where this may be relevant to the interpretation of the result.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/**@typeCode="COMP"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/**act**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/**@classCode="INFRM"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/**@moodCode="EVN"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/**code**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/code/**@code="281296001"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/code/**@codeSystemVersion="20110531"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/code/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/code/**@displayName="result comments"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship/act/**text:ST**		
Imaging Examination Result Group > **Anatomical Location**	Details about the individual anatomical location to which these 'Result group' examination results refer, where finer-grained representation of Anatomical location is required.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Imaging Examination Result Group > Anatomical Location > **Specific Location**	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Imaging Examination Result Group > Anatomical Location > Specific Location > **Anatomical Location Name**	The name of an anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**targetSiteCode**	SNOMED CT-AU Body Structure Foundation Reference Set	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result Group > Anatomical Location > Specific Location > **Side**	The lateraility of an anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/**qualifier**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/**name**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@code="78615007"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystemVersion="20110531"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@displayName="with laterality"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/**value**	SNOMED CT-AU Laterality Reference Set	See <code> for available attributes.
Imaging Examination Result Group > Anatomical Location > **Anatomical Location Description**	Description of anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/**originalText**		
Imaging Examination Result Group > Anatomical Location > **Anatomical Location Image**	Image or images used to identify a location.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/**@typeCode="REFR"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/**observationMedia**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**@classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**@moodCode="EVN"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**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.
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**value**		

Example 7.23. Imaging Examination Result Group 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>

   ...

   <!-- Diagnostic Investigations -->
   <component>
    <section>

    ...

     <!-- Imaging Examination Result -->
     <component>
      <section>

       ...

          <entry>
           <observation>

             ...

         <!-- Imaging Examination Result Group -->
         <entryRelationship typeCode="COMP">
          <organizer classCode="BATTERY" moodCode="EVN">
          <id root="0224C9E2-85CA-11E0-911F-D0D14724019B"/>
           <code code="268445003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
            displayName="ultrasound scan - obstetric" />
           <statusCode code="completed" />

           <!-- Individual Imaging Examination Result -->
           <component>
            <observation classCode="OBS" moodCode="EVN">
             <id root="59D44B0C-599E-11E0-B6BD-FA04E0D72085" />
             <code code="396551005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
              displayName="femur length" />

             <!-- Result Value -->
             <value unit="mm" value="28" xsi:type="PQ" />

             <!-- Result Value Normal Status -->
             <interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="  2.16.840.1.113883.5.83" displayName="Normal" />

             <!-- Anatomical Location name -->
             <targetSiteCode code="182046008" codeSystem="2.16.840.1.113883.6.96"
              codeSystemName="SNOMED-CT" displayName="femur">
```

```
          <!-- Anatomical Location Description -->
          <originalText>Left Femur</originalText>
          <!-- Side -->
          <qualifier>
           <name code="78615007" codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED-CT-AU" codeSystemVersion="20110531"
            displayName="with laterality" />
           <value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
            displayName="left" xsi:type="CD" />
          </qualifier>
         </targetSiteCode>

         <!-- Anatomical Location Image -->
         <entryRelationship typeCode="REFR">
          <observationMedia classCode="OBS" moodCode="EVN">
           <id root="060E2C54-7519-11E0-98E3-A5674824019B" />
           <value mediaType="image/jpeg">
            <reference value="femur.jpg" />
           </value>
          </observationMedia>
         </entryRelationship>

         <!-- Result Comment -->
         <entryRelationship typeCode="COMP">
          <act classCode="INFRM" moodCode="EVN">
           <code code="281296001" codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
            displayName="result comments" />
           <text>Femur measured during ultrasound scan.</text>
          </act>
         </entryRelationship>

         <!-- Result Value Reference Range Details -->
         <referenceRange typeCode="REFV">
          <observationRange classCode="OBS" moodCode="EVN.CRT">
           <code code="281301001" codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
            displayName="within reference range" />
           <value xsi:type="IVL_PQ">
            <low value="25" unit="mm" />
            <high value="32" unit="mm" />
           </value>
          </observationRange>
         </referenceRange>
         <!-- End Result Value Reference Range Details -->

        </observation>
       </component>
       <!-- End Individual Imaging Examination Result -->

      </organizer>
     </entryRelationship>
     <!-- End Imaging Examination Result Group -->

     ...

      </observation>
     </entry>

     ...
   </section>
  </component>
  <!-- End Imaging Examination Result -->

...
```

```
    </section>
   </component>
   <!-- End Diagnositc Investigations -->

   ...

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

7.1.5.2.2 EXAMINATION REQUEST DETAILS

Identification

Name	Examination Request Details
Metadata Type	Data Group
Identifier	DG-16511

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	IMAGING EXAMINATION RESULT	Optional	0..*

CDA R-MIM Representation

Figure 7.24, “Examination Request Details” 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 Examination Request Details data group maps to a component Act of a containing Observation. The Examination Requested Name is mapped to a component Observation and the Report Identifier is also mapped to a component Observation. The Receiver Order Identifier and the DICOM Study Identifier are mapped to related Acts. The Image Details are mapped to a component Act whose id is the Image Identifier, whose value is the Image View Name and whose effectiveTime is the Image DateTime. The DICOM Series Identifier is mapped to a component Act. The Image is mapped to a related ObservationMedia class.

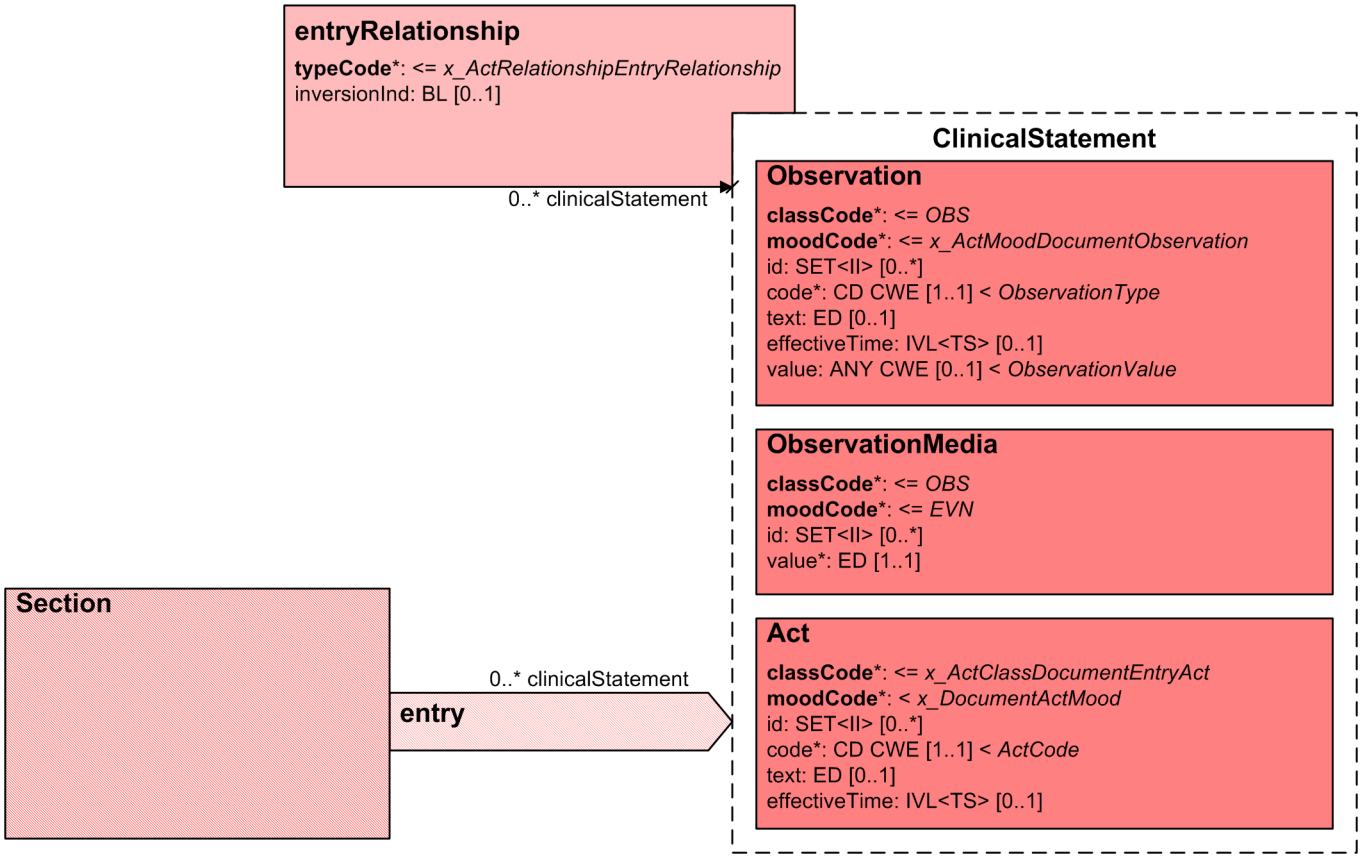


Figure 7.24. Examination Request Details

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*[8] 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[diag_inv]/section/component[im_exam]/section/entry[img_exam_res]/observation		
Examination Request Details	Details concerning a single examination requested.	0..*	**entryRelationship[exam_req]/@typeCode="SUBJ"**		
			entryRelationship[exam_req]/**@inversionInd="true"**		
			entryRelationship[exam_req]/**act**		
			entryRelationship[exam_req]/act/**@classCode="ACT"**		
			entryRelationship[exam_req]/act/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/**code**		
			entryRelationship[exam_req]/act/code/**@code="102.16511"**		
			entryRelationship[exam_req]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/code/**@displayName="Examination Request Details"**		

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > **Examination Requested Name**	Identification of imaging examination or procedure requested, where the examination requested differs from the examination actually performed.	0..*	entryRelationship[exam_req]/act/**entryRelationship[im_req_exam_nm]/@typeCode="REFR"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/**observation**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/**@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/**code**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/code/**@code="103.16512"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/ code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/code/**@displayName="Examination Requested Name"**		
			entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/observation/**text:ST**		
Imaging Examination Result >Examination Request Details > **DICOM Study Identifier**	Unique identifier of this study allocated by the imaging service.	0..1	entryRelationship[exam_req]/act/**entryRelationship[exam_perf]/@typeCode="SUBJ"**		See <id> for available attributes.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/**act**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/**act/@classCode="ACT"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/**act/@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/**code**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/code/**@code="103.16513"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/code/**@displayName="DICOM Study Identifier"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/**id**		See <id> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > **Report Identifier**	The local identifier given to the imaging examination report.	0..1	entryRelationship[exam_req]/act/**entryRelationship/@typeCode="COMP"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/**observation**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/**@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/**id**		See <id> for available attributes.
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/**code**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/code/**@code="103.16514"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/code/**@displayName="Report Identifier"**		
Examination Request Details > **Image Details**	Images referred to, or provided, to assist clinical understanding of the examination.	0..*	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/**entryRelationship[img_det]/@typeCode="COMP"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/**observation**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**code**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/code/**@code="103.16515"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/code/**@displayName="Image Details"**		
Examination Request Details > Image Details > **Image Identifier**	Unique identifier of this image allocated by the imaging service (often the DICOM image instance UID).	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**id**		See <id> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > Image Details > **DICOM Series Identifier**	Unique identifier of this series allocated by the imaging service.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**entryRelationship[dicom_ser]/@typeCode="REFR"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**entryRelationship[dicom_ser]/act/**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/**@classCode="ACT"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/**id**		See <id> for available attributes. NB. The DICOM Series Identifier is placed in the root attribute.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/**code**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/**@code="103.16517"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/**@displayName="DICOM Series Identifier"**		
Examination Request Details > Image Details > **Image View Name**	The name of the imaging view e.g Lateral or Antero-posterior (AP).	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**value:CD**	NS	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > Image Details > **Subject Position**	Description of the subject of care's position when the image was performed.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**entryRelationship/@typeCode="REFR"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/**observation/**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/**@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/**code**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/code/**@code="103.16519"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/code/**@displayName="Subject Position"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/observation/**value:ST**		
Examination Request Details > Image Details > **Image DateTime**	Specific date/time the imaging examination was performed.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/**effectiveTime**		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > Image Details > **Image**	An attached or referenced image of a current view.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**@typeCode="SPRT"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia**		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/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.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/value:ED**		

Example 7.24. Examination Request Details 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 Diagnositc Investigations section -->
   <component>
    <section>

    ...

     <!-- Begin Imaging Examination Result -->
     <component>
     <section>

       <!-- Begin Imaging Examination Result Observation -->
       <entry>
          <observation>

       ...

       <!-- Begin Examination Request Details -->
       <entryRelationship inversionInd="true" typeCode="SUBJ">
          <act classCode="ACT" moodCode="EVN">
           <code code="102.16511" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Examination Request Details" />

           <!-- Begin Examination Requested Name -->
           <entryRelationship typeCode="REFR">
            <observation classCode="OBS" moodCode="EVN">
             <code code="103.16512" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Examination Requested name" />
             <text>U/S Obstetric - Dating</text>
            </observation>
           </entryRelationship>
           <!-- End Examination Requested Name -->

           <!-- Report Identifier -->
           <entryRelationship typeCode="COMP">
            <observation classCode="OBS" moodCode="EVN">
             <id root="1.23456879" />
             <code code="103.16514" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Report Identifier" />
            </observation>
           </entryRelationship>
           <!-- End Report Identifier -->

           <!-- Imaging Examination Performed -->
           <entryRelationship typeCode="SUBJ">
```

```
  <act classCode="ACT" moodCode="EVN">
   <!-- DICOM Study Identifier -->
   <id root="1.2.124.113532.192.168.224.50.20110427.83527.2623361" />
   <code code="103.16513" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="DICOM Study Identifier" />

   <!-- Image Details -->
   <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">

     <!-- Image Identifier -->
     <id root="1.2.392.200036.9116.7.8.6.58542403.6.0.1289367131841248" />
     <code code="103.16515" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Image Details" />

     <!-- Image DateTime -->
     <effectiveTime value="201104271000" />

     <!-- Image View Name -->
     <value code="241510009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU" codeSystemVersion="20101130" displayName="ultrasound scan of leg"
      xsi:type="CD" />

     <!-- DICOM Series Identifier -->
     <entryRelationship typeCode="REFR">
      <act classCode="ACT" moodCode="EVN">
       <id root="1.2.392.200036.9116.7.8.6.58542403.2.0.1125941630756854" />
       <code code="103.16517" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="DICOM Series Identifier" />
      </act>
     </entryRelationship>
     <!-- End DICOM Series Identifier -->

     <!-- Subject Position -->
     <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
       <code code="103.16519" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Subject Position" />
       <value xsi:type="ST">Supine</value>
      </observation>
     </entryRelationship>
     <!-- End Subject Position -->

     <!-- Image -->
     <entryRelationship typeCode="SPRT">
      <observationMedia classCode="OBS" moodCode="EVN">
       <id root="060E2C54-7519-11E0-98E3-A5674824019B" />
       <value mediaType="image/jpeg">
        <reference value="123456.jpg" />
       </value>
      </observationMedia>
     </entryRelationship>
     <!-- End Image -->

    </observation>
   </entryRelationship>
   <!-- End Image Details -->

  </act>
 </entryRelationship>
 <!-- End Imaging Examination Performed -->

</act>
</entryRelationship>
<!-- End Examination Request Details -->


...

</observation>
```

```
        </entry>
       </section
      </component>
     </section>
    </component>

    ...

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

7.1.5.3 REQUESTED SERVICE

Identification

Name	Requested Service
Metadata Type	Data Group
Identifier	DG-20158

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	SERVICE PROVIDER	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	DIAGNOSTIC INVESTIGATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.25, “Requested Service” 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 Requested Service section is composed of a Component Section class related to the Diagnostic Investigations section through a component relationship. The section has a number of act entries to describe the Requested Service.

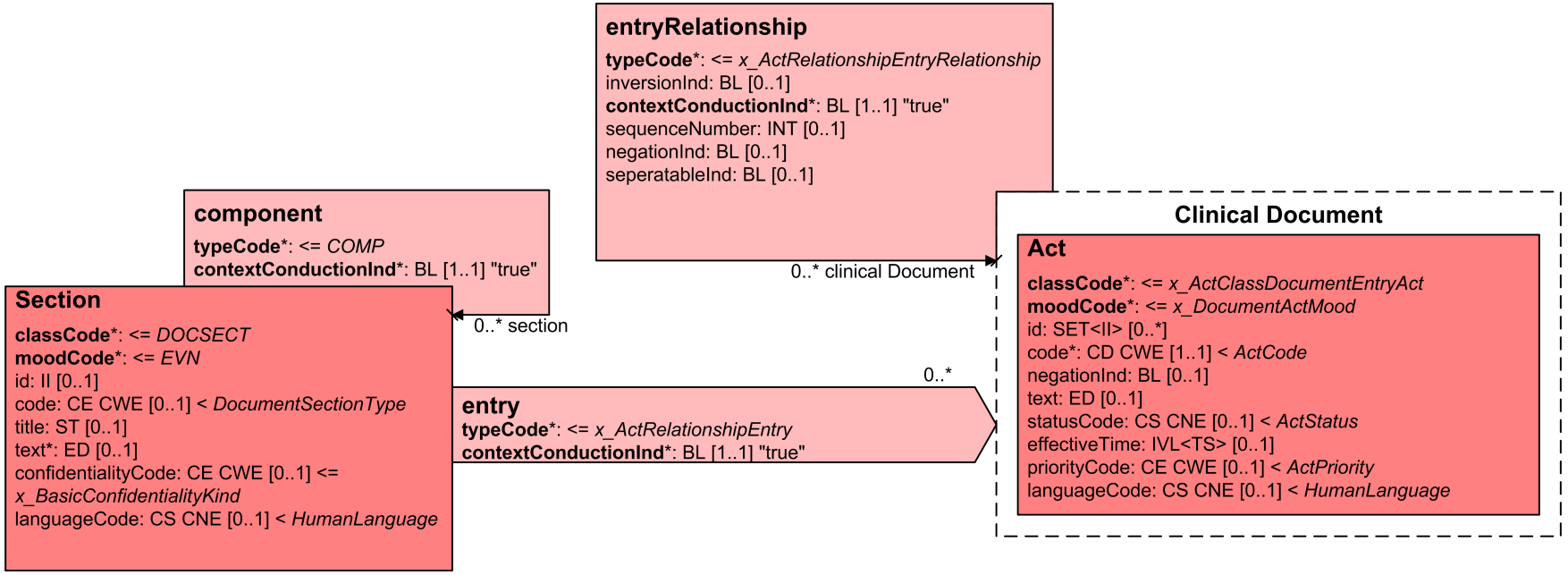


Figure 7.25. Requested Service

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/component[diag_inv]/section		
Requested Service	A request for a diagnostic investigation of the subject of care.	0..*	**component[req_serv]/section/code**		
			component[req_serv]/section/code/**@code="102.20158"**		
			component[req_serv]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[req_serv]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[req_serv]/section/code/**@displayName="Requested Service"**		
			component[req_serv]/section/**title="Requested Service"**		
			component[req_serv]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section		
Requested Service > **Requested Service Description**	Describes the service arranged for, or provided to the subject of care.	1..1	**entry[service]**		
			entry[service]/**act**		
			entry[service]/act/**@classCode="ACT"**		
			entry[service]/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[service]/act/**code**	NS	See <code> for available attributes.
Requested Service > **DateTime Service Scheduled**	The datetime at which the arranged service is scheduled to be provided to the Subject of Care.	0..1	entry[service]/act/**effectiveTime**		See <time> for available attributes.
Requested Service > **Service Commencement Window**	The datetime or date range at/during which the arranged service is scheduled to be provided to the Subject of Care.	0..1	entry[service]/act/**effectiveTime**		See <time> for available attributes.
Requested Service > **Service Booking Status**	An indication of the booking status of the arranged service.	1..1	entry[service]/act/**@moodCode**	HL7 v3 CDA: Act.moodCode	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Requested Service > **Subject of Care Instruction Description**	Describes the instructions/advice and information that have been given to the subject of care from a healthcare provider in relation to the requested service.	0..1	entry[service]/act/**entryRelationship**		
			entry[service]/act/entryRelationship/**@typeCode="COMP"**		
			entry[service]/act/entryRelationship/**act**		
			entry[service]/act/entryRelationship/act/**@classCode="INFRM"**		
			entry[service]/act/entryRelationship/act/**@modeCode="EVN"**		
			entry[service]/act/entryRelationship/act/**code**		
			entry[service]/act/entryRelationship/act/code/**@code="103.10146"**		
			entry[service]/act/entryRelationship/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[service]/act/entryRelationship/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[service]/act/entryRelationship/act/code/**@displayName="Subject of Care Instruction Description"**		
			entry[service]/act/entryRelationship/act/**text**		
Requested Service > **Service Provider**	The provider (individual or organisation) that has been arranged to provide the service.	0..1	See: SERVICE PROVIDER		
Requested Service > **Requested Service DateTime**	The point in time at which the Requested Service action is completed.	1..1	entry[service]/act/**entryRelationship**		
			entry[service]/act/entryRelationship/**@typeCode="COMP"**		
			entry[service]/act/entryRelationship/**act**		
			entry[service]/act/entryRelationship/act/**@classCode="ACT"**		
			entry[service]/act/entryRelationship/act/**@modeCode="EVN"**		
			entry[service]/act/entryRelationship/act/**code**		
			entry[service]/act/entryRelationship/act/code/**@code="103.16635"**		
			entry[service]/act/entryRelationship/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[service]/act/entryRelationship/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[service]/act/entryRelationship/act/code/**@displayName="Requested Service DateTime"**		
			entry[service]/act/entryRelationship/act/**effectiveTime**		See <time> for available attributes.

Example 7.25. Requested Service 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 Diagnostic Investigations -->
   <component>
    <section>

     ...

     <!-- Begin Requested Service -->
     <component>
      <section>
       <code code="102.20158" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Requested Service" />
       <title>Requested Service</title>
       <text>
        <table>
         <thead>
          <tr>
           <th>Service</th>
           <th>Time</th>
           <th>Instructions</th>
           <th>Booking Status</th>
          </tr>
         </thead>
         <tbody>
          <tr>
           <td>Xray Chest</td>
           <td>30 December 2010 10am</td>
           <td>No special instructions required.</td>
           <td>Appointment</td>
          </tr>
         </tbody>
        </table>
       </text>

       <!-- Begin Requested Service Description -->
       <entry>

        <!-- Begin Service Booking Status (moodCode) -->
        <act classCode="ACT" moodCode="APT">
        <!-- End Service Booking Status (moodCode) -->

         <id root="57F6EC7E-F2E9-11E0-81A3-C1BB4824019B" />
```

```
        <code code="399208008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
         displayName="chest x-ray" />

        <!-- Begin DateTime Service Scheduled/Service Commencement Window -->
        <effectiveTime>
         <center value="201212301000+1000" />
         <width unit="wk" value="2" />
        </effectiveTime>
        <!-- End DateTime Service Scheduled/Service Commencement Window -->

        <!-- Begin Service Provider -->
        <performer typeCode="PRF">

         ...

        </performer>
        <!-- End Service Provider -->

        <!-- Begin Subject of Care Instruction Description -->
        <entryRelationship typeCode="COMP">
         <act classCode="INFRM" moodCode="EVN">
          <code code="103.10146" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
           displayName="Subject of Care Instruction Description" />
          <text>No special instructions required.</text>
         </act>
        </entryRelationship>
        <!-- End Subject of Care Instruction Description -->

        <!-- Begin Requested Service DateTime -->
        <entryRelationship typeCode="COMP">
         <act classCode="ACT" moodCode="EVN">
          <code code="103.16635" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
           displayName="Requested Service DateTime" />
          <effectiveTime value="201012301000+1000" />
         </act>
        </entryRelationship>
        <!-- End Requested Service DateTime -->

       </act>
      </entry>
      <!-- End Requested Service Description -->

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

    ...

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

  ...

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

7.1.5.3.1 SERVICE PROVIDER

Identification

Name	Service Provider
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	REQUESTED SERVICE	Optional	0..1

7.1.5.3.1.1 SERVICE PROVIDER - PERSON

CDA R-MIM Representation

Figure 7.26, “Service Provider - Person” 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 SERVICE PROVIDER data group is represented by the performer participation of the ARRAGNED SERVICE Act.

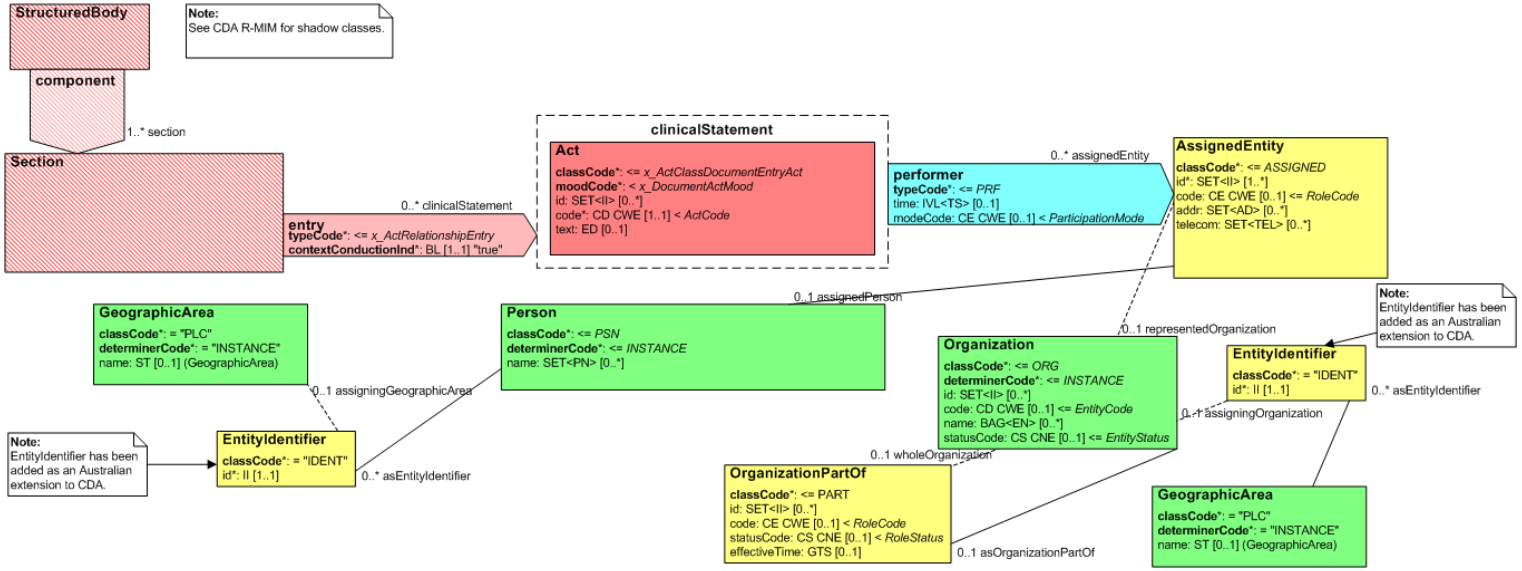


Figure 7.26. Service Provider - Person

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[diag_inv]/section/component[req_serv]/section/entry[service]/act		
Service Provider (Person)	The provider (individual) who has been arranged to provide the service.	0..1	**performer**		
Service Provider > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	performer/**@typeCode="PRF"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Service Provider".	
Service Provider > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	performer/**assignedEntity/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	performer/assignedEntity/**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.
Service Provider > **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	performer/assignedEntity/**assignedPerson**		
Service Provider > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/assignedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Service Provider > 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..*	performer/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Service Provider > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Service Provider > 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.
Service Provider > 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 performer/assignedEntity/assignedPerson.
Service Provider > 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..*	performer/assignedEntity/assignedPerson/**<Person Name>**		See common pattern: Person Name.
Service Provider > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	performer/assignedEntity/assignedPerson/**<Employment>**		See common pattern: Employment.

Example 7.26. Service Provider - Person 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 Diagnostic Investigations Section -->
   <component>
    <section>

     ...

    <!-- Begin Requsted Service Section -->
    <component>
     <section>

      ...

      <!-- Requested Service -->
      <entry>
       <act>

        ...

        <!-- Begin Service Provider - Person -->
        <performer typeCode="PRF">

         <assignedEntity>
          <!-- ID is used for system purposes such as matching -->
          <id root="AE0DB4EE-0CD0-11E0-8D84-CC50DFD72085" />

          <!-- Begin Role -->
          <code code="253916" codeSystem="2.16.840.1.113883.13.62"
           codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1"
           displayName="Radiologist" />
          <!-- End Role -->

          <!-- Begin Address -->
          <addr use="WP">
           <streetAddressLine>67 Radiology Drive</streetAddressLine>
           <city>Nehtaville</city>
           <state>QLD</state>
           <postalCode>5555</postalCode>
           <additionalLocator>32568931</additionalLocator>
           <country>Australia</country>
          </addr>
```

```
<!-- End Address -->

<!-- Begin Electronic Communication Detail -->
<telecom value="mailto:os@hospital.com.au" />
<!-- End Communication Detail -->

<assignedPerson>

 <!-- Begin Person Name -->
 <name use="L">
  <prefix>Dr</prefix>
  <given>Bone</given>
  <family>Doctor</family>
 </name>
 <!-- End Person Name -->

 <!-- Begin Entity Identifier -->
 <ext:asEntityIdentifier classCode="IDENT">
  <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8663611234567890" />
  <ext:assigningGeographicArea classCode="PLC">
   <ext:name>National Identifier</ext:name>
  </ext:assigningGeographicArea>
 </ext:asEntityIdentifier>
 <!-- End Entity Identifier -->

 <!-- Employer Organisation (Participant (Organisation)) -->
 <ext:asEmployment classCode="EMP">

  <!-- Position In Organisation -->
  <ext:code>
   <originalText>Staff Radiologist</originalText>
  </ext:code>

  <!-- Occupation -->
  <ext:jobCode code="253916" codeSystem="2.16.840.1.113883.13.62"
   codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition"
   displayName="Radiologist" />

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

  <ext:employerOrganization>
   <!-- Department/Unit -->
   <name>Radiology Specialists</name>

   <asOrganizationPartOf>
    <wholeOrganization>

     <!-- Organisation Name -->
     <name use="ORGB">Radiology Clinics</name>

     <!-- Entity Identifier -->
     <ext:asEntityIdentifier classCode="IDENT">
      <ext:id assigningAuthorityName="HPI-O"
       root="1.2.36.1.2001.1003.0.8003621231167877" />
      <ext:assigningGeographicArea classCode="PLC">
       <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
     </ext:asEntityIdentifier>
    </wholeOrganization>
   </asOrganizationPartOf>
  </ext:employerOrganization>
 </ext:asEmployment>
```

```
          </assignedPerson>

         </assignedEntity>
        </performer>
        <!-- End Service Provider - Person -->

        ...

       </act>
      </entry>
      <!-- End Requested Service -->
     </section>
    </component>
    <!-- End Requested Service Section -->

    ...

   </section>
  </component>
  <!-- End Diagnostic Investigations Section -->

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

7.1.5.3.1.2 SERVICE PROVIDER - ORGANISATION

CDA R-MIM Representation

Figure 7.27, “Service Provider - Organisation” 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 SERVICE PROVIDER data group is represented by the performer participation of the ARRAGNED SERVICE Act.

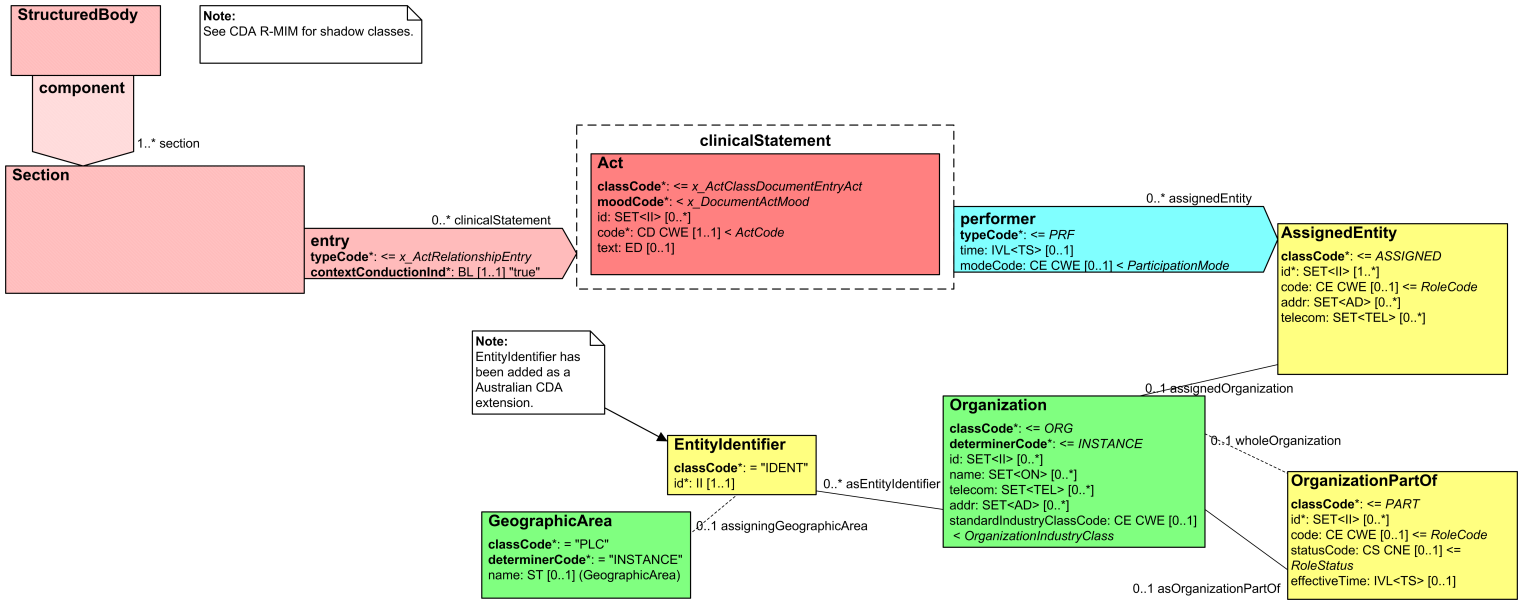


Figure 7.27. Service Provider - Organisation

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[diag_inv]/section/component[req_serv]/section/entry[service]/act/		
Service Provider (Organisation)	The provider (organisation) who has been arranged to provide the service.	0..1	**performer**		
Service Provider > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	performer/**@typeCode="PRF"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Service Provider".	
Service Provider > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	performer/**assignedEntity/code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	See <code> for available attributes.
n/a	n/a	1..1	performer/assignedEntity/**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.
Service Provider > **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	performer/assignedEntity/**representedOrganization**		
Service Provider > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Service Provider > 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.	0..*	performer/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Service Provider > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SCS Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Service Provider > 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 ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Service Provider > Participant > Person or Organisation or Device > **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 performer/assignedEntity/associatedPerson.
Service Provider > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	performer/assignedEntity/representedOrganization/**asOrganizationPartof/wholeOrganization/name**		
Service Provider > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	performer/assignedEntity/representedOrganization/**name**		
Service Provider > Participant > Person or Organisation or Device > Organisation > Organisation Name Detail > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	performer/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.27. Service Provider - Organisation 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 Diagnostic Investigations Section -->
   <component>
    <section>

     ...

    <!-- Begin Requested Service Section -->
    <component>
     <section>

      ...

      <!-- Requested Service -->
      <entry>
       <act>

        ...

        <!-- Begin Service Provider - Organisation -->
        <performer typeCode="PRF">

         <assignedEntity>
          <!-- ID is used for system purposes such as matching -->
          <id root="0B15F408-F2EA-11E0-9610-D3BC4824019B" />

          <!-- Begin Role -->
          <code code="309964003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
           displayName="radiology department" />
          <!-- End Role -->

          <!-- Begin Address -->
          <addr use="WP">
           <streetAddressLine>115 Radiology Street</streetAddressLine>
           <city>Nehtaville</city>
           <state>QLD</state>
           <postalCode>5555</postalCode>
           <additionalLocator>32568931</additionalLocator>
           <country>Australia</country>
          </addr>
          <!-- End Address -->
```

```
            <!-- Begin Electronic Communication Detail -->
            <telecom use="WP" value="tel:0788324888" />
            <!-- End Electronic Communication Detail -->

            <representedOrganization>
             <!-- Begin Department/Unit -->
             <name>Xray Department</name>
             <!-- End Department/Unit -->
             <asOrganizationPartOf>
              <wholeOrganization>

               <!-- Begin Organisation Name -->
               <name use="ORGB">Private Radiology Clinic</name>
               <!-- End Organisation Name -->

               <!-- Begin Entity Identifier -->
               <ext:asEntityIdentifier classCode="IDENT">
                <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003345771167888" />
                <ext:assigningGeographicArea classCode="PLC">
                 <ext:name>National Identifier</ext:name>
                </ext:assigningGeographicArea>
               </ext:asEntityIdentifier>
               <!-- End Entity Identifier -->

              </wholeOrganization>
             </asOrganizationPartOf>
            </representedOrganization>
           </assignedEntity>
          </performer>
          <!-- End Service Provider - Organisation -->

          ...

         </act>
        </entry>
        <!-- End Requested Service -->
       </section>
      </component>
      <!-- End Requested Service Section -->

      ...

     </section>
    </component>
    <!-- End Diagnostic Investigations 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.

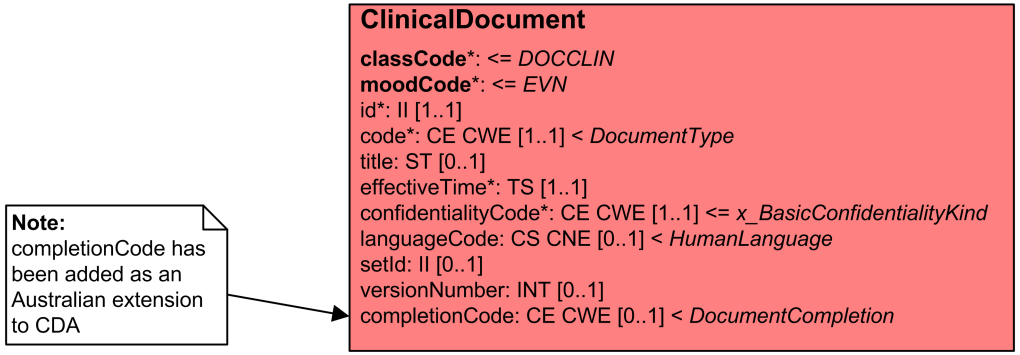


Figure 9.1. CDA R-MIM Representation

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.

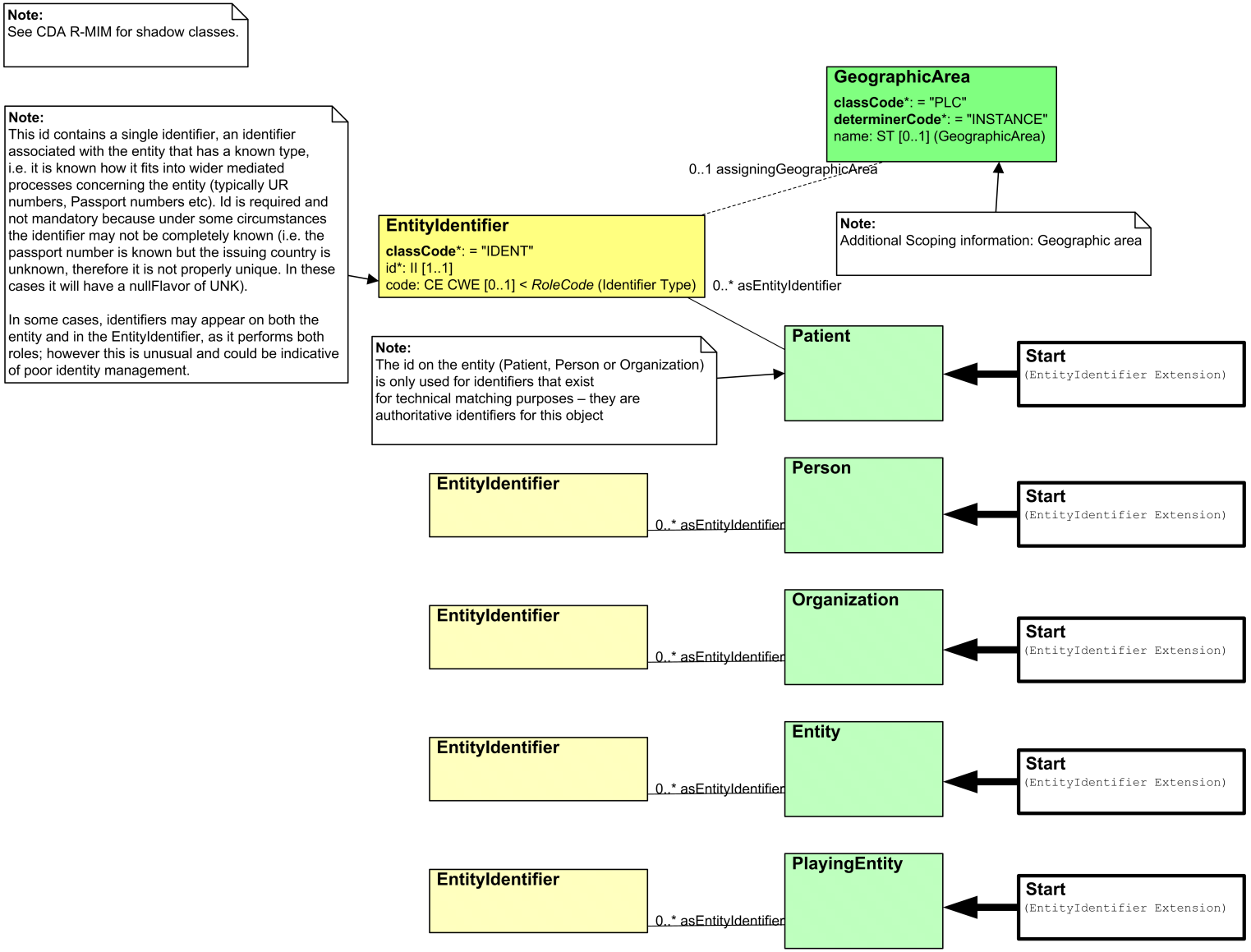


Figure 9.2. CDA R-MIM Representation

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.

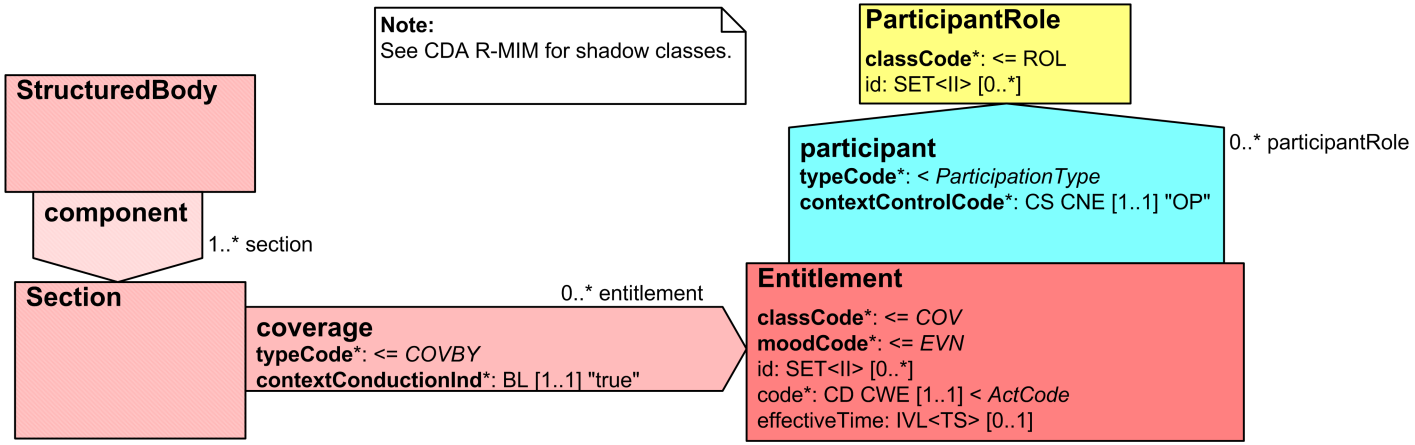


Figure 9.3. CDA R-MIM Representation

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.

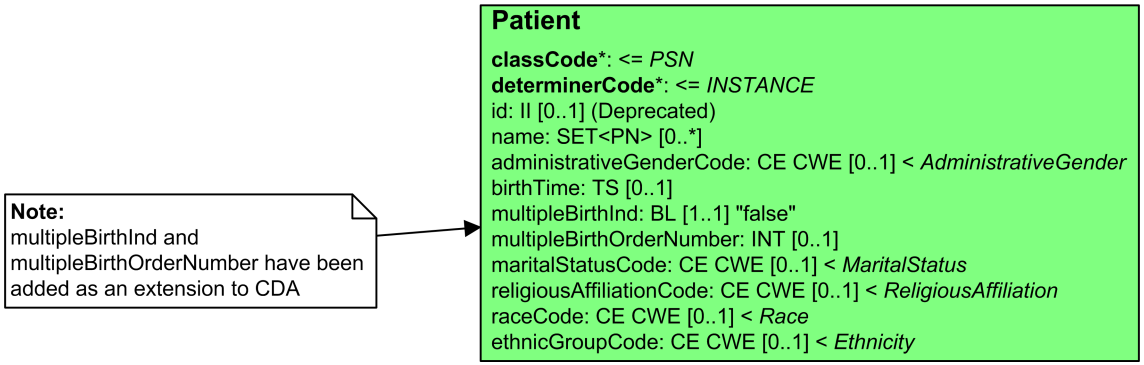


Figure 9.4. CDA R-MIM Representation

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.

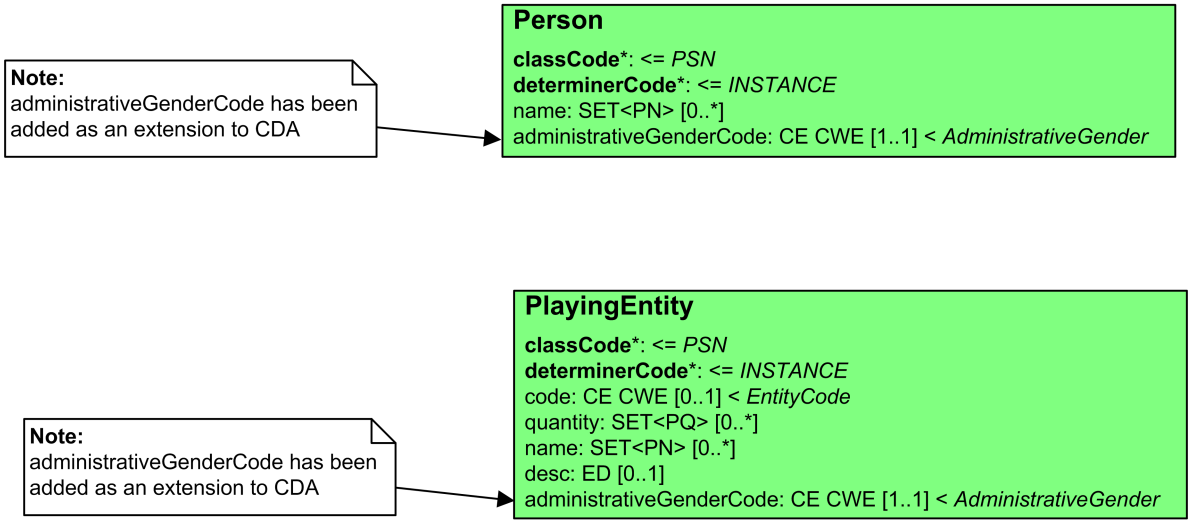


Figure 9.5. CDA R-MIM Representation

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.

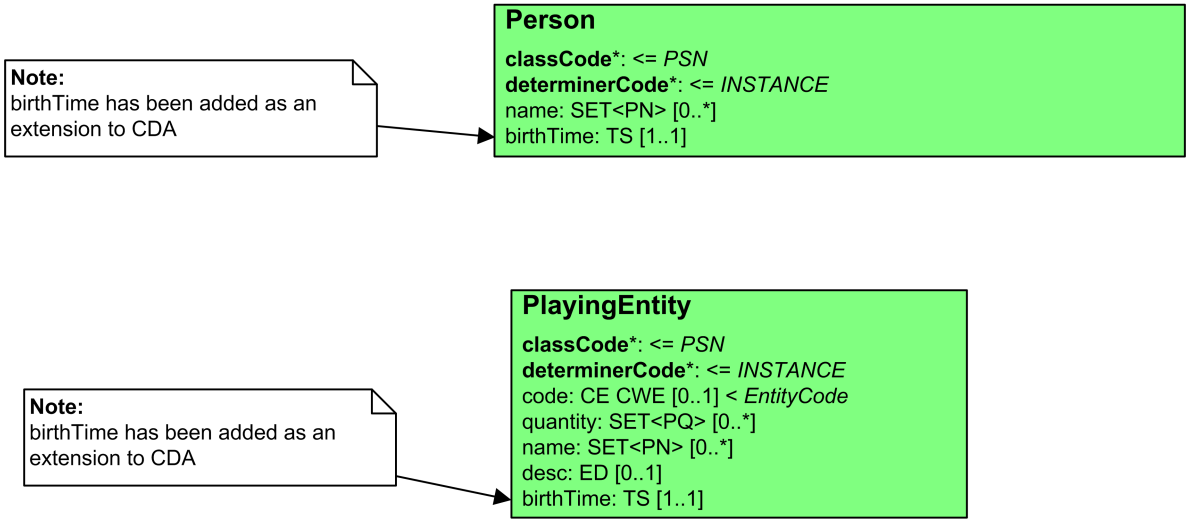


Figure 9.6. CDA R-MIM Representation

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.

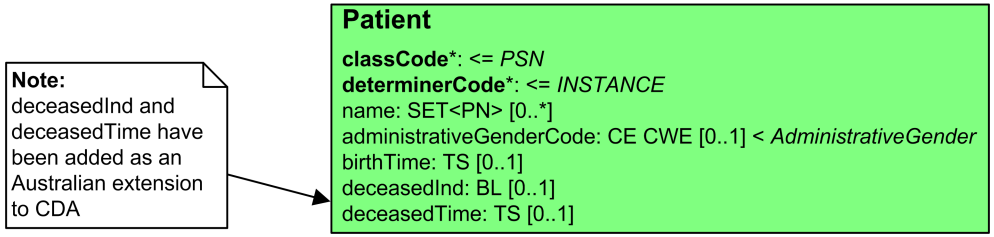


Figure 9.7. CDA R-MIM Representation

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.

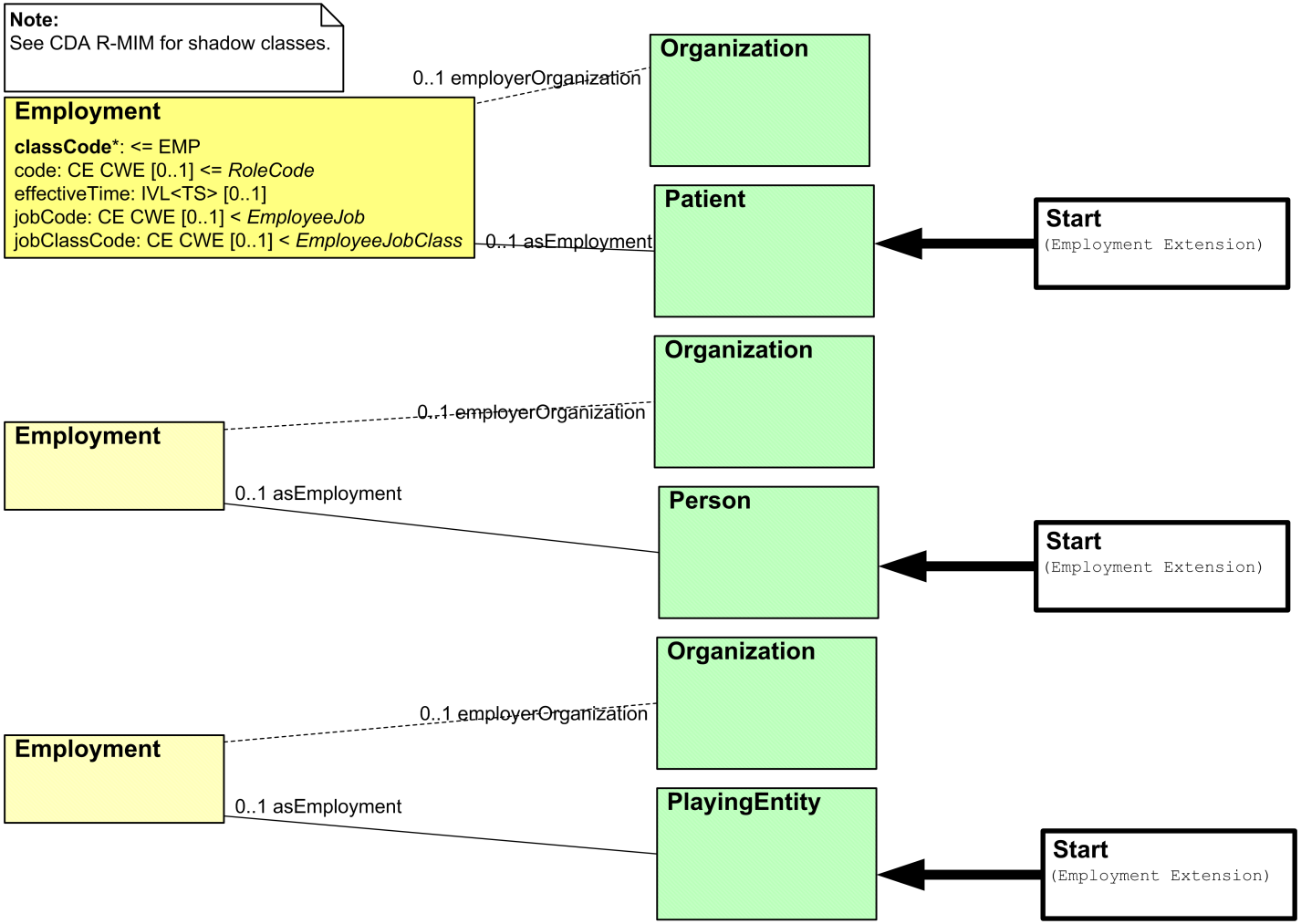


Figure 9.8. CDA R-MIM Representation

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.

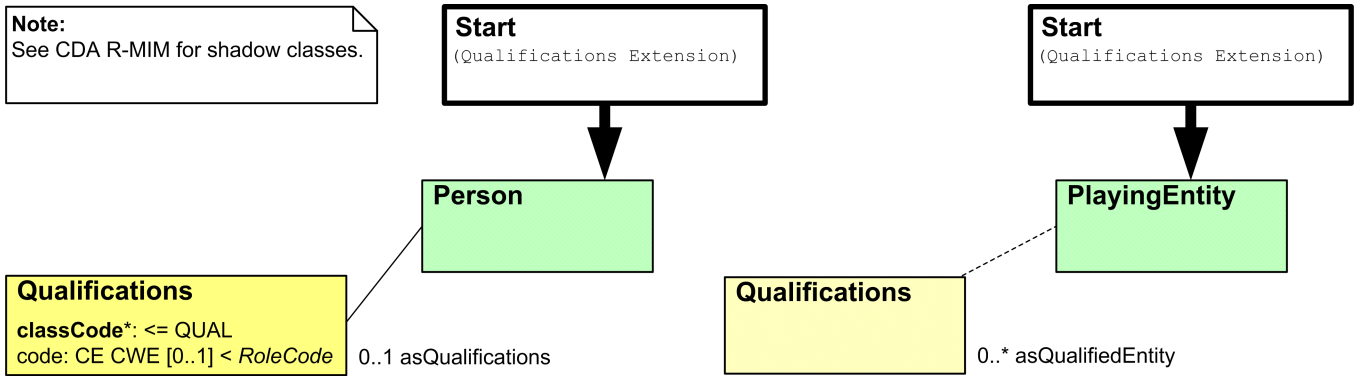


Figure 9.9. CDA R-MIM Representation

9.10 Container

Figure 9.10, “CDA R-MIM Representation” shows a subset of the CDA R-MIM containing those classes with the relevant Australian CDA extension represented.

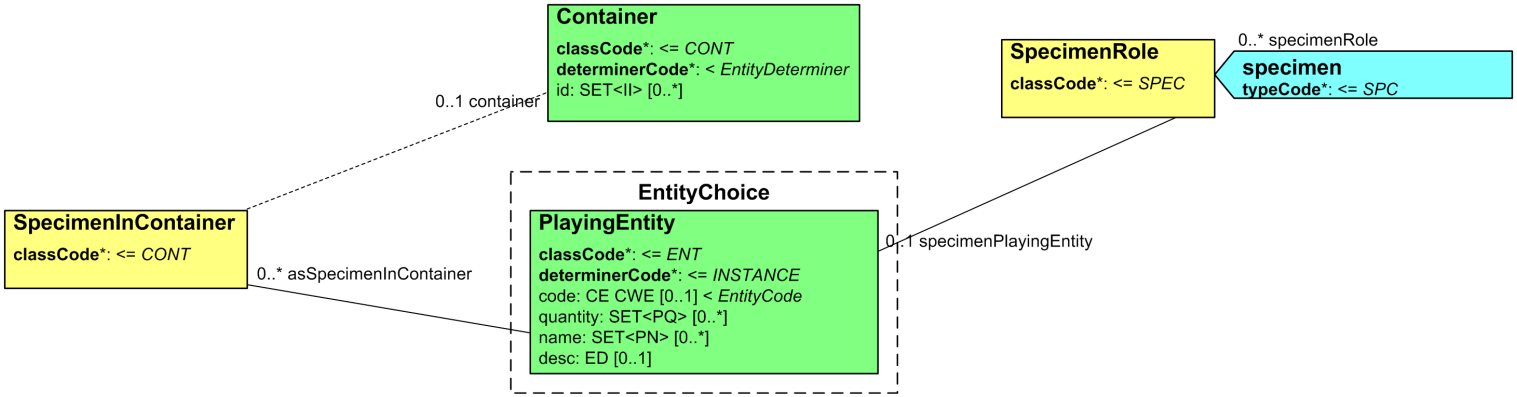


Figure 9.10. CDA R-MIM Representation

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 HL7 V3: ObservationInterpretationNormality

displayName	code	codeSystemName	codeSystem
Abnormal	A	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
Abnormal alert	AA	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
High alert	HH	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
Low alert	LL	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
High	H	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
Low	L	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83
Normal	N	HL7 ObservationInterpretationNormality	2.16.840.1.113883.5.83

10.20 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** conform to the requirements specified in the CDA Rendering Specification.
  - 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.

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	5.1	ClinicalDocument	Code changed	Changed displayName to "Referral Note" from "e-Referral"	NEHTA	Document Review - not aligned with SCS	3 June 2011
3	5.1	ClinicalDocument	Mapping table changed	Added completionCode mapping	NEHTA	Document Review - not aligned with SCS	3 June 2011
4	5.1.2	Information Recipient	XML Example changed	Removed Sex and Date of Birth from the XML example	NEHTA	Document Review - not aligned with mapping table	6 June 2011
5	5.1.2	Information Recipient	Cardinalities changed	InformationRecipient cardinality changed to 0..*	NEHTA	Document Review - not aligned with CDA R-MIM	30 June 2011
6	5.1.4	Encompassing Encounter	Removed Section	Removed EncompassingEncounter section as it wasn't required.	NEHTA	Document Review	30 June 2011
7	6.1	e-Referral	Changed RMIM Diagram	Added legalAuthenticator to RMIM diagram	NEHTA	Document Review	6 June 2011
8	6.1.1	Document Author	XML example changed	Added @use to example xml under wholeOrganization/name	NEHTA	Document Review - not aligned with mapping table	6 June 2011
9	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Entity Identifier Changed to 1..* Document Author > Participant > Address Changed to 1..2 Document Author > Participant > Electronic Communication Detail Changed to 1..* Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation Changed to 0..* Document Author > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth Changed to 1..1	NEHTA	Document Review - not aligned with SCS	30 June 2011
10	6.1.1	Document Author	Mapping table changed	Removed reference to "Organisation Name Detail"	NEHTA	Document Review	2 June 2011
11	6.1.2	Subject of Care	XML Example changed	Code changed to 102.16279	NEHTA	Document Review - not aligned with mapping table	6 June 2011
12	6.1.2	Subject of Care	Cardinalities changed	EntityIdentifier cardinality changed to 1..* Address cardinality changed to 1..2 Date of Death cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	1 July 2011
13	7.1.1	Referral Detail	Mapping table changed	Changed mapping for Referral Detail	NEHTA	Document Review - mapping wrong	6 June 2011
14	7.1.1	Referral Detail	Cardinalities changed	Changed Obligation from Optional to Essential	NEHTA	Document Review - not aligned with SCS	6 June 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
15	7.1.1	Referral Detail	Mapping table changed	Changed referral dateTime to entry/observation	NEHTA	Document Review	6 June 2011
16	7.1.1.1	Referee	Cardinalities changed	Referee > Participant > Entity Identifier Changed to 0..* Referee > Participant > Address Changed to 1..2 Referee > Participant > Electronic Communication Detail Changed to 1..* Referee > Participant > Person or Organisation or Device > Person > Employer Organisation Changed to 0..*	NEHTA	Document Review - not aligned with SCS	6 June 2011
17	7.1.1.1	Referee	XML example changed	Added @use to example xml under wholeOrganization/name	NEHTA	Document Review - not aligned with mapping table	8 June 2011
18	7.1.1.2	Usual GP	Cardinalities changed	Usual GP Changed to 0..1 Usual GP > Participant > Entity Identifier Changed to 1..* Usual GP > Participant > Address Changed to 0..* Usual GP > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth Changed to 1..1 Usual GP > Participant > Person or Organisation or Device > Person > Employer Organisation Changed to 0..*	NEHTA	Document Review - not aligned with SCS	30 June 2011
19	7.1.1.2	Usual GP	XML example changed	Added @use to example xml under wholeOrganization/name	NEHTA	Document Review - not aligned with mapping table	8 June 2011
20	7.1.2.1	Problem/Diagnosis	XML Example changed	Changed from using a NCTIS code to using a SNOMED code	NEHTA	Document Review - not aligned with mapping table	30 June 2011
21	7.1.2.1	Problem/Diagnosis	XML Example changed	Date of Resolution/Remission - removed id from xml example.	NEHTA	Document Review - not aligned with mapping table	30 June 2011
22	7.1.2.1	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
23	7.1.2.2	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
24	7.1.2.2	Exclusion Statement - Problems and Diagnoses	XML example changed	Changed code Exclusion Statement - Problem/Diagnoses in XML Example to 103.16302.2.2.1	NEHTA	Document Review - not aligned with mapping table	17 May 2011
25	7.1.2.4	Exclusion Statement - Procedures	Mapping table changed	entry[gbl_pro]/observation/typeCode="OBS" changed typeCode to classCode	NEHTA	Document Review - error	17 May 2011
26	7.1.2.4	Exclusion Statement - Procedures	XML example changed	Changed Exclusion Statement - Procedures > Global statement code to 103.16302.2.2.2	NEHTA	Document Review - not aligned with mapping table	30 June 2011
27	7.1.2.4	Exclusion Statement - Procedures	XML example changed	Removed id from XML example	NEHTA	Document Review - not aligned with mapping table	17 May 2011
28	7.1.2.4	Exclusion Statement - Procedures	Identification table changed	Changed id to 16603	NEHTA	Document Review - error	30 June 2011
29	7.1.2.5	Other Medical History Item	Mapping table changed	Added missing code	NEHTA	Document Review - error	30 June 2011
30	7.1.4.1	Adverse Substance Reaction	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Adverse Substance Reaction > Reaction Event cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	3 June 2011
31	7.1.4.1	Adverse Substance Reaction	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Adverse Substance Reaction > Manifestation cardinality changed to 1..*	NEHTA	Document Review - not aligned with SCS	3 June 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
32	7.1.4.1	Adverse Substance Reaction	XML Example changed	Changed code to 102.16473	NEHTA	Document Review - not aligned with mapping table	30 June 2011
33	7.1.4.1	Adverse Substance Reaction	XML Example changed	Removed playingEntity	NEHTA	Document Review - not aligned with mapping table	30 June 2011
34	7.1.4.1	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
35	7.1.4.2	Exclusion Statement - Adverse Substance Reactions	Mapping table changed	Added mapping for entry/[gbl_adv]/observation/id	NEHTA	Document Review - missing mapping	29 June 2011
36	7.1.4.2	Exclusion Statement - Adverse Substance Reactions	XML example changed	Changed value of code in example.	NEHTA	Document Review - invalid code used.	17 May 2011
37	7.1.2	Medical History	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Medical History cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	3 June 2011
38	7.1.3	Medications	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Medications Cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	3 June 2011
39	7.1.3.1	Medication Instruction	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Medication Instruction > Directions cardinality changed to 1..1	NEHTA	Document Review - not aligned with SCS	3 June 2011
40	7.1.5	Diagnostic Investigations	XML Example changed	Added section/text to xml example.	NEHTA	Document Review - not aligned with mapping table	30 June 2011
41	7.1.5.1	Pathology Test Result	XML Example changed	Example rewritten	NEHTA	Document Review - not aligned with mapping table	30 June 2011
42	7.1.5.1	Pathology Test Result	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Pathology Test Result cardinality changed to 0..*	NEHTA	Document Review - not aligned with SCS	3 June 2011
43	7.1.5.1	Pathology Test Result	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Pathology Test Result > Test Result Representation cardinality changed to 0..1	NEHTA	Document Review - not aligned with SCS	3 June 2011
44	7.1.5.1	Pathology Test Result	Constrained out	(Data hierarchy, relationship table, mapping table) Pathology Test Result > Test Request Details > Requester Order Identifier removed.	NEHTA	Document Review - not aligned with SCS	3 June 2011
45	7.1.5.1	Pathology Test Result	Constrained out	(Data hierarchy, relationship table, mapping table) Pathology Test Result > Test Request Details > Receiver Order Identifier removed.	NEHTA	Document Review - not aligned with SCS	3 June 2011
46	7.1.5.1.1	Test Specimen Detail	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review - not aligned with mapping table	30 June 2011
47	7.1.5.1.2	Pathology Test Result Group	Mapping table changed	Changed vocab to NS	NEHTA	Document Review	29 June 2011
48	7.1.5.1.2	Pathology Test Result Group	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review	29 June 2011
49	7.1.5.1.2.1	Result Group Specimen Detail	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review	29 June 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
50	7.1.5.1.2.1	Result Group Specimen Detail	Cardinalities changed	Result Group Specimen Detail cardinality changed to 0..1	NEHTA	Document Review - not aligned with SCS	29 June 2011
51	7.1.5.2	Imaging Examination Result	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review	29 June 2011
52	7.1.5.2	Imaging Examination Result	Cardinalities changed	(Data hierarchy, relationship table, mapping table) Imaging Examination Result cardinality changed to 0..*	NEHTA	Document Review - not aligned with SCS	3 June 2011
53	7.1.5.2	Imaging Examination Result	Mapping table changed	Changes to mappings	NEHTA	Document Review - not aligned with SCS	29 June 2011
54	7.1.5.2.1	Imaging Examination Result Group	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review - not aligned with SCS	29 June 2011
55	7.1.5.2.2	Examination Request Details	XML Example changed	Rewrote parts of XML Example	NEHTA	Document Review - not aligned with SCS	29 June 2011
56	7.1.5.2.2	Examination Request Details	Constrained out	(Data hierarchy, relationship table, mapping table) Receiver Order Identifier removed.	NEHTA	Document Review - not aligned with SCS	29 June 2011
57	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
58	8.4	Entity Identifier	XML example changed	Removed Medicare Number example from Entity Identifier in Common patterns and replaced with IHI example.	NEHTA	Document Review - example wrong	28 June 2011
59	10.14	Vocabularies/Code Sets	Added section	Added NCTIS: Admin Codes Entitlement Type	NEHTA	Document Review - vocab missing	28 June 2011
60	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	ClinicalDocument	XML example updated	Fixed errors in XML example.	NEHTA	Document Review - not aligned with mapping table	9 September 2011
2	6.1	eReferral	Cardinalities changed	eReferral > 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 > Participation Period cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
4	6.1.1	Document Author	Cardinalities changed	Document Author > 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					
5	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
6	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
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 > Electronic Communication Detail change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
9	6.1.2	Subject Of Care	Cardinalities changed	Subject Of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Indigenous Status change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
10	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
11	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
12	7.1.1	Referral Detail	Definition changed	Referral Detail > Referral Reason definition updated.	NEHTA	Document Review - Consistency across specifications.	9 September 2011
13	7.1.1	Referral Detail	Code and XML example updated.	Referral Detail > Referral DateTime @code changed to 103.16620.	NEHTA	Incorrect code used.	9 September 2011
14	7.1.1.1	Referee	Cardinalities changed	Referee > Participant > Electronic Communication Detail cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
15	7.1.1.1	Referee	Cardinalities changed	Referee > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
16	7.1.1.1	Document Author	XML Example updated	Changed XML example of Referree > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier.	NEHTA	Incorrect example of Entity Identifier.	9 September 2011
17	7.1.1.2	Usual GP	Cardinalities changed	Usual GP cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
18	7.1.1.2	Usual GP	Cardinalities changed	Usual GP > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier cardinality change to 1..*	NEHTA	Document Review - Consistency across specifications.	9 September 2011
19	7.1.1.2	Usual GP	XML Example updated	Changed XML example of Usual GP > Participant > Person or Organisation or Device > Person > Employer Organisation > Entity Identifier.	NEHTA	Incorrect example of Entity Identifier.	9 September 2011
20	7.1.4	Adverse Substance Reaction	Cardinalities changed	Adverse Substance Reaction > Reaction Event > Manifestation cardinality change to 1..1	NEHTA	Document Review - Consistency across specifications.	9 September 2011
21	10.13	NCTIS: Admin Codes - Global Statement Values	New value added	Added "None Supplied".	NEHTA	Values supplied insufficient for requirements.	9 September 2011
22	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 1.0 31 Oct 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	6.1.1	DOCUMENT AUTHOR	Cardinality	Document Author > Participation Period element - author/time old spec: 1..1 new spec: 0..1	NEHTA	Alignment of specifications	2 Dec 2012
2	7.1.5.1	IMMUNISATIONS	Cardinality	Immunisations cardinality old spec: "Essential 1..*" new spec: "Optional 0..*"	NEHTA	Alignment of specifications	2 Dec 2012
3	7.1.6.1	PATHOLOGY TEST RESULT	Cardinality	Cardinality of Child TEST SPECIMEN DETAIL old spec: "Optional 0..*" new spec: "Essential 1..*"	NEHTA	Alignment of specifications	2 Dec 2012
4	7.1.6.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail cardinalityold spec: 0..* new spec: 1..*	NEHTA	Alignment of specifications	2 Dec 2012
5	7.1.6.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing cardinalityold spec: 0..* new spec: 1..*	NEHTA	Alignment of specifications	2 Dec 2012
6	7.1.6.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing > Collection DateTime cardinalityold spec: 0..* new spec: 1..*	NEHTA	Alignment of specifications	2 Dec 2012
7	7.1.6.1.2.1	Result Group Specimen Detail	Cardinality	Result Group Specimen Detail > Handling and Processing was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
8	7.1.6.1.2.1	Result Group Specimen Detail	Cardinality	Result Group Specimen Detail > Handling and Processing > Collection DateTime was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
9	7.1.6.3.1.1	Service Provider - Person	Cardinality	Service Provider > Participant > Person or Organisation or Device > Person > Person Name old spec: 1..1 new spec: 1..*	NEHTA	Alignment of specifications	2 Dec 2012
10	7.1.6.3	Requested Service	Code change	Requested Service code change from "102.16636" to "102.20158"	NEHTA	Alignment of specifications	2 Dec 2012
11	10.20	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
12	7.1.5	IMMUNISATIONS	Context changed	Immunisations context old spec: "ClinicalDocument/component/structuredBody/component[meds]/section" new spec: "ClinicalDocument/component/structuredBody/component[imms]/section"	NEHTA	Alignment of specifications	2 Dec 2012
13	7.1.6.1	PATHOLOGY TEST RESULT	Context changed	Pathology Test Result > Test Request Details > Test Requested Name context old spec: "entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/act" new spec: "entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation"	NEHTA	Alignment of specifications	2 Dec 2012
14	7.1.6.1.1	TEST SPECIMEN DETAIL	Context changed	Test Specimen Detail Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test_res]/section/ Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/	NEHTA	Alignment of specifications	2 Dec 2012
15	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	Context changed	Pathology Test Result Group Pathology Test Result Group Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entryRelationship[res_gp]/organizer Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer	NEHTA	Alignment of specifications	2 Dec 2012
16	7.1.6.1.2.1	Result Group Specimen Detail	Context changed	Result Group Specimen Detail Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entryRelationship[res_gp]/organizer/component/observation Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/component/observation	NEHTA	Alignment of specifications	2 Dec 2012
17	7.1.6.2	Imaging Examination Result	context clarification	Imaging Examination Result table new spec introduces "CDA Body Level 3 Data Elements" subgrouping whereas old spec does not	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					
18	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	Context changed	Imaging Examination Result Group Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[im_exam_res]/section/entryRelationship[im_res_gp]/organizer Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/entryRelationship[im_res_gp]/organizer	NEHTA	Alignment of specifications	2 Dec 2012
19	7.1.6.2.2	EXAMINATION REQUEST DETAILS	Context changed	Examination Request Details Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[im_exam]/section/entryRelationship[exam_req]/act Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/entryRelationship[exam_req]/act	NEHTA	Alignment of specifications	2 Dec 2012
20	7.1.6.3	Requested Service	Context changed	CDA Body Level 3 Data Elements Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[arranged]/section Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section	NEHTA	Alignment of specifications	2 Dec 2012
21	7.1.6.3.1.1	Service Provider - Person	Context changed	Service Provider (Person) Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section/entry[service]/act/performer Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/entry[service]/act/performer	NEHTA	Alignment of specifications	2 Dec 2012
22	6.1.1	DOCUMENT AUTHOR	New Element (common Pattern Employment added)	Document Author > Participant > Person or Organisation or Device > Person > Employment Detail is now using the common Pattern Employment and removes the requirement for assignedAuthor/representedOrganisation (table entries plus xml fragment)	NEHTA	Alignment of specifications	2 Dec 2012
23	7.1.4.3	MEDICAL HISTORY ITEM	Element Removed	Medical History Item > Medical History Item Comment entry/act/entryRelationship/act/id: removed	NEHTA	Alignment of specifications	2 Dec 2012
24	7.1.6.3.1.1	Service Provider - Person	Element Changed	Service Provider > Participation Period removed old spec: - Service Provider > Participation Period - The time interval during which the participation in the health care event occurred. - 0..1 performer/time - See <time> for available attributes. new spec: => removed	NEHTA	Alignment of specifications	2 Dec 2012
25	7.1.6.3.1.1	Service Provider - Person	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 Common pattern: Employment has been added (pg 259-260)	NEHTA	Alignment of specifications	2 Dec 2012
26	7.1.3.1	MEDICATION	Element Changed	Medication > Change Type entry[med_inst]/substanceAdministration old spec: "negationInd" new spec: "@negationInd"	NEHTA	Alignment of specifications	2 Dec 2012
27	7.1.4.3	MEDICAL HISTORY ITEM	element value changed	Medical History Item > Medical History Item Comment - entry/act/entryRelationship/@typeCode old spec: "REFR" new spec: "COMP"	NEHTA	Alignment of specifications	2 Dec 2012
28	7.1.6.1.1	TEST SPECIMEN DETAIL	element value changed	Test Specimen Detail > Anatomical Site > Specific Location > Side - entryRelationship[spec]/observation/targetSiteCode/qualifier old spec: "value:CD" new spec: "value"	NEHTA	Alignment of specifications	2 Dec 2012
29	7.1.6.1.1	TEST SPECIMEN DETAIL	Element Changed	Test Specimen Detail > Identifiers > Container Identifier Element entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ ext:asSpecimenInContainer/ext:container/id changed to entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ ext:asSpecimenInContainer/ext:container/ext:id	NEHTA	Alignment of specifications	2 Dec 2012
30	7.1.6.1.2.1	Result Group Specimen Detail	Element Changed	ResultGroup SpecimenDetail > Anatomical Site > Specific Location > Side Element component/observation/targetSiteCode/qualifier/value:CD now value ANY, ie component/observation/targetSiteCode/qualifier/value	NEHTA	Alignment of specifications	2 Dec 2012
31	7.1.6.1.2.1	Result Group Specimen Detail	Element Changed	Result Group Specimen Detail > Identifier > Container Identifier was: component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/id now: component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id	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					
32	7.1.6.2	IMAGING EXAMINATION RESULT	Element Changed	Imaging Examination Result > Anatomical Site > Specific Location > Side Element: entry[img_exam_res]/observation/targetSiteCode/qualifier/value:CD now value ANY, ie entry[img_exam_res]/observation/targetSiteCode/qualifier/value	NEHTA	Alignment of specifications	2 Dec 2012
33	7.1.6.2	IMAGING EXAMINATION RESULT	Element Changed	Imaging Examination Result > Examination Result Representation Element: entry[img_exam_res]/observation/value:ED now text, ie entry[img_exam_res]/observation/text	NEHTA	Alignment of specifications	2 Dec 2012
34	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	Element Changed	Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details > Imaging Examination Result Value Reference Range Element: entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/value:PQ changed to value:IVL_PQ; ie entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/value:IVL_PQ	NEHTA	Alignment of specifications	2 Dec 2012
35	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	Element Changed	Imaging Examination Result Group > Anatomical Site > Specific Location > Side Element entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/value:CD now value ANY, ie entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/value	NEHTA	Alignment of specifications	2 Dec 2012
36	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	element name change	Individual Pathology Test Result Value Normal Status old spec: "Result Value Normal Status" new spec: "Individual Pathology Test Result Value Normal Status"	NEHTA	Alignment of specifications	2 Dec 2012
37	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	element name change	Individual Pathology Test Result Value Reference Range Details old spec: "Result Value Reference Range Details" new spec: "Individual Pathology Test Result Value Reference Range Details"	NEHTA	Alignment of specifications	2 Dec 2012
38	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	element name change	Individual Pathology Test Result Comment old spec: "Result Comment" new spec: "Individual Pathology Test Result Comment"	NEHTA	Alignment of specifications	2 Dec 2012
39	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	element name change	Individual Pathology Test Reference Range Guidance old spec: "Reference Range Guidance" new spec: "Individual Pathology Test Reference Range Guidance"	NEHTA	Alignment of specifications	2 Dec 2012
40	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Imaging Examination Result Value old spec: "Result Value" new spec: "Imaging Examination Result Value"	NEHTA	Alignment of specifications	2 Dec 2012
41	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Imaging Examination Result Value Normal Status old spec: "Result Value Normal Status" new spec: "Imaging Examination Result Value Normal Status"	NEHTA	Alignment of specifications	2 Dec 2012
42	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Imaging Examination Result Value Reference Range Details old spec: "Result Value Reference Range Details" new spec: "Imaging Examination Result Value Reference Range Details"	NEHTA	Alignment of specifications	2 Dec 2012
43	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Imaging Examination Result Value Reference Range Meaning old spec: "Result Value Reference Range Meaning" new spec: "Imaging Examination Result Value Reference Range Meaning"	NEHTA	Alignment of specifications	2 Dec 2012
44	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Imaging Examination Result Value Reference Range old spec: "Result Value Reference Range" new spec: "Imaging Examination Result Value Reference Range"	NEHTA	Alignment of specifications	2 Dec 2012
45	7.1.6.2.1	IMAGING EXAMINATION RESULT GROUP	element name change	Anatomical Location old spec: "Anatomical Site" new spec: "Anatomical Location"	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					
46	7.1.6.1.1	TEST SPECIMEN DETAIL	mapping	Collection DateTime mapping old spec: "Test Specimen Detail > Collection and handling > Handling and Processing > Collection DateTime" new spec: "Test Specimen Detail > Handling and Processing > Collection DateTime"	NEHTA	Alignment of specifications	2 Dec 2012
47	7.1.6.1.1	TEST SPECIMEN DETAIL	mapping	Collection Setting mapping old spec: "Test Specimen Detail > Collection and handling > Handling and Processing > Collection Setting" new spec: "Test Specimen Detail > Handling and Processing > Collection Setting"	NEHTA	Alignment of specifications	2 Dec 2012
48	7.1.6.1.1	TEST SPECIMEN DETAIL	mapping	DateTime Received mapping old spec: "Test Specimen Detail > Collection and handling > Handling and Processing > DateTime Received" new spec: "Test Specimen Detail > Handling and Processing > DateTime Received"	NEHTA	Alignment of specifications	2 Dec 2012
49	7.1.6.1.2	PATHOLOGY TEST RESULT GROUP	mapping	Individual Pathology Test Result Value mapping old spec: "Pathology Test Result Group > Individual Pathology Test Result > Result Value" new spec: "Pathology Test Result Group > Individual Pathology Test Result > IndividualPathology Test Result Value"	NEHTA	Alignment of specifications	2 Dec 2012
50	7.1.2.1	ADVERSE REACTION	Vocab change	Adverse Reaction > Reaction Event > Manifestation Vocab was SNOMED CT-AU Clinical Manifestation Values Reference Set and now Clinical Manifestation Values (Is this still SNOMED or something esle?)	NEHTA	Alignment of specifications	2 Dec 2012
51	7.1.6.3.1.1	Service Provider - Person	Vocab change	Service Provider > Role old spec: "Role SHALL have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]" new spec: "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."	NEHTA	Alignment of specifications	2 Dec 2012

Changes Version 1.1 09 September 2011 to Version 2.1 09 December 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
1	5.1	ClinicalDocument	Cardinality change	legalAuthenticator old spec: Essential 1..1 new spec: optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
2	6.1.1	DOCUMENT AUTHOR	Cardinality	Document Author > Participation Period was 1..1 and now 0..1 This is a required CDA element so cannot be 0..1	NEHTA	Alignment of specifications	2 Dec 2012
3	6.1.1	DOCUMENT AUTHOR	Cardinality change	Document Author > Participation Period maps to author/time old spec: Essential 1..1 new spec: optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
4	6.1.1	DOCUMENT AUTHOR	Cardinality	Document Author > Participant > Person or Organisation or Device > Person > Person Name was 1..1 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
5	6.1.2	SUBJECT OF CARE	Cardinality	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
6	7.1.1.1.1	REFEREE - PERSON	Cardinality	Referee > Participant > Address was 1..2 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
7	7.1.1.1.1	REFEREE - PERSON	Cardinality	Referee > Participant > <PersonName> was 1..1 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
8	7.1.1.1.1	REFEREE - PERSON	Cardinality change	participant/associatedEntity/<Address> was 1..2 now 1..*	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					
9	7.1.1.2.1	USUAL - GP - PERSON	Cardinality	Usual GP - Person was Essential 1..* now Optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
10	7.1.4.1	ADVERSE REACTION	Cardinality	Adverse Reaction > Reaction Event was 1..1 now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
11	7.1.4.1	ADVERSE REACTION	Cardinality	Adverse Reaction > Reaction Event > Manifestation was 1..1 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
12	7.1.5.1	PATHOLOGY TEST RESULT	Cardinality	Pathology Test Result > Test Result Representation was 0..* now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
13	7.1.5.1	PATHOLOGY TEST RESULT	Cardinality change	Pathology Test Result > Test Result Representation was 0..* now 0..1 Only one full representation now allowed.	NEHTA	Alignment of specifications	2 Dec 2012
14	7.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	TEST SPECIMEN DETAIL was 0..* now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
15	7.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
16	7.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing > Collection DateTime was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
17	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Cardinality	Result Group Specimen Detail > Handling and Processing was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
18	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Cardinality	Result Group Specimen Detail > Handling and Processing > Collection DateTime was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
19	7.1.2.3	OTHER MEDICAL HISTORY ITEM	Code Change	entry/act/code/@code change from "102.15513" to "102.166627" Reflects Data Group change.	NEHTA	Alignment of specifications	2 Dec 2012
20	7.1.3	MEDICATIONS	Code Change	Medications @code was 101.16022 chaged to 101.16146	NEHTA	Alignment of specifications	2 Dec 2012
21	7.1.3.2	EXCLUSION STATEMENT - MEDICATIONS	Code Change	Medications @code was 103.16302.2.2.3 changed to 103.16302.2.2.1	NEHTA	Alignment of specifications	2 Dec 2012
22	7.1.3.2	EXCLUSION STATEMENT - MEDICATIONS	Code Change	XML Fragment Medications @code was 103.16302 changed to 103.16302.2.2.1	NEHTA	Alignment of specifications	2 Dec 2012
23	7.1.4.1	ADVERSE REACTION	Code Change	Medications @code was 102.16473 changed to 102.15517 Reflects Data Group change.	NEHTA	Alignment of specifications	2 Dec 2012
24	7.1.4.2	EXCLUSION STATEMENT - ADVERSE REACTIONS	Code Change	Global statement @code was 103.16302.2.2.4 changed to 103.16302.2.2.2	NEHTA	Alignment of specifications	2 Dec 2012
25	7.1.5.1.1	TEST SPECIMEN DETAIL	Context Changed	"Test Specimen Detail Context was : ClinicalDocument/component/structuredBody/component[diag_inv]/section/entry[path_test_res]/observation/entryRelationship[spec]/observation Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test_res]/entry[path_test_res]/observation/entryRelationship[spec]/observation"	NEHTA	Alignment of specifications	2 Dec 2012
26	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Context Changed	Result Group Specimen Detail Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/component/observation/entryRelationship[PathDiag]/observation/ Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/component/observation	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					
27	7.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Context Changed	Imaging Examination Result Group Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/entryRelationship/observation[im_exam_res]/entryRelationship[im_res_gp]/organizer Context now: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/entryRelationship[im_res_gp]/organizer	NEHTA	Alignment of specifications	2 Dec 2012
28	6.1	e-Referral	New Element	e-Referral > DateTime Authored ClinicalDocument/author/time/@value added	NEHTA	Alignment of specifications	2 Dec 2012
29	6.1.1	DOCUMENT AUTHOR	New Element (common Pattern Employment added)	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
30	7.1.1.1.2	REFEREE - ORGANISATION	New	New Data Group defined Referree - Organisation	NEHTA	Alignment of specifications	2 Dec 2012
31	7.1.1.2.1	USUAL - GP - PERSON	New	New Data Group defined USUAL GP - PERSON	NEHTA	Alignment of specifications	2 Dec 2012
32	7.1.1.2.1	USUAL - GP - PERSON	New Element (common Pattern Employment added)	Usual GP > 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 assignedPerson instead of scopingOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
33	7.1.1.2.2	USUAL - GP - ORGANISATION	New	New Data Group defined USUAL GP - ORGANISATION	NEHTA	Alignment of specifications	2 Dec 2012
34	7.1.2.3	OTHER MEDICAL HISTORY ITEM	New	Other Medical History Item > Medical History Item Time Interval	NEHTA	Alignment of specifications	2 Dec 2012
35	7.1.2.3	OTHER MEDICAL HISTORY ITEM	New	Other Medical History Item > Medical History Item Comment	NEHTA	Alignment of specifications	2 Dec 2012
36	7.1.5	DIAGNOSTIC INVESTIGATIONS	New	Requested service data element added	NEHTA	Alignment of specifications	2 Dec 2012
37	7.1.5.1.1	TEST SPECIMEN DETAIL	New Data Component	Test Specimen Detail > Anatomical Site > Anatomical Location Image added with Optionality 0..*	NEHTA	Alignment of specifications	2 Dec 2012
38	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	New Data Component	Result Group SpecimenDetail > Anatomical Site > Anatomical Location Image added with Optionality 0..*	NEHTA	Alignment of specifications	2 Dec 2012
39	7.1.5.3	REQUESTED SERVICE	New Data Component	REQUESTED SERVICE added as Optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
40	6.1.1	DOCUMENT AUTHOR	Deleted	administrativeGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012
41	7.1.1.1.1	REFEREE - PERSON	Removed	administrativeGenderCode removed.	NEHTA	Alignment of specifications	2 Dec 2012
42	7.1.2.2	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Removed	Group Removed	NEHTA	Alignment of specifications	2 Dec 2012
43	7.1.2.4	EXCLUSION STATEMENT - PROCEDURES	Removed	Group Removed	NEHTA	Alignment of specifications	2 Dec 2012
44	7.1.2.3	OTHER MEDICAL HISTORY ITEM	Removed	Other Medical History Item > DateTime Recorded now removed was 0..1	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					
45	7.1.5.1	PATHOLOGY TEST RESULT	Vocab Change	Pathology Test Result > Diagnostic Service mapped to entry[path_test_res]/observation/entryRelationship[diag_serv]/observation. entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/value:CD has Vocab change from NS (none Specified) to HL7 Diagnositc Service Values (table0074)	NEHTA	Alignment of specifications	2 Dec 2012
46	7.1.5.1.1	TEST SPECIMEN DETAIL	Data Type change	Test Specimen Detail > Anatomical Site > Specific Location > Side Was: entry[spec]/observation/targetSiteCode/qualifier/value:CD Now: entryRelationship[spec]/observation/targetSiteCode/qualifier/value with CD removed for ANY.	NEHTA	Alignment of specifications	2 Dec 2012
47	7.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Data Type change	Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details Was : entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/value:PQ Now : entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/value:IVL_PQ	NEHTA	Alignment of specifications	2 Dec 2012
48	7.1.5.1	PATHOLOGY TEST RESULT	Element Mapping change.	Pathology Test Result > Test Request Details > Test Requested Name Was: entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/act/text Now: entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/value:CD	NEHTA	Alignment of specifications	2 Dec 2012
49	7.1.5.1.1	TEST SPECIMEN DETAIL	Element Mapping change.	Test Specimen Detail > Handling and Processing > Collection Setting Old Spec: entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/text:ST New Spec: entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/value:ST	NEHTA	Alignment of specifications	2 Dec 2012
50	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Element Mapping change.	Result Group Specimen Detail > Handling and Processing > Collection Setting Old Spec: component/observation/entryRelationship[coll_set]/observation/text:ST New Spec: component/observation/entryRelationship[coll_set]/observation/value:ST	NEHTA	Alignment of specifications	2 Dec 2012
51	7.1.4.1	ADVERSE REACTION	XPATH Error	Error in Mapping with code defined in Path. Old Spec: entry/act/code/entryRelationship[rct_evnt]/ New Spec: entry/act/entryRelationship[rct_evnt]/ Error is repeated for @code/@codeSystem/@codeSystemName/@displayName	NEHTA	Alignment of specifications	2 Dec 2012
52	7.1.5.1.1	TEST SPECIMEN DETAIL	XML Element change	Test Specimen Detail > Identifiers > Container Identifier Was : entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/id Now : entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id	NEHTA	Alignment of specifications	2 Dec 2012
53	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	XML Element change	Result Group Specimen Detail > Handling and Processing > DateTime Received Was : component/observation/entryRelationship[date_rec]/observation/effectiveTime Now : component/observation/entryRelationship[date_rec]/observation/value:TS	NEHTA	Alignment of specifications	2 Dec 2012
54	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	XML Element change	Result Group Specimen Detail > Identifiers > Container Identifier Was : component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/id Now : component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id	NEHTA	Alignment of specifications	2 Dec 2012
55	7.1.5.1.1	Test Specimen Detail	Corrected context path.	Path changed - From: "Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/entry[path_test_res]/observation" To: "Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test_res]/entry[path_test_res]/observation/"	NEHTA	Document Feedback	27 September 2011
56	Throughout Document	Throughout Document	Participations Updated	Updated document to use Participation 3.2.	NEHTA	Updated SCS	14 November 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
57	7.1.3	Medications	Code changed	Code updated to 101.16146	NEHTA	Bug	14 November 2011
58	N/A	N/A	Document Status	Updated to Final	NEHTA	Status Change	08 December 2011
59	N/A	N/A	Participation Mapping Change	All participations that contain Employment details have been updated to include the CDA AU extension for Employment Details.	NEHTA	Corrected mapping	08 December 2011
60	N/A	Requested Service	New section added	Requested Service has been added - 7.1.5.3.	NEHTA	Updated SCS	08 December 2011
61	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Data type change.	Test Request Details changed from Text to Codeable Text with mapping changes to support this.	NEHTA	Updated SCS	08 December 2011
62	7.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Data type change.	Result Group Name changed from Coded Text to Codeable Text	NEHTA	Updated SCS	08 December 2011
63	7.1.5.2	IMAGING EXAMINATION RESULT GROUP	Data type change.	Result Name changed from Coded Text to Codeable Text	NEHTA	Updated SCS	08 December 2011
64	7.1.1.1, 7.1.1.2	REFEREE, USUAL GP	Mappings Changed	Mappings changed to allow for both Person and Organisation.	NEHTA	Updated SCS	08 December 2011
65	7.1.2.2, 7.1.2.4	EXCLUSION STATEMENT - PROBLEM AND DIAGNOSIS, EXCLUSION STATEMENT - PROCEDURES	Removed	Removed.	NEHTA	Updated SCS	08 December 2011
66	N/A	N/A	Bug Fixes	Miscellaneous bug fixes throughout the document. No mapping or structural changes were incurred unless otherwise stated in this log of changes.	NEHTA	Bug fixes	08 December 2011

Changes Version 2.1 09 December 2011 to Version 2.2 07 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 e-RF SCS is implemented as a CDA document. Conformance can be claimed to this Implementation Guide, either with regard to instances of e-Referral CDA XML documents, or to systems that consume or produce e-Referral CDA XML documents. When a conformance claim is made, it is made against this document, i.e. 'e-Referral: CDA Implementation Guide v2.1'. to This document describes how a an e-Referral 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	07 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 e-Referral CDA documents may claim conformance if all the documents it produces are conformant to this guide.	NEHTA	Document Feedback	07 March 2012
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	07 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	07 March 2012
5	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	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
6	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	07 March 2012
7	1.8	Conformance	Updated conformance statement	Updated the conformance statement from. A system that consumes e-Referral 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 e-Referral 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 e-Referral 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 e-Referral 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	07 March 2012
8	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	07 March 2012
9	1.9	Known Issues	Added Known Issue	Added known issue entry for 'Patient Nominated Contacts - Person > Relationship to Subject of Care' mapping.	NEHTA	Document Feedback	07 March 2012
10	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	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
11	1.9	Known Issues	Removed Known Issue	Removed the following Known Issue Entity Identifier Conformance statements in the comments column need to be verified.	NEHTA	Document Feedback	07 March 2012
12	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	07 March 2012
13	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	07 March 2012
14	2.3	CDA Extensions	Updated version numbers	Changed the current CDA extensions version and its namespace version number from 1.0 to 3.0 Changed the future CDA extension namespace version number reference from 2.0 to 4.0	NEHTA	Document Feedback	07 March 2012
15	3	e-Referral	Updated Data Hierarchy	Updated datatype of 1) DIAGNOSTIC INVESTIGATIONS > PATHOLOGY TEST RESULT > Result Group (PATHOLOGY TEST RESULT GROUP) > Result Group Name (Pathology Test Result Group Name) 2) DIAGNOSTIC INVESTIGATIONS > PATHOLOGY TEST RESULT > Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT) > Result Name (Individual Pathology Test Result Name) 3) DIAGNOSTIC INVESTIGATIONS > IMAGING EXAMINATION RESULT > Result Group (IMAGING EXAMINATION RESULT GROUP) > Result Group Name (Imaging Examination Result Group Name) 4) DIAGNOSTIC INVESTIGATIONS > IMAGING EXAMINATION RESULT > Result Group (IMAGING EXAMINATION RESULT GROUP) > Result (INDIVIDUAL IMAGING EXAMINATION RESULT) > Result Name (Individual Imaging Examination Result Name) from CodedText to CodeableText	NEHTA	Document Feedback	07 March 2012
16	3	e-Referral	Updated Data Hierarchy	Added PATIENT NOMINATED CONTACTS and DateTime Attested to the Data Hierarchy table.	NEHTA	Document Feedback	07 March 2012
17	5.1	ClinicalDocument	Updated mapping and XML example	Updated mapping and XML example from: templateId/@extension="2.1" to: templateId/@extension="2.2"	NEHTA	Document Feedback	21 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
18	5.1	ClinicalDocument	Updated Mapping and XML example fragment	Changed templateId/@root and XML example from. 1.2.36.1.2001.1001.101.100.21000 to 1.2.36.1.2001.1001.101.100.1002.2	NEHTA	Document Feedback	07 March 2012
19	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 eReferral CDA Implementation Guide.	NEHTA	Document Feedback	07 March 2012
20	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	07 March 2012
21	5.1.1	LegalAuthenticator	Updated Mapping reference	Changed all occurrences of 'LegalAuthenticator' in the mapping table to 'legalAuthenticator'.	NEHTA	Document Feedback	07 March 2012
22	6.1	e-Referral	Updated Relationships table	Added 'Patient Nominated Contact' mapping to the relationships table.	NEHTA	Document Feedback	07 March 2012
23	6.1	e-Referral	Updated mapping table	Added 'Patient Nominated Contact' mapping to the mapping table.	NEHTA	Document Feedback	07 March 2012
24	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	07 March 2012
25	6.1.2	SUBJECT OF CARE	Updated R-MIM representation	Added 0..1 as cardinality for assignedGeographicArea association	NEHTA	Document Feedback	07 March 2012
26	6.1.3	PATIENT'S NOMINATED CONTACTS	Added section and XML example	Added PATIENT'S NOMINATED CONTACTS section with mapping table, R-MIM representation and XML example.	NEHTA	Document Feedback	07 March 2012
27	7.1.1	REFERRAL DETAIL	Updated definition	Updated Referral Detail definition from Specific information about the clinical referral. to This section captures detailed information about the clinical referral	NEHTA	Document Feedback	07 March 2012
28	7.1.1	REFERRAL DETAIL	Updated relationship table	Changed Usual GP Obligation in the relationships table from 'Essential' to 'Optional'.	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
29	7.1.1.1.1	REFEREE - PERSON	Fixed typo	Changed 'Context: ClincalDocument' to 'Context: ClinicalDocument'.	NEHTA	Document Feedback	07 March 2012
30	7.1.1.1.1	REFEREE - PERSON	Updated R-MIM Representation	Removed 'administrativeGenderCode' and 'birthTime' attributes and its 'Note' comment from the 'Person' class in the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
31	7.1.1.1.2	REFEREE - ORGANISATION	Updated XML example fragment	Added asOrganizationPartOf/wholeOrganization elements to the XML example.	NEHTA	Document Feedback	10 February 2012
32	7.1.1.1.2	REFEREE - ORGANISATION	Updated XML example fragment	Added asOrganizationPartOf/wholeOrganization/name element to the XML example.	NEHTA	Document Feedback	10 February 2012
33	7.1.1.1.2	REFEREE - ORGANISATION	Updated mapping	Updated mapping from: participant/associatedEntity/participant/associatedEntity/@classCode to: participant/associatedEntity/@classCode	NEHTA	Document Feedback	07 March 2012
34	7.1.1.1.2	REFEREE - ORGANISATION	Added Mapping and XML example	Added mapping and XML example for Organisation Name Usage Mapping: participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/@use	NEHTA	Document Feedback	07 March 2012
35	7.1.1.1.2	REFEREE - ORGANISATION	Fixed typo	Changed 'Context: ClincalDocument' to 'Context: ClinicalDocument'.	NEHTA	Document Feedback	07 March 2012
36	7.1.1.1.2	REFEREE - ORGANISATION	Updated SCS Data Component Name	Updated Usual GP SCS Data Component Name from Prescriber Organisation > Participant > Person or Organisation or Device > Organisation > Department/Unit to Referee > Participant > Person or Organisation or Device > Organisation > Department/Unit	NEHTA	Document Feedback	07 March 2012
37	7.1.1.1.2	REFEREE - ORGANISATION	Fixed typo	Changed text in the CDA R-MIM Representation paragraph from. Figure 7.6, “Usual GP” shows a subset of the CDA R-MIM to Figure 7.4, “Referee” shows a subset of the CDA R-MIM	NEHTA	Document Feedback	07 March 2012
38	7.1.1.2.1	USUAL GP - PERSON	Updated mapping	Changed Address, Electronic Communication Detail cardinality from 1..* to 0..*	NEHTA	Document Feedback	07 March 2012
39	7.1.1.2.1	USUAL GP - PERSON	Updated mapping	Changed Employment Detail cardinality from 0..1 to 1..1	NEHTA	Document Feedback	07 March 2012
40	7.1.1.2.1	USUAL GP - PERSON	Updated mapping	Added mapping for participant/associatedEntity/id to the mapping table.	NEHTA	Document Feedback	07 March 2012
41	7.1.1.2.1	USUAL GP - PERSON	Updated R-MIM Representation	Removed 'administrativeGenderCode' and 'birthTime' attributes and its 'Note' comment from the 'Person' class in the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
42	7.1.1.2.2	USUAL GP - ORGANISATION	Updated XML example fragment	Added missing asOrganizationPartOf/wholeOrganization elements to the XML example.	NEHTA	Document Feedback	10 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
43	7.1.1.2.2	USUAL GP - ORGANISATION	Updated XML example fragment	Added asOrganizationPartOf/wholeOrganization/name element to the XML example.	NEHTA	Document Feedback	10 February 2012
44	7.1.1.2.2	USUAL GP - ORGANISATION	Fixed typo	Changed 'Context: ClincalDocument' to 'Context: ClinicalDocument'.	NEHTA	Document Feedback	07 March 2012
45	7.1.1.2.2	USUAL GP - ORGANISATION	Updated mapping	Updated mapping from: participant/functionCode="PCP" to: participant/functionCode/@code="PCP"	NEHTA	Document Feedback	07 March 2012
46	7.1.1.2.2	USUAL GP - ORGANISATION	Updated mapping	Updated mapping from: participant/associatedEntity/participant/associatedEntity/@classCode to: participant/associatedEntity/@classCode	NEHTA	Document Feedback	07 March 2012
47	7.1.1.2.2	USUAL GP - ORGANISATION	Updated mapping	Changed Address, Electronic Communication Detail cardinality from 1..* to 0..*	NEHTA	Document Feedback	07 March 2012
48	7.1.1.2.2	USUAL GP - ORGANISATION	Updated SCS Data Component Name	Updated Usual GP SCS Data Component Name from Prescriber Organisation > Participant > Person or Organisation or Device > Organisation > Department/Unit to Usual GP > Participant > Person or Organisation or Device > Organisation > Department/Unit	NEHTA	Document Feedback	07 March 2012
49	7.1.1.2.2	USUAL GP - ORGANISATION	Added Mapping and XML example	Added mapping and XML example for Organisation Name Usage Mapping: participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/@use	NEHTA	Document Feedback	07 March 2012
50	7.1.2.3	OTHER MEDICAL HISTORY ITEM	Updated XML example fragment	Removed /entry/act/entryRelationship/act/id element from the XML example.	NEHTA	Document Feedback	10 February 2012
51	7.1.2.3	OTHER MEDICAL HISTORY ITEM	Updated XML example	Updated displayName from: Medical History Item to: Other Medical History Item	NEHTA	Document Feedback	07 March 2012
52	7.1.2.3	OTHER MEDICAL HISTORY ITEM	Updated XML example	Updated displayName from: Medical History Comment to: Medical History Item Comment	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
53	7.1.3.1	MEDICATION INSTRUCTION	Updated mapping	Removed the reference sets for prescribing and administering contexts. Removed: 929360081000036101 Medicinal product pack reference set 929360071000036103 Medicinal product unit of use reference set 929360041000036105 Trade product pack reference set 929360031000036100 Trade product unit of use reference set 929360051000036108 Containered trade product pack reference set	NEHTA	Document Feedback	07 March 2012
54	7.1.4.1	ADVERSE REACTION	Updated Mapping	Replaced all occurrences of 'entry/act/code/entryRelationship[rct_evnt]/observation/' to 'entry/act/entryRelationship[rct_evnt]/observation/code/'.	NEHTA	Document Feedback	10 February 2012
55	7.1.5	DIAGNOSTIC INVESTIGATIONS	Updated XML example fragment	Removed <text> element from the XML example.	NEHTA	Document Feedback	10 February 2012
56	7.1.5	DIAGNOSTIC INVESTIGATIONS	Updated R-MIM Representation	Removed text attribute from the R-MIM Section class.	NEHTA	Document Feedback	10 February 2012
57	7.1.5.1	PATHOLOGY TEST RESULT	Updated XML example	Updated codeSystem value in 'Overall Pathology Test Result Status' XML example from . codeSystem="1.2.36.2001.1001.104.16501" to codeSystem="1.2.36.1.2001.1001.101.104.16501"	NEHTA	Document Feedback	07 March 2012
58	7.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example	Removed two occurrences of xsi:type="ED" attribute from observationMedia/value data elements.	NEHTA	Document Feedback	07 March 2012
59	7.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example	Updated code from: 102.16156.132.1.1 to: 102.16156.2.2.1	NEHTA	Document Feedback	07 March 2012
60	7.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example fragment	Changed id to ext:id in the 'Test Specimen Detail > Identifiers > Container Identifier' XML example.	NEHTA	Document Feedback	10 February 2012
61	7.1.5.1.1	TEST SPECIMEN DETAIL	Updated context.	Updated context from: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test_res]/entry[path_test_res]/observation/entryRelationship[spec]/observation to: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[spec]/observation	NEHTA	Document Feedback	10 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					

62	7.1.5.1.2	PATHOLOGY TEST RESULT GROUP	Updated XML example	Updated 'Pathology Test Result Group > Individual Pathology Test Result > Individual Pathology Test Result Value Normal Status' XML fragment from.
				`<interpretationCode code="N" />`
				to
				`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />`
				and
				`<interpretationCode code="HH" />`
				to
				`<interpretationCode code="HH" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="High alert" />`
					NEHTA	Document Feedback	07 March 2012

63	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Updated XML example	Removed xsi:type="ED" attribute from 'Anatomical Location Image' observationMedia/value data element.	NEHTA	Document Feedback	07 March 2012
64	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL; Result Group Specimen Detail > Handling and Processing > DateTime Received	Updated XML example	Removed effectiveTime elements from the XML example.	NEHTA	Document Feedback	07 March 2012
65	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL; Result Group Specimen Detail > Handling and Processing > DateTime Received	Updated XML example	Updated displayName from displayName="Date and Time of Receipt" to displayName="DateTime Received"	NEHTA	Document Feedback	07 March 2012
66	7.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL; Result Group Specimen Detail > Handling and Processing > DateTime Received	Updated XML example	Added value:TS element to the XML example	NEHTA	Document Feedback	07 March 2012

67	7.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated XML example	Updated 'Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Normal Status' XML fragment from.
				`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.1.11.10206" displayName="Normal" />`
				to
				`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />`
					NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
68	7.1.5.2.2	EXAMINATION REQUEST DETAILS	Updated mapping	Updated 5 occurrences of Examination Request Details > Image Details > DICOM Series Identifier mapping from entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/observation/ to entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/	NEHTA	Document Feedback	07 March 2012
69	7.1.5.2.2	EXAMINATION REQUEST DETAILS	Updated XML example fragment	Removed /entryRelationship[exam_req]/act/id element from the XML example.	NEHTA	Document Feedback	10 February 2012
70	7.1.5.3.1.1	SERVICE PROVIDER - PERSON	Updated R-MIM Representation	Removed 'administrativeGenderCode' and 'birthTime' attributes and its 'Note' comment from the 'Person' class in the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
71	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	07 March 2012
72	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	07 March 2012
73	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	07 March 2012
74	8.8	Employment	Added Mapping	Added ext:asEmployment/@classCode mapping to the mapping table.	NEHTA	Document Feedback	07 March 2012
75	8.8	Employment	Added Mapping and XML example	Added mapping and XML examples for @ClassCode,ext:jobClassCode, ext:jobCode and ext:code elements. Added the 'Note' text above the Employment Mapping table.	NEHTA	Document Feedback	07 March 2012
76	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	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rationale For Change	Date Changed
	Section	Section Name					
77	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	07 March 2012
78	8.8	Employment	Updated Mapping	Changed employerOrganization to ext:employerOrganization in the mapping table.	NEHTA	Document Feedback	07 March 2012
79	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	07 March 2012
80	8.8	Employment	Updated cardinality	Changed cardinality for 'Employment Detail > Employer Organisation' from '1..*' to'0..*'	NEHTA	Document Feedback	07 March 2012
81	Appendix A	CDA Narratives	Updated Conformance points	Changed the following conformance point from. 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. to The narrative contents SHALL conform to the requirements specified in the CDA Rendering Specification.	NEHTA	Document Feedback	07 March 2012
82	Appendix A	CDA Narratives	Updated Conformance statements	Removed the following conformance points. • 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	NEHTA	Document Feedback	07 March 2012
83	Page ii	Copyright	Updated Copyright year	Changed year from '2011' to '2012'.	NEHTA	Document Feedback	07 March 2012

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