nehta

# Event Summary

## CDA Implementation Guide

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Final

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# Document Information

## Document owner

| Document Owner |
| --- |
| The National Clinical Terminology and Information Service |

## Related documents

| Name | Version/Release Date |
| --- | --- |
| *Event Summary Structured Content Specification* | Version 1.1, Issued To be published |
| *Information Requirements - Event Summary* | Version 1.1, Issued 31 October 2011 |
| *Participation Data Specification* | Version 3.2, Issued 20 July 2011 |

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# List of Examples

# 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 Event Summary Structured Content Specification (ES SCS) as an HL7 Clinical Document Architecture Release 2 (CDA) XML document. This guide is based on Version 1.1 of the ES SCS [NEHT2011bq]. The primary aim of the guide is to take implementers step by step through mapping each data component of the ES 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 Event Summary. The resulting CDA document would be used for the electronic exchange of Event Summaries between healthcare providers.

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

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

## 1.2 Event Summary Definition

A Event Summary is defined in the ES SCS [NEHT2011bq] as:

> A record, reported by a clinician, of one significant health care event involving the subject of care.

## 1.3 HL7 Clinical Document Architecture

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

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

Some of the advantages of CDA are:

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

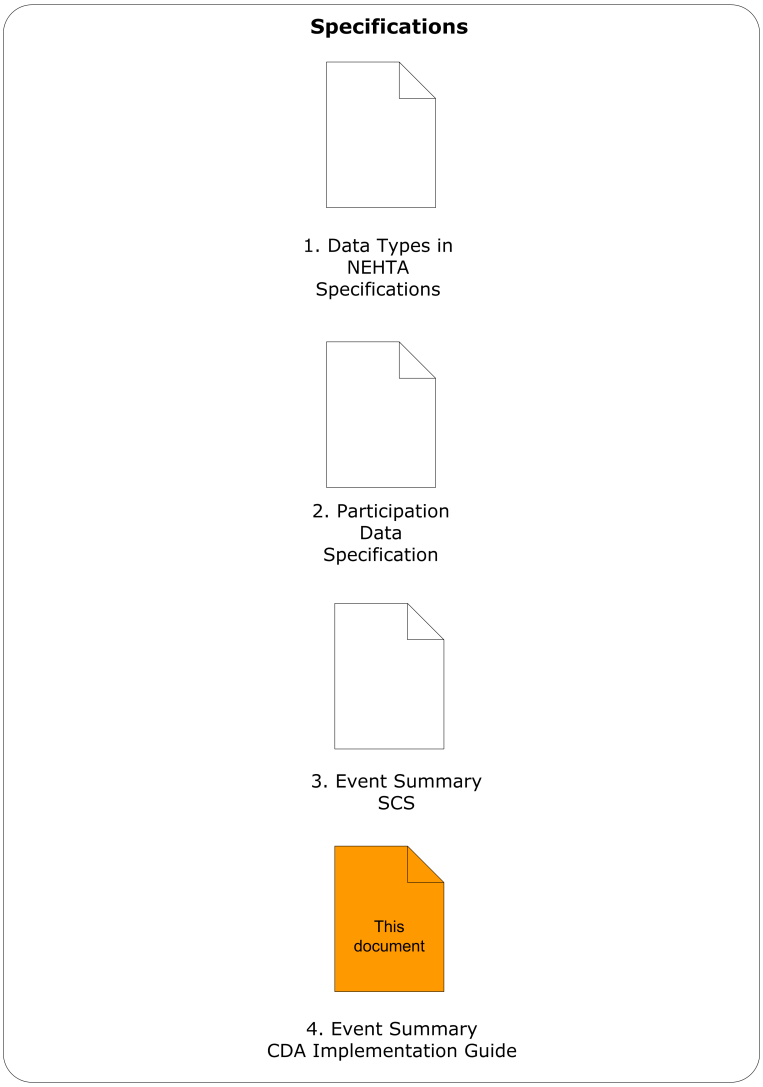
# 1.4 Intended Audience

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. Event Summary – Structured Content Specification [NEHT2011bq] – clinical content specification describing the logical data structures, data components, and value domains which constitute an Event Summary.

# 1.6 Acronyms

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

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

# 1.7 Keywords

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

**Keywords used in this document**

| Keyword | Interpretation |
|---|---|
| **SHALL** | This word, or the terms '**REQUIRED**' or '**MUST**', means that the definition is an absolute requirement of the specification. |
| **SHOULD** | This word, or the adjective '**RECOMMENDED**', means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course. |
| **MAY** | This word, or the adjective '**OPTIONAL**', means that an item is truly optional. One implementer may choose to include the item because a particular implementation requires it, or because the implementer determines that it enhances the implementation while another implementer may omit the same item. An implementation which does not include a particular option must be prepared to interoperate with another implementation which does include the option, perhaps with reduced functionality. In the same vein, an implementation which does include a particular option must be prepared to interoperate with another implementation which does not include the option (except of course, for the feature the option provides). |
| **SHALL NOT** | This phrase, or the phrase '**MUST NOT**' means that the definition is an absolute prohibition of the specification. |
| **SHOULD NOT** | This phrase, or the phrase '**NOT RECOMMENDED**' means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label. |

# 1.8 Conformance

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

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

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

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

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

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

- Allowing the use of alternative value sets in place of the value sets specified in this document
- Allowing the use of alternative identifiers in place of the HI Service identifiers
- 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 Status | As a NEHTA Managed Specification, the contents of this document are the result of extensive clinical collaboration and editorial review, and the specification is considered to be 'Final'. Nonetheless, as software implementations and standards review of this specification progress, normative updates may be required. |
| 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. |
| <code> | The explanation of how to use the code element in the Common Patterns chapter needs to be revisited. |
| 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. |
| DOCUMENT AUTHOR,Service Provider | Location of Participation is currently not mapped. |
| PATHOLOGY TEST RESULT | Anatomical Location Image and Specimen Image are mapped to observationMedia - How will these be differen-tiated? |
| Thoughout document | While every effort has been taken to ensure that the ex-amples 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 ES SCS as a conformant HL7 CDA XML document. The Event Summary is built in two parts:

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

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

In order to properly implement this specification, the reader should be familiar with the ES 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 ES 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<br><br>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<br>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.

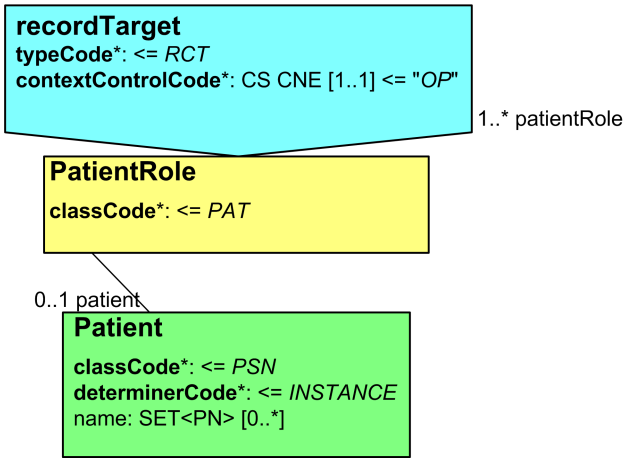



**Figure 2.1. Example - Header Part**

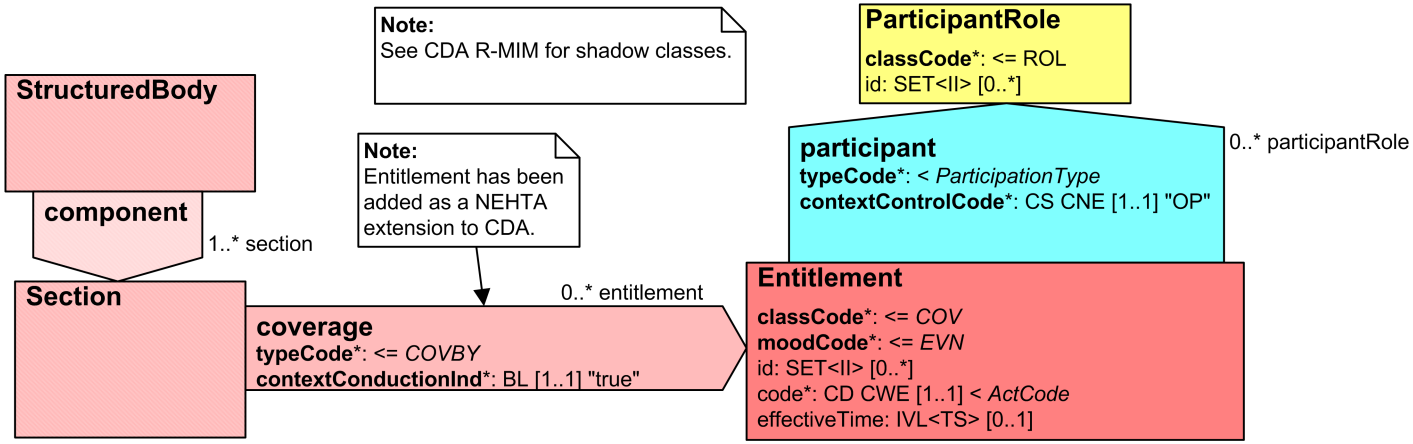



**Figure 2.2. Example - Body Part**

# 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.<br><br>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.<br><br>If there is a name in round brackets after the path, this is the name of the reused data group for the SCS component.<br><br>The data component in **bold** text (the last in the path) is the data component for this row.<br><br>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.<br><br>The cardinality of the data element in the SCS maps to the cardinality of the element in the CDA document.<br><br>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.<br><br>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.<br><br>The syntax for this is similar to XPath:<br><br>{/name{[index]}}n{/<pattern>}<br><br>Where:<br><br>• {} indicates optional<br>• {}n means a section that may repeat<br>• <pattern> contains a link to a common pattern<br>• [index] differentiates two similar mappings<br><br>Examples:<br><br>1. component/act/participation[inf_prov]/role/ **<Address>**<br><br>2. **participant**<br><br>participant/**@typeCode="ORG"**<br><br>participant/**associatedEntity**<br><br>participant/associatedEntity/**@classCode="SDLOC"**<br><br>participant/associatedEntity/**code**<br><br>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.<br><br>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.<br><br>It is possible for one SCS data component to map to more than one CDA Schema element as in Example 2.<br><br>Any fixed attribute values are represented as a separate line of the mapping such as those shown in Example 2.<br><br>The path may end with a pattern designator, such as <Address>. This indicates that the mapping involves a number of sub-elements of the named element following the pattern as shown in the name (which is a link to the appropriate pattern in this document). | The name of the vocabulary. | Helpful additional information about the mapping. |

**How to interpret the following example mapping:**

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Header Data Elements** | | | Context: ClinicalDocument | | |
| **Subject of Care** | Identifies the person about whom the healthcare event/encounter/clinical interaction has been captured and/or interchanged, that led to the creation of the document. In other words, the subject of the information. | 1..1 | recordTarget/**patientRole** | | |
| n/a | n/a | 1..1 | recordTarget/patientRole/**id** | UUID<br><br>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.<br><br>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 Event Summary CDA W3C XML Schema (referred to in this document as the ES 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 ES CDA Schema; and
- Australian CDA extensions have been added to the ES CDA Schema.

The modified ES 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.

Event Summaries that conform to this specification **SHALL** validate against the ES 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 ES 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 Event Summary Data Hierarchy

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

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

| | | | | | |
|---|---|---|---|---|---|
| | Event Summary | | | | |
| CONTEXT | | | | | |
| | | SUBJECT OF CARE | | | 1..1 |
| | | Encounter Period | | | 1..1 |
| | | DOCUMENT AUTHOR | | | 1..1 |
| CONTENT | | | | | |
| | | EVENT DETAILS | | | 0..1 |
| | | | CLINICAL SYNOPSIS | | 1..1 |
| | | | | Clinical Synopsis Description | 1..1 |
| | | NEWLY IDENTIFIED ADVERSE REACTIONS | | | 0..1 |
| | | | ADVERSE REACTION | | 1..* |
| | | | | Substance/Agent | 1..1 |
| | | | | REACTION EVENT | 0..1 |
| | | | | Manifestation | 1..* |
| | | MEDICATIONS | | | 0..1 |
| | | | MEDICATION | | 1..* |
| | | | | Medicine (Therapeutic Good Identification) | 1..1 |
| | | | | Directions | 1..1 |
| | | | | Clinical Indication | 0..1 |
| | | | | Comment | 0..1 |
| | | | | Change Type | 1..1 |
| | | | | Change or Recommendation? | 1..1 |
| | | | | Change Description | 0..1 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | Change Reason | 0..1 |
| | | DIAGNOSES/INTERVENTIONS | | | 0..1 |
| | | | PROBLEM/DIAGNOSIS | | 0..* |
| | | | | Problem/Diagnosis (Problem/Diagnosis Identification) | 1..1 |
| | | | | Date of Onset | 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 |
| | | | MEDICAL HISTORY ITEM | | 0..* |
| | | | | Medical History Item Description | 1..1 |
| | | | | Medical History Item TimeInterval | 0..1 |
| | | | | Medical History Item Comment | 0..1 |
| | | IMMUNISATIONS | | | 0..1 |
| | | | IMMUNISATION | | 1..* |
| | | | | Medicine (Therapeutic Good Identification) | 1..1 |
| | | | | Medication Action DateTime | 1..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 | | | 0..* |
| | | | | | | SPECIFIC LOCATION | | 0..1 |
| | | | | | | | Name of Location (Anatomical Location Name) | 0..1 |
| | | | | | | | Side | 0..1 |
| | | | | | | Description (Anatomical Location Description) | | 0..1 |
| | | | | | | Anatomical Location Image | | 0..* |
| | | | | | PHYSICAL DETAILS | | | 0..* |
| | | | | | | Weight | | 0..1 |
| | | | | | | DIMENSIONS | | 0..1 |
| | | | | | | | Volume | 0..1 |
| | | | | | | 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 | | | 0..1 |
| | | | | | | Result Value Normal Status | | | 0..1 |
| | | | | | | RESULT VALUE REFERENCE RANGE DETAILS | | | 0..* |
| | | | | | | | Result Value Reference Range Meaning | | 1..1 |
| | | | | | | | Result Value Reference Range | | 1..1 |
| | | | | | | Result Comment | | | 0..* |
| | | | | | | 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 LOCATION | | | 0..* |
| | | | | | | | SPECIFIC LOCATION | | 0..1 |
| | | | | | | | | Anatomical Location Name | 0..1 |
| | | | | | | | | Side | 0..1 |
| | | | | | | | Anatomical Location Description | | 0..1 |
| | | | | | | | Anatomical Location Image | | 0..* |
| | | | | | | PHYSICAL DETAILS | | | 0..* |
| | | | | | | | Weight | | 0..1 |
| | | | | | | | DIMENSIONS | | 0..1 |
| | | | | | | | | Volume | 0..1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Description | 0..1 |
| | | | | | | | Image | 0..1 |
| | | | | | | COLLECTION AND HANDLING | | 0..1 |
| | | | | | | | Sampling Preconditions | 0..1 |
| | | | | | | HANDLING AND PROCESSING | | 1..1 |
| | | | | | | | Collection DateTime | 1..1 |
| | | | | | | | Collection Setting | 0..1 |
| | | | | | | | 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 | | | | 0..* |
| | | | | | SPECIFIC LOCATION | | | 0..1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Name of Location (Anatomical Location Name) | | 0..1 |
| | | | | | | Side | | 0..1 |
| | | | | | Description (Anatomical Location Description) | | | 0..1 |
| | | | | | 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 | | 0..1 |
| | | | | | | Result Value Normal Status | | 0..1 |
| | | | | | | RESULT VALUE REFERENCE RANGE DETAILS | | 0..* |
| | | | | | | | Result Value Reference Range Meaning | 1..1 |
| | | | | | | | Result Value Reference Range | 1..1 |
| | | | | | | Result Comment | | 0..* |
| | | | | | ANATOMICAL LOCATION | | | 0..1 |
| | | | | | | SPECIFIC LOCATION | | 0..1 |
| | | | | | | | Anatomical Location Name | 0..1 |
| | | | | | | | Side | 0..1 |
| | | | | | | Anatomical Location Description | | 0..1 |
| | | | | | | 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 |
| | | | | | | Image View Name | 0..1 |
| | | | | | | 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 ES 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.

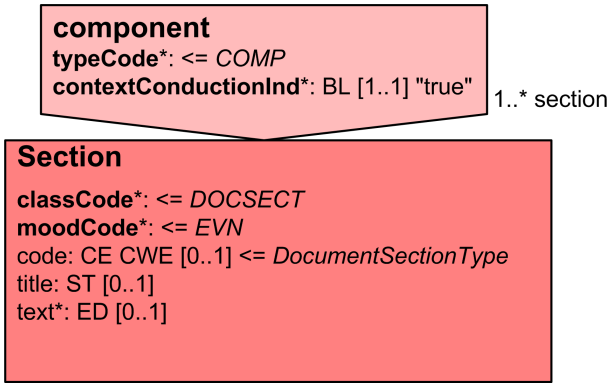



**Figure 4.1. Administrative Observations**

# 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<br><br>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 ES SCS specification. These elements include CDA specific header elements (both required and optional) and data elements described in the Endpoint Specification (EPS). The CDA header elements are specified in the CDA Schema Data Element column and where they map to Endpoint specification elements is indicated in the EPS Element column.

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

## 5.1 ClinicalDocument

### Identification

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

### Relationships

**Children Not Included in Mapping for This Section**

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

# CDA R-MIM Representation

Figure 5.1, “ClinicalDocument”

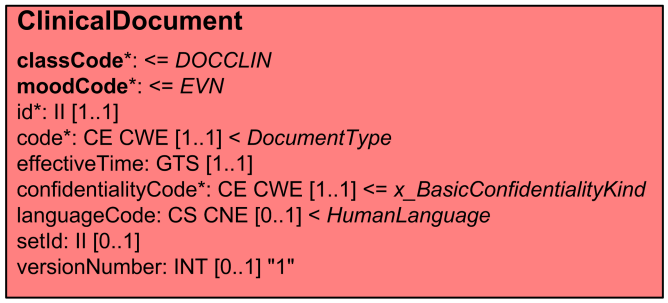



**Figure 5.1. ClinicalDocument**

# CDA Mapping

| CDA Schema Data Element | Definition | Card | Vocab | EPS Element | Comments |
|---|---|---|---|---|---|
| Context: / | | | | | |
| **ClinicalDocument** | The ClinicalDocument class is the entry point into the CDA R-MIM, and corresponds to the <ClinicalDocument> XML element that is the root element of a CDA document. | 1..1 | | | |
| ClinicalDocument/**typeId** | A technology-neutral explicit reference to this CDA, Release Two specification. | 1..1 | | | |
| ClinicalDocument/typeId/**@extension="POCD_HD000040"** | | 1..1 | | | The unique identifier for the CDA, Release Two Hierarchical Description. |
| ClinicalDocument/typeId/**@root="2.16.840.1.113883.1.3"** | | 1..1 | | | The OID for HL7 Registered models. |
| ClinicalDocument/**templateId** | | 1..* | | | One or more template identifiers that indicate constraints on the CDA document that this document conforms to. One of the identifiers must be the templateId that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA Rendering Specification.<br><br>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="1.2.36.1.2001.1001.101.100.1002.136"** | | 1..1 | | docType | The healthcare context-specific name of the published Event Summary CDA Implementaion Guide. |
| ClinicalDocument/templateId/**@extension="1.2"** | | 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 record, reported by a clinician, of one significant health care event involving the subject of care. |
| ClinicalDocument/code/**@code="34133-9"** | | | | | |
| ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"** | | | | | |
| ClinicalDocument/code/**@codeSystemName="LOINC"** | | | | | |
| ClinicalDocument/code/**@displayName="Summarization of episode 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 ClinicalDocument.effectiveTime is the time the original document is created. | 1..1 | | creationTime | |
| ClinicalDocument/**confidentialityCode/@nullFlavor="NA"** | Codes that identify how sensitive a piece of information is and/or that indicate how the information may be made available or disclosed. | 1..1 | | | |
| ClinicalDocument/**languageCode** | | 0..1 | [RFC3066] – Tags for the Identification of Languages | | <Language Code> – <COUNTRY CODE> |
| ClinicalDocument/**setId** | Represents an identifier that is common across all document revisions. | 0..1 | UUID<br><br>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="1.2.36.1.2001.1001.101.100.1002.136" extension="1.2"/>
 <id root="8BC3406A-B93F-11DE-8A2B-6A1C56D89593"/>
 <code code="34133-9"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Summarization of episode 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.

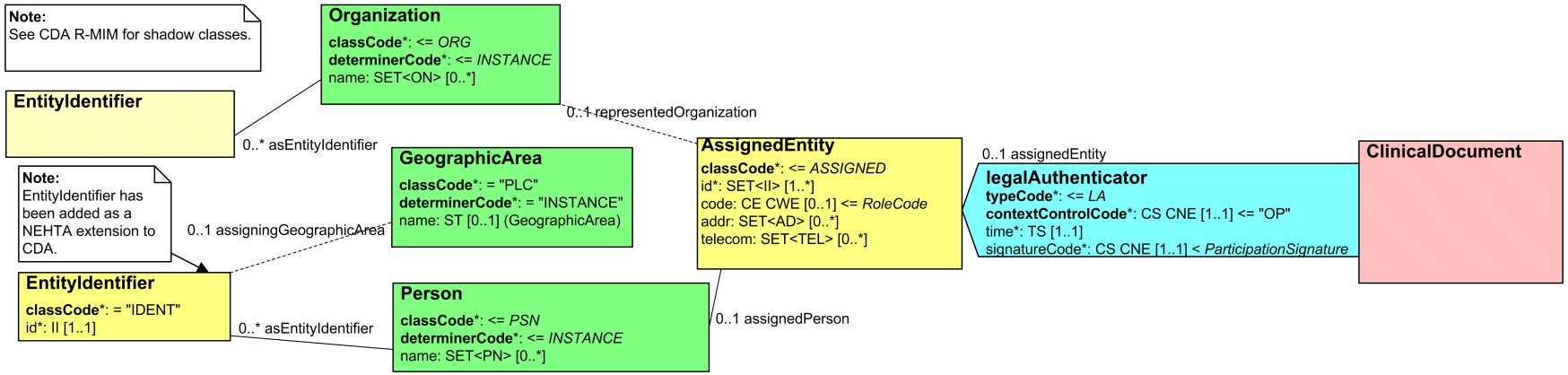



**Figure 5.2. LegalAuthenticator**

# 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<br><br>This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used. | |
| legalAuthenticator/**assignedEntity** | A legalAuthenticator is a person in the role of an assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class). | 1..1 | | |
| legalAuthenticator/assignedEntity/**assignedPerson** | The entity playing the role (assignedEntity) is a person. | 0..1 | | |
| legalAuthenticator/assignedEntity/assignedPerson/**<Entity Identifier>** | The entity identifier of the person. | 0..* | | See common pattern: Entity Identifier. |
| legalAuthenticator/assignedEntity/**<Address>** | A postal address for the entity (assignedPerson) while in the role (assignedEntity). | 0..* | | See common pattern: Address. |
| legalAuthenticator/assignedEntity/**<Electronic Communication Detail>** | A telecommunication address for the entity (assignedPerson) while in the role (assignedEntity). | 0..* | | See common pattern: Electronic Communication Detail. |
| legalAuthenticator/assignedEntity/assignedPerson/**<Person Name>** | A non-unique textual identifier or moniker for the entity (assignedPerson). | 0..* | | See common pattern: Person Name. |
| legalAuthenticator/assignedEntity/**representedOrganization** | The entity scoping the role (assignedEntity). | 0..1 | | |

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

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

# Example

### Example 5.2. LegalAuthenticator XML Fragment

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

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

 …

 <!-- Begin CDA Header -->

 …

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

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

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

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

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

```
    <representedOrganization>

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

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

 …

 <!-- End CDA Header -->

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

 …

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

# 5.1.2 Custodian

## Identification

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

## Relationships

**Parent**

| Name | Obligation | Occurrence |
|---|---|---|
| ClinicalDocument | Essential | 1..1 |

# CDA R-MIM Representation

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

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

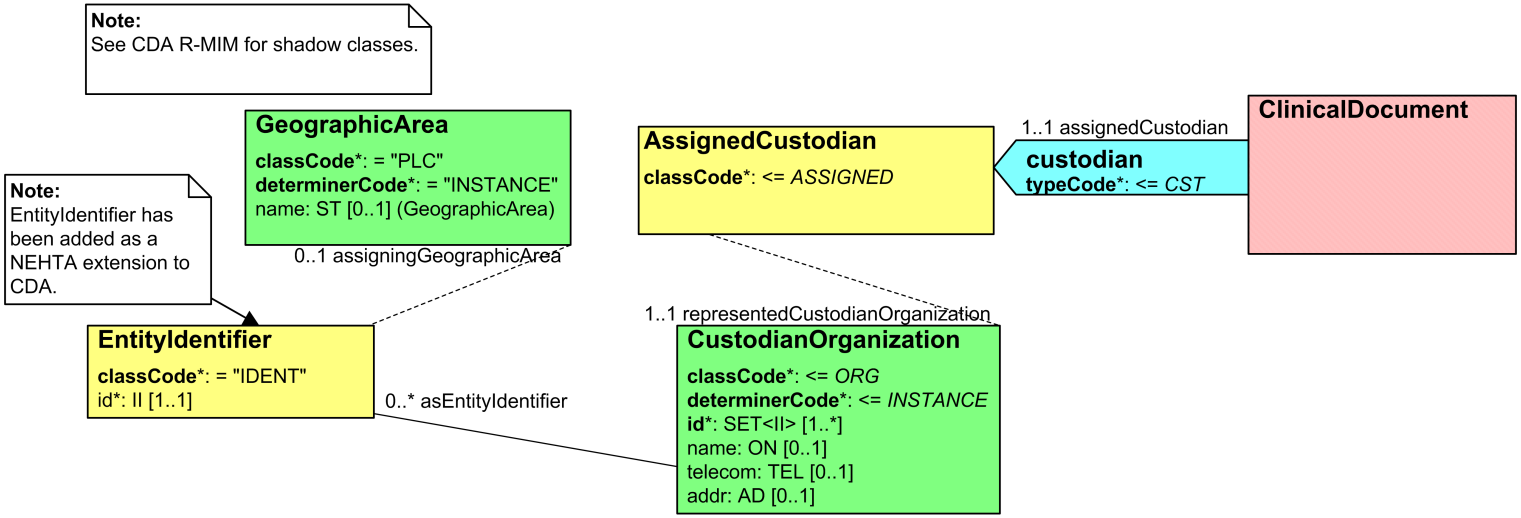



**Figure 5.3. Custodian**

# CDA Mapping

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

# Example

### Example 5.3. Custodian Body XML Fragment

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

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

   …

   <!-- Begin CDA Header -->

   …

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

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

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

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

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

   …

   <!-- End CDA Header -->

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

```
      …

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

# 6 Context Data Specification - CDA Mapping

## 6.1 Event Summary

### Identification

| | |
|---|---|
| **Name** | EVENT SUMMARY |
| **Metadata Type** | Structured Document |
| **Identifier** | SD-16473 |

### Relationships

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

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

### CDA R-MIM Representation

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

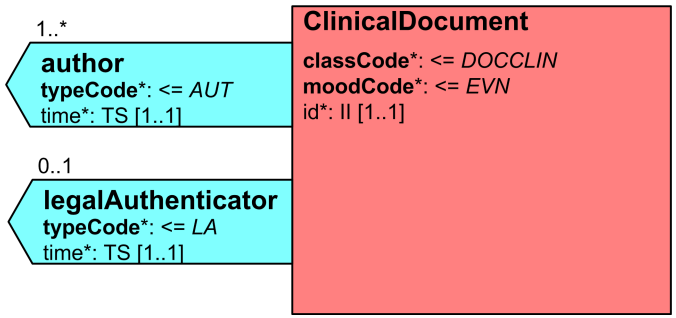



**Figure 6.1. CDA Header Model for Event Summary Context**

# CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Header Data Elements** | | | | | |
| **Event Summary** | A record, reported by a clinician, of one significant health care event involving the subject of care. | 1..1 | ClinicalDocument/**code** | | |
| | | | ClinicalDocument/code/**@code="34133-9"** | | |
| | | | ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"** | | |
| | | | ClinicalDocument/code/**@codeSystemName="LOINC"** | | |
| | | | ClinicalDocument/code/**@displayName="Summarization of episode note"** | | |
| | | | ClinicalDocument/**effectiveTime** | | Document creation time. |
| Event Summary > **DateTime Attested** | The date (and time if known) that the document author or document authoriser/approver confirms (usually by signature) that a document is complete and genuine. | 1..1 | ClinicalDocument/**legalAuthenticator/time** | | See <time> for available attributes. |
| Event Summary > **Encounter Period** | The date (and optionally time) of the start and end of the encounter that this event summary refers to. | 1..1 | ClinicalDocument/**componentOf/encompassingEncounter/effectiveTime** | | See <time> for available attributes. |
| *Event Summary* > ***Subject of Care*** | See: SUBJECT OF CARE | | | | |
| *Event Summary* > ***Document Author*** | See: DOCUMENT AUTHOR | | | | |

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

### Example 6.1. Event Summary Context XML Fragment

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

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

 …

 <code code="34133-9"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Summarization of episode note"/>
 <effectiveTime value="200910201235"/>
 >

   ...

   <!-- Begin CDA Header -->

   ...

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

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

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

   ...

    <!-- Begin Encounter Period -->
 <componentOf>
  <encompassingEncounter>
   <effectiveTime value="201112141100+1000">
    <low value="201112141100+1000" />
    <high value="201112141130+1000" />
   </effectiveTime>
  </encompassingEncounter>
 </componentOf>
 <!-- End Encounter Period -->

   <!-- 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 |
|---|---|---|---|
|  | Event Summary | Essential | 1..1 |

# CDA R-MIM Representation

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

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

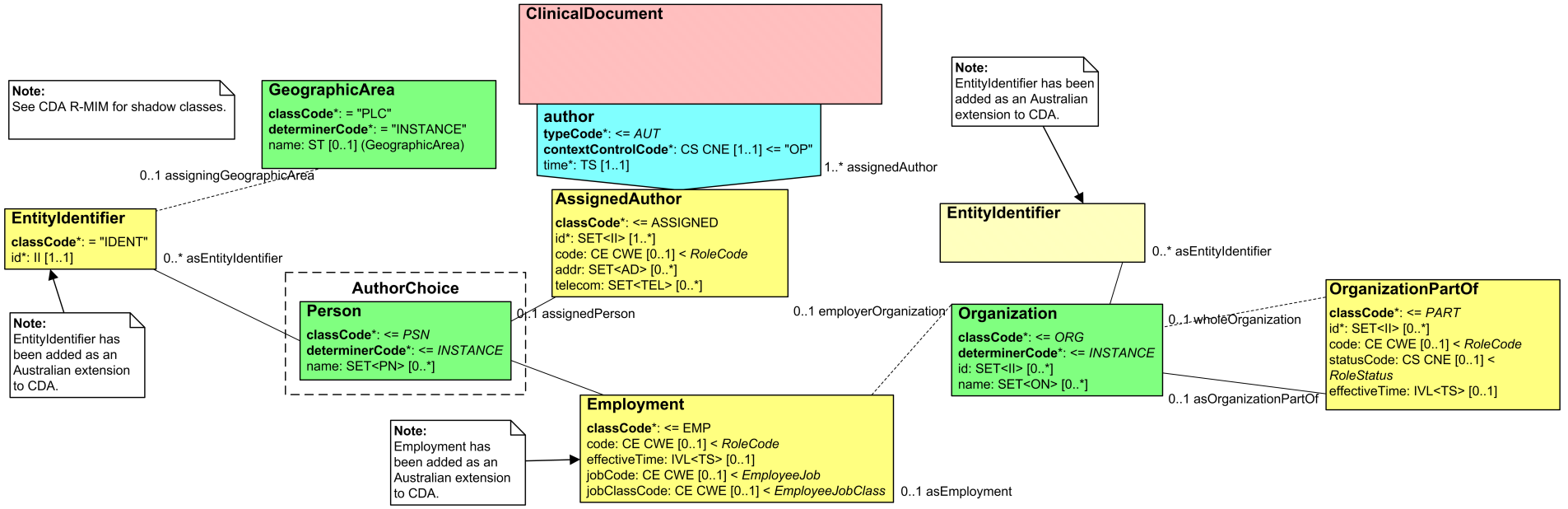



**Figure 6.2. Document Author**

# CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Header Data Elements** | | | Context: ClinicalDocument | | |
| **Document Author** | The healthcare provider who composed the event summary. | 1..1 | **author** | | |
| Document Author > **Participation Period** | The time interval during which the participation in the health care event occurred. | 0..1 | author/**time** | This element will hold the same value as Event Summary > DateTime Attested (ClinicalDocument/**legalAuthenticator/time**)<br><br>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].<br><br>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<br><br>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.<br><br>The cardinality of this component propagates to its children. |
| Document Author > Participant > Person or Organisation or Device > **Person** | An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient). | 1..1 | n/a | | Not mapped directly, encompassed implicitly in author/assignedAuthor/assignedPerson. |
| Document Author > Participant > Person or Organisation or Device > Person > **Person Name** | The appellation by which an individual may be identified separately from any other within a social context. | 1..* | author/assignedAuthor/assignedPerson/**<Person Name>** | | See common pattern: Person Name. |
| Document Author > Participant > Person or Organisation or Device > Person > **Employment Detail** | A person's occupation and employer. | 1..1 | author/assignedAuthor/assignedPerson/**<Employment>** | | See common pattern: Employment. |

### Example 6.2. Document Author XML Fragment

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

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

   …

   <!-- Begin Source of Event Summary -->
 <author>

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

  <assignedAuthor>

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

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

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

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

   <!-- Participant -->
   <assignedPerson>

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

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

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

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

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

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

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

      <asOrganizationPartOf>
       <wholeOrganization>

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

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

       </wholeOrganization>
      </asOrganizationPartOf>
     </ext:employerOrganization>
    </ext:asEmployment>
   </assignedPerson>
  </assignedAuthor>
 </author>
   <!-- End 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 |
|---|---|---|---|
|  | Event Summary | Essential | 1..1 |

# CDA R-MIM Representation

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

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

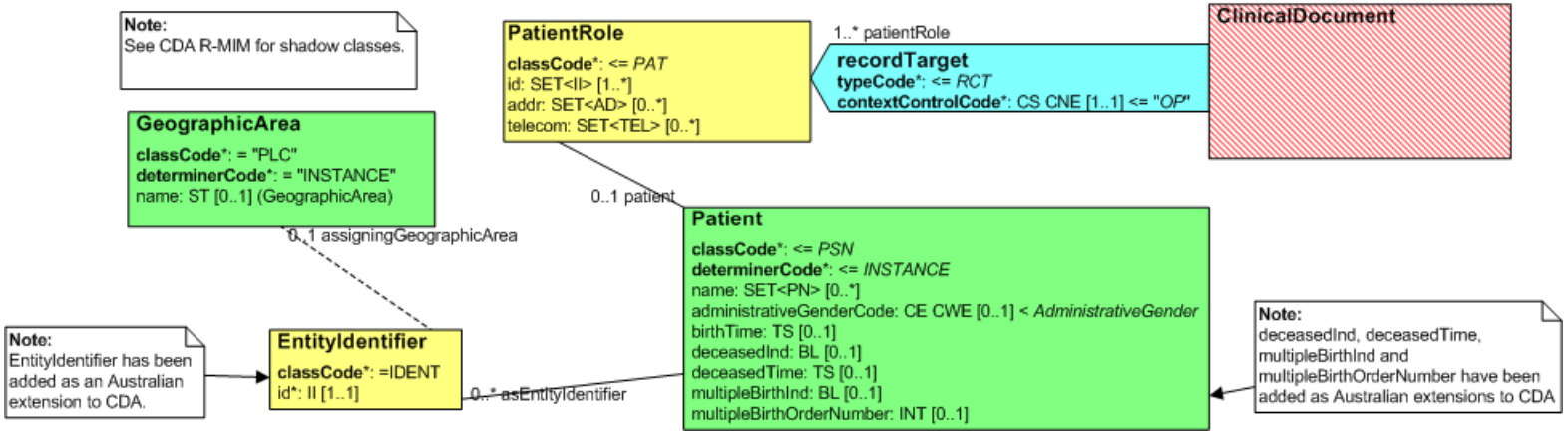



**Figure 6.3. Subject of Care - Header Data Elements**

## Note

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

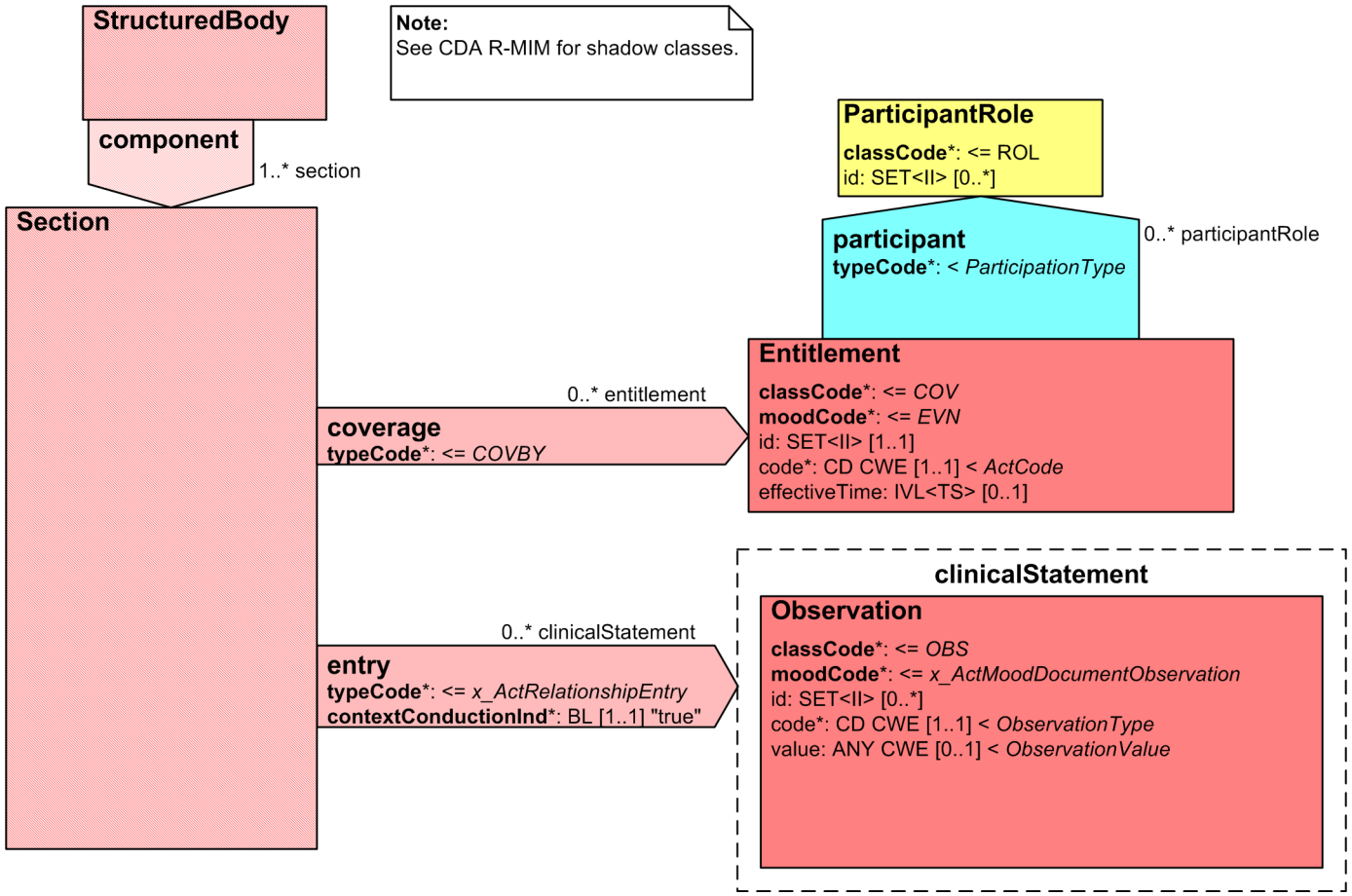



**Figure 6.4. Subject of Care - Body Data Elements**

# CDA Mapping

## Note

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

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

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Header Data Elements** | | | Context: ClinicalDocument | | |
| **Subject of Care** | Identifies the person about whom the healthcare event/encounter/clinical interaction has been captured and/or interchanged, that led to the creation of the document. In other words, the subject of the information. | 1..1 | recordTarget/**patientRole** | | |
| n/a | n/a | 1..1 | recordTarget/patientRole/**id** | UUID<br><br>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.<br><br>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 > **Participation Type** | The categorisation of the nature of the participant's involvement in the healthcare event described by this participation. | 1..1 | n/a | Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Subject of Care". | Not mapped directly, encompassed implicitly in recordTarget/ typeCode = "RCT" (optional, fixed value). |

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

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

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Sex** | The biological distinction between male and female. Where there is inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics. | 1..1 | recordTarget/patientRole/patient/**administrativeGenderCode** | AS 5017-2006 Health Care Client Identifier Sex | |
| Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > **Date of Birth Detail** | Details of the accuracy, origin and value of a person's date of birth. | 1..1 | n/a | | This logical NEHTA data component has no mapping to CDA.<br><br>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<br><br>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<br><br>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.<br><br>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<br><br>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<br><br>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<br><br>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.<br><br>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.<br><br>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<br><br>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<br><br>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>
```

# 7 Content Data Specification - CDA Mapping

## 7.1 Event Summary

### Identification

| | |
|---|---|
| **Name** | EVENT SUMMARY |
| **Metadata Type** | Structured Document |
| **Identifier** | SD-16473 |

### Relationships

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

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | EVENT DETAILS | Optional | 0..1 |
|  | NEWLY IDENTIFIED ADVERSE REACTIONS | Optional | 0..1 |
|  | MEDICATIONS | Optional | 0..1 |
|  | DIAGNOSES/INTERVENTIONS | Optional | 0..1 |
|  | IMMUNISATIONS | Optional | 0..1 |
|  | DIAGNOSTIC INVESTIGATIONS | Optional | 0..1 |

# CDA R-MIM Representation

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

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

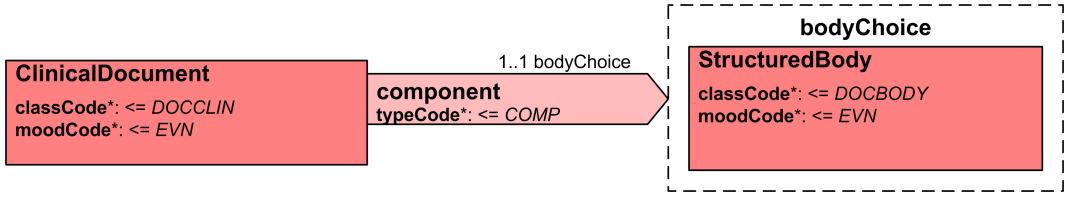



**Figure 7.1. Event Summary**

# CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Header Data Elements** | | | | | |
| **Event Summary** | A record, reported by a clinician, of one significant health care event involving the subject of care. | 1..1 | **ClinicalDocument** | | |
| **CDA Body Level 2 Data Elements** | | | | | |
| Event Summary (Body) | See above. | 1..1 | ClinicalDocument/**component/structuredBody** | | |

### Example 7.1. Event Summary Body XML Fragment

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

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

   …

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

      …

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

# 7.1.1 EVENT DETAILS

## Identification

| | |
|---|---|
| **Name** | Event Details |
| **Metadata Type** | Section |
| **Identifier** | S-16672 |

## Relationships

### Children Not Included in Mapping for This Section

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Clinical Synopsis | Essential | 1..1 |

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Event Summary | Optional | 0..1 |

# CDA R-MIM Representation

Figure 7.2, “Event 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 Header elements.

The Event Details section is mapped to a Section.

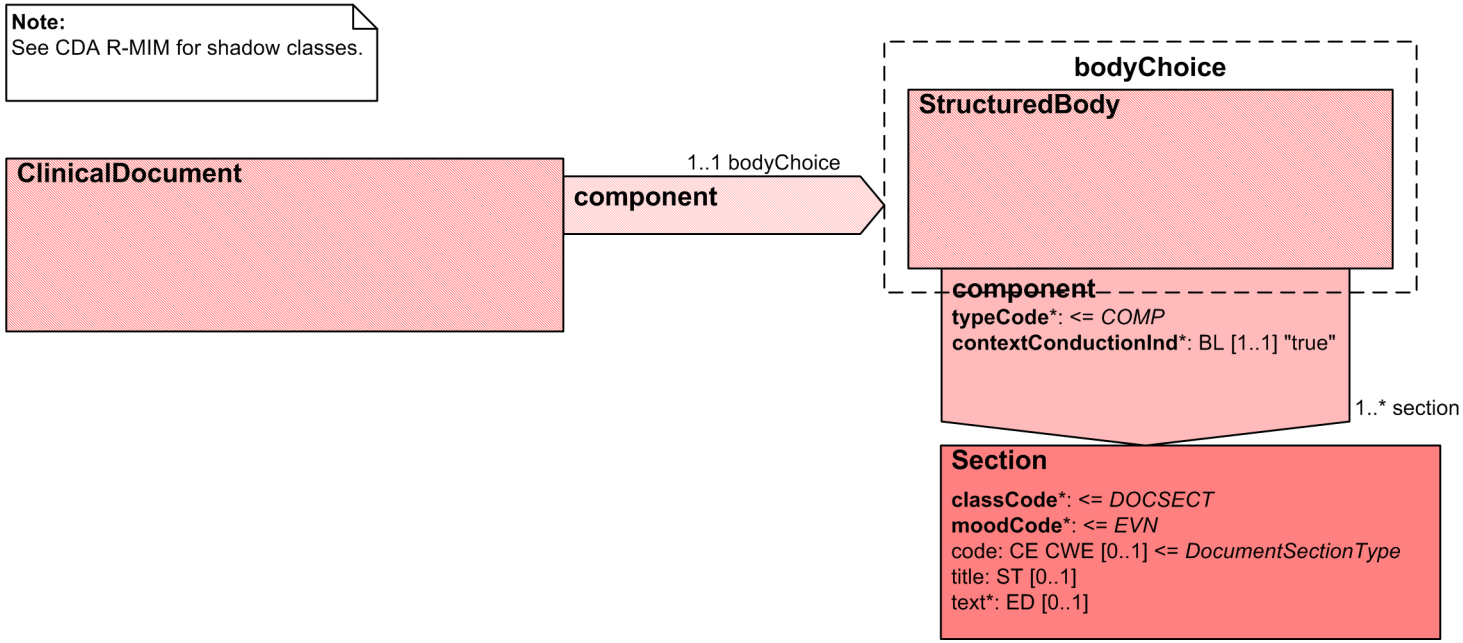



**Figure 7.2. Event Details**

# 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 | | |
| **Event Details** | Summary information concerning the event. | 0..1 | **component[evt_det]/section** | | |
| | | | component[evt_det]/section/**code** | | |
| | | | component[evt_det]/section/**@code="101.16672"** | | |
| | | | component[evt_det]/section/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | component[evt_det]/section/**@codeSystemName="NCTIS Data Components"** | | |
| | | | component[evt_det]/section/**@displayName="Event Details"** | | |
| | | | component[evt_det]/section/**title="Event Details"** | | |
| | | | component[evt_det]/section/**text** | | See Appendix A, *CDA Narratives* |

### Example 7.2. Event 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 Event Details -->
   <component>
    <section>
     <code code="101.16672" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Event Details" />
     <title>Event Details</title>
     <text>Sally presented to me today after a fall in a local shopping centre. Suffered a deep laceration to her right
     calf which required cleaning and 4 sutures.</text>

     ...

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

   ...

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

# 7.1.1.1 Clinical Synopsis

## Identification

| | |
|---|---|
| **Name** | CLINICAL SYNOPSIS |
| **Metadata Type** | Data Group |
| **Identifier** | DG-15513 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | EVENT DETAILS | Essential | 1..1 |

## CDA R-MIM Representation

Figure 7.3, “Clinical Synopsis” 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.

Clinical Synopsis data group comprises of a Section class related to its parent section by a component relationship. The Clinical Synopsis is represented by an Act related to the Section class by an entry relationship.

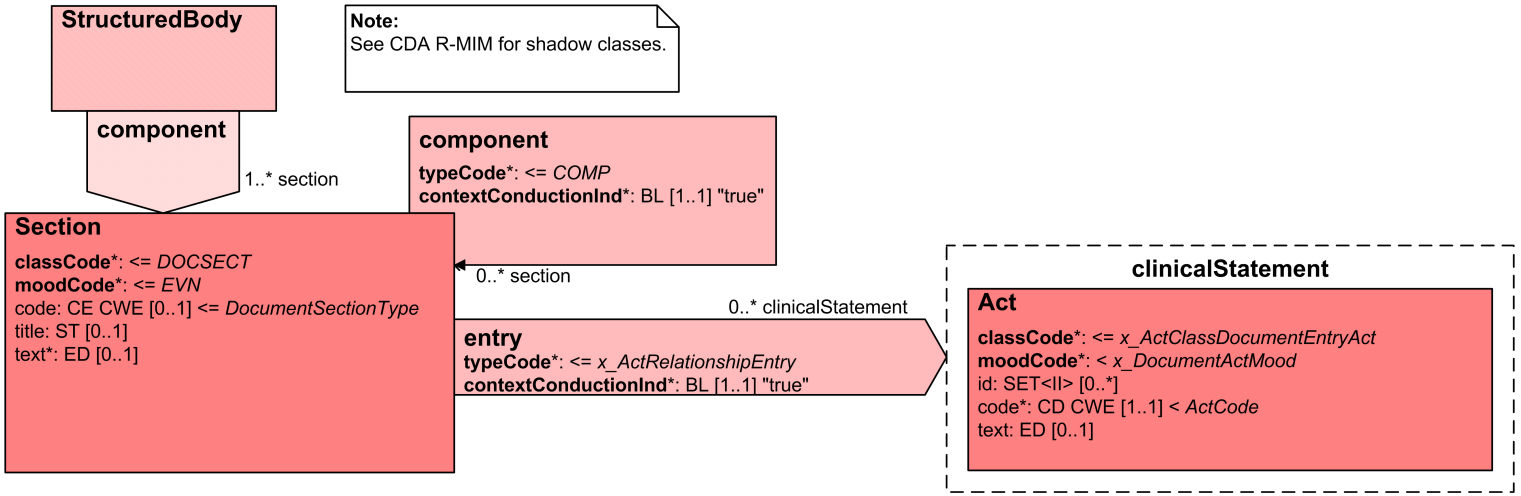



**Figure 7.3. Clinical Synopsis**

## 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[Evt_det]/section | | |
| **Clinical Synopsis** | A clinical synopsis of the event and its reasons. | 1..1 | **entry** | | |
| | | | entry/**act** | | |
| | | | entry/act/**@classCode="ACT"** | | |
| | | | entry/act/**@moodCode="EVN"** | | |
| | | | entry/act/**id** | UUID<br><br>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="102.15513 "** | | |
| | | | entry/act/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry/act/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry/act/code/**@displayName="Clinical Synopsis"** | | |
| Clinical Synopsis > **Clinical Synopsis Description** | The Clinical Synopsis, written in free text. | 1..1 | entry/act/**text:ST** | | |

### Example 7.3. Clinical Synopsis 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 Event Details section -->
   <component>
    <section>
     ...

     <!-- Begin Clinical Synopsis  -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <code code="102.15513" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Clinical Synopsis" />

       <!-- Begin Clinical Synopsis Description -->
       <text>Sally presented to me today after a fall in a local shopping centre. Suffered a deep laceration to her
       right calf which required cleaning and 4 sutures.</text>
       <!-- End Clinical Synopsis Description -->

      </act>
     </entry>
     <!-- End Clinical Synopsis -->

     ...

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

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

# 7.1.2 NEWLY IDENTIFIED 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 | Essential | 1..* |

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Event Summary | Optional | 0..1 |

## CDA R-MIM Representation

Figure 7.4, “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.

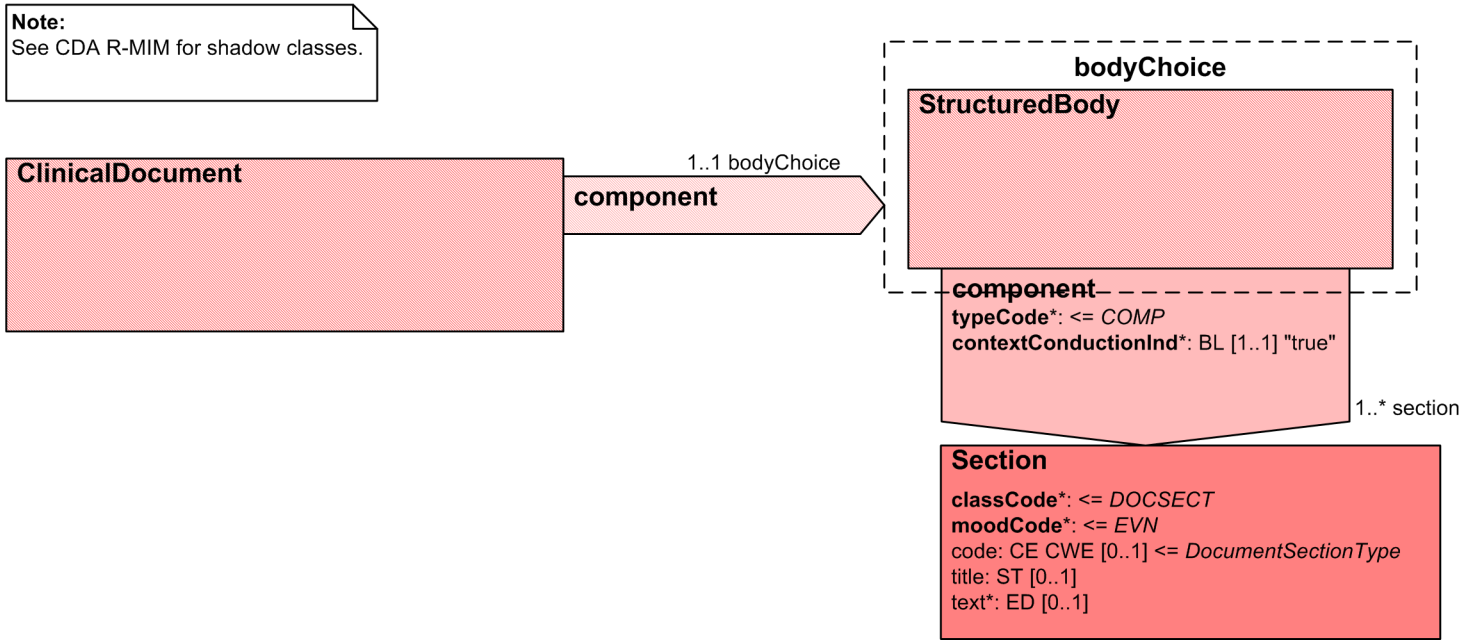



**Figure 7.4. Adverse Reactions**

# 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 | | |
| **Newly Identified Adverse Reactions** | Information about adverse reactions of the patient (including allergies and intolerances), and any relevant reaction details. This includes statements about adverse reactions that need to be positively recorded as absent or excluded. Includes adverse reactions of which the author became aware during the health event. | 0..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* |
| Newly Identified 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. | 1..* | See: ADVERSE REACTION | | |

### Example 7.4. Adverse Reactions XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    ...

     <!-- Adverse Reactions -->
   <component>
    <section>
     <code code="101.20113" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Adverse Reactions" />
     <title>Adverse Reactions</title>
     <text>
      <table>
       <thead>
        <tr>
         <th>Agent</th>
         <th>Reaction description</th>
        </tr>
       </thead>
       <tbody>
        <tr>
         <td>Penicillin</td>
         <td>Servere urticaria on trunk and legs; Nausea and vomiting</td>
        </tr>
        <tr>
         <td>Metoprolol</td>
         <td>Acute exacerbation of Chronic Obstructive Airways Disease</td>
        </tr>
       </tbody>
      </table>
     </text>

     ...

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

  ...

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

# 7.1.2.1 ADVERSE REACTION

## Identification

| | |
|---|---|
| **Name** | Adverse Reaction |
| **Metadata Type** | Data Group |
| **Identifier** | DG-15517 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | NEWLY IDENTIFIED ADVERSE REACTIONS | Essential | 1..* |

## CDA R-MIM Representation

Figure 7.5, “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.

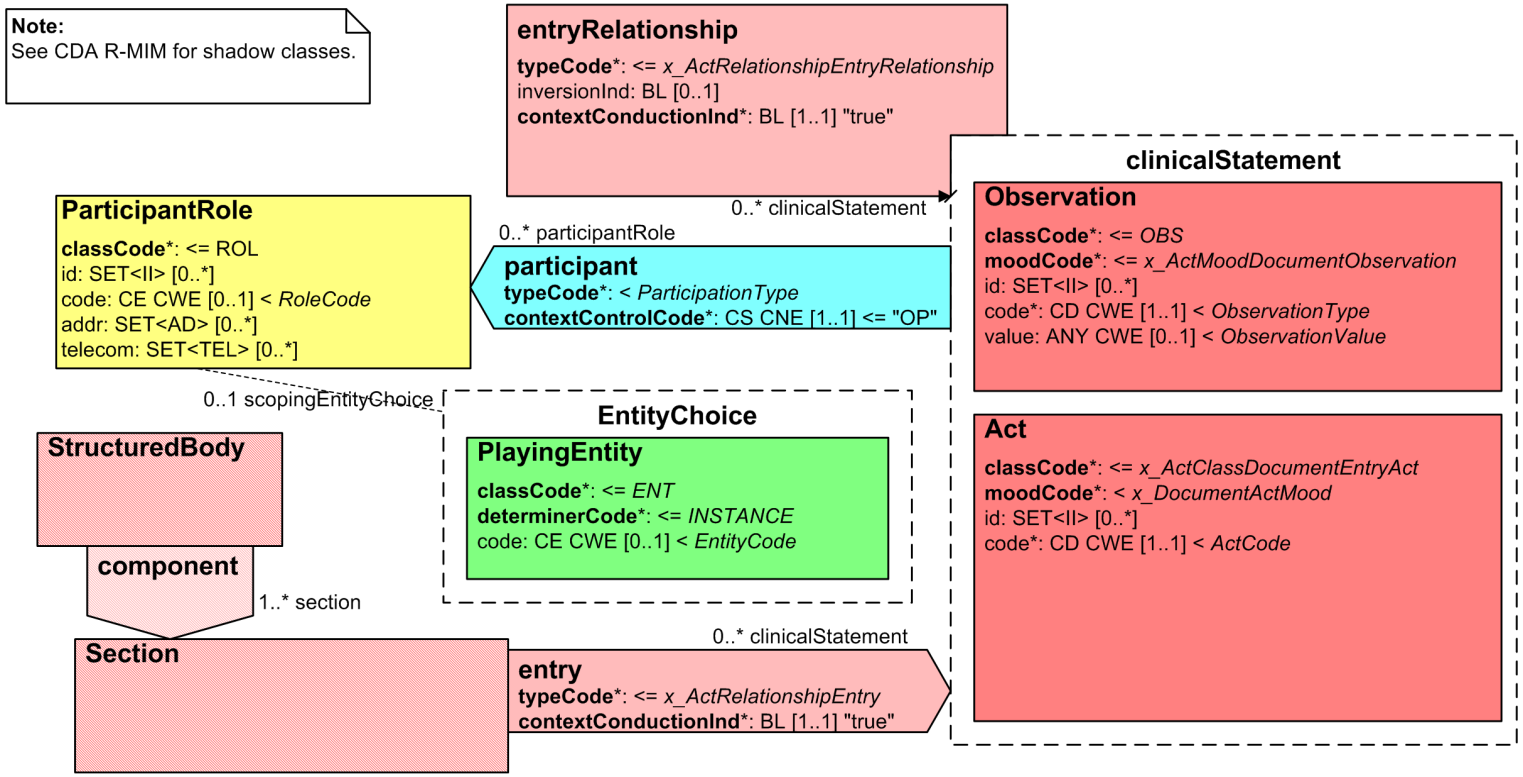



**Figure 7.5. ADVERSE REACTION**

## CDA Mapping

### Note

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

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

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Body Level 3 Data Elements** | | | Context: ClinicalDocument/component/structuredBody/component[adv_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. | 1..* | **entry** | | |
| | | | entry/**act** | | |
| | | | entry/act/**@classCode="ACT"** | | |
| | | | entry/act/**@moodCode="EVN"** | | |
| | | | entry/act/**id** | UUID<br><br>This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used. | See <id> for available attributes. |
| | | | entry/act/**code** | | |
| | | | entry/act/code/**@code="102.15517"** | | |
| | | | entry/act/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry/act/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry/act/code/**@displayName="Adverse Reaction"** | | |
| Adverse Reaction > **Substance/Agent** | Identification of a substance, agent, or a class of substance, that is considered to be responsible for the adverse reaction. | 1..1 | entry/act/**participant** | | |
| | | | entry/act/participant/**@typeCode="CAGNT"** | | |
| | | | entry/act/participant/**participantRole/playingEntity/code** | NEHTA Substance/Agent Values | See <code> for available attributes. |

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

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Adverse Reaction > **Reaction Event** | Details about each adverse reaction event. | 0..1 | entry/act/**entryRelationship[rct_evnt]/@typeCode="CAUS"** | | |
| | | | entry/act/entryRelationship[rct_evnt]/**observation** | | |
| | | | entry/act/entryRelationship[rct_evnt]/observation/**@classCode="OBS"** | | |
| | | | entry/act/entryRelationship[rct_evnt]/observation/**@moodCode="EVN"** | | |
| | | | entry/act/entryRelationship[rct_evnt]/observation/**code** | | |
| | | | entry/act/entryRelationship[rct_evnt]/observation/code/**@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 7.5. Adverse Substance 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>

   ...

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

    ...

     <!-- Begin Newly Identified Adverse Reaction -->
     <entry>
      <act classCode="ACT" moodCode="EVN">
       <id root="F80F2792-EFD5-11E0-8AC8-FA1A4924019B" />
       <code code="102.15517" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Adverse Reaction" />

       <!-- Begin Substance/Agent -->
       <participant typeCode="CAGNT">
        <participantRole>
         <playingEntity>
          <code code="6369005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT AU"
           displayName="penicillin" />
         </playingEntity>
        </participantRole>
       </participant>
       <!-- End Substance/Agent -->

       <!-- Begin 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" />

         <!-- Begin Manifestation -->
         <entryRelationship inversionInd="true" typeCode="MFST">
          <observation classCode="OBS" moodCode="EVN">
           <code code="126485001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT AU"
            displayName="urticaria" />
          </observation>
         </entryRelationship>
         <entryRelationship inversionInd="true" typeCode="MFST">
          <observation classCode="OBS" moodCode="EVN">
           <code code="422587001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT AU"
```

```
            displayName="nausea" />
          </observation>
         </entryRelationship>
         <!-- End Manifestation -->

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

      </act>
     </entry>
     <!-- End Newly Identified Adverse Reaction -->

     ...

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

   ...

    </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 | Essential | 1..* |

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Event Summary | Optional | 0..1 |

## CDA R-MIM Representation

Figure 7.6, “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.

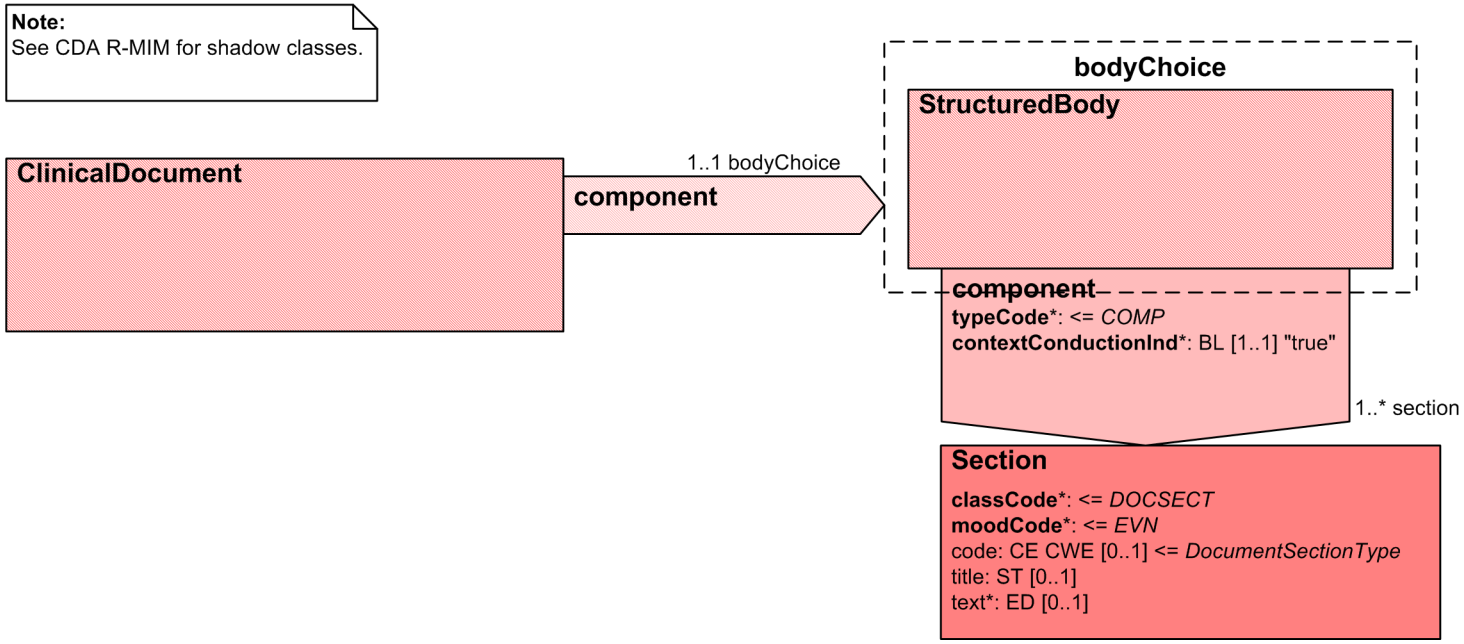



**Figure 7.6. Medications**

# 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 patient or the patient has/had been taking. | 0..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** | 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. | 1..* | See: MEDICATION | | |

### Example 7.6. Medications XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

   <!-- Begin Medications -->
   <component>
    <section>
     <code code="101.16146" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
      displayName="Medications" />
     <title>Medications</title>
     <text>
      <table>
       <thead>
        <tr>
         <th>Status</th>
         <th>Item Description</th>
         <th>Dose Instructions</th>
         <th>Reason for Medication</th>
         <th>Additional Comments</th>
         <th>Reason for Change</th>
        </tr>
       </thead>
       <tbody>
        <tr>
         <td>New - prescribed</td>
         <td>Lasix (frusemide 40 mg) tablet</td>
         <td>1 tablet once daily oral</td>
         <td>Fluid retention, 3 months</td>
         <td>Trial</td>
         <td />
        </tr>
       </tbody>
      </table>
     </text>

     ...

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

  ...

    </structuredBody>
```

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

# 7.1.3.1 MEDICATION

## Identification

| | |
|---|---|
| **Name** | Medication |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16211 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | MEDICATIONS | Essential | 1..* |

## CDA R-MIM Representation

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

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

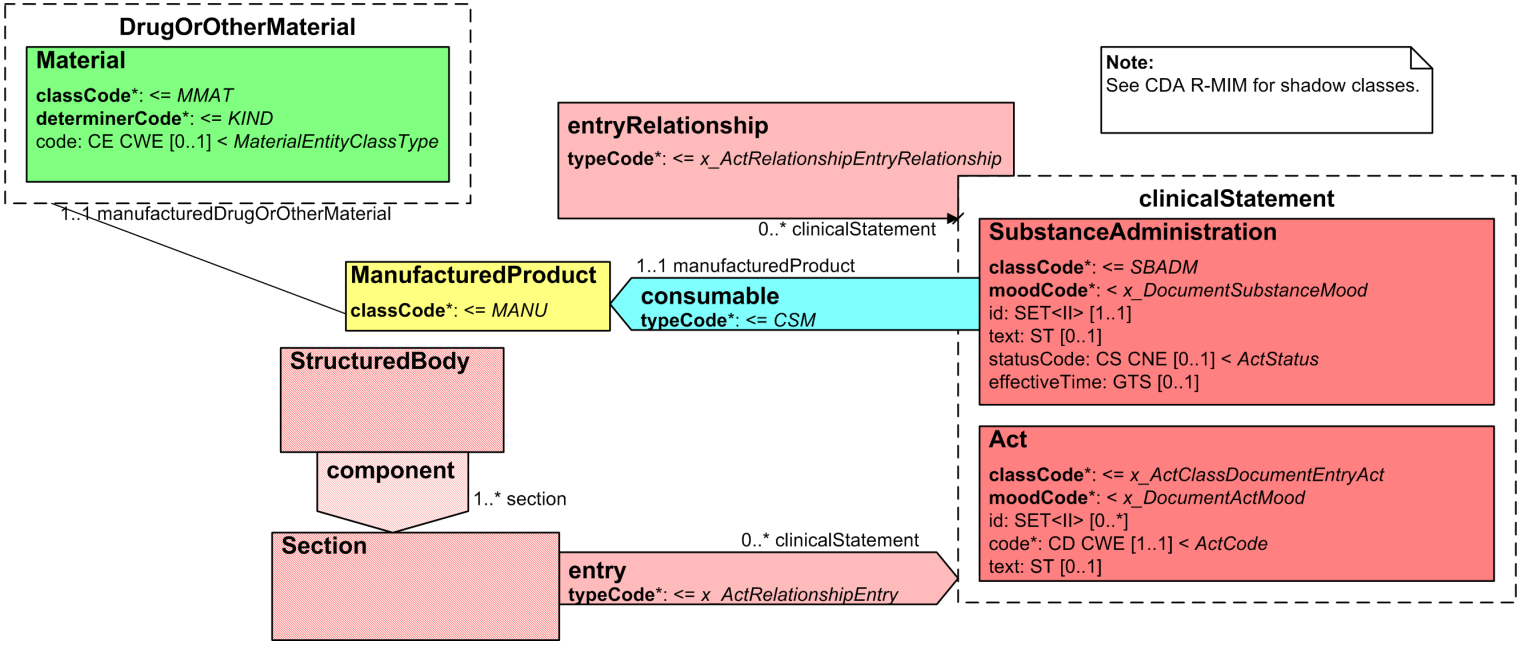



**Figure 7.7. Medication**

## CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Body Level 3 Data Elements** | | | Context: ClinicalDocument/component/structuredBody/component[med]/section | | |
| **Medication** | Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human. | 1..* | **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<br><br>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 > **Therapeutic Good Identification** | Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use Definition (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989). | 1..1 | entry[med_inst]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code** | Australian Medicines Terminology<br><br>The permissible values are the members of the following 7 AMT reference sets:<br>• 929360061000036106 Medicinal product reference set<br>• 929360081000036101 Medicinal product pack reference set<br>• 929360071000036103 Medicinal product unit of use reference set<br>• 929360021000036102 Trade product reference set<br>• 929360041000036105 Trade product pack reference set<br>• 929360031000036100 Trade product unit of use reference set<br>• 929360051000036108 Containered trade product pack reference set | See <code> for available attributes. |
| Medication > **Directions** | A complete narrative description of how much, when and how to use the medicine, vaccine or other therapeutic good. | 1..1 | entry[med_inst]/substanceAdministration/**text:ST** | | |

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Medication > **Clinical Indication** | A reason for ordering the medicine, vaccine or other therapeutic good. | 0..1 | entry[med_inst]/substanceAdministration/**entryRelationship[cln_ind]/@typeCode="RSON"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/**act** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**@classCode="INFRM"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**@moodCode="EVN"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**code** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@code="103.10141"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/**@displayName="Clinical Indication"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/**text:ST** | | |

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Medication > **Comment** | Any additional information that may be needed to ensure the continuity of supply, rationale for current dose and timing, or safe and appropriate use. | 0..1 | entry[med_inst]/substanceAdministration/**entryRelationship[cmts]/ @typeCode="COMP"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/**act** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/ act/**@classCode="INFRM"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/ act/**@moodCode="EVN"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**id** | UUID<br><br>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[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**code** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/ code/**@code="103.16044"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/ code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/ code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/ code/**@displayName="Comment"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/**text:ST** | | |

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Medication > **Change Type** | The way in which this instruction differs from the previous instruction. | 1..1 | entry[med_inst]/substanceAdministration/**entryRelationship[change]/@typeCode="SPRT"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/**observation** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**@classCode="OBS"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**@moodCode="EVN"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**code** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/code/**@code="103.16593"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/code/**@codeSystemName="NCTIS Data Components** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/code/**@displayName="Change Type"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**value:CD** | NCTIS: Change Type Values | See <code> for available attributes. |
| | | | entry[med_inst]/substanceAdministration/**@negationInd** | true | If the meaning of 'Change Type' is "ceased" AND the value of 'Recommendation or Change' is "The change has been made" then this element is present and have a value of true. Otherwise this element is not present. |

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Medication > **Change or Recommendation?** | Identifies whether the change has already been made or is a recommendation which has not been made. | 1..1 | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**entryRelationship[made]/@typeCode="COMP"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/**observation** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/**@classCode="OBS"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/**@moodCode="EVN"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/**code** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/code/**@code="103.16595"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/code/**@codeSystemName="NCTIS Data Components** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/code/**@displayName="Recommendation or Change"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/**value:CD** | NCTIS: Admin Codes - Recommendation or Change Values | See <code> for available attributes. |
| Medication > **Change Description** | Description of the change in the subject of care's medication item information. | 0..1 | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**text:ST** | | |

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| Medication >**Change Reason** | The justification for the stated change in medication. | 0..1 | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/**entryRelationship[change_rsn]/@typeCode="RSON"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/**act** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/**@classCode="INFRM"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/**@moodCode="EVN"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/**code** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/code/**@code="103.10177"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/code/**@displayName="Change Reason"** | | |
| | | | entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/**text** | | |

### Example 7.7. Medication XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     ...

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

     ...

     <!-- Begin Medication -->
     <entry>
      <substanceAdministration classCode="SBADM" moodCode="EVN">
       <id root="BB5DFFC2-EFD9-11E0-97C1-3B1F4924019B" />

       <!-- Begin Directions -->
       <text>1 tablet once daily oral</text>
       <!-- End Directions -->

       <!-- Begin Medicine -->
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <code code="6006011000036102" codeSystem="1.2.36.1.2001.1004.100"
           codeSystemName="Australian Medicinces Terminology (AMT)"
           displayName="Lasix (frusemide 40 mg) tablet: uncoated, 1 tablet" />
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>
       <!-- End Medicine -->

       <!-- Begin Clinical Indication -->
       <entryRelationship typeCode="RSON">
        <act classCode="INFRM" moodCode="EVN">
         <code code="103.10141" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Clinical Indication" />
         <text>Fluid retention, 3 months</text>
        </act>
       </entryRelationship>
       <!-- End Clinical Indication -->

       <!-- Begin Comment -->
       <entryRelationship typeCode="COMP">
        <act classCode="INFRM" moodCode="EVN">
```

```
        <id root="B559F850-EFDA-11E0-B288-67204924019B" />
        <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
         displayName="Comment" />
        <text>Trial</text>
       </act>
      </entryRelationship>
      <!-- End Comment -->

      <!-- Beging Change Type -->
      <entryRelationship typeCode="SPRT">
       <observation classCode="OBS" moodCode="EVN">
        <code code="103.16593" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
         displayName="Change Type" />

        <!-- Begin Change Description -->
        <text>New - prescribed.</text>
        <!-- End Change Description -->

        <value code="04" codeSystem="1.2.36.1.2001.1001.101.104.16592"
         codeSystemName="NCTIS Change Type Values" displayName="Prescribed" xsi:type="CD" />

        <!-- Begin Change or Recommendation -->
        <entryRelationship typeCode="COMP">
         <observation classCode="OBS" moodCode="EVN">
          <code code="103.16595" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
           displayName="Recommendation or Change" />
          <value code="02" codeSystem="1.2.36.1.2001.1001.101.104.16594"
           codeSystemName="NCTIS Recommendation or Change Values" displayName="The change has been made."
           xsi:type="CD" />
         </observation>
        </entryRelationship>
        <!-- End Change or Recommendation -->

        <!-- Change Reason -->
        <entryRelationship typeCode="RSON">
         <act classCode="INFRM" moodCode="EVN">
          <code code="103.10177" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
           displayName="Change Reason" />
          <text>New - prescribed.</text>
         </act>
        </entryRelationship>
        <!-- End Change Reason -->

       </observation>
      </entryRelationship>
      <!-- End Change Type -->

     </substanceAdministration>
    </entry>
    <!-- End Medication -->

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

  ...

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

# 7.1.4 DIAGNOSES/INTERVENTIONS

## Identification

| | |
|---|---|
| **Name** | Diagnoses/Interventions |
| **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..* |
|  | MEDICAL HISTORY ITEM | Optional | 0..* |

**Parent**

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Event Summary | Optional | 0..1 |

# CDA R-MIM Representation

Figure 7.8, “Diagnoses/Interventions” 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 Diagnoses/Interventions section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

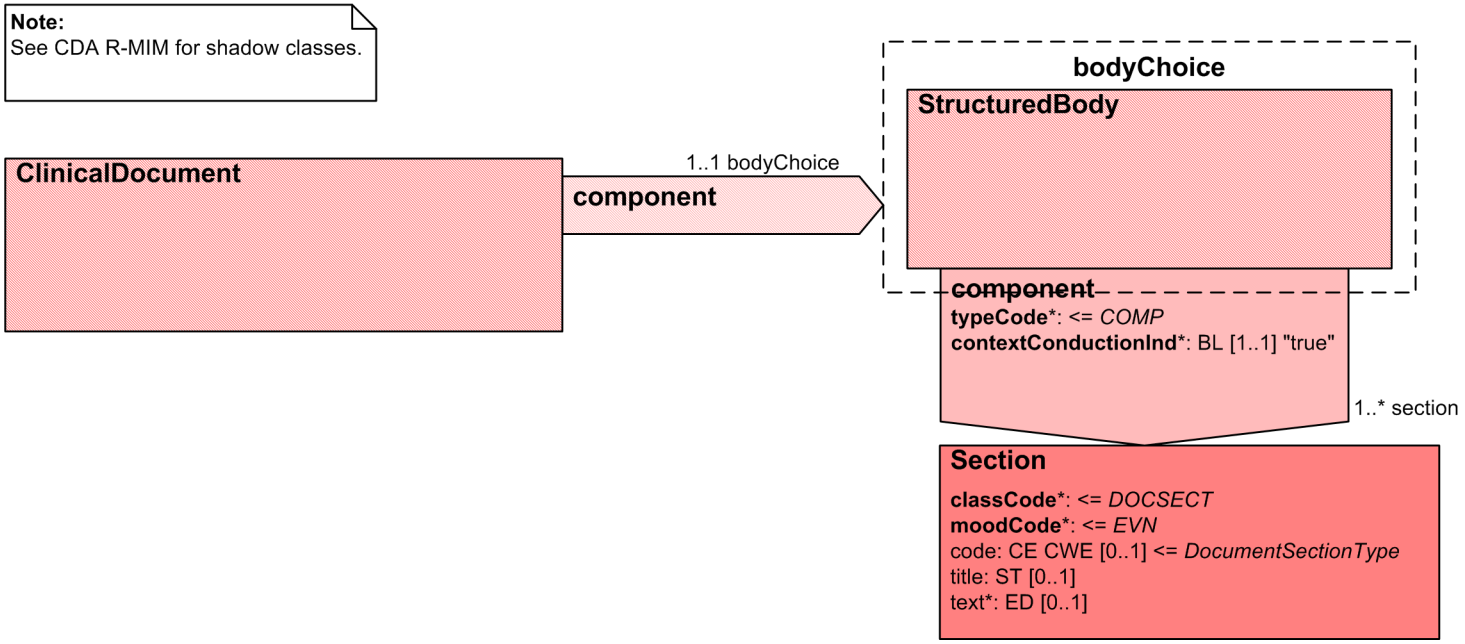



**Figure 7.8. Diagnoses/Interventions**

# 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 | | |
| **Diagnoses/Interventions** | The current and past medical history of the subject of care which is relevant to the clinical event, this includes problem/diagnosis and medical or surgical procedures performed. | 0..1 | component[diag_int]/**section** | | |
| | | | component[diag_int]/section/**code** | | |
| | | | component[diag_int]/section/code/**@code="101.16117"** | | |
| | | | component[diag_int]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | component[diag_int]/section/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | component[diag_int]/section/code/**@displayName="Diagnoses/Interventions"** | | |
| | | | component[diag_int]/section/**title="Diagnoses/Interventions"** | | |
| | | | component[diag_int]/section/**text** | | See Appendix A, *CDA Narratives* |
| Diagnoses/Interventions > **Problem/Diagnosis** | The problems and/or diagnoses that form part of the current and past medical history of the subject of care. | 0..* | See: PROBLEM/DIAGNOSIS | | |
| Diagnoses/Interventions > **Procedure** | A clinical activity carried out for therapeutic, evaluative, investigative, screening or diagnostic purposes. | 0..* | See: PROCEDURE | | |
| Diagnoses/Interventions > **Medical History Item** | A medical history entry which cannot be categorised into one of the categories such as Procedure and Problem/Diagnosis. | 0..* | See: MEDICAL HISTORY ITEM | | |

### Example 7.8. Diagnoses/Interventions 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="Diagnoses/Interventions" />
     <title>Diagnoses/Interventions</title>
     <text>Diagnoses/Interventions narrative goes here.</text>

     ...

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

  ...

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

# 7.1.4.1 PROBLEM/DIAGNOSIS

## Identification

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

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | DIAGNOSES/INTERVENTIONS | Optional | 0..* |

## CDA R-MIM Representation

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

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

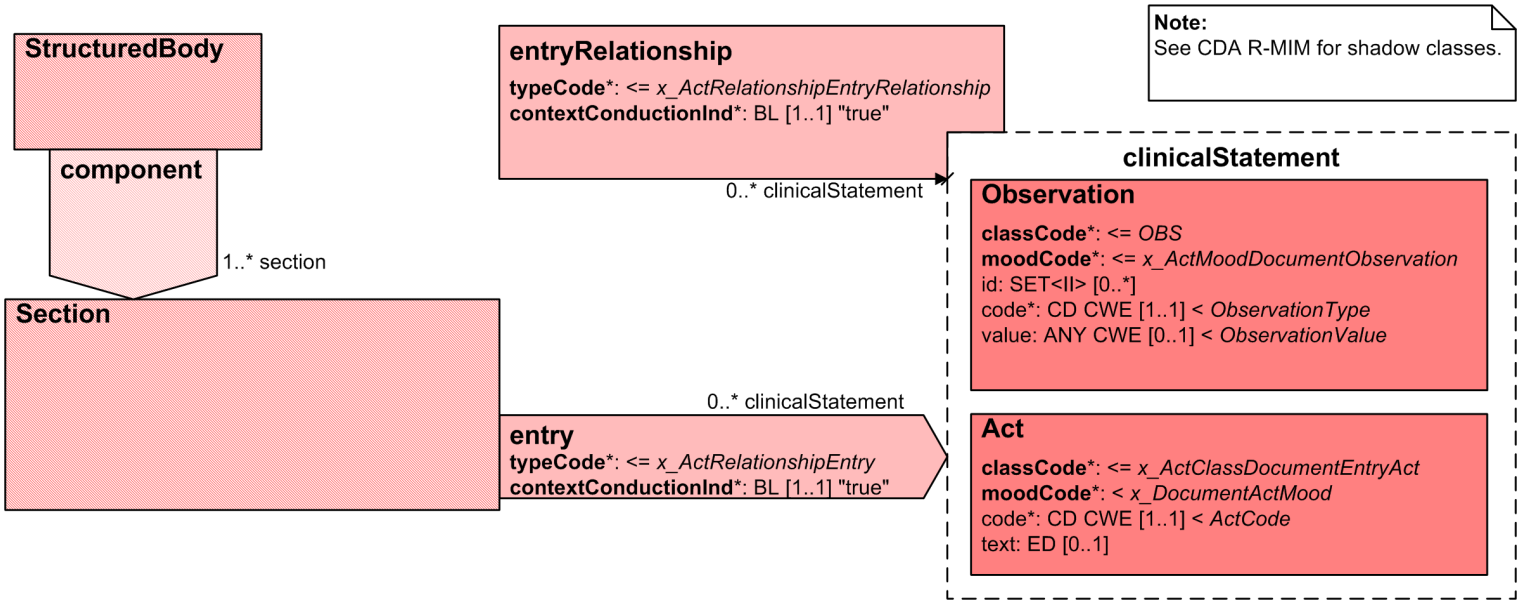



**Figure 7.9. Problem/Diagnosis**

## CDA Mapping

### Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[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[dia_int]/section | | |
| **Problem/Diagnosis** | The problems and/or diagnoses that form part of the current and past medical history of the subject of care. | 0..* | **entry[prob]** | | |
| | | | entry[prob]/**observation** | | |
| | | | entry[prob]/observation/**@classCode="OBS"** | | |
| | | | entry[prob]/observation/**@moodCode="EVN"** | | |
| | | | entry[prob]/observation/**id** | UUID<br><br>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. |

[2] 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 > **Problem/Diagnosis Comment** | Additional narrative about the problem or diagnosis not captured in other fields. | 0..1 | entry[prob]/observation/**entryRelationship[cmt]/@typeCode="COMP"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/**act** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/**@classCode="INFRM"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/**@moodCode="EVN"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/**code** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/code/**@code="103.16545"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/code/**@displayName="Problem/Diagnosis Comment"** | | |
| | | | entry[prob]/observation/entryRelationship[cmt]/act/**text:ST** | | |

### Example 7.9. Problem/Diagnosis XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     ...

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

     ...

     <!-- Begin Problem/Diagnosis -->
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <id root="CF549D3A-EFE1-11E0-88B2-B9284924019B" />
       <code code="282291009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
        displayName="Diagnosis interpretation" />

       <!-- Begin Date of Onset -->
       <effectiveTime value="201112141120+1000" />
       <!-- End Date of Onset -->

       <!-- Begin Problem/Diagnosis Identification -->
       <value code="262562003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
        displayName="deep laceration" xsi:type="CD" />
       <!-- End Problem/Diagnosis Identification -->

       <!-- Begin 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>Deep laceration to his right calf</text>
        </act>
       </entryRelationship>
       <!-- End Problem/Diagnosis Comment -->

      </observation>
     </entry>
     <!-- End Problem/Diagnosis -->

     ...

    </section>
   </component>
```

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

    ...

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

</ClinicalDocument>
```

# 7.1.4.2 PROCEDURE

## Identification

| | |
|---|---|
| **Name** | Procedure |
| **Metadata Type** | Data Group |
| **Identifier** | DG-15514 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | DIAGNOSES/INTERVENTIONS | Optional | 0..* |

## CDA R-MIM Representation

Figure 7.10, “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.

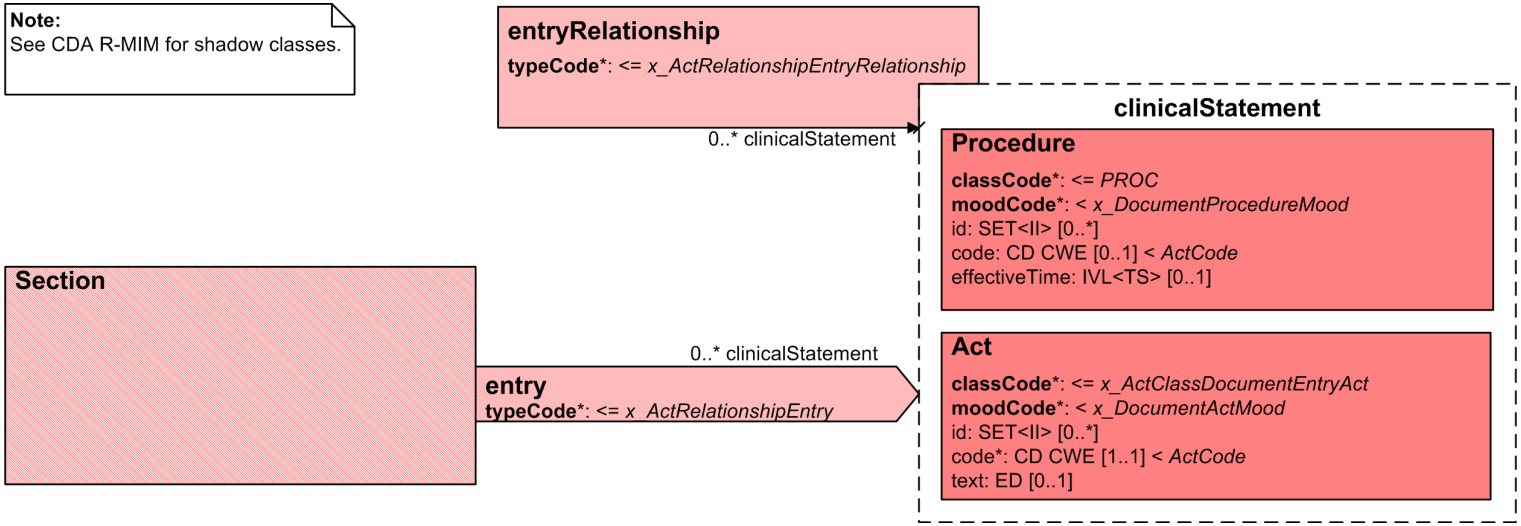



**Figure 7.10. Procedure**

## 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[dia_int]/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<br><br>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 7.10. 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>

   ...

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

     ...

     <!-- Begin Procedure -->
     <entry>
      <procedure classCode="PROC" moodCode="EVN">
       <id root="4B859322-EFE3-11E0-AB98-842A4924019B" />

       <!-- Begin Procedure Name -->
       <code code="391906003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
        displayName="closure of skin laceration by suture" />
       <!-- end Procedure Name -->

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

       <!-- Begin 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>5 x 3\0 sutures under LA</text>
        </act>
       </entryRelationship>
       <!-- End Procedure Comment -->

      </procedure>
     </entry>
     <!-- End Procedure -->

     ...

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

   ...
```

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

# 7.1.4.3 MEDICAL HISTORY ITEM

## Identification

| | |
|---|---|
| **Name** | Medical History Item |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16627 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | DIAGNOSES/INTERVENTIONS | Optional | 0..* |

## CDA R-MIM Representation

Figure 7.11, “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 Medical History Data Group is represented by an Act related to the Section class by an entry relationship.

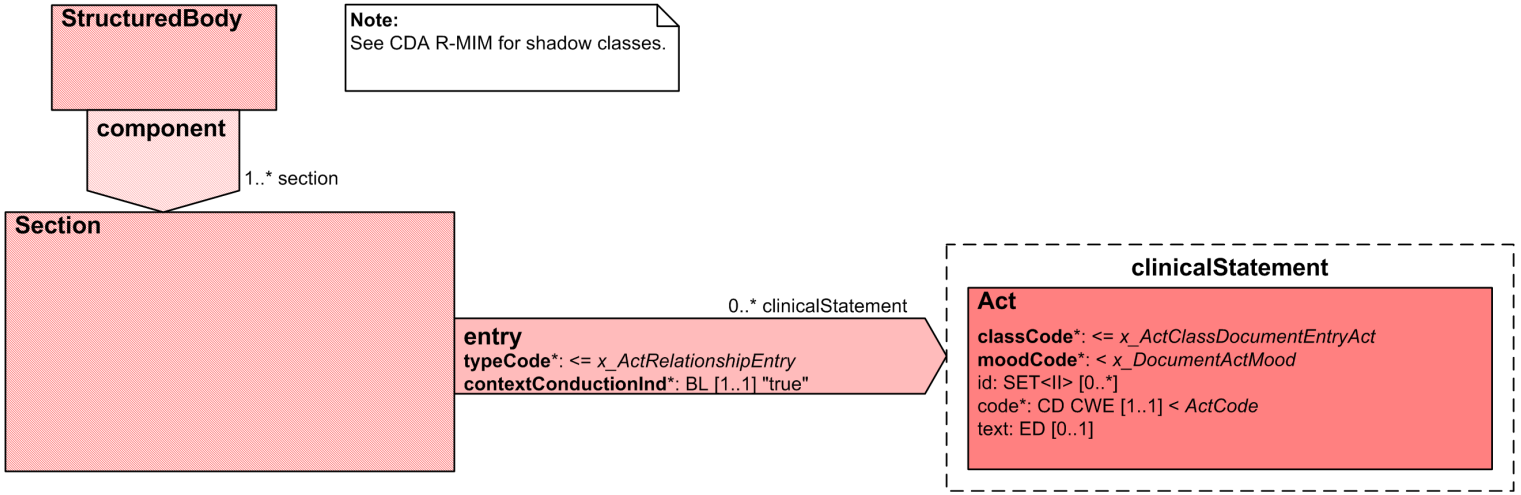



**Figure 7.11. Medical History Item**

## 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[dia_int]/section | | |
| **Medical History Item** | A medical history entry which cannot be categorised as a procedure or a problem/diagnosis. | 0..* | **entry** | | |
| | | | entry/**act** | | |
| | | | entry/act/**@classCode="ACT"** | | |
| | | | entry/act/**@moodCode="EVN"** | | |
| | | | entry/act/**id** | UUID<br><br>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="Medical History Item"** | | |
| 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** | | |
| 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. |
| 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 7.11. 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="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 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>
```

# 7.1.5 IMMUNISATIONS

## Identification

| | |
|---|---|
| **Name** | Immunisations |
| **Metadata Type** | Section |
| **Identifier** | S-16638 |

## Relationships

### Children Not Included in Mapping for This Section

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | IMMUNISATION | Essential | 1..* |

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | Event Summary | Optional | 0..1 |

# CDA R-MIM Representation

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

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

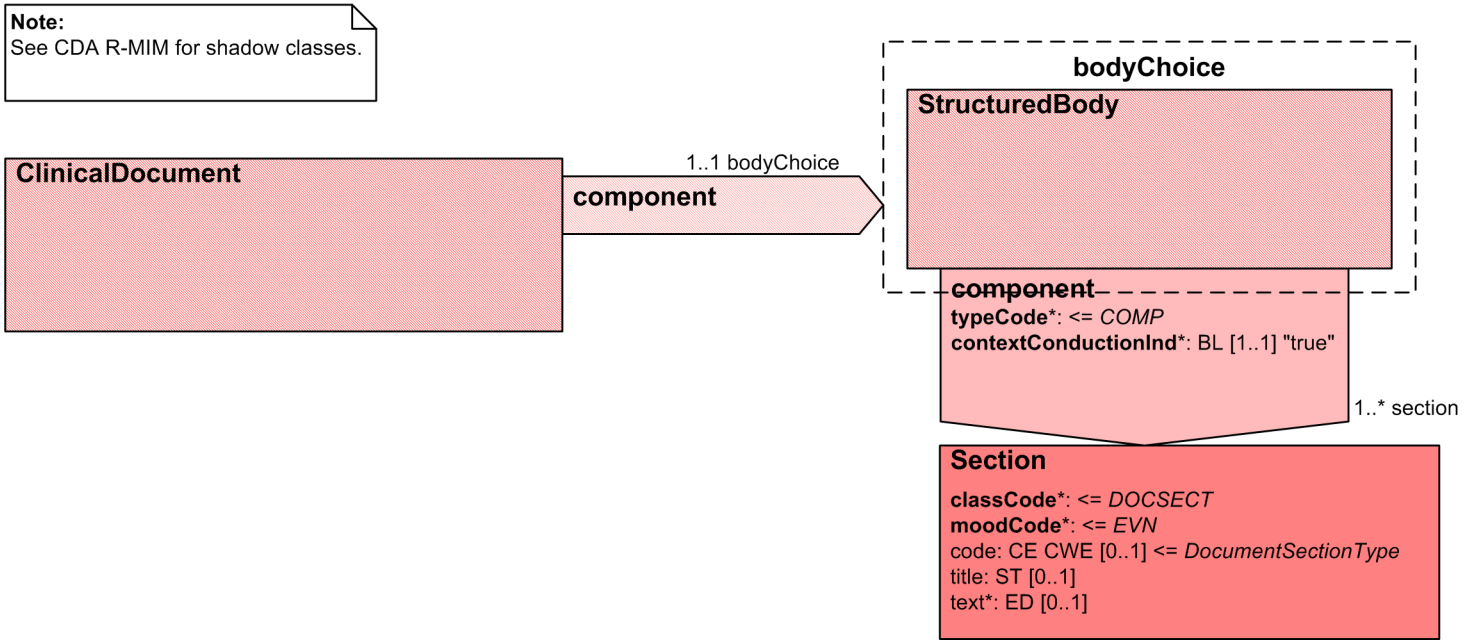



**Figure 7.12. Immunisations**

# CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Body Level 2 Data Elements** | | | Context: ClinicalDocument/component/structuredBody | | |
| **Immunisations** | Information about the immunisation history of the subject of care. | 0..1 | component[imms]/**section** | | |
| | | | component[imms]/section/**code** | | |
| | | | component[imms]/section/code/**@code="101.16638"** | | |
| | | | component[imms]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"** | | |
| | | | component[imms]/section/code/**@codeSystemName="NCTIS Data Components"** | | |
| | | | component[imms]/section/code/**@displayName="Immunisations"** | | |
| | | | component[imms]/section/**title="Immunisations"** | | |
| | | | component[imms]/section/**text** | | See Appendix A, *CDA Narratives* |
| Immunisations > **Immunisation** | The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult. | 1..* | See: IMMUNISATION | | |

### Example 7.12. Immunisations XML Fragment

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

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

 <!-- Begin CDA Header -->

 …

 <!-- End CDA Header -->

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

   …

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

     ...

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

   …

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

</ClinicalDocument>
```

# 7.1.5.1 IMMUNISATION

## Identification

| | |
|---|---|
| **Name** | Administered Immunisation |
| **Metadata Type** | Data Group |
| **Identifier** | DG-16210 |

## Relationships

### Parent

| Data Type | Name | Obligation | Occurrence |
|---|---|---|---|
|  | IMMUNISATIONS | Optional | 0..* |

## CDA R-MIM Representation

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

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

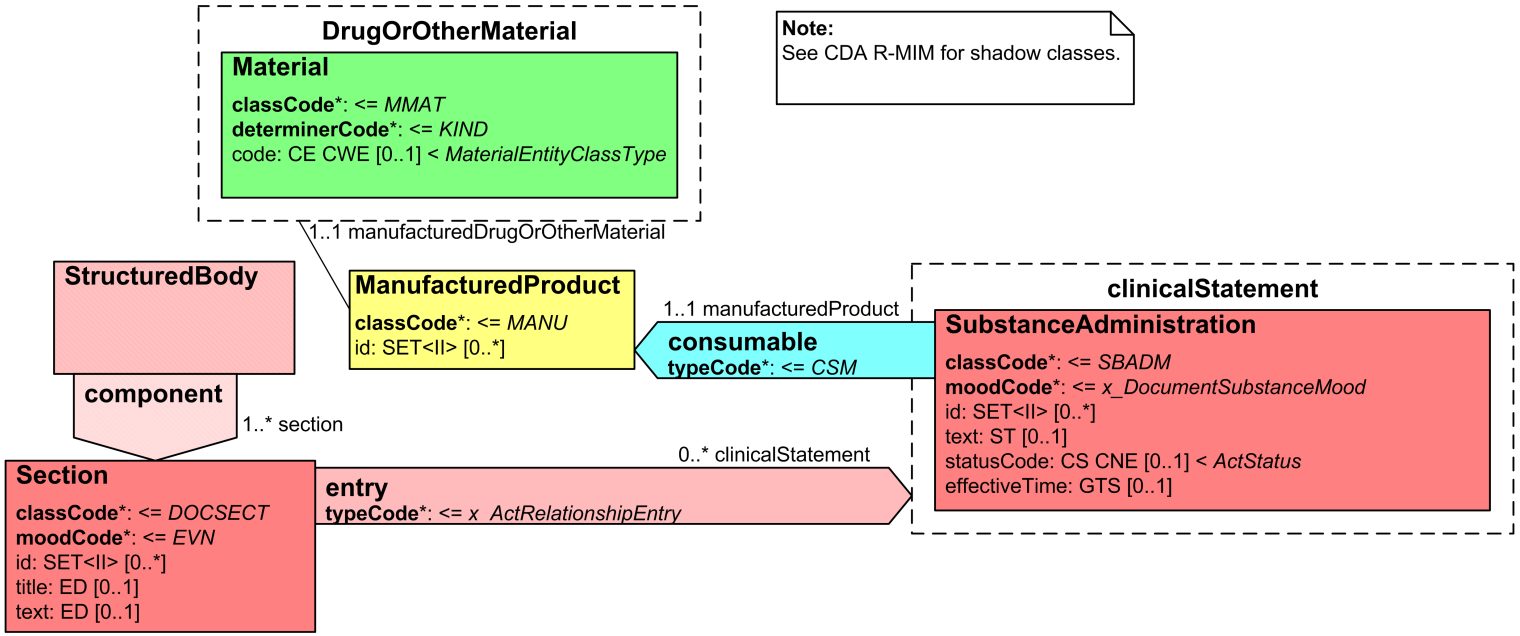



**Figure 7.13. Administered Immunisation**

## CDA Mapping

| NEHTA SCS Data Component | Data Component Definition | Card | CDA Schema Data Element | Vocab | Comments |
|---|---|---|---|---|---|
| **CDA Body Level 3 Data Elements** | | | Context: ClinicalDocument/component/structuredBody/component[imms]/section | | |
| **Immunisation** | The act of administering a dose of a vaccine to a person for the purpose of preventing or minimising the effects of a disease by producing immunity and/or to counter the effects of an infectious organism or insult. | 1..* | entry[med_act] | | |
| | | | entry[med_act]/**substanceAdministration** | | |
| | | | entry[med_act]/substanceAdministration/**@moodCode="EVN"** | | |
| | | | entry[med_act]/substanceAdministration/**@classCode="SBADM"** | | |
| | | | entry[med_act]/substanceAdministration/**id** | UUID<br><br>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. |
| Immunisation > **Therapeutic Good Identification** | The medicine, vaccine or other therapeutic good which was the focus of the action. | 1..1 | entry[med_act]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code** | Australian Medicines Terminology<br><br>The permissible values are the members of the following AMT reference set:<br><br>• 929360031000036100 Trade product unit of use reference set | See <code> for available attributes. |
| Immunisation > **Medication Action DateTime** | The point in time at which the Medication Action is completed. | 1..1 | entry[med_act]/substanceAdministration/**effectiveTime** | | See <time> for available attributes. |

### Example 7.13. Immunisation XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     ...

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

     ...

     <!-- Begin Immunisation -->
     <entry>
      <substanceAdministration classCode="SBADM" moodCode="EVN">
       <id root="0D183538-EFE6-11E0-8B34-CC2D4924019B" />

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

       <!-- Begin Therapeutic Good Identification -->
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <code code="73929011000036108" codeSystem="1.2.36.1.2001.1004.100"
           codeSystemName="Australian Medicinces Terminology (AMT)" displayName="Boostrix" />
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>
       <!-- End Therapeutic Good Identification -->

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

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

   ...

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

```
</ClinicalDocument>
```

# 7.1.6 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 |
|---|---|---|---|
| | Event Summary | Optional | 0..1 |

## CDA R-MIM Representation

Figure 7.14, “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.

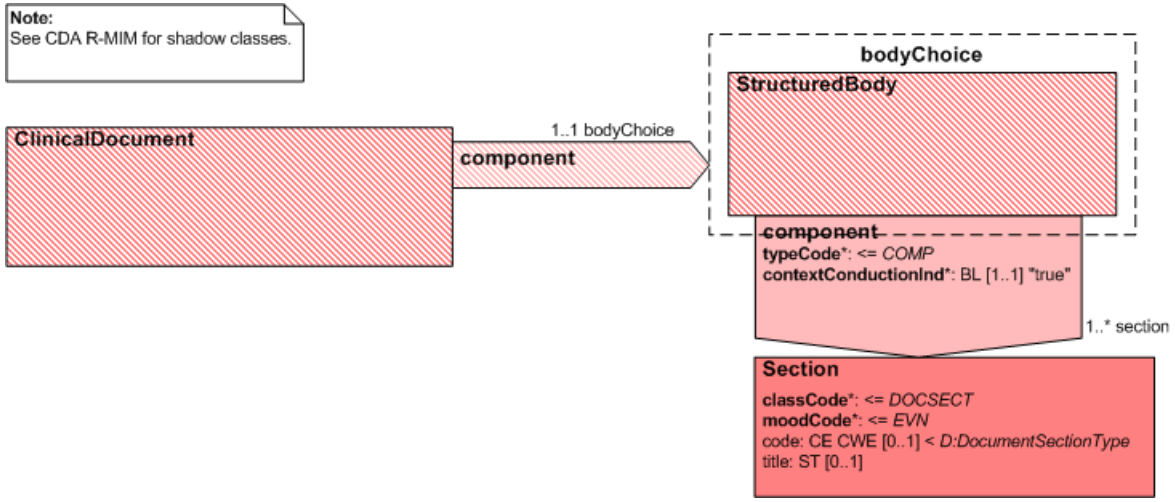



**Figure 7.14. Diagnostic Investigations**

# 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 or requested for 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"** | | |
| 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 7.14. 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>

    ...

   <!-- Begin 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>
```

# 7.1.6.1 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 7.15, “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.

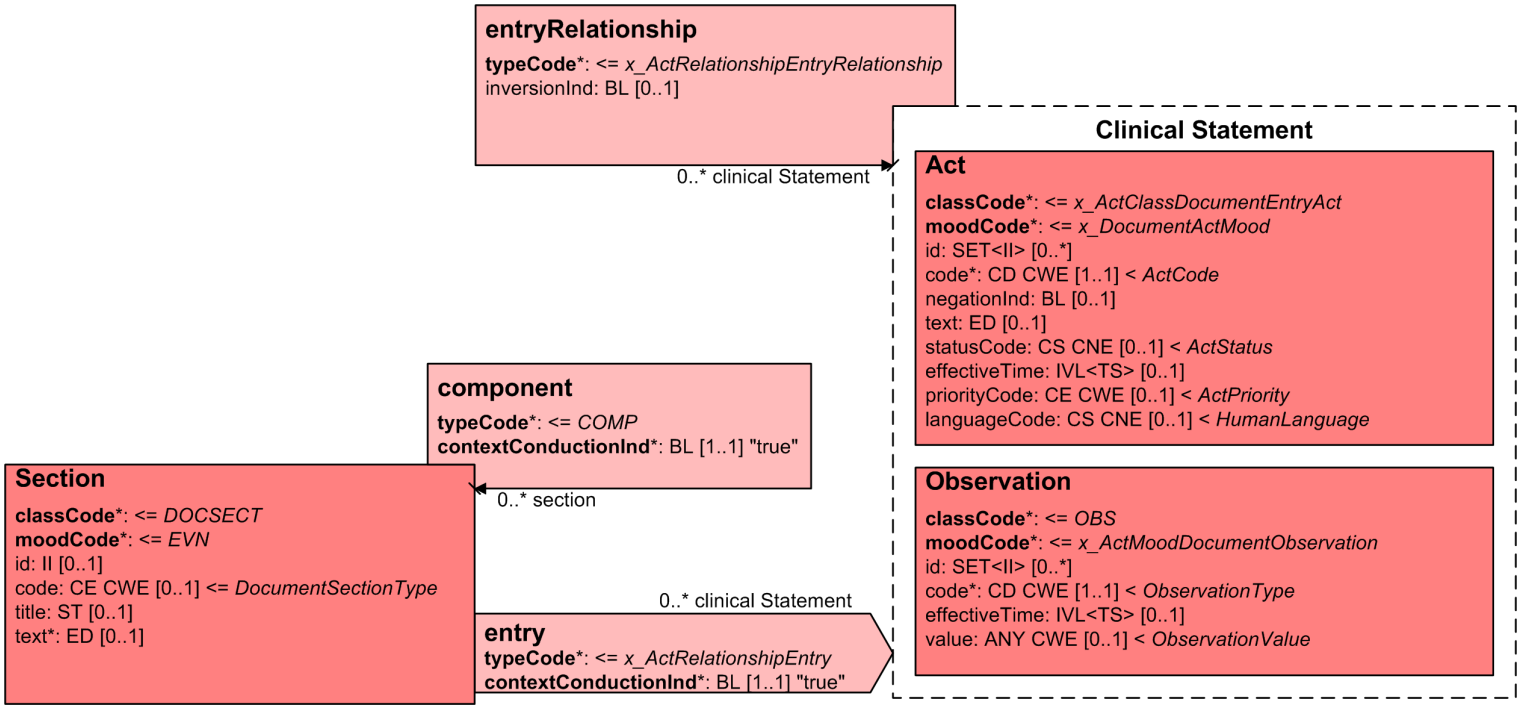



**Figure 7.15. Pathology Test Result**

## 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<br><br>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 7.15. 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="1.2.36.2001.1001.101.104.16501"
     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>
```

## 7.1.6.1.1 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 7.16, “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.

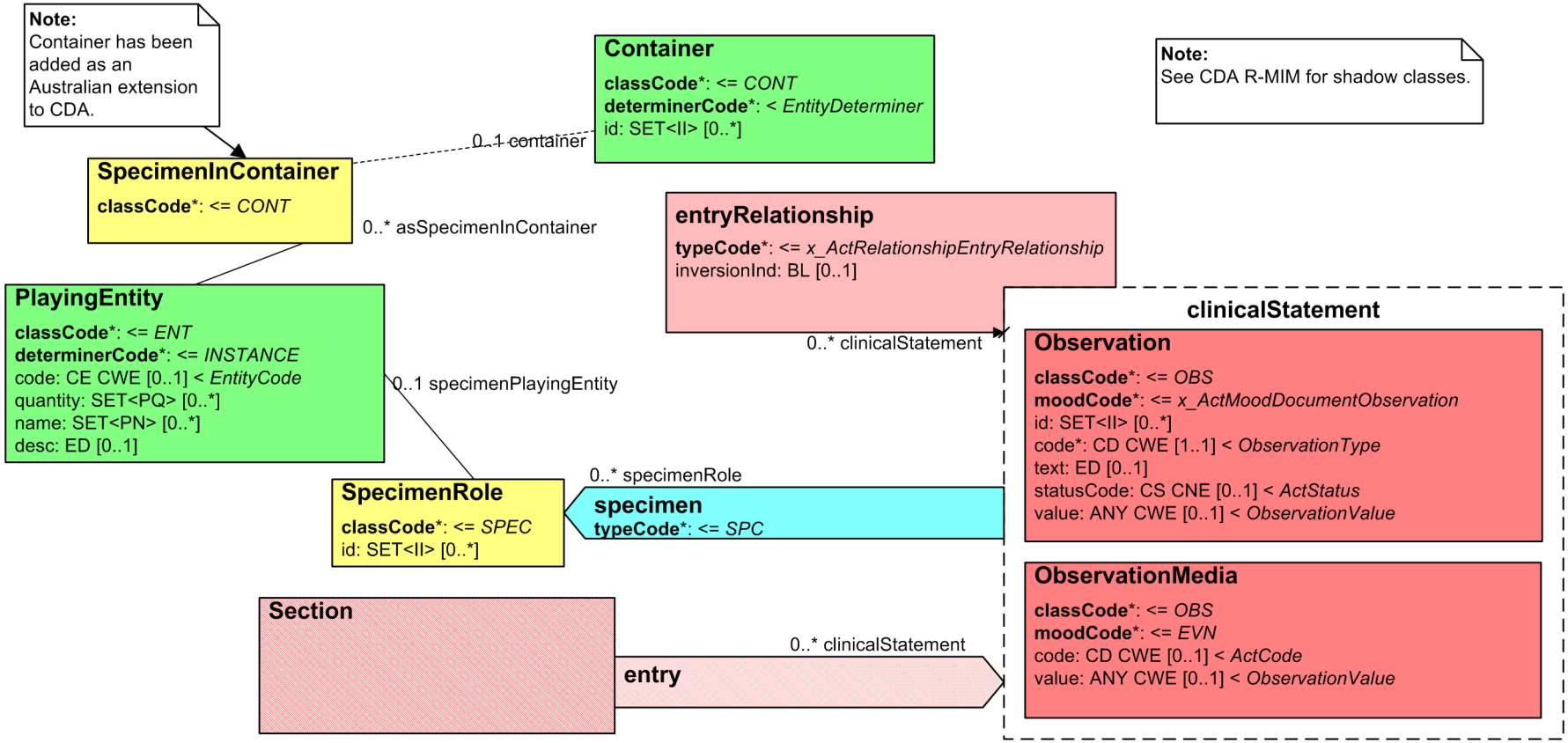



**Figure 7.16. Test Specimen Detail**

## 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*[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[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/ | | |
| **Test Specimen Detail** | Details about the individual specimen to which these 'Result group' test results refer, where testing of multiple specimens is required. | 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.<br><br>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 |
|---|---|---|---|---|---|
| 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.<br>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<br><br>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.<br><br>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<br><br>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.<br><br>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.<br><br>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.<br>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 7.16. 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>

      ...

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

         <!-- Begin Specimen Tissue Type -->
         <code code="102.16156.2.2.1" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Test Specimen Detail" />
         <!-- End Specimen Tissue Type -->

         <!-- Begin Specimen Collection DateTime -->
         <effectiveTime value="201112141120+1000" />
         <!-- End Specimen 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 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>
    <code code="SER" codeSystem="2.16.840.1.113883.12.70" displayName="Serum" />

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

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

    <!-- Begin Continer Identifier -->
    <ext:asSpecimenInContainer classCode="CONT">
     <ext:container>
      <ext:id root="1.2.123.654321" extension="CNH45218964" />
     </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" value="Pathology Clinic" />
  </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 Specimen 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 Specimen Image -->

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

       ...

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

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

  ...

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

## 7.1.6.1.2 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 7.17, “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.

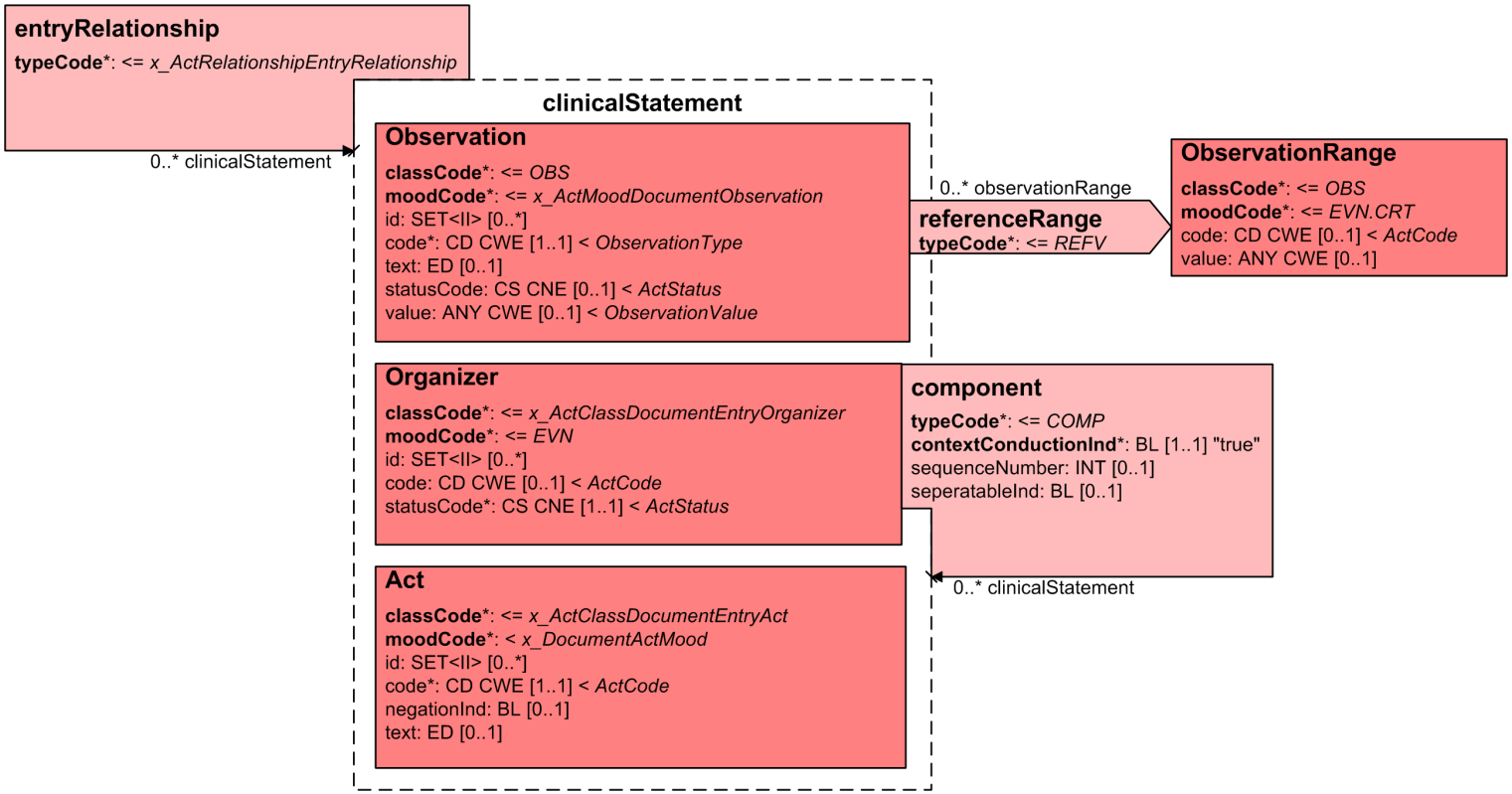



**Figure 7.17. Pathology Test Result Group**

## 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<br><br>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<br><br>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 7.17. 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>

         ...

         <!-- 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 Result Value -->
             <value unit="mmol/L" value="0.06" xsi:type="PQ" />
             <!-- End Result Value -->

             <!-- Begin Result Value Normal Status -->
             <interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality"
```

```
   codeSystem="2.16.840.1.113883.5.83"
   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>
     </section>
    </component>
   </section>
  </component>
  <!-- End Pathology Test Result -->

  ...

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

```
    ...

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

#### 7.1.6.1.2.1 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 7.18, “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.

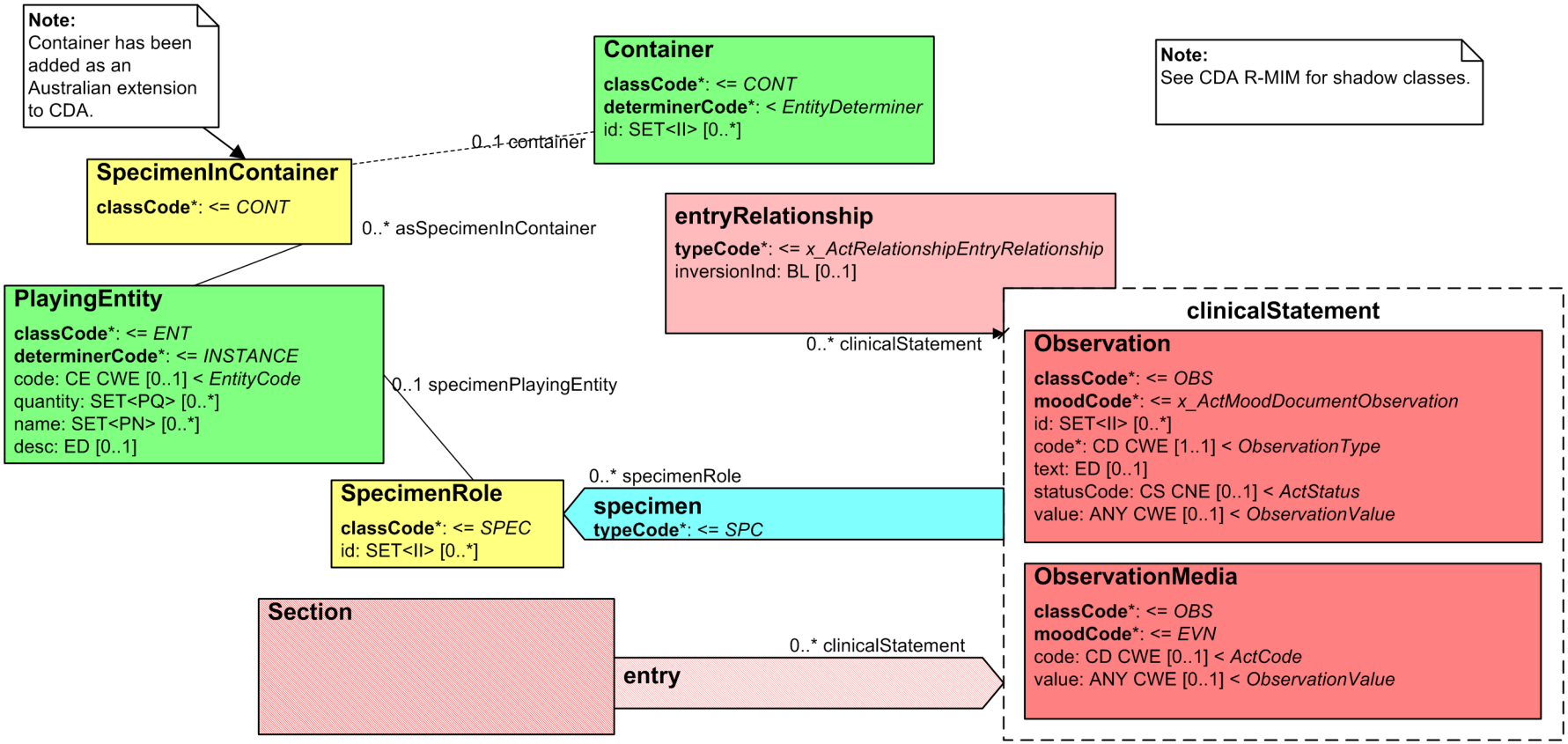



**Figure 7.18. Result Group Specimen Detail**

### 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*[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/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.<br><br>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 |
|---|---|---|---|---|---|
| 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.<br><br>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<br><br>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.<br><br>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<br><br>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.<br><br>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.<br><br>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.<br><br>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 7.18. Result Specimen 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>

    …

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

       ...

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

         ...

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

            ...

          <!-- Begin Result Group Specimen Detail -->
          <component>
           <observation classCode="OBS" moodCode="EVN">

            <!-- Begin Specimen Tissue Type -->
            <code code="102.16156.2.2.2" codeSystem="1.2.36.1.2001.1001.101"
             codeSystemName="NCTIS Data Components" displayName="Result Group Specimen Detail" />
            <!-- End Specimen Tissue Type -->

            <!-- 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 Antomical 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 code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
   displayName="left" />
 </qualifier>
 <!-- End Side -->

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

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

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

  <specimenPlayingEntity>
   <code code="SER" codeSystem="2.16.840.1.113883.12.70" displayName="Serum" />

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

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

   <!-- Begin Container Identifier -->
   <ext:asSpecimenInContainer classCode="CONT">
    <ext:container>
     <ext:id root="1.2.123.654321" />
    </ext:container>
   </ext:asSpecimenInContainer>
   <!-- End Container 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" value="Pathology Clinic" />
       </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 Specmien 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 Specmien Image -->

     </observation>
    </component>
    <!-- End Result Group Specimen Detail -->

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

   ...

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

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

     ...

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

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

# 7.1.6.2 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 7.19, “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.

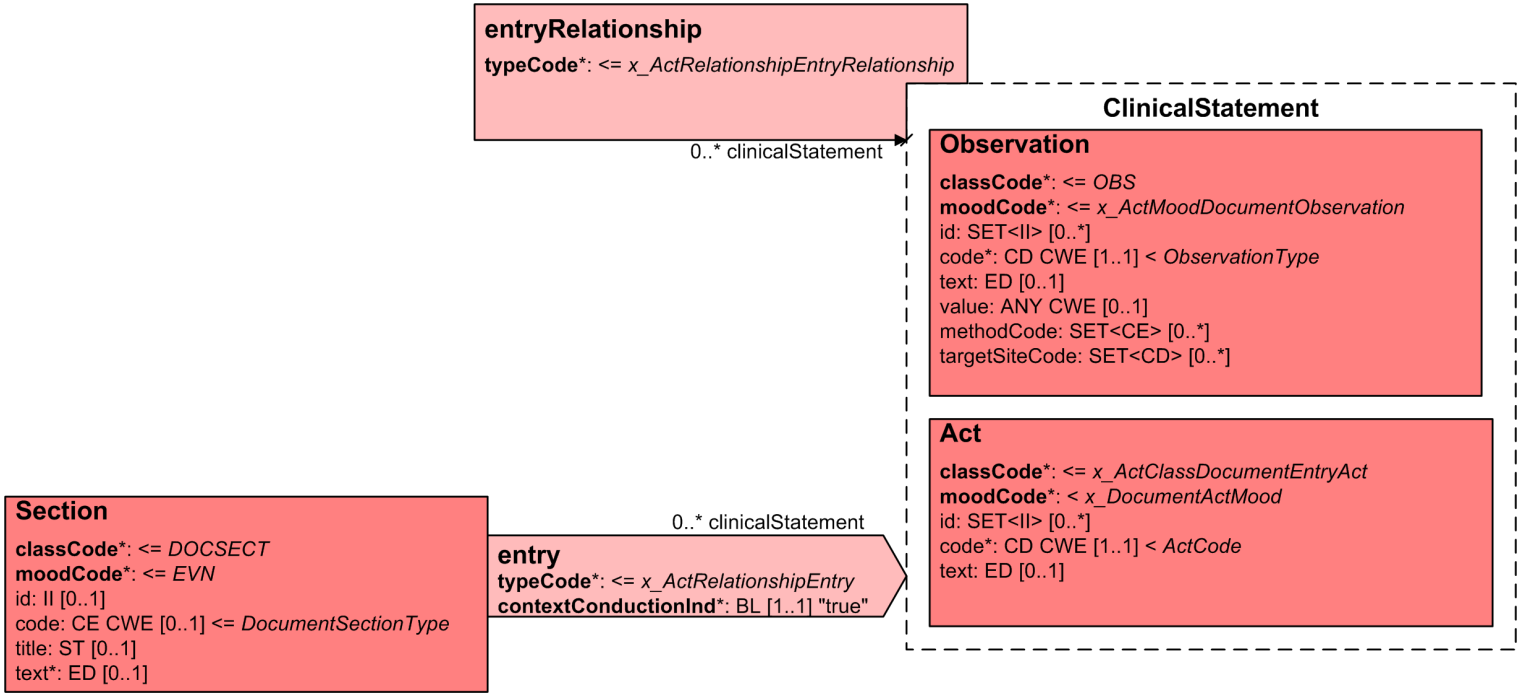



**Figure 7.19. Imaging Examination Result**

## 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*[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 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. |

[5] 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.<br>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.<br>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<br><br>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<br><br>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 7.19. 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>

    ...

     <!-- Begin 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>
        <table>
         <thead>
          <tr>
           <th>Imaging Examination</th>
           <th>Result</th>
           <th>Result Status</th>
          </tr>
         </thead>
         <tbody>
          <tr>
           <td>Chest X-ray</td>
           <td>
            <paragraph>The lungs and pleura appear clear.</paragraph>
            <paragraph>Cardiac and mediastinal contours are within normal limits.</paragraph>
           </td>
           <td>Normal</td>
          </tr>
         </tbody>
        </table>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <id root="D3C0BC62-F08D-11E0-A994-06864824019B" />

         <!-- Begin Imaging Examination Result Name -->
         <code code="399208008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
          displayName="chest x-ray" />
         <!-- End Imaging Examination Result Name -->
```

```
<!-- Begin Examination Result Representation -->
<text mediaType="application/pdf">
 <reference value="result.pdf" />
</text>
<!-- End Examination Result Representation -->

<!-- Begin Imaging Modality -->
<methodCode code="363680008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
 displayName="x-ray" />
<!-- End Imaging Modality -->

<!-- Begin Anatomical Location Name -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
 codeSystemVersion="20110531" displayName="thorax">

 <!-- Begin Anatomical Location Description -->
 <originalText>Chest/Thorax</originalText>
 <!-- End Anatomical Location Description -->

 <!-- Begin Side (if appropriate) -->
 <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" />
 </qualifier>
 <!-- End Side -->

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

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="REFR">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="1E311BD0-F092-11E0-8852-0E8B4824019B" />
  <value mediaType="image/jpeg">
   <reference value="location.jpeg" />
  </value>
 </observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Begin 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 -->

<!-- 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>Fluid Retention.</text>
 </act>
</entryRelationship>
<!-- End Clinical Information Provided -->
```

```
        <!-- Begin Findings -->
        <entryRelationship typeCode="REFR">
         <observation classCode="OBS" moodCode="EVN">
          <id root="D1ECC286-F093-11E0-9BC8-508D4824019B" />
          <code code="103.16503" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
           displayName="Findings" />
          <text>The lungs and pleura appear clear. Cardiac and mediastinal contours are within normal
           limits.</text>
         </observation>
        </entryRelationship>
        <!-- End Findings -->

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

          ...

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

        <!-- Examination Request Details -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
         <act classCode="ACT" moodCode="EVN">

          ...

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

        <!-- Begin 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="201112141120+1000" />
         </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>
```

## 7.1.6.2.1 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 7.20, “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.

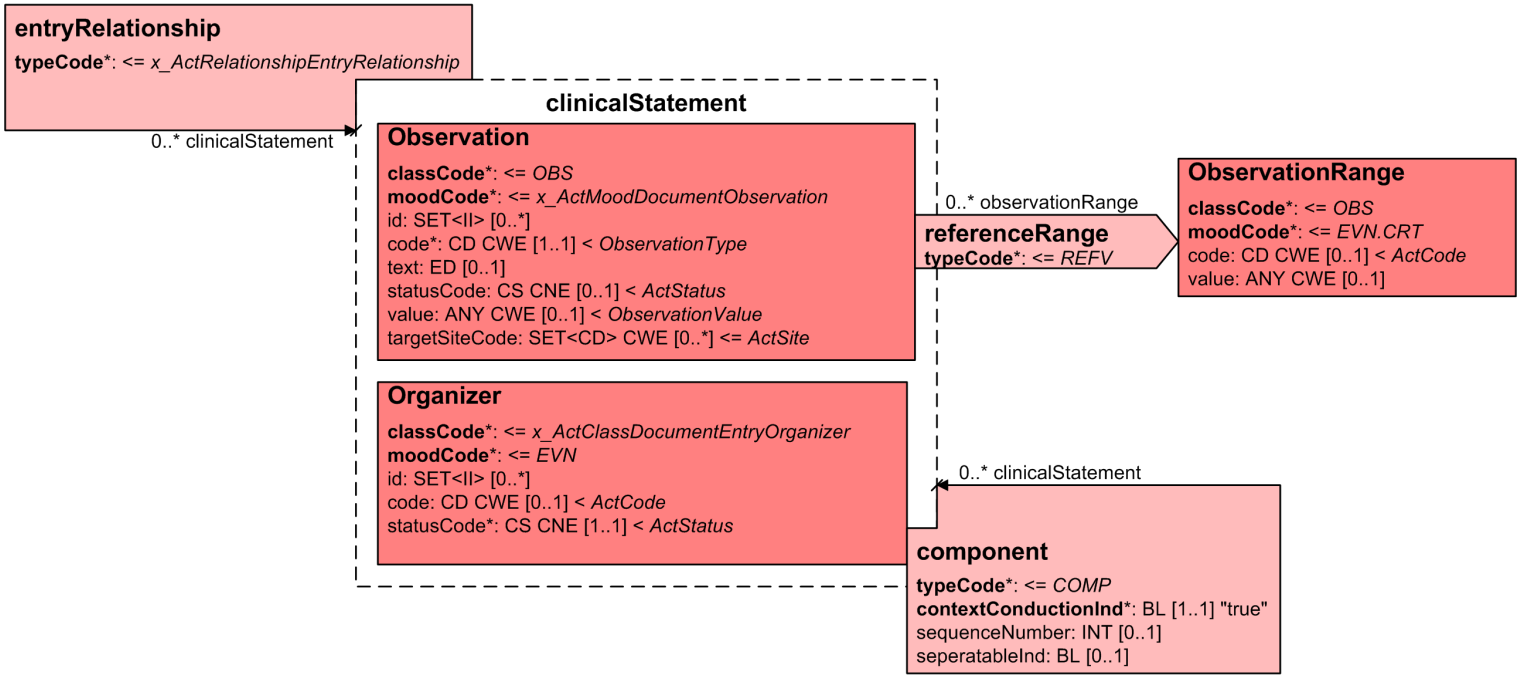



**Figure 7.20. Imaging Examination Result Group**

### 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*[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 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<br><br>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. |

[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 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<br><br>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: ObservationInterpretationNormality | 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.<br><br>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.<br><br>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<br><br>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 7.20. 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>

      ...

         <!-- Begin Imaging Examination Result Group -->
         <entryRelationship typeCode="COMP">
          <organizer classCode="BATTERY" moodCode="EVN">
           <id root="061116F4-F097-11E0-BF4C-10914824019B" />

           <!-- Begin Imaging Examination Result Group Name -->
           <code code="399208008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
            displayName="chest x-ray" />
           <!-- Begin Imaging Examination Result Group Name -->

           <statusCode code="completed" />

           <!-- Begin Individual Imaging Examination Result -->
           <component>
            <observation classCode="OBS" moodCode="EVN">
             <id root="2C600DDA-F09A-11E0-9BDE-8D944824019B" />

             <!-- Begin Individual Imaging Examination Result Name -->
             <code nullFlavor="UNK">
              <originalText>Cardiothoricic Ratio</originalText>
             </code>
             <!-- End Individual Imaging Examination Result Name -->

             <!-- Begin Result Value -->
             <value value="0.45" xsi:type="PQ" />
             <!-- En Result Value -->

             <!-- Begin Result Value Normal Status -->
             <interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality"
```

```
 codeSystem="2.16.840.1.113883.5.83"
 displayName="Normal" />
<!-- End Result Value Normal Status -->

<!-- Begin Anatomical Location Name -->
<targetSiteCode code="80891009" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT" displayName="heart">

 <!-- Begin Anatomical Location Description -->
 <originalText>Heart</originalText>
 <!-- Begin Anatomical Location Description -->

 <!-- Begin Side (if appropriate) -->
 <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" />
 </qualifier>
 <!-- End Side -->

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

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="REFR">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="218F125E-F304-11E0-99C9-46DC4824019B" />
  <value mediaType="image/jpeg">
   <reference value="location.jpeg" />
  </value>
 </observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- 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>CTR within normal limits.</text>
 </act>
</entryRelationship>
<!-- End Result Comment -->

<!-- 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="0.25" />
   <high value="0.50" />
  </value>
  <!-- End Result Value Reference Range -->

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

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

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

         ...

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

     ...

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

    ...

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

## 7.1.6.2.2 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 7.21, “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.

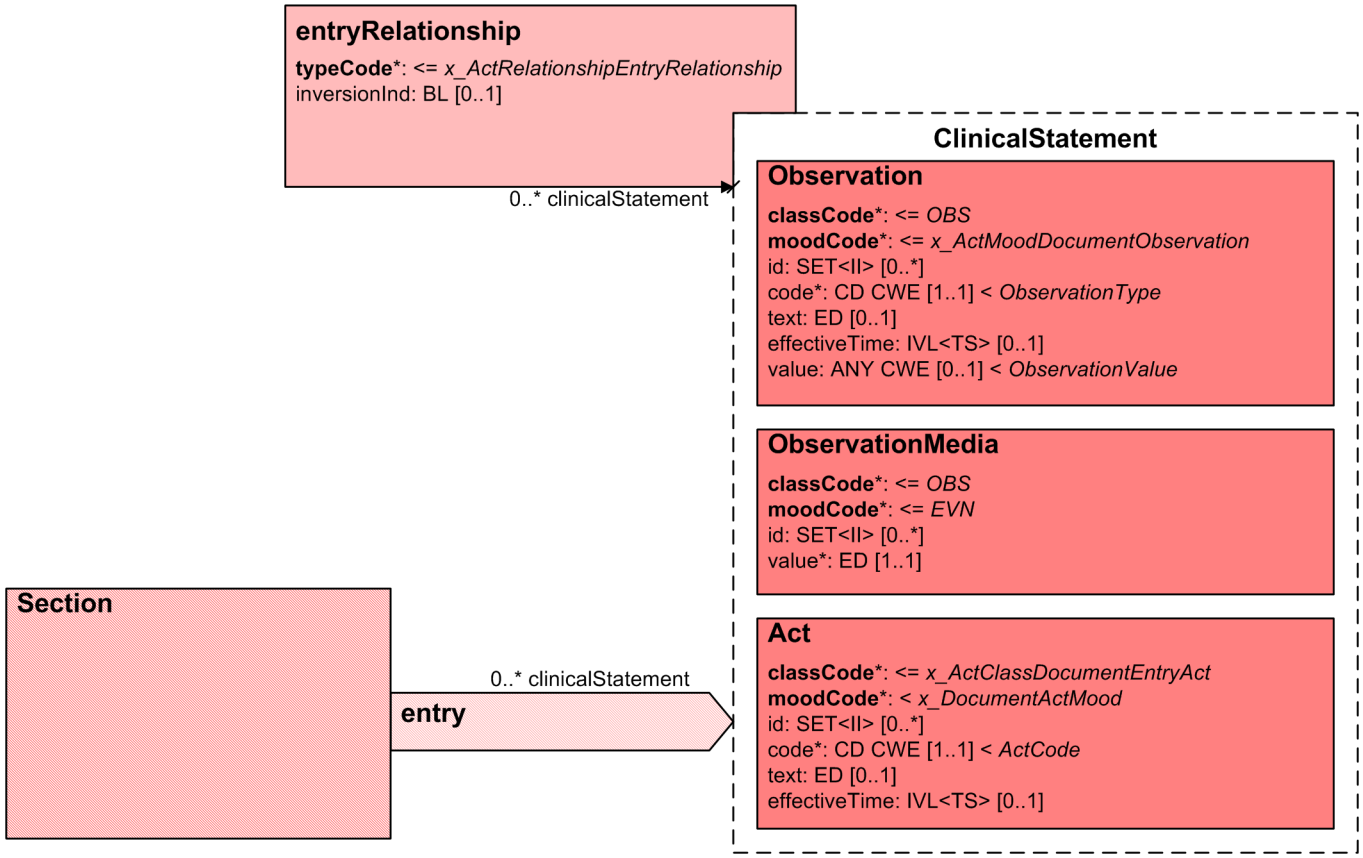



**Figure 7.21. Examination Request Details**

### 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*[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/ | | |
| **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"** | | |

[7] 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.<br><br>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<br><br>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 7.21. 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>

       ...

          <!-- 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>Chest X-ray</text>
             </observation>
            </entryRelationship>
            <!-- End Examination Requested Name -->

            <!-- Begin DICOM Study Identifier -->
            <entryRelationship typeCode="SUBJ">
             <act classCode="ACT" moodCode="EVN">
              <id root="1.2.312.1264.124654654.12456456301" />
              <code code="103.16513" codeSystem="1.2.36.1.2001.1001.101"
               codeSystemName="NCTIS Data Components" displayName="DICOM Study Identifier" />

              <!-- Begin Image DateTime -->
              <effectiveTime value="201012141120+1000" />
              <!-- End Image DateTime -->

              <!-- Begin Image Details -->
              <entryRelationship typeCode="COMP">
```

```
   <observation classCode="OBS" moodCode="EVN">

    <!-- Begin Image Identifier -->
    <id root="1.2.3.4.5.123654789654" />
    <!-- End Image Identifier -->

    <code code="103.16515" codeSystem="1.2.36.1.2001.1001.101"
     codeSystemName="NCTIS Data Components" displayName="Image Details" />

    <!-- Begin Image DateTime -->
    <effectiveTime value="201012141120+1000"/>
    <!-- End Image DateTime -->

    <!-- Begin Image View Name -->
    <value code="67632007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
     displayName="diagnostic radiography of chest, PA" xsi:type="CD" />
    <!-- End Image View Name -->

    <!-- Begin DICOM Series Identifier -->
    <entryRelationship typeCode="REFR">
     <act classCode="ACT" moodCode="EVN">
      <id root="1.2.3.1.2.2654654654654564" />
      <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 -->

    <!-- Begin 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">PA Erect</value>
     </observation>
    </entryRelationship>
    <!-- End Subject Position -->

    <!-- Begin Image -->
    <entryRelationship typeCode="SPRT">
     <observationMedia classCode="OBS" moodCode="EVN">
      <id root="CD85BBA8-F2E6-11E0-B5BD-9FB84824019B" />
      <value mediaType="image/jpeg">
       <reference value="xray.jpeg" />
      </value>
     </observationMedia>
    </entryRelationship>
    <!-- End Image -->

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

 </act>
</entryRelationship>
<!-- End DICOM Study Identifier -->

<!-- Begin Report Identifier -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <id root="DDB50F06-F304-11E0-A7F3-5ADD4824019B"/>
  <code code="103.16514" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
   displayName="Report Identifier" />
 </observation>
</entryRelationship>
```

```
            <!-- End Report Identifier -->

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

      ...

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

     ...

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

# 7.1.6.3 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 7.22, “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.

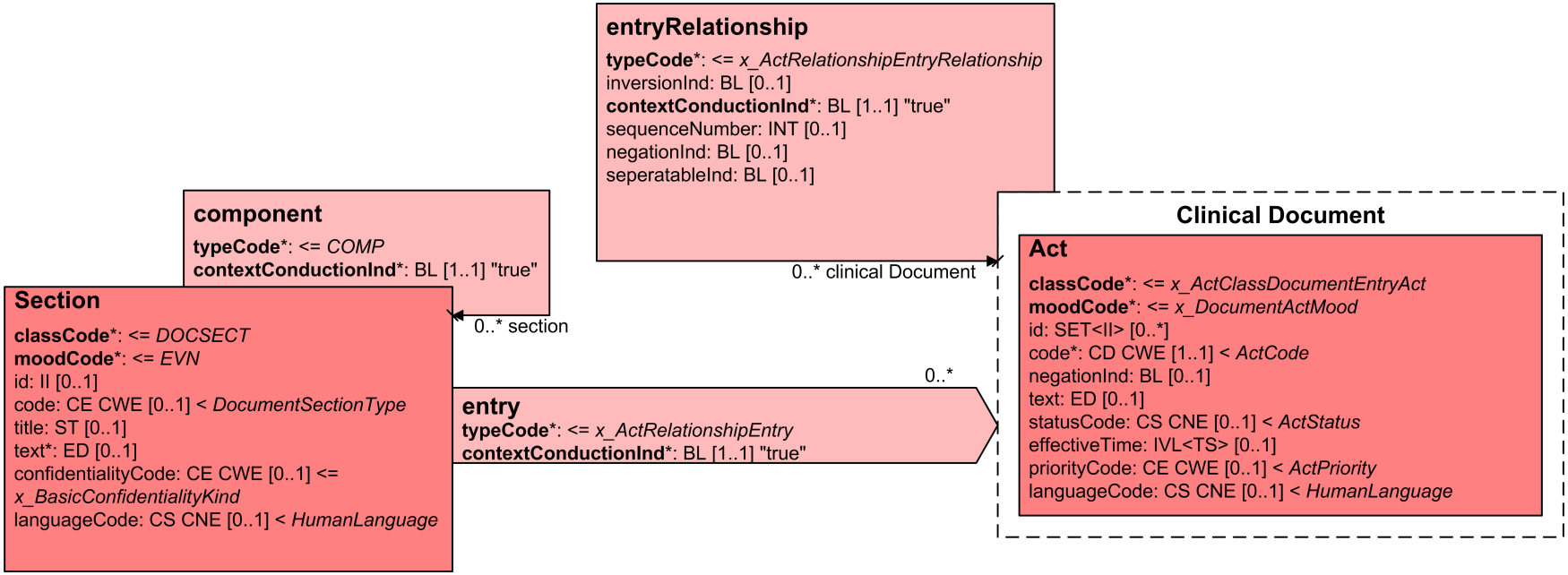



**Figure 7.22. Requested Service**

## 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<br><br>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 7.22. 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>
```

### 7.1.6.3.1 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 |

#### 7.1.6.3.1.1 Service Provider - Person

### CDA R-MIM Representation

Figure 7.23, “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 ClinicalStatement.

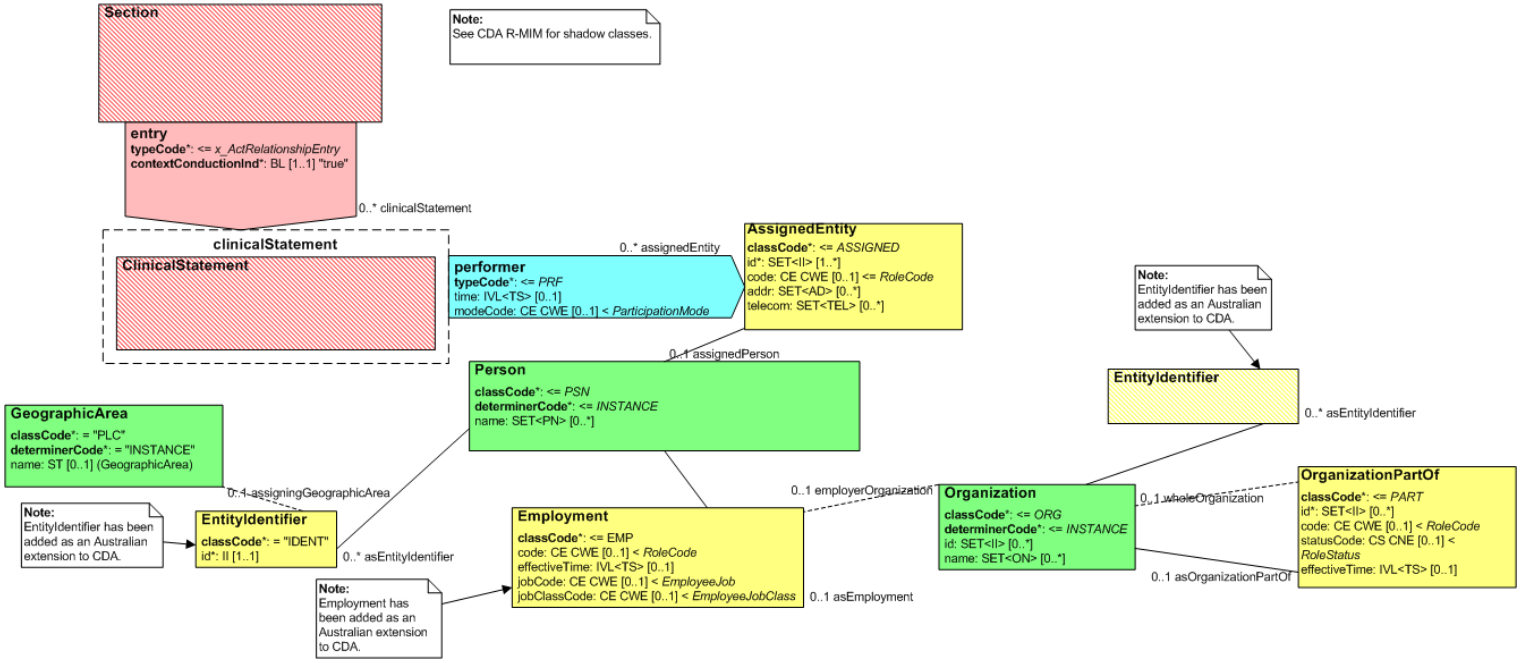



**Figure 7.23. Service Provider - Person**

## 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].<br><br>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<br><br>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.<br><br>This logical NEHTA data component has no mapping to CDA.<br><br>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 7.23. 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 -->
   <component>
    <section>

     ...

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

       ...

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

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

         ...

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

          <!-- Begin Participation Period -->
          <time>
           <low value="201212301000+1000" />
           <high value="201212301030+1000" />
          </time>
          <!-- End Participation Period -->

          <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 -->

</assignedPerson>

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

  <!-- Position In Organisation -->
  <ext:code>
   <originalText>Senior Ortopaedic Specialist</originalText>
  </ext:code>

  <!-- Occupation -->
  <ext:jobCode code="253514" codeSystem="2.16.840.1.113883.13.62"
   codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition"
   displayName="Orthopaedic Surgeon" />

  <!-- 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>Orthopaedic Specialists</name>

   <asOrganizationPartOf>
    <wholeOrganization>

     <!-- Organisation Name -->
     <name use="ORGB">Orthopaedic 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>
           <!-- End Employment Detail -->

          </assignedEntity>
         </performer>
         <!-- End Service Provider - Person (If required) -->

         ...

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

       ...

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

     ...

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

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

### 7.1.6.3.1.2 Service Provider - Organisation

## CDA R-MIM Representation

Figure 7.24, “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.

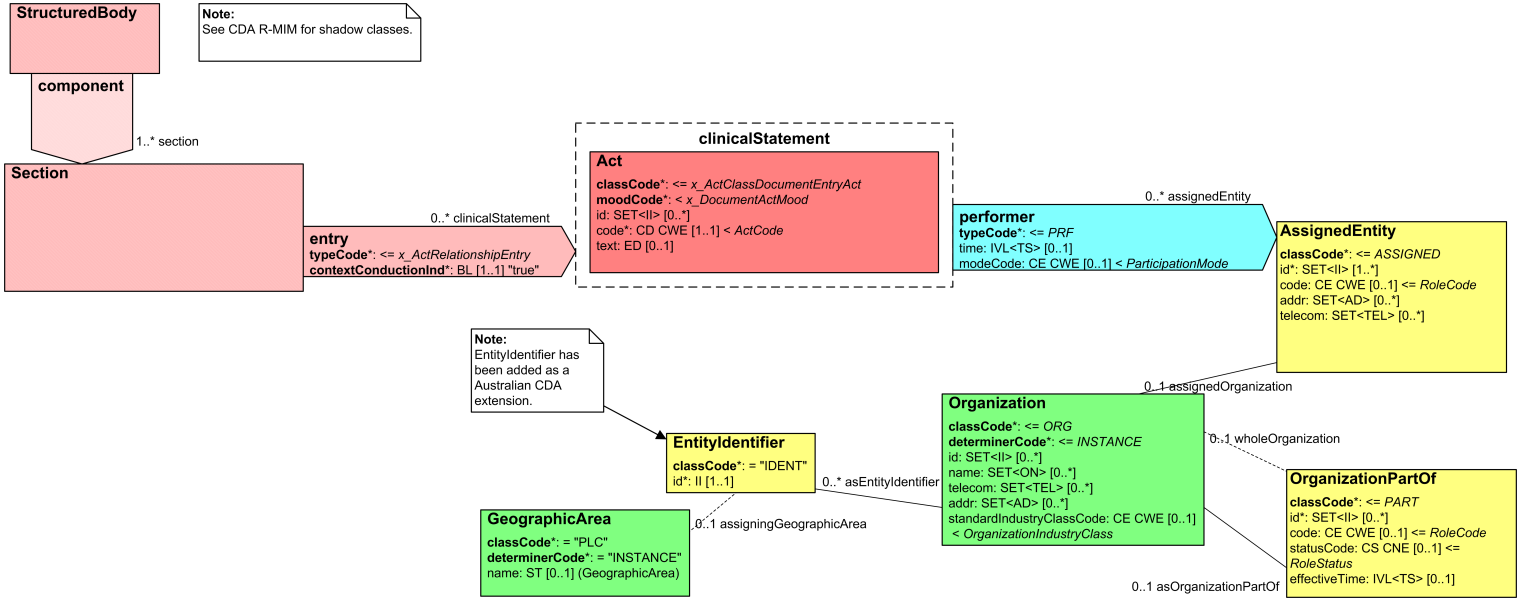



**Figure 7.24. Service Provider - Organisation**

## 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 > **Participation Period** | The time interval during which the participation in the health care event occurred. | 0..1 | performer/**time** | | See <time> for available attributes. |
| 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<br><br>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.<br><br>This logical NEHTA data component has no mapping to CDA.<br><br>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** | | |

### Example 7.24. 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 -->
   <component>
    <section>

     ...

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

       ...

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

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

         ...

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

          <!-- Participation Period -->
          <time>
           <low value="201212301000+1000"/>
           <high value="201212301030+1000"/>
          </time>

          <assignedEntity>

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

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

           <!-- Address -->
```

```
            <addr use="WP">
             <streetAddressLine>105 Hospital 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" />

            <representedOrganization>
             <asOrganizationPartOf>
              <wholeOrganization>

               <!-- Organisation Name -->
               <name>Private Hospital</name>

               <!-- Entity Identifier -->
               <ext:asEntityIdentifier classCode="IDENT">
                <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003321771167888" />
                <ext:assigningGeographicArea classCode="PLC">
                 <ext:name>National Identifier</ext:name>
                </ext:assigningGeographicArea>
               </ext:asEntityIdentifier>

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

          ...

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

        ...

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

      ...

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

     </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.<br><br>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.<br><br>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.<br><br>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.<br><br>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.<br>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.<br>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]<br>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]<br>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]<br><br>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]<br><br>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]<br><br>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.<br><br>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.<br><br>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.<br><br>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.

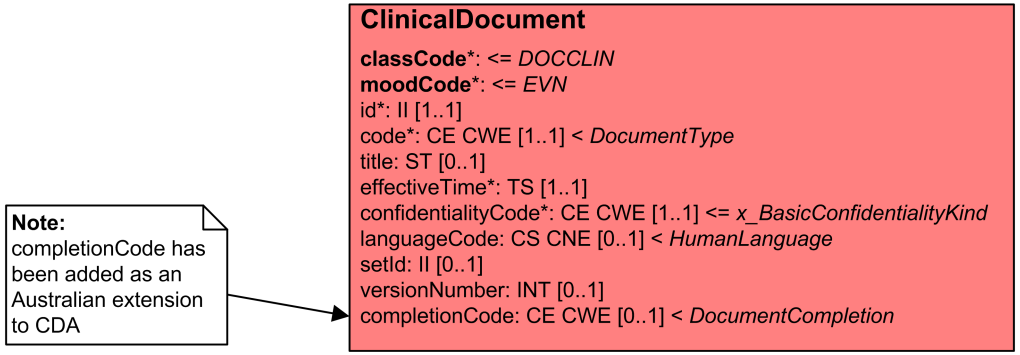



**Figure 9.1. CDA R-MIM Representation**

# 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.

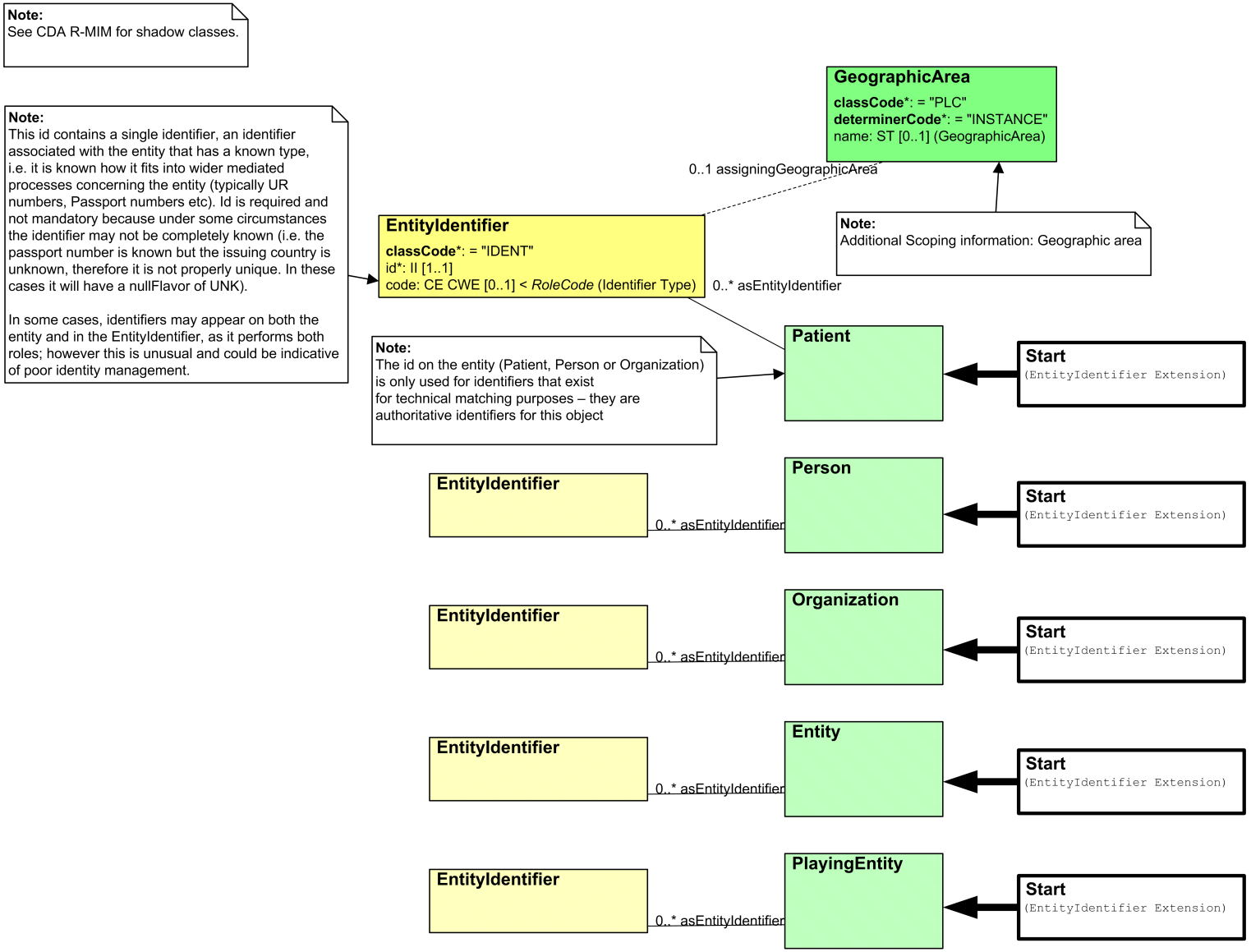



**Figure 9.2. CDA R-MIM Representation**

# 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.

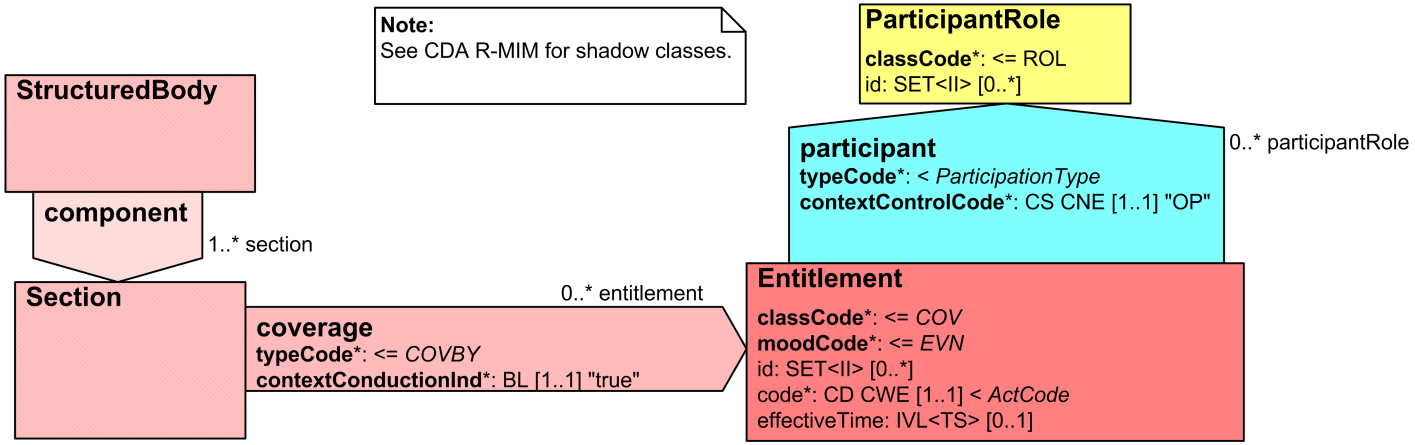



**Figure 9.3. CDA R-MIM Representation**

# 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.

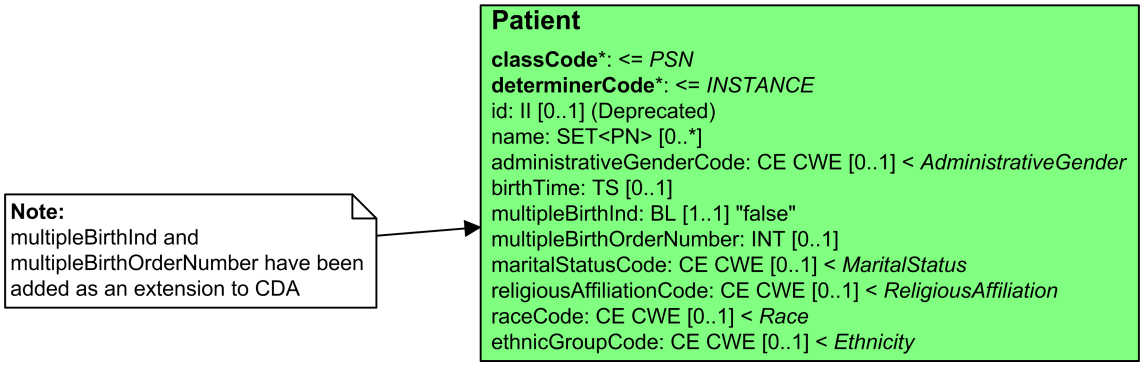



**Figure 9.4. CDA R-MIM Representation**

# 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.

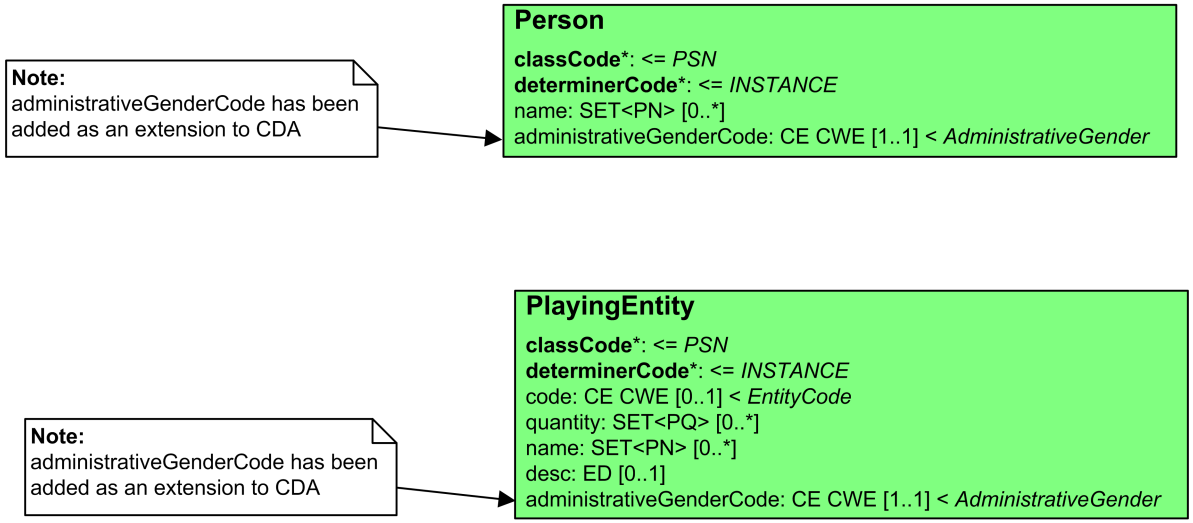



**Figure 9.5. CDA R-MIM Representation**

# 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.

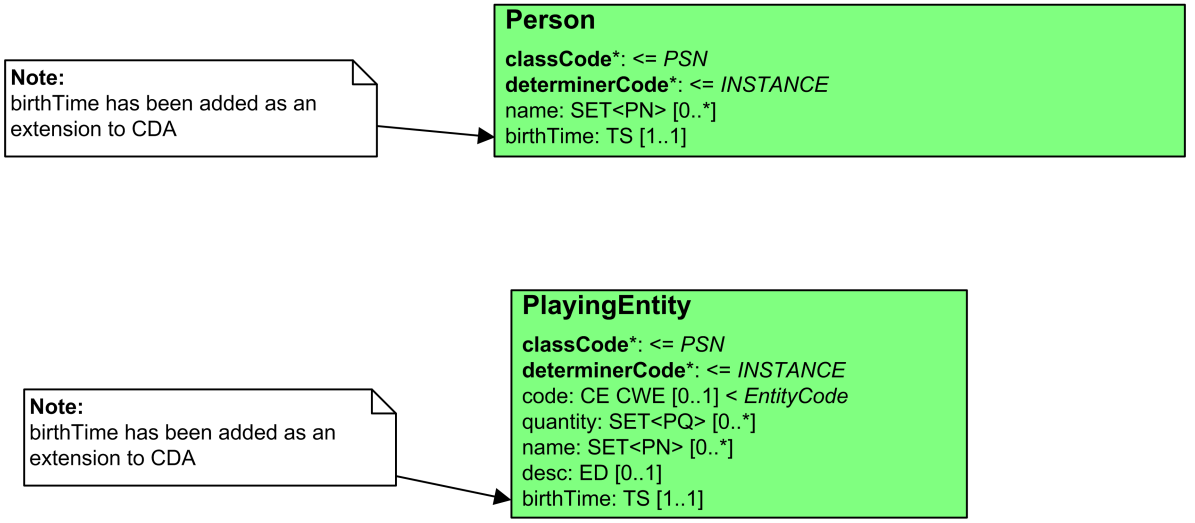



**Figure 9.6. CDA R-MIM Representation**

# 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.

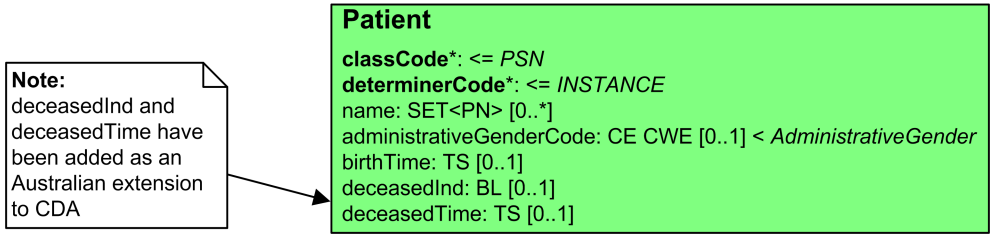



**Figure 9.7. CDA R-MIM Representation**

# 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.

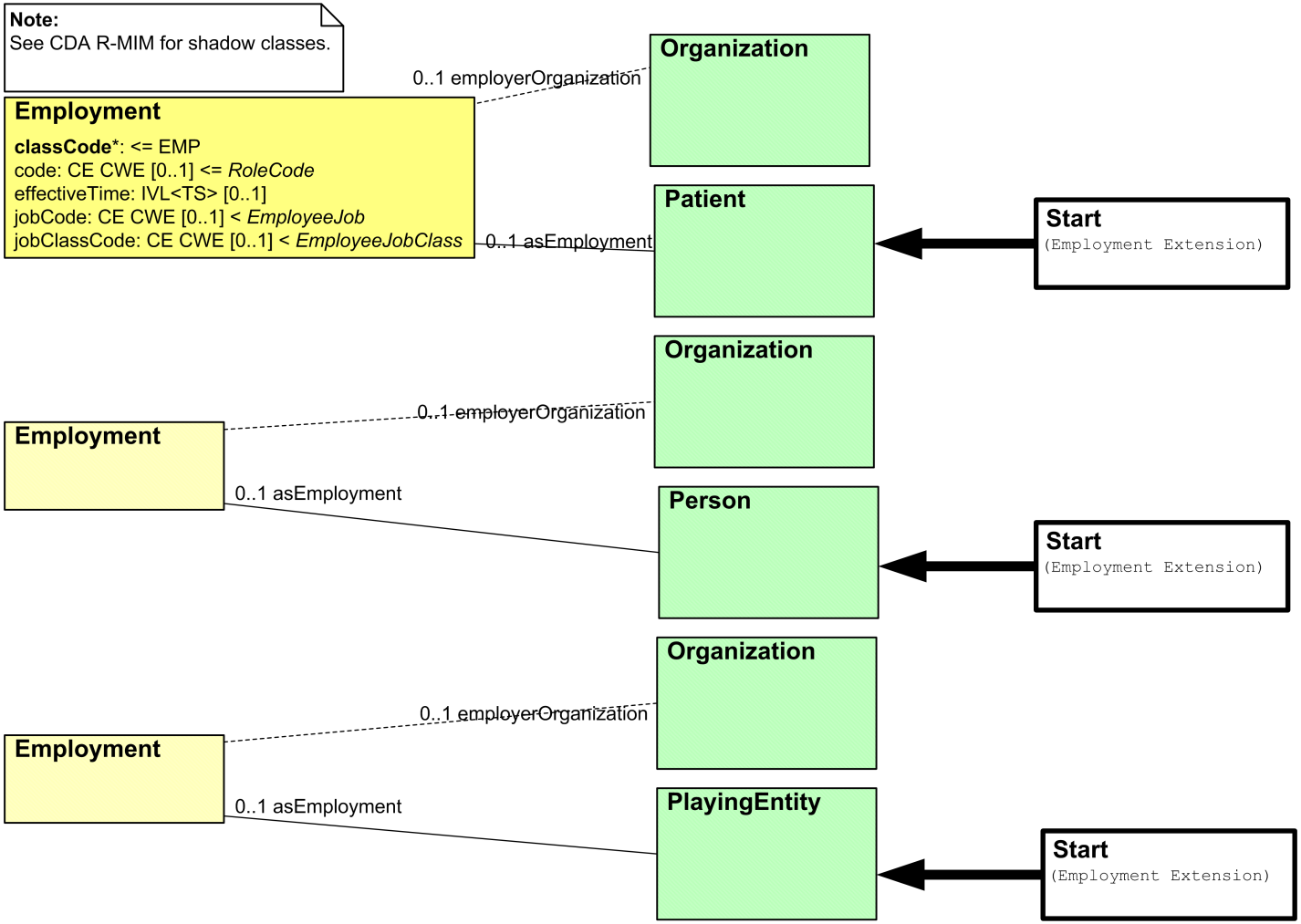



**Figure 9.8. CDA R-MIM Representation**

# 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.

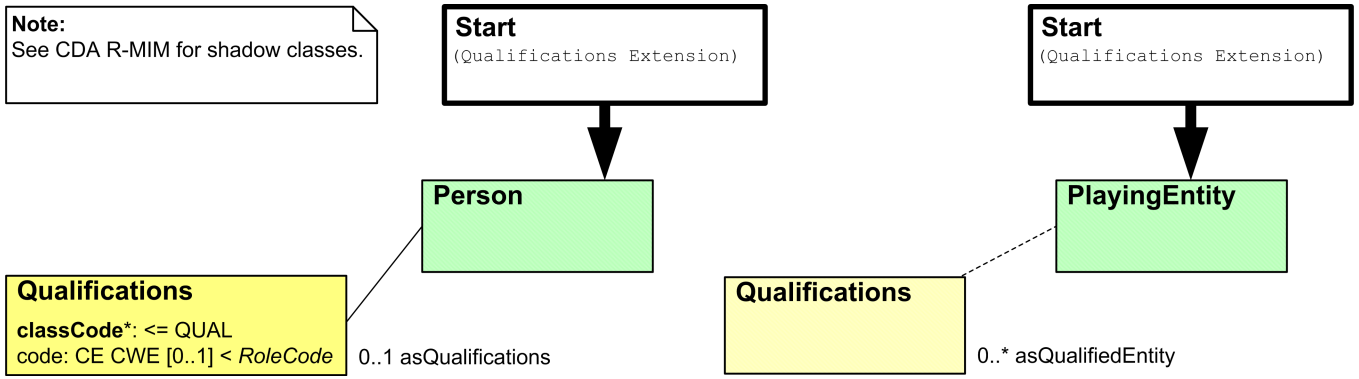



**Figure 9.9. CDA R-MIM Representation**

# 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.

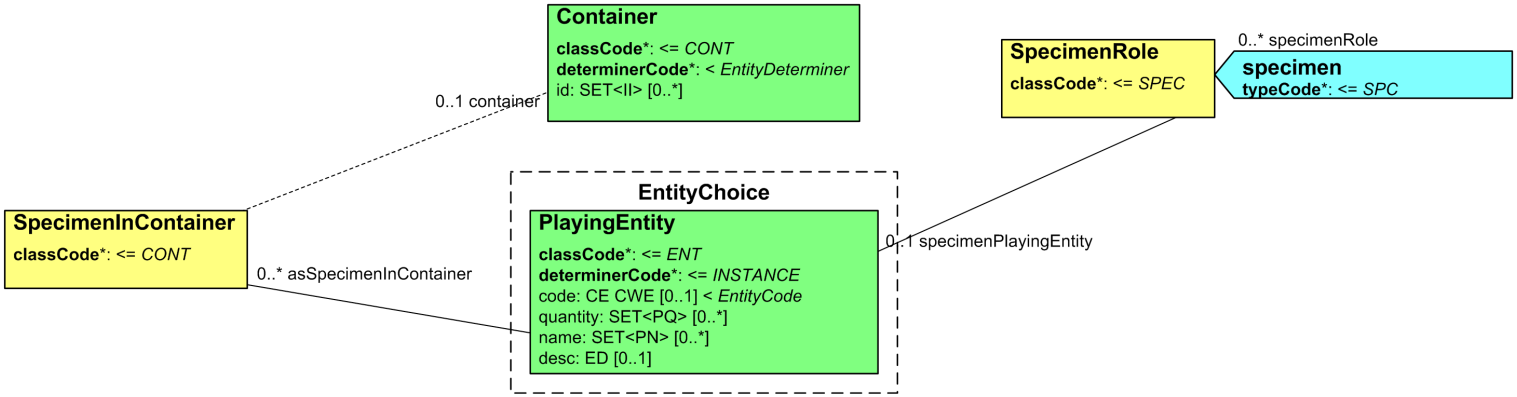



**Figure 9.10. CDA R-MIM Representation**

# 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<br><br>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<br><br>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 - Recommendation or Change Values

| displayName | code | codeSystemName | codeSystem |
|---|---|---|---|
| A recommendation to make the change. | 01 | NCTIS Recommendation or Change Values | 1.2.36.1.2001.1001.101.104.16594 |
| The change has been made. | 02 | NCTIS Recommendation or Change Values | 1.2.36.1.2001.1001.101.104.16594 |

# 10.13 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 |

# 10.14 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 |

# 10.15 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 |

# 10.16 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 |

# 10.17 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). |

# 10.18 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. |

# 10.19 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 |

# 10.20 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 |

# 10.21 NCTIS: Change Type Values

| displayName | code | codeSystemName | codeSystem |
|---|---|---|---|
| Unchanged | 01 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |
| Changed | 02 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |
| Cancelled | 03 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |
| Prescribed | 04 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |
| Ceased | 05 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |
| Suspended | 06 | NCTIS Change Type Values | 1.2.36.1.2001.1001.101.104.16592 |

# 10.22 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 31 October 2011 to Version 1.0 01 December 2011

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 1 | N/A | N/A | Document Status | Updated to Final | NEHTA | Status Change | 01 December 2011 |
| 2 | 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 | 01 December 2011 |
| 3 | 7.1.6.3 | Requested Service | Data group Identifer Updated | Data group Identifier updated to DG-20158. | NEHTA | Corrected data group identifier. | 01 December 2011 |
| 4 | 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 | 01 December 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 | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 1 | 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 |
| 2 | 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 |
| 3 | 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 |
| 4 | 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 |
| 5 | 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 |
| 6 | 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 |
| 7 | 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 |
| 8 | 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 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 9 | 7.1.5.1 | IMMUNISATIONS | Cardinality | Immunisations cardinaility old spec: "Essential 1..*" new spec: "Optional 0..*" | NEHTA | Alignment of specifications | 2 Dec 2012 |
| 10 | 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 |
| 11 | 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 |
| 12 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Cardinality | Test Specimen Detail cardinaility old spec: 0..* new spec: 1..* | NEHTA | Alignment of specifications | 2 Dec 2012 |
| 13 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Cardinality | Test Specimen Detail > Handling and Processing cardinaility old spec: 0..* new spec: 1..* | NEHTA | Alignment of specifications | 2 Dec 2012 |
| 14 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Cardinality | Test Specimen Detail > Handling and Processing > Collection DateTime cardinaility old spec: 0..* new spec: 1..* | NEHTA | Alignment of specifications | 2 Dec 2012 |
| 15 | 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 |
| 16 | 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 |
| 17 | 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 |
| 18 | 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 |
| 19 | 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 |
| 20 | 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 |
| 21 | 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 |
| 22 | 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 |
| 23 | 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 |
| 24 | 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 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 25 | 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 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | 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 |
| 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 |
| 32 | 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 |
| 33 | 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 |
| 34 | 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 |
| 35 | 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 |
| 36 | 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 |
| 37 | 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 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 38 | 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 |
| 39 | 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 |
| 40 | 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 |
| 41 | 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 |
| 42 | 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 |
| 43 | 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 |
| 44 | 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 |
| 45 | 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 |
| 46 | 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 |
| 47 | 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 |
| 48 | 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 |
| 49 | 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 |
| 50 | 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 |

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| | Section | Section Name | | | | | |
| 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 01 December 2011 to Version 1.2 07 March 2012

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 1 | Page ii | Copyright | Updated Copyright year | Changed year from '2011' to '2012'. | NEHTA | Document Feedback | 07 March 2012 |
| 2 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br><br>This document describes how an ES SCS is implemented as a CDA document. Conformance can be claimed to this Implementation Guide, either with regard to instances of Event Summary CDA XML documents, or to systems that consume or produce Event Summary CDA XML documents. When a conformance claim is made, it is made against this document, i.e. 'Event Summary: CDA Implementation Guide v1.1'.<br><br>to<br><br>This document describes how an Event Summary SCS is implemented as a CDA document. Conformance claims are not made against this Implementation Guide directly; rather, they are made against additional conformance profiles documented elsewhere. Any document that claims conformance to any derived conformance profile must meet these base requirements: | NEHTA | Document Feedback | 07 March 2012 |
| 3 | 1.8 | Conformance | Updated Conformance statement | Removed the following statements from the Conformance section.<br><br>1. A conformant document has the following properties.<br>2. It SHALL adhere to all cardinalities as specified in the mappings in this guide.<br>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.<br>4. A system that produces Event Summary CDA documents may claim conformance if all the documents it produces are conformant to this guide. | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 4 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br>It **SHALL** use vocabularies and codes sets as specified in the mappings, unless the vocabulary has been explicitly stated as:<br>to<br>If the vocabulary has been explicitly stated as 'NS' it must be interpreted as: | NEHTA | Document Feedback | 07 March 2012 |
| 5 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br>It SHALL be valid against the additional conformance requirements that are established in this document.<br>to<br>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 |
| 6 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br>The document SHALL conform to the requirements specified in the CDA Rendering Guide.<br>to<br>The document SHALL conform to the requirements specified in the CDA Rendering Specification. | NEHTA | Document Feedback | 07 March 2012 |
| 7 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br>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.<br>to<br>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 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 8 | 1.8 | Conformance | Updated Conformance statement | Updated the conformance statement from.<br><br>A system that consumes Event Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Note: conformant systems that consume Event Summary CDA documents are not required to process all the structured data entries in the CDA document but they SHALL be able to correctly render the document for endusers when appropriate (see 2.1 Clinical Document Architecture Release 2).<br><br>to<br><br>A system that consumes Event Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Conformant systems that consume Event Summary CDA documents are not required to process any or all of the structured data entries in the CDA document but they SHALL be able to correctly render the document for end-users when appropriate (see 2.1 Clinical Document Architecture Release 2). | NEHTA | Document Feedback | 07 March 2012 |
| 9 | 1.8 | Conformance | Updated Conformance statement | Added the following statements to the conformance section.<br><br>Conformance Profiles of this document may make additional rules that override this document in regard to<br><br>1. Allowing the use of alternative value sets in place of the value sets specified in this document<br><br>2. Allowing the use of alternative identifiers in place of the HI Service identifiers<br><br>3. Making required data elements and/or section divisions optional | NEHTA | Document Feedback | 07 March 2012 |
| 10 | 1.9 | Known Issues | Removed Known Issue | Removed the following Known Issue<br><br>Throughout document<br><br>Participation 3.2 has Person name as 1..* . For consistency with other CDA guides this is remaining as 1..1 | NEHTA | Document Feedback | 07 March 2012 |
| 11 | 1.9 | Known Issues | Added Known Issue | Added the following Known Issue<br><br>Throughout document<br><br>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 |
| 12 | 1.9 | Known Issues | Removed Known Issue | Removed the following Known Issue<br><br>5 CDA Header<br><br>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 | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 13 | 1.9 | Known Issues | Removed Known Issue | Removed the following Known Issue<br>Entity Identifier<br>Conformance statements in the comments column need to be verified. | NEHTA | Document Feedback | 07 March 2012 |
| 14 | 10.19 | 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 |
| 15 | 10.21 | NCTIS: Change Type Values | Updated '10.21 NCTIS: Change Type Values' table | Added new Code Set value for 'Ceased' with the following value.<br>displayName = Ceased<br>code = 05<br>codeSystemName = NCTIS Change Type Values<br>codeSystem = 1.2.36.1.2001.1001.101.104.16592 | NEHTA | Document Feedback | 07 March 2012 |
| 16 | 10.21 | NCTIS: Change Type Values | Updated new '10.21 NCTIS: Change Type Values' table | Added new Code Set value for 'Suspended' with the following value.<br>displayName = Suspended<br>code = 06<br>codeSystemName = NCTIS Change Type Values<br>codeSystem = 1.2.36.1.2001.1001.101.104.16592 | NEHTA | Document Feedback | 07 March 2012 |
| 17 | 10.21 | NCTIS: Change Type Values | Updated new '10.15 NCTIS: Change Type Values' table | Changed codeSystem value from<br>NCTIS Change Type Values<br>to<br>1.2.36.1.2001.1001.101.104.16592<br>Changed codeSystemName value from<br>NCTIS Data Components.104.16592<br>to<br>NCTIS Change Type Values | NEHTA | Document Feedback | 07 March 2012 |
| 18 | 2.3 | CDA Extensions | Updated version numbers | Changed the current CDA extensions version and its namespace version number from 1.0 to 3.0<br>Changed the future CDA extension namespace version number reference from 2.0 to 4.0 | NEHTA | Document Feedback | 07 March 2012 |
| 19 | 3 | Event Summary Data Hierarchy | Updated Data Hierarchy | Updated 'DIAGNOSTIC INVESTIGATIONS> PATHOLOGY TEST RESULT> TEST SPECIMEN DETAIL' cardinality from 0..* to 1..* | NEHTA | Document Feedback | 07 March 2012 |
| 20 | 3 | Event Summary Data Hierarchy | Updated Data Hierarchy | Updated 'TEST SPECIMEN DETAIL > Handling and Processing' cardinality from 0..1 to 1..1 | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 21 | 3 | Event Summary Data Hierarchy | Updated Data Hierarchy | Updated 'TEST SPECIMEN DETAIL > Handling and Processing > Collection DateTime' cardinality from 0..1 to 1..1 | NEHTA | Document Feedback | 07 March 2012 |
| 22 | 3 | Event Summary Data Hierarchy | Updated Data Hierarchy | Updated 'Result Group Specimen Detail > Handling and Processing' cardinality from 0..1 to 1..1 | NEHTA | Document Feedback | 07 March 2012 |
| 23 | 3 | Event Summary Data Hierarchy | Updated Data Hierarchy | Updated 'Result Group Specimen Detail > Handling and Processing > Collection DateTime' cardinality from 0..1 to 1..1 | NEHTA | Document Feedback | 07 March 2012 |
| 24 | 5.1 | ClinicalDocument | Updated mapping and XML example | Updated mapping templateId/@extension mapping and XML example to "1.2". | NEHTA | Document Feedback | 07 March 2012 |
| 25 | 5.1 | ClinicalDocument | Updated Mapping and XML example fragment | Changed templateId/@root and XML example from.<br>1.2.36.1.2001.1001.101.100.16473<br>to<br>1.2.36.1.2001.1001.101.100.1002.136 | NEHTA | Document Feedback | 07 March 2012 |
| 26 | 5.1 | ClinicalDocument | Updated Mapping table | Changed templateId/@root 'Comments' column from.<br>The healthcare context-specific name of the published Structured Content Specification.<br>to<br>The healthcare context-specific name of the published Event Summary CDA Implementaion Guide. | NEHTA | Document Feedback | 07 March 2012 |
| 27 | 5.1 | ClinicalDocument | Updated Cardinality and comment | Changed ClinicalDocument/templateId cardinality from 1..1 to 1..* in the mapping table.<br>Added the following comment to the mapping table 'Comments' column.<br>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.<br>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 |
| 28 | 5.1.1 | LegalAuthenticator | Updated Mapping reference | Changed all occurances of 'LegalAuthenticator' in the mapping table to 'legalAuthenticator'. | NEHTA | Document Feedback | 07 March 2012 |
| 29 | 6.1.1 | DOCUMENT AUTHOR | Updated Mapping table | Updated the '</assignedPerson>' close tag order in the XML example.. | NEHTA | Document Feedback | 07 March 2012 |
| 30 | 6.1.1 | DOCUMENT AUTHOR | Updated cardinality | Updated 'Document Author > Participant > Person or Organisation or Device > Person > Person Name' cardinality from '1..1' to '1..*'. | NEHTA | Document Feedback | 07 March 2012 |
| 31 | 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 |
| 32 | 6.1.2 | SUBJECT OF CARE | Updated cardinality | Updated 'Subject of Care > Participant > Person or Organisation or Device > Person > Person Name' cardinality from '1..1' to '1..*'. | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 33 | 6.1.2 | SUBJECT OF CARE | Updated R-MIM representation | Added 0..1 as cardinality for assignedGeographicArea | NEHTA | Document Feedback | 07 March 2012 |
| 34 | 6.1.2 | SUBJECT OF CARE | Updated mapping table | Added 'CDA Header Data Elements' and 'Clinical Document' context header above the following mappings<br>Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Country of Birth<br>Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > State/Territory of Birth<br>Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Indigenous Status | NEHTA | Document Feedback | 07 March 2012 |
| 35 | 7.1.2.1 | ADVERSE REACTION | Updated context | Replaced all occurrences of 'entry/act/code/entryRelationship[rct_evnt]/observation/' to 'entry/act/entryRelationship[rct_evnt]/observation/code'. | NEHTA | Document Feedback | 07 March 2012 |
| 36 | 7.1.4.1 | PROBLEM/DIAGNOSIS | Updated mapping | Updated context from:<br>ClinicalDocument/component/structuredBody/component[dia_inv]/section<br>to:<br>ClinicalDocument/component/structuredBody/component[dia_int]/section | NEHTA | Document Feedback | 07 March 2012 |
| 37 | 7.1.4.2 | PROCEDURE | Updated mapping | Updated context from:<br>ClinicalDocument/component/structuredBody/component[dia_inv]/section<br>to:<br>ClinicalDocument/component/structuredBody/component[dia_int]/section | NEHTA | Document Feedback | 07 March 2012 |
| 38 | 7.1.4.3 | MEDICAL HISTORY ITEM | Updated XML example fragment | Removed the id element from the XML mapping example. | NEHTA | Document Feedback | 07 March 2012 |
| 39 | 7.1.4.3 | MEDICAL HISTORY ITEM | Updated XML example fragment | Changed typeCode attribute value from 'REFR' to 'Comp' in the XML example. | NEHTA | Document Feedback | 07 March 2012 |
| 40 | 7.1.4.3 | MEDICAL HISTORY ITEM | Updated mapping | Updated context from:<br>ClinicalDocument/component/structuredBody/component[dia_inv]/section<br>to:<br>ClinicalDocument/component/structuredBody/component[dia_int]/section | NEHTA | Document Feedback | 07 March 2012 |
| 41 | 7.1.6 | DIAGNOSTIC INVESTIGATIONS | Updated R-MIM representation | Removed text element from the 'Section' class in the R-MIM diagram. | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
|---|---|---|---|---|---|---|---|
| | Section | Section Name | | | | | |
| 42 | 7.1.6.1 | PATHOLOGY TEST RESULT | Updated XML example | Updated codeSystem value in 'Overall Pathology Test Result Status' XML example from.<br>codeSystem="1.2.36.2001.1001.104.16501"<br>to<br>codeSystem="1.2.36.1.2001.1001.101.104.16501" | NEHTA | Document Feedback | 07 March 2012 |
| 43 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Updated mapping | Updated mapping from:<br>entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/text:ST<br>to:<br>entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/value:ST | NEHTA | Document Feedback | 07 March 2012 |
| 44 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Updated XML example | Updated XML example for 'Test Specimen Detail > Handling and Processing > Collection Setting' from:<br>`<text>Pathology Clinic</text>`<br>to:<br>`<value xsi:type="ST" value="Pathology Clinic" />` | NEHTA | Document Feedback | 07 March 2012 |
| 45 | 7.1.6.1.1 | 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 |
| 46 | 7.1.6.1.1 | TEST SPECIMEN DETAIL | Updated XML example fragment | Updated the XML example for 'Test Specimen Detail > Identifiers > Container Identifier' value from 'id' to 'ext:id' and added @extension="CNH45218964". | NEHTA | Document Feedback | 07 March 2012 |
| 47 | 7.1.6.1.2 | PATHOLOGY TEST RESULT GROUP | Updated XML example | Updated SCS Data Component Name from:<br>Individual Pathology Test Result Value Reference Range Details<br>to:<br>Individual Pathology Test Result Value Reference Range | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
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| | Section | Section Name | | | | | |
| 48 | 7.1.6.1.2 | 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.<br>`<interpretationCode code="N" />`<br>to<br>`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />`<br>and<br>`<interpretationCode code="HH" />`<br>to<br>`<interpretationCode code="HH" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="High alert" />` | NEHTA | Document Feedback | 07 March 2012 |
| 49 | 7.1.6.1.2.1 | Result Group Specimen Detail | Updated mapping | Updated mapping from:<br>component/observation/entryRelationship[coll_set]/observation/text:ST<br>to:<br>component/observation/entryRelationship[coll_set]/observation/value:ST | NEHTA | Document Feedback | 07 March 2012 |
| 50 | 7.1.6.1.2.1 | RESULT GROUP SPECIMEN DETAIL | Updated XML example | Updated XML example for 'Result Group Specimen Detail > Handling and Processing > Collection Setting' from:<br>`<text>Pathology Clinic</text>`<br>to:<br>`<value xsi:type="ST" value="Pathology Clinic" />` | NEHTA | Document Feedback | 07 March 2012 |
| 51 | 7.1.6.1.2.1 | Result Group Specimen Detail | Updated XML example fragment | Updated the XML fragment for 'Result Group Specimen Detail > Identifiers > Container Identifier' from 'id' to 'ext:id'. | NEHTA | Document Feedback | 07 March 2012 |
| 52 | 7.1.6.1; Example 7.20. | IMAGING EXAMINATION RESULT GROUP. | Updated XML example fragment | Added qualifier element to the XML example. | NEHTA | Document Feedback | 07 March 2012 |
| 53 | 7.1.6.2.1 | IMAGING EXAMINATION RESULT GROUP | Updated SCS Data Component Name | Updated SCS Data Component Name from:<br>Imaging Examination Result Group > Anatomical Site<br>to:<br>Imaging Examination Result Group > Anatomical Location | NEHTA | Document Feedback | 07 March 2012 |

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| 54 | 7.1.6.2.1 | 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.<br><br>`<interpretationCode code="N" />`<br><br>to<br><br>`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />` | NEHTA | Document Feedback | 07 March 2012 |
| 55 | 7.1.6.2.2 | EXAMINATION REQUEST DETAILS | Updated mapping | Updated 5 occurances of Examination Request Details > Image Details > DICOM Series Identifier mapping from<br><br>entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/observation/<br><br>to<br><br>entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/ | NEHTA | Document Feedback | 07 March 2012 |
| 56 | 7.1.6.2.2 | EXAMINATION REQUEST DETAILS | Updated XML example | Removed xsi:type="ED" attribute from observationMedia/value data elements. | NEHTA | Document Feedback | 07 March 2012 |
| 57 | 7.1.6.2; Example 7.19. | IMAGING EXAMINATION RESULT | Updated XML example fragment | Added qualifier element to the XML example. | NEHTA | Document Feedback | 07 March 2012 |
| 58 | 7.1.6.3.1.1 | Service Provider - Person | Updated SCS Data Component Name | Updated context from:<br><br>ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/entry[service]/act<br><br>to:<br><br>ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section/entry[service]/act | NEHTA | Document Feedback | 07 March 2012 |
| 59 | 7.1.6.3.1.1 | 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 |
| 60 | 7.1.6.3.1.2 | Service Provider - Organisation | Updated mapping table | Changed mapping table Context label from<br><br>CDA Header Data Elements<br><br>to<br><br>CDA Body Level 3 Data Elements | NEHTA | Document Feedback | 07 March 2012 |

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| 61 | 8.4 | Entity Identifier | Updated cardinality | Updated cardinality column text from<br>Cardinality comes from linking parent.<br>to<br>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 |
| 62 | 8.7 | Electronic Communication Detail | Updated Vocabulary reference | Updated Vocab column text for 'Electronic Communication Medium' and 'Electronic Communication Usage Code' from<br>AS 5017-2006: Health Care Client Electronic Communication Usage Code> HL7:TelecommunicationAddressUse.<br>to<br>HL7 v3: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse. | NEHTA | Document Feedback | 07 March 2012 |
| 63 | 8.7 | Electronic Communication Detail | Updated Mapping comments | Added the following text to 'Electronic Communication Medium' and 'Electronic Communication Usage Code' comments column<br>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 |
| 64 | 8.8 | Employment | Added Mapping | Added ext:asEmployment/@classCode mapping to the mapping table. | NEHTA | Document Feedback | 07 March 2012 |
| 65 | 8.8 | Employment | Updated Mapping | Changed employerOrganization to ext:employerOrganization in the mapping table. | NEHTA | Document Feedback | 07 March 2012 |
| 66 | 8.8 | Employment | Added mapping | Added mapping for 'Employment' NEHTA logical data component with cardinality as mentioned below<br>Cardinality comes from linking parent. | NEHTA | Document Feedback | 07 March 2012 |
| 67 | 8.8 | Employment | Added Mapping | Added the following statement to the 'Employment Detail > Employer Organisation' row.<br>There is a known issue in NEHTA Participation Data Specification for this logical Data Component's cardinality.<br>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 |
| 68 | 8.8 | Employment | Added Mapping | Added the following statement to the 'Employment Detail > Occupation' row.<br>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 |
| 69 | 8.8 | Employment | Updated Mapping | Added the 'Note' text above the Employment Mapping table. | NEHTA | Document Feedback | 07 March 2012 |
| 70 | 8.8 | Employment | Updated cardinality | Changed cardinality for 'Employment Detail > Employer Organisation' from '1..*' to'0..*' | NEHTA | Document Feedback | 07 March 2012 |

| ID | Document Ref. | | Change Type | Change Detail | Changed Instigated By | Rational For Change | Date Changed |
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| | Section | Section Name | | | | | |
| 71 | Appendix A | CDA Narratives | Updated Conformance points | Changed the following conformance point from.<br><br>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.<br><br>to<br><br>The narrative contents SHALL conform to the requirements specified in the CDA Rendering Specification. | NEHTA | Document Feedback | 07 March 2012 |
| 72 | Appendix A | CDA Narratives | Updated Conformance statements | Removed the following conformance points.<br><br>• 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<br><br>• Note<br><br>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 |
| 73 | Document Version | Throughout the document. | Incremented version number | Incremented version number from 1.1 to 1.2 | NEHTA | Bug fix | 07 March 2012 |
| 74 | Event Summary SCS Reference | Throughout the document. | Updated bibliography reference | The document reference for Event Summary SCS bibliography reference has been updated throughout the document. | NEHTA | Document Feedback | 07 March 2012 |
| 75 | N/A | Reference List | Updated bibliography reference | Changed Event Summary SCS reference from<br><br>National E-Health Transition Authority, 31 October 2011, Event Summary Structured Content Specification, Version 1.0<br><br>to<br><br>National E-Health Transition Authority, To be published, Event Summary Structured Content Specification, Version 1.1 | NEHTA | Document Feedback | 07 March 2012 |

# Reference List


[ABS2006] Australian Bureau Of Statistics, September 2006, *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899*, accessed 15 March 2010.
http://www.abs.gov.au/ausstats/abs@.nsf/mf/1220.0

[ABS2008] Australian Bureau Of Statistics, May 2008, *Standard Australian Classification of Countries (SACC) Cat. No. 1269*, accessed 15 March 2010.
http://www.abs.gov.au/ausstats/abs@.nsf/mf/1269.0

[AIHW2005] Australian Institute of Health and Welfare, March 2005, *AIHW Mode of Separation*, accessed 15 March 2010.
http://meteor.aihw.gov.au/content/index.phtml/itemId/270094

[HL7CDAR2] Health Level Seven, Inc., January 2010, *HL7 Clinical Document Architecture*, Release 2, accessed 18 November 2010.
http://www.hl7.org/implement/standards/cda.cfm

[HL7RIM] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard – Reference Information Model*, accessed 15 March 2010.
http://www.hl7.org/v3ballot/html/infrastructure/rim/rim.htm

[HL7V3] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard*, accessed 15 March 2010.
http://www.hl7.org/v3ballot/html/welcome/environment/index.htm

[HL7V3DT] Health Level Seven, Inc., January 2010, *HL7 V3 RIM, Data types and Vocabulary*, accessed 18 November 2009.
http://www.hl7.org/memonly/downloads/v3edition.cfm

[IHTS2009] International Health Terminology Standards Development Organisation, January 2010, *SNOMED-CT*, accessed 15 March 2010.
http://www.ihtsdo.org/snomed-ct

[INFO2009] Canada Health Infoway, *CDA Validation Tools: infoway_release_2_2X_18.zip*, accessed 18 November 2009.
http://www.hl7.org/memonly/downloads/v3edition.cfm

[ISO21090-2008] International Organization for Standardization, *ISO 21090:2008 – Health Informatics – Harmonized data types for information interchange*, Edition 1 (Monolingual), accessed 09 November 2009.
http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=35646

[ISO8601-2004] International Organization for Standardization, 18 March 2008, *ISO 8601:2004 - Data elements and interchange formats - Information interchange - Representation of dates and times*, Edition 3 (Monolingual), accessed 09 November 2009.
http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=40874

[NEHT2005a] National E-Health Transition Authority, 25 May 2005, *NEHTA Acronyms, Abbreviations & Glossary of Terms*, Version 1.2, accessed 09 November 2009.
http://www.nehta.gov.au/component/docman/doc_download/8-clinical-information-glossary-v12

[NEHT2007b] National E-Health Transition Authority, 24 September 2007, *Interoperability Framework*, Version 2.0.
http://www.nehta.gov.au/connecting-australia/ehealth-interoperability

[NEHT2010a] National E-Health Transition Authority, February 2010, *Australian Medicines Terminology*, accessed 15 March 2010.
http://www.nehta.gov.au/connecting-australia/clinical-terminologies/australian-medicines-terminology

[NEHT2010c] National E-Health Transition Authority, September 2010, *Data Types in NEHTA Specifications: A Profile of the ISO 21090 Specification*, Version 1.0, accessed 13 September 2010.
http://www.nehta.gov.au/component/docman/doc_download/1121-data-types-in-nehta-specifications-v10

[NEHT2011bq] National E-Health Transition Authority, To be published, *Event Summary Structured Content Specification*, Version 1.1.

[NEHT2011v] National E-Health Transition Authority, 20 July 2011, *Participation Data Specification*, Version 3.2, accessed 22 July 2011.
http://www.nehta.gov.au/component/docman/doc_download/1341-participation-data-specification-v32

[NEHT2011w] National E-Health Transition Authority, 31 October 2011, *Information Requirements - Event Summary*, Version 1.1, accessed 22 November 2011.
http://www.nehta.gov.au/vendor-documents/CTI/ES-000-21-01-ES%20Information%20Requirements-v1.1-20111024.pdf

[RFC2119] Network Working Group, 1997, *RFC2119 - Key words for use in RFCs to Indicate Requirement Levels*, accessed 13 April 2010.
http://www.faqs.org/rfcs/rfc2119.html

[RFC3066] Network Working Group, 2001, *RFC3066 - Tags for the Identification of Languages*, accessed 13 April 2010.
http://www.ietf.org/rfc/rfc3066.txt

[RING2009] Ringholm, 2009, *CDA Examples*, accessed 15 March 2010.
http://www.ringholm.de/download/CDA_R2_examples.zip

[SA2006a] Standards Australia, 2006, *AS 4846 (2006) – Healthcare Provider Identification*, accessed 12 November 2009.
http://infostore.saiglobal.com/store/Details.aspx?ProductID=318554

[SA2006b] Standards Australia, 2006, *AS 5017 (2006) – Healthcare Client Identification*, accessed 12 November 2009.
http://infostore.saiglobal.com/store/Details.aspx?ProductID=320426

[SA2007a] Standards Australia, 2007, *AS 4700.6 (2007) – Implementation of Health Level 7 (HL7) Version 2.5 – Part 6: Referral, discharge and health record messaging*.
http://www.saiglobal.com/online/