



Event Summary
CDA[®] Implementation Guide
Version 1.3

10 April 2015

Approved for external use

Document ID: NEHTA-1846:2015

National E-Health Transition Authority Ltd

Level 25
56 Pitt Street
Sydney NSW 2000
Australia
www.nehta.gov.au

Disclaimer

The National E-Health Transition Authority Ltd (NEHTA) makes the information and other material ('Information') in this document available in good faith but without any representation or warranty as to its accuracy or completeness. NEHTA cannot accept any responsibility for the consequences of any use of the Information. As the Information is of a general nature only, it is up to any person using or relying on the Information to ensure that it is accurate, complete and suitable for the circumstances of its use.

Document Control

This document is maintained in electronic form and is uncontrolled in printed form. It is the responsibility of the user to verify that this copy is the latest revision.

Copyright © 2015 National E-Health Transition Authority Ltd

This document contains information which is protected by copyright. All Rights Reserved. No part of this work may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems—without the permission of NEHTA. All copies of this document must include the copyright and other information contained on this page.

Document Information

Key information

Owner	Head of Delivery
Contact for enquiries	NEHTA Help Centre
	t: 1300 901 001
	e: help@nehta.gov.au

Product version history

Product version	Date	Release comments
1.2	12 Mar 2012	Initial public release.
1.3	10 Apr 2015	This version implements changes authorised in September 2014 (by CCB-0345).

Related documents

Name	Version/Release Date
Event Summary Structured Content Specification	Version 1.2, Issued 10 April 2015
Participation Data Specification	Version 3.2, Issued 20 July 2011
Event Summary Information Requirements	Version 1.2, Issued 10 April 2015
CDA Rendering Specification	Version 1.0, Issued 07 March 2012

This page is intentionally left blank.

Acknowledgements

Council of Australian Governments

The National E-Health Transition Authority is jointly funded by the Australian Government and all State and Territory Governments.

Regenstrief Institute (LOINC)

This material contains content from LOINC® (<http://loinc.org>). The LOINC table, LOINC codes, and LOINC panels and forms file are copyright © 1995-2014, Regenstrief Institute, Inc. and the Logical Observation Identifiers Names and Codes (LOINC) Committee and available at no cost under the license at <https://loinc.org/terms-of-use/>.

IHTSDO (SNOMED CT)

This material includes SNOMED Clinical Terms® (SNOMED CT®) which is used by permission of the International Health Terminology Standards Development Organisation (IHTSDO). All rights reserved. SNOMED CT®, was originally created by The College of American Pathologists.

“SNOMED” and “SNOMED CT” are registered trademarks of the IHTSDO, (<http://www.ihtsdo.org/>).

HL7 International

This document includes excerpts of HL7® International standards and other HL7 International material. HL7 International is the publisher and holder of copyright in the excerpts. The publication, reproduction and use of such excerpts is governed by the HL7 IP Policy (see <http://www.hl7.org/legal/ippolicy.cfm>) and the HL7 International License Agreement.

This page is intentionally left blank.

Table of Contents

1. Introduction	1
1.1. Document Purpose and Scope	1
1.2. Event Summary Definition	1
1.3. HL7® Clinical Document Architecture	1
1.4. Intended Audience	2
1.5. Document Map	2
1.6. Acronyms	3
1.7. Keywords	3
1.8. Conformance	4
1.9. Known Issues	5
2. Guide for Use	9
2.1. Clinical Document Architecture Release 2	9
2.2. Mapping Interpretation	11
2.3. CDA® Extensions	22
2.4. W3C XML Schema	23
2.5. Schematron	24
2.6. Implementation Strategies	25
3. Event Summary Data Hierarchy	27
4. Administrative Observations	37
5. CDA® Header	41
5.1. ClinicalDocument	41
5.1.1. LegalAuthenticator	46
5.1.2. Custodian	52
6. Context Data Specification - CDA® Mapping	57
6.1. EVENT SUMMARY	57
6.1.1. DOCUMENT AUTHOR	62
6.1.2. SUBJECT OF CARE	71
6.1.3. ENCOUNTER	91
7. Content Data Specification - CDA® Mapping	95
7.1. Event Summary	95
7.1.1. Event Details (EVENT OVERVIEW)	99
7.1.1.1. Event Details (CLINICAL SYNOPSIS)	103
7.1.2. Newly Identified Adverse Reactions (ADVERSE REACTIONS)	107
7.1.2.1. ADVERSE REACTION	111
7.1.3. Medications (MEDICATION ORDERS)	119
7.1.3.1. Known Medication (MEDICATION INSTRUCTION)	124
7.1.4. Diagnoses/Interventions (MEDICAL HISTORY)	134
7.1.4.1. PROBLEM/DIAGNOSIS	140
7.1.4.2. PROCEDURE	146
7.1.4.3. UNCATEGORISED MEDICAL HISTORY ITEM	152
7.1.5. IMMUNISATIONS	158
7.1.5.1. Administered Immunisation (MEDICATION ACTION)	163
7.1.6. DIAGNOSTIC INVESTIGATIONS	168
7.1.6.1. PATHOLOGY TEST RESULT	174
7.1.6.1.1. Test Specimen Detail (SPECIMEN)	189
7.1.6.1.2. Result Group (PATHOLOGY TEST RESULT GROUP)	203
7.1.6.1.2.1. Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	214
7.1.6.1.2.2. Result Group Specimen Detail (SPECIMEN)	219
7.1.6.2. IMAGING EXAMINATION RESULT	233
7.1.6.2.1. Result Group (IMAGING EXAMINATION RESULT GROUP)	246
7.1.6.2.1.1. Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	257
7.1.6.2.2. EXAMINATION REQUEST DETAILS	262
7.1.6.3. REQUESTED SERVICE	274
7.1.6.3.1. SERVICE PROVIDER	282
7.1.6.3.1.1. Service Provider as a Healthcare Person	283
7.1.6.3.1.2. Service Provider as an Organisation	294
8. Common Patterns	299

8.1. code	299
8.2. id	301
8.3. time	303
8.4. Entity Identifier	305
8.5. Person Name	307
8.6. Address	309
8.7. Electronic Communication Detail	314
8.8. Employment	316
9. NEHTA CDA[®] Extensions	321
9.1. ClinicalDocument.completionCode	321
9.2. EntityIdentifier	322
9.3. Entitlement	323
9.4. Multiple Birth	324
9.5. Administrative Gender Code	325
9.6. Birth Time	326
9.7. Deceased Time	327
9.8. Employment	328
9.9. Qualifications	329
9.10. Container	330
9.11. Participant Entity Organization	331
10. Vocabularies and Code Sets	333
10.1. HL7 [®] : TelecommunicationAddressUse	333
10.2. AS 5017-2006 Health Care Client Identifier Sex	335
10.3. AS 5017-2006: Health Care Client Name Usage	336
10.4. AS 4846-2006: Health Care Provider Organisation Name Usage	337
10.5. AS 5017-2006: Health Care Client Source of Death Notification	338
10.6. AS 5017-2006: Health Care Client Identifier Address Purpose	339
10.7. AS 5017-2006: Health Care Client Identifier Geographic Area	340
10.8. AS 5017-2006: Health Care Client Electronic Communication Medium	341
10.9. AS 5017-2006: Health Care Client Electronic Communication Usage Code	343
10.10. AS 5017-2006 Australian State/Territory Identifier - Postal	344
10.11. AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator	345
10.12. NCTIS: Admin Codes - Document Status	347
10.13. NCTIS: Admin Codes - Entitlement Type	348
10.14. HL7 [®] v3 CDA [®] : Act.moodCode	349
10.15. HL7 [®] v3 CDA [®] : RelatedDocument.typeCode	350
10.16. METeOR 291036: Indigenous Status	351
10.17. NCTIS: Admin Codes - Result Status	352
10.18. CodeSystem OIDs	353
10.19. HL7 [®] V3: ObservationInterpretationNormality	354
10.20. HL7 [®] : Diagnostic Service Section ID	355
A. CDA[®] Narratives	357
B. Log of Changes	359
Reference List	373

List of Examples

2.1. Mapping Interpretation	19
4.1. Administrative Observations XML Fragment	40
5.1. ClinicalDocument Body XML Fragment	45
5.2. LegalAuthenticator XML Fragment	50
5.3. Custodian Body XML Fragment	55
6.1. Event Summary Context XML Fragment	60
6.2. DOCUMENT AUTHOR XML Fragment	68
6.3. SUBJECT OF CARE XML Fragment	86
6.4. ENCOUNTER XML Fragment	94
7.1. Event Summary Body XML Fragment	98
7.2. Event Details (EVENT OVERVIEW) XML Fragment	102
7.3. Event Details (CLINICAL SYNOPSIS) XML Fragment	106
7.4. Newly Identified Adverse Reactions (ADVERSE REACTIONS) XML Fragment	110
7.5. ADVERSE REACTION XML Fragment	117
7.6. Medications (MEDICATION ORDERS) XML Fragment	122
7.7. Known Medication (MEDICATION INSTRUCTION) XML Fragment	132
7.8. Diagnoses/Interventions (MEDICAL HISTORY) XML Fragment	138
7.9. PROBLEM/DIAGNOSIS XML Fragment	144
7.10. PROCEDURE XML Fragment	150
7.11. UNCATEGORISED MEDICAL HISTORY ITEM XML Fragment	156
7.12. IMMUNISATIONS XML Fragment	161
7.13. Administered Immunisation (MEDICATION ACTION) XML Fragment	166
7.14. DIAGNOSTIC INVESTIGATIONS XML Fragment	172
7.15. PATHOLOGY TEST RESULT XML Fragment	185
7.16. Test Specimen Detail (SPECIMEN) XML Fragment	199
7.17. Result Group (PATHOLOGY TEST RESULT GROUP) XML Fragment	211
7.18. Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) XML Fragment	217
7.19. Result Group Specimen Detail (SPECIMEN) XML Fragment	229
7.20. IMAGING EXAMINATION RESULT XML Fragment	242
7.21. Result Group (IMAGING EXAMINATION RESULT GROUP) XML Fragment	254
7.22. Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) XML Fragment	260
7.23. EXAMINATION REQUEST DETAILS XML Fragment	271
7.24. REQUESTED SERVICE XML Fragment	279
7.25. SERVICE PROVIDER - Person XML Fragment	290
7.26. SERVICE PROVIDER - Organisation XML Fragment	297
8.1. code	300
8.2. id	302
8.3. Simple timestamp	303
8.4. Low time	303
8.5. Interval timestamp 1	303
8.6. Interval timestamp 2	304
8.7. Width time	304
8.8. Entity Identifier	306
8.9. Person Name	308
8.10. Address	313
8.11. Electronic Communication Detail	315
8.12. Employment	318
10.1. All values	333
10.2. One value	333

This page is intentionally left blank.

1 Introduction

1.1 Document Purpose and Scope

This document provides a guide to implementing the logical model detailed by NEHTA's Event Summary (ES) Structured Content Specification (SCS) as an HL7® Clinical Document Architecture Release 2 (CDA®) XML document. This implementation guide is based on Version 1.2 of the ES SCS [NEHT2015b]. The primary aim of the implementation guide is to take implementers step by step through mapping each data component of the ES SCS to a corresponding CDA® attribute or element.

This implementation 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 ES. The resulting CDA® document can be used for the electronic exchange of ES information between healthcare providers.

In addition, this implementation 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 National Clinical Terminology and Information Service (NCTIS) values your questions, comments and suggestions about this document. Please direct your questions or feedback to <help@nehta.gov.au>.

1.2 Event Summary Definition

An Event Summary is defined in the ES SCS [NEHT2015b] as:

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

1.3 HL7® Clinical Document Architecture

The CDA® is a document markup standard that specifies the structure and semantics of clinical documents for the purpose of supporting interoperable exchange and use at human and system levels.

CDA® has been chosen as the format for electronic clinical documents because it is consistent with NEHTA's commitment to a service and document-oriented approach to electronic information exchange, which will contribute 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®.¹

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

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

1.4 Intended Audience

This document is aimed at software development teams, architects, designers, clinicians and informatics researchers who are responsible for the delivery of clinical applications, infrastructure components and messaging interfaces and also for those who wish to evaluate the clinical suitability of NEHTA-endorsed specifications.

This document and related artefacts are 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 IT-014 documents. 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: A Profile of the ISO 21090 Specification \[NEHT2010c\]](#) is 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 \[NEHT2015b\]](#) is a 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
ES	Event Summary
HL7®	Health Level Seven
OID	Object Identifier
RIM	Reference Information Model
SCS	Structured Content Specification
UUID	Universally Unique Identifier
XHTML	Extensible Hypertext Markup Language
XML	Extensible Markup Language
XSD	XML Schema Definition
XSL	Extensible Stylesheet Language

For a complete listing of all relevant acronyms, abbreviations and a glossary of terms please refer to [NEHTA Acronyms, Abbreviations & Glossary of Terms \[NEHT2005a\]](#).

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 [RFC2119 - Key words for use in RFCs to Indicate Requirement Levels \[RFC2119\]](#).

Keywords used in this document

Keyword	Interpretation
SHALL	This word, or the term REQUIRED , means that the statement is an absolute requirement of the specification.
SHOULD	This word, or the term 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 term 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 means that the statement 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 the ES 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 **SHALL** 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** be valid against the NEHTA CDA[®] Schema that accompanies this implementation guide after any additional extensions not in the NEHTA extension namespace have been removed, along with any other CDA[®] content not described by this implementation guide.
- It **SHALL** use the mappings as they are stated in this document.
- It **SHALL** use all fixed values specified in the mappings (e.g. `@attribute="FIXED_VALUE"`).
- If the vocabulary has been explicitly stated as 'NS' it **SHALL** 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 normative use of the word 'shall' identified by the term presented in uppercase and bold typeface).
- The narrative **SHALL** conform to the requirements described in this implementation guide.
- The document **SHALL** conform to the requirements specified in the CDA Rendering Specification [\[NEHT2012s\]](#).
- 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 implementation 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* ES 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 ES 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 [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 Healthcare Identifiers Service identifiers.
- Making required data elements and 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 is working on solutions to these issues, and we encourage comments to further assist the development of these solutions.

Reference	Description
Throughout document: XML Examples	<p>While every effort has been taken to ensure that the examples are consistent with the normative mappings in this message specification, care needs to be taken when copying XML examples for implementation and validation.</p> <p>Where there are conflicts with the written message specification or schema and the xml examples, the specification or schema takes precedence.</p>
Throughout document: R-MIMs	<p>While every effort has been taken to ensure that the R-MIM diagrams are consistent with the normative mappings in this message specification, there may be a few discrepancies between R-MIM diagrams and CDA® mapping tables. The CDA® mapping takes precedence if there are discrepancies.</p>
Throughout document: Participation types	<p>The participation types in the OID register are not exhaustive, hence the absence of a participation type is not an error.</p>
Throughout document	<p>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.</p>
Document Recipients	<p>Document Recipients were not specified in the Structured Content Specification but most likely need to be added in the CDA® Header section.</p>
6.1.1 DOCUMENT AUTHOR :: Participation Period	<p>The constraint requiring the participation period of the <i>DOCUMENT AUTHOR</i> to hold the same value as <i>Date Time Attested</i> is not universally applicable. The document author and legal authenticator are typically expected to be different participants, and would therefore have different participation periods.</p> <p>The SCS notes that many other specifications do not include Date Time Attested and that the intent of this logical data element requires clarification.</p> <p>It is expected that this constraint will be removed in later versions of this specification.</p>
7.1.1.2 ADVERSE REACTION :: Reaction Type and REACTION EVENT	<p>The current mapping of <i>REACTION EVENT</i> is not aligned with the logical model, which, as a consequence, impacts the mapping choices for <i>Reaction Type</i>. <i>REACTION EVENT</i> should be mapped to an Act or an Organizer with <i>Reaction Type</i> as the code.</p>

Reference	Description
7.1.2.2 Known Medication (MEDICATION INSTRUCTION) :: Change Type and negationInd	<p>Advice was received that the constraint to set the negationInd attribute of the SubstanceAdministration class to 'true' where a medication has been ceased (the Change Type value is 'ceased' and Change Status is 'The change has been made') is incorrect. As a result of this advice, the mappings for the negationInd attribute have been removed and its use prohibited.</p> <p>Subsequent review of the HL7[®] documentation would indicate that, in fact, the negationInd attribute may have been used correctly and its mappings may be reinstated in a future release of this specification.</p>
7.1.2.2 Known Medication (MEDICATION INSTRUCTION) :: Medication Instruction Comment	The value for displayName of @code="103.16044" in this version of the specification is fixed as "Additional Comments". The correct value is "Medication Instruction Comment". Correcting this value is beyond the scope of release of this document.
7.1.3.1 PROBLEM/DIAGNOSIS :: Date of Resolution/Remission	<p>The mappings for <i>Date of Resolution/Remission</i> do not link back the <i>Date of Onset</i>, however the <i>Date of Resolution/Remission</i> is not necessarily the end of the problem (or diagnosis) described.</p> <p>The mappings depend on how an instance of the <i>Problem/Diagnosis</i> DCM is defined. If it is defined as an episode of a problem then using effectiveTime.high for <i>Date of Resolution/Remission</i> (thereby linking it to <i>Date of Onset</i>) would be fine because then a recurrence of the same problem would be a separate instance of <i>Problem/Diagnosis</i>. If, however, it is defined as covering the full duration of a problem in a person's life, then several remissions and relapses may occur and effectiveTime.high cannot be used as the <i>Date of Resolution/Remission</i>.</p> <p>It is intended that the <i>Problem/Diagnosis</i> DCM will be modified to represent a single episode of a problem or diagnosis and, when it is, the CDA[®] mappings for <i>Date of Resolution/Remission</i> will change.</p>
7.1.6.1 PATHOLOGY TEST RESULT	The <i>PATHOLOGY TEST RESULT</i> data group is mapped as a Section, however it would be more appropriate to map it as the Observation that has <i>Pathology Test Result Name</i> mapped to its code element.
7.1.6.1 PATHOLOGY TEST RESULT 7.1.6.1 PATHOLOGY TEST RESULT :: Pathology Test Result Name	The mapping of the <i>Pathology Test Result Name</i> logical data element (and by implication <i>PATHOLOGY TEST RESULT</i>) is to an Observation, however no logical data elements are mapped to the value element of that Observation. An Observation without a value is meaningless calling into question the mapping of <i>Pathology Test Result Name</i> (and by implication <i>PATHOLOGY TEST RESULT</i>) to an Observation.

Reference	Description
7.1.6.1 PATHOLOGY TEST RESULT :: Overall Pathology Test Result Status	The current mapping of the <i>Overall Pathology Test Result Status</i> logical data element to the value element of a subordinate Observation of the <i>Pathology Test Result</i> Observation is semantically weak. This mapping was forced by the choice of logical value domain; consideration should be given to instead using the <i>statusCode</i> element of the <i>Pathology Test Result</i> Observation.
7.1.6.1 PATHOLOGY TEST RESULT :: Test Requested Name	The <i>Test Requested Name</i> logical element is mapped as the value element of a subordinate Observation to the <i>TEST REQUEST DETAILS</i> Act. However, it would be more appropriate to map it as the code element of the <i>TEST REQUEST DETAILS</i> Act.
7.1.6.1 PATHOLOGY TEST RESULT :: Observation DateTime	The <i>Observation DateTime</i> logical element is mapped as the <i>effectiveTime</i> element of a subordinate Observation to the <i>Pathology Test Result</i> Observation. However, it would be more appropriate to map it as the <i>effectiveTime</i> element of the <i>Pathology Test Result</i> Observation.
7.1.6.1.1 Test Specimen Detail (SPECIMEN) 7.1.6.1.2.2 Result Group Specimen Detail (SPECIMEN)	The mapping of the <i>SPECIMEN</i> logical data group is to an Observation, however no logical data elements are mapped to the value element of that Observation. An Observation without a value is meaningless calling into question the mapping of <i>SPECIMEN</i> to Observation.
7.1.6.1.1 Test Specimen Detail (SPECIMEN) :: Anatomical Location Image 7.1.6.1.1 Test Specimen Detail (SPECIMEN) :: Image	Both <i>Anatomical Location Image</i> and <i>Image</i> are mapped as subordinate ObservationMedia of the <i>SPECIMEN</i> Observation; there is no provided means to differentiate which ObservationMedia represents the logical data element <i>Anatomical Location Image</i> and which represents the logical data element <i>Image</i> .
7.1.6.1.2 Result Group (PATHOLOGY TEST RESULT GROUP) :: Individual Pathology Test Result Status	The current mapping of the <i>Individual Pathology Test Result Status</i> logical data element to the value element of a subordinate Observation of the <i>PATHOLOGY TEST RESULT GROUP</i> Observation is semantically weak. This mapping was forced by the choice of logical value domain; consideration should be given to instead using the <i>statusCode</i> element of the <i>PATHOLOGY TEST RESULT GROUP</i> Observation.
7.1.6.1.2.2 Result Group Specimen Detail (SPECIMEN) :: Anatomical Location Image 7.1.6.1.2.2 Result Group Specimen Detail (SPECIMEN) :: Image	Both <i>Anatomical Location Image</i> and <i>Image</i> are mapped as subordinate ObservationMedia of the <i>SPECIMEN</i> Observation; there is no provided means to differentiate which ObservationMedia represents the logical data element <i>Anatomical Location Image</i> and which represents the logical data element <i>Image</i> .
7.1.6.1.2.1 Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	The logical model reference range data components have changed as a result of ongoing development, however no changes to the mappings for reference range data components have been included in this specification. Representing these changes in CDA® would effect a normative change to current implementation which is beyond the scope of the release of this document.
7.1.6.2 IMAGING EXAMINATION RESULT	The <i>IMAGING EXAMINATION RESULT</i> data group is mapped as a Section, however it would be more appropriate to map it as the Observation that has <i>Imaging Examination Result Name</i> mapped to its code element.

Reference	Description
7.1.6.2 IMAGING EXAMINATION RESULT 7.1.6.2 IMAGING EXAMINATION RESULT :: Imaging Examination Result Name	The mapping of the <i>Imaging Examination Result Name</i> logical data element (and by implication <i>IMAGING EXAMINATION RESULT</i>) is to an Observation, however no logical data elements are mapped to the value element of that Observation. An Observation without a value is meaningless calling into question the mapping of <i>Imaging Examination Result Name</i> (and by implication <i>IMAGING EXAMINATION RESULT</i>) to an Observation.
7.1.6.2 IMAGING EXAMINATION RESULT :: Observation DateTime	The <i>Observation DateTime</i> logical element is mapped as the <i>effectiveTime</i> element of a subordinate Observation to the <i>Imaging Examination Result</i> Observation. However, it would be more appropriate to map it as the <i>effectiveTime</i> element of the <i>Imaging Examination Result</i> Observation.
7.1.6.2.1.1 Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	The logical model reference range data components have changed as a result of ongoing development, however no changes to the mappings for reference range data components have been included in this specification. Representing these changes in CDA [®] would effect a normative change to current implementation which is beyond the scope of the release of this document.
7.1.6.3 REQUESTED SERVICE 7.1.6.3 REQUESTED SERVICE :: Requested Service Description	The <i>REQUESTED SERVICE</i> data group is mapped as a Section, however it would be more appropriate to map it as an Act which would allow the <i>Requested Service Description</i> data element to be mapped directly to the code element of that <i>REQUESTED SERVICE</i> Act.
8.5 Person Name :: Preferred Name Indicator code	The "PRF" code for "preferred name" has been approved by the HL7 [®] Patient Administration Workgroup to be added to Table 0200 Name Type. The updated table will be published in HL7 [®] v2.8.2 after ballot in November 2014.
10 Vocabularies and Code Sets: AS 4846-2006 and AS 5017-2006 superseded	AS 4846-2014 <i>Person and provider identification in healthcare</i> has been published and supersedes both AS 4846-2006 <i>Healthcare provider identification</i> and AS 5017-2006 <i>Healthcare client identification</i> .
AS 5017-2006: Health Care Client Identifier Geographic Area	The Health Care Client Identifier Geographic Area vocabulary table lists <i>displayName</i> , <i>code</i> , <i>codeSystemName</i> and <i>codeSystem</i> , while only the <i>displayName</i> is used in the mapping. Verification of using only the <i>displayName</i> needs to be performed.

2 Guide for Use

This document describes how to properly implement the ES SCS [NEHT2015b] as a conformant HL7® CDA® XML document. The ES specification is contained in two publications:

- 1) A logical specification, 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) An 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 and the HL7® CDA® documentation, and understand 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 V3 RIM, Data types and Vocabulary \[HL7V3DT\]](#).

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. The body 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 narrative section.

It is a requirement that all of the clinical information **SHALL** 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®.

It is a conformance requirement that the rendered narrative **SHALL** be able to stand alone as a source of authenticated information for consuming parties. Content from the CDA® body **SHALL NOT** be omitted from the narrative.

Further information and guidance on the CDA® narrative is available in [Appendix A, CDA® Narratives](#).

The following references are recommended to gain a better understanding of CDA®:

- [HL7 Clinical Document Architecture \[HL7CDAR2\]](#)
- [HL7 V3 RIM, Data types and Vocabulary \[HL7V3DT\]](#)
- [CDA Examples \[RING2009\]](#)
- [CDA Validation Tools: infoway_release_2_2X_18.zip \[INFO2009\]](#)

2.2 Mapping Interpretation

The core of this implementation 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 the SCS and the CDA® implementation guide 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 several 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 implementation 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

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

Parent

Data Type	Name	Occurrences (child within parent)
Icon illustrating the Metadata or Data type.	ITEM NAME (This is a link to another section containing the mapping for this item. Item names in upper case indicate that the item is a section or data group. Item names in start case indicate that the item is a data element).	The number of instances of the child item within the parent 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.

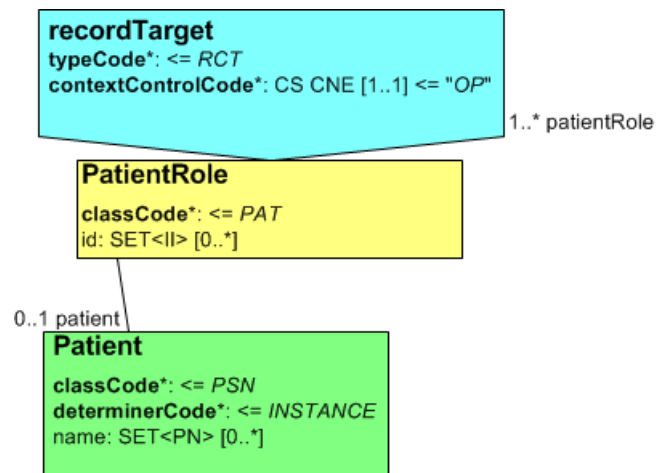


Figure 2.1. Example - Header Part

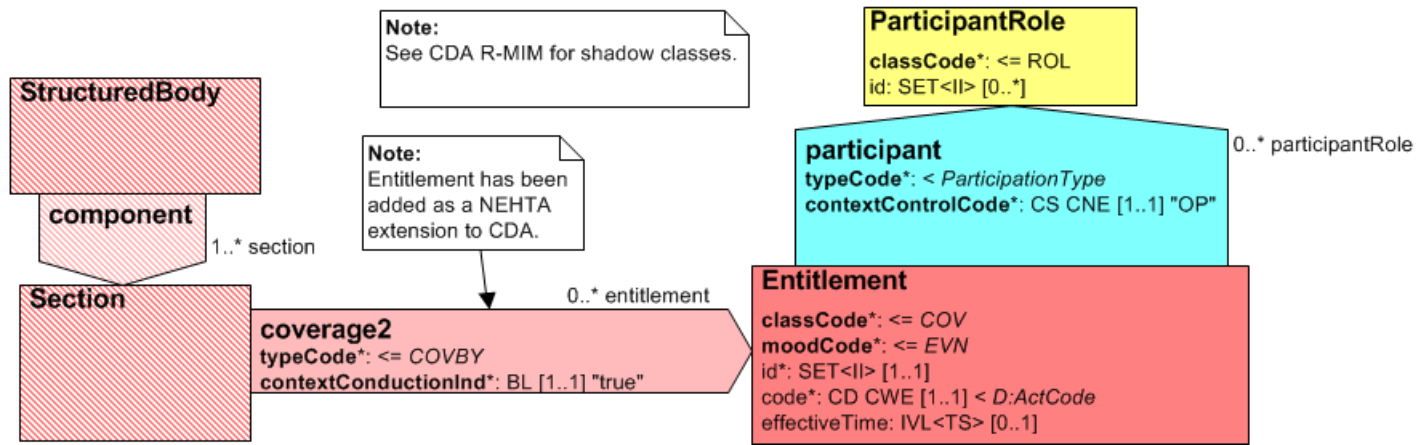


Figure 2.2. Example - Body Part

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		
<p>The path in the SCS.</p> <p>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.</p> <p>If there is a name in round brackets after the path, this is the name of the reused data group for the SCS component.</p> <p>The data component in bold text (the last in the path) is the data component for this row.</p> <p>i.e. Parent Data Component > Child Data Component</p>	<p>The definition of the item from the SCS.</p>	<p>The cardinality of the data element in the SCS.</p> <p>The cardinality of the data element in the SCS maps to the cardinality of the element in the CDA® document.</p> <p>Where the cardinality of the SCS data element is more constrained than the cardinality of the CDA® element then the SCS cardinality takes precedence. That is, if an element is mandatory in the SCS and optional in CDA® then it will also become mandatory in the CDA® document.</p> <p>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.</p>	<p>The schema element(s) in the CDA® document that correspond(s) to the SCS data component.</p> <p>The syntax for this is similar to XPath: {/name{[index]}n{<pattern>}</p> <p>Where:</p> <ul style="list-style-type: none"> {} indicates optional {n} means a section that may repeat <pattern> contains a link to a common pattern [index] differentiates two similar mappings <p>Examples:</p> <ol style="list-style-type: none"> component/act/participation[inf_prov]/role/<Address> participant participant/@typeCode="ORG" participant/associatedEntity participant/associatedEntity/@classCode="SDLOC" participant/associatedEntity/code <p>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 NEHTA CDA® Schema. The cardinalities of the items map through from the SCS.</p> <p>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 detail. 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.</p> <p>It is possible for one SCS data component to map to more than one CDA® schema element as in Example 2.</p> <p>Any fixed attribute values are represented as a separate line of the mapping, such as those shown in Example 2.</p> <p>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).</p>	<p>The name of the vocabulary.</p>	<p>Helpful additional information about the mapping.</p>

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	Person who receives healthcare services.	1..1	recordTarget/patientRole		
n/a	n/a	1..1	recordTarget/patientRole/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Required CDA [®] element. If there are any entitlements for Subject of Care, this value SHALL be the same as: ClinicalDocument/ component/ structuredBody/ component[admin_obs]/ section/ entry/ act/ participant/ participantRole/ id where participantRole/@classCode = "PAT".
Subject of Care > Participant > Person	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in recordTarget/patientRole/ patient.
Subject of Care > Participant > Person > Person Name	The appellation by which an individual may be identified separately from any other within a social context.	1..*	recordTarget/patientRole/patient/<Person Name>		See common pattern: Person Name .

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Header 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 NEHTA CDA® extension: Entitlement . All data elements within this section SHALL be deemed as CDA® Header data elements for conformance assessment.
			ext:coverage2/ext:entitlement		
			ext:coverage2/ext:entitlement/@classCode="COV"		
			ext:coverage2/ext:entitlement/@moodCode="EVN"		
			ext:coverage2/ext:entitlement/ext:participant/@typeCode="BEN"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/@classCode="PAT"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/ext:id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	SHALL hold the same value as ClinicalDocument/recordTarget/patientRole/id.
Subject of Care > Participant > Entitlement > Entitlement Number	A number or code issued for the purpose of identifying the entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	1..1	ext:coverage2/ext:entitlement/ext:id		
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		

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 **SHALL** 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[®] Header 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[®], a NEHTA CDA[®] extension has been added in order to represent Entitlement. This extension is indicated by the presence of the 'ext:' prefix. The Entitlement CDA[®] elements **SHALL** be deemed CDA[®] Header data elements for conformance assessment. 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 **SHALL** hold the same value as the ClinicalDocument/recordTarget/patientRole/id mentioned 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 NEHTA 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 an 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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:hl7-org:v3"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  ...
  >
  ...
  <!-- 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 Identifier"/>
            <!-- 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+1000"/>
        <high value="202701010101+1000"/>
    </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 on 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 have a namespace other than the standard HL7[®]v3 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 CDA[®] extensions 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 CDA® W3C XML Schema (referred to in this document as the NEHTA CDA® Schema). This schema differs from the base HL7® CDA® W3C XML Schema (referred to in this document as the HL7® CDA® Schema) as mentioned below:

- NEHTA CDA® extensions have been added to the NEHTA CDA® Schema.

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

An Event Summary document that conforms to this specification **SHALL** validate against the NEHTA 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 implementation guide.

2.6 Implementation Strategies

There are many platform-specific implementation options for readers implementing 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) or 3rd Generation Language (3GL) code (or both).
- 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 NEHTA CDA® Schema provided with this implementation guide, to read or write documents.
- Use existing libraries, possibly open source, that 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.







Note


























Items below whose icon is grey are technical identifiers whose purpose is to facilitate interoperability, sharing of data and secondary use. It is typically expected that such identifiers will be generated internally by systems and not displayed to users since they usually have no clinical significance.
























	EVENT SUMMARY		
CONTEXT			
	SUBJECT OF CARE		1..1
	DOCUMENT AUTHOR		1..1
	ENCOUNTER		1..1
	DateTime Health Event Started		0..1
	DateTime Health Event Ended		1..1
	Document Instance Identifier		1..1
	Document Type		1..1
	DateTime Attested		1..1
CONTENT			
	Event Details (EVENT OVERVIEW)		0..1
	Event Details (CLINICAL SYNOPSIS)		1..1
	Clinical Synopsis Description		1..1
	Clinical Synopsis Instance Identifier		1..1
	Detailed Clinical Model Identifier		1..1
	Event Overview Instance Identifier		0..1
	Section Type		1..1
	Newly Identified Adverse Reactions (ADVERSE REACTIONS)		0..1
	ADVERSE REACTION		1..*



			Substance/Agent	1..1
			REACTION EVENT	0..1
			Manifestation	1..*
			Reaction Type	0..1
			Adverse Reaction Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			Adverse Reactions Instance Identifier	0..1
			Section Type	1..1
		Medications (MEDICATION ORDERS)		0..1
		Known Medication (MEDICATION INSTRUCTION)		1..*
			Therapeutic Good Identification	1..1
			Directions	1..1
			Clinical Indication	0..1
			Medication Instruction Comment	0..1
			Change Type	1..1
			Change Status	1..1
			Change Description	0..1
			Change or Recommendation Reason	0..1
			Medication Instruction Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			Medication Orders Instance Identifier	0..1
			Section Type	1..1
		Diagnoses/Interventions (MEDICAL HISTORY)		0..1
		PROBLEM/DIAGNOSIS		0..*
			Problem/Diagnosis Identification	1..1

























			Date of Onset	0..1
			Problem/Diagnosis Comment	0..1
			Problem/Diagnosis Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			PROCEDURE	0..*
			Procedure Name	1..1
			Procedure Comment	0..1
			Procedure DateTime	1..1
			Procedure Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			UNCATEGORISED MEDICAL HISTORY ITEM	0..*
			Medical History Item Description	1..1
			Medical History Item TimeInterval	0..1
			Medical History Item Comment	0..1
			Uncategorised Medical History Item Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			Medical History Instance Identifier	0..1
			Section Type	1..1
			IMMUNISATIONS	0..1
			Administered Immunisation (MEDICATION ACTION)	1..*
			Therapeutic Good Identification	1..1
			Medication Action DateTime	1..1
			Medication Action Instance Identifier	1..1
			Detailed Clinical Model Identifier	1..1
			Immunisations Instance Identifier	0..1

















		Section Type		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 (SPECIMEN)		1..*
			Specimen Tissue Type	0..1
			Collection Procedure	0..1
		Anatomical Site (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 (PHYSICAL PROPERTIES OF AN OBJECT)		0..*
			Weight	0..1
		DIMENSIONS		0..1
			Volume	0..1
			Description (Object Description)	0..1
			Image	0..1
		COLLECTION AND HANDLING		0..1
			Sampling Preconditions	0..1
		HANDLING AND PROCESSING		1..1
			Date and Time of Collection (Collection DateTime)	1..1
			Collection Setting	0..1

					Date and Time of Receipt (DateTime Received)	0..1
					IDENTIFIERS	0..1
					Specimen Identifier	0..1
					Parent Specimen Identifier	0..1
					Container Identifier	0..1
					Overall Pathology Test Result Status	1..1
					Clinical Information Provided	0..1
					Result Group (PATHOLOGY TEST RESULT GROUP)	0..*
					Pathology Test Result Group Name	1..1
					Result (INDIVIDUAL PATHOLOGY TEST RESULT)	1..*
					Individual Pathology Test Result Name	1..1
					Result Value (INDIVIDUAL PATHOLOGY TEST RESULT VALUE)	0..1
				  	Individual Pathology Test Result Value	1..1
					Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	0..1
					Normal Status	0..1
					REFERENCE RANGE	0..*
					Reference Range Meaning	1..1
					Reference Range	1..1
					Individual Pathology Test Result Comment	0..*
					Individual Pathology Test Result Reference Range Guidance	0..1
					Individual Pathology Test Result Status	1..1
					Result Group Specimen Detail (SPECIMEN)	0..1
					Specimen Tissue Type	0..1

					Collection Procedure	0..1
					Anatomical Site (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 (PHYSICAL PROPERTIES OF AN OBJECT)	0..*
					Weight	0..1
					DIMENSIONS	0..1
					Volume	0..1
					Description (Object Description)	0..1
					Image	0..1
					COLLECTION AND HANDLING	0..1
					Sampling Preconditions	0..1
					HANDLING AND PROCESSING	1..1
					Date and Time of Collection (Collection DateTime)	1..1
					Collection Setting	0..1
					Date and Time of Receipt (DateTime Received)	0..1
					IDENTIFIERS	0..1
					Specimen Identifier	0..1
					Parent Specimen Identifier	0..1
					Container Identifier	0..1
					Pathological Diagnosis	0..*
					Conclusion (Pathology Test Conclusion)	0..1

			Test Result Representation	0..1
			Test Comment	0..1
			TEST REQUEST DETAILS	0..*
			Test Requested Name	0..*
			Laboratory Test Result Identifier	0..1
			Observation DateTime	1..1
			Pathology Test Result Instance Identifier	0..1
			Detailed Clinical Model Identifier	1..1
			IMAGING EXAMINATION RESULT	0..*
			Examination Result Name (Imaging Examination Result Name)	1..1
			Imaging Modality	0..1
			Anatomical Site (ANATOMICAL LOCATION)	0..*
			SPECIFIC LOCATION	0..1
			Anatomical Location Name	0..1
			Side	0..1
			Anatomical Location Description	0..1
			Anatomical Location Image	0..*
			Imaging Examination Result Status	1..1
			Clinical Information Provided	0..1
			Findings	0..1
			Result Group (IMAGING EXAMINATION RESULT GROUP)	0..*
			Imaging Examination Result Group Name	1..1
			Result (INDIVIDUAL IMAGING EXAMINATION RESULT)	1..*
			Individual Imaging Examination Result Name	1..1
			Result Value (IMAGING EXAMINATION RESULT VALUE)	0..1

							Result Value (Imaging Examination Result Value)	1..1
								
								
							Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	0..1
							Normal Status	0..1
							REFERENCE RANGE	0..*
							Reference Range Meaning	1..1
							Reference Range	1..1
							Result Comment	0..*
							Anatomical Site (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	
				Observation DateTime	1..1	
				Imaging Examination Result Instance Identifier	0..1	
				Detailed Clinical Model Identifier	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	
				Requested Service Instance Identifier	0..1	
				Detailed Clinical Model Identifier	1..1	
			Diagnostic Investigations Instance Identifier			0..1
			Section Type			1..1

This page is intentionally left blank.

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.

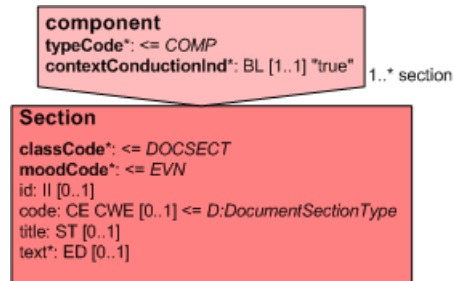


Figure 4.1. Administrative Observations

CDA® Mapping

At most one instance of Administrative Observation section **SHOULD** be present in a CDA® document. The cardinality of this section comes from its linking context data elements (e.g. CDA® context data element(s) mapped to Administrative Observation Section). If any of the linking context data elements are mandatory, then this section **SHALL** be marked as a mandatory section.

This section **SHALL NOT** be populated if there are no entries or text to go in it.

This section **SHALL** contain a code if provided.

All data elements (with the exception of narrative text) within this section **SHALL** be deemed as CDA® Header data elements for conformance assessment.

The <text> data element is **OPTIONAL** and **SHALL** be treated as a Level 2 CDA® data element.

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	Cardinality comes from linking context data elements	component/section[admin_obs]		
		0..1	component/section[admin_obs]/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
		1..1	component/section[admin_obs]/code		
			component/section[admin_obs]/code/@code="102.16080"		
			component/section[admin_obs]/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component/section[admin_obs]/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component/section[admin_obs]/code/@displayName="Administrative Observations"		
		0..1	component/section[admin_obs]/title="Administrative Observations"		
		0..1	component/section[admin_obs]/text		See Appendix A, CDA® Narratives .

Example 4.1. Administrative Observations XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-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 typeCode="COMP"><!-- [admin_obs] -->
        <section classCode="DOCSECT" moodCode="EVN">
          <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 Body -->
</ClinicalDocument>
```

5 CDA® Header

This chapter contains CDA®-specific header elements (both **REQUIRED** and **OPTIONAL**) that are not specified in the ES SCS specification. The CDA® Schema Data Element describes each element.

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

Name	Occurrence
LegalAuthenticator	1..1
Custodian	1..1

CDA[®] R-MIM Representation

```
ClinicalDocument  
classCode*: <= DOCCLIN  
moodCode*: <= EVN  
id*: II [1..1]  
code*: CE CWE [1..1] < D:DocumentType  
effectiveTime*: TS [1..1]  
confidentialityCode*: CE CWE [1..1] < D:x_BasicConfidentialityKind  
languageCode: CS CNE [0..1] < V:HumanLanguage  
setId: II [0..1]  
versionNumber: INT [0..1]  
completionCode: CE CWE [0..1] < D:DocumentCompletion
```

Note:
completionCode is added
as a NEHTA extension
to CDA

Figure 5.1. ClinicalDocument

CDA® Mapping

CDA® Schema Data Element	Definition	Card	Vocab	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/ typeld	A technology-neutral explicit reference to the CDA® Release 2 specification.	1..1		
ClinicalDocument/typeld/@ extension ="POCD_HD000040"		1..1		The unique identifier for the CDA® Release 2 Hierarchical Description.
ClinicalDocument/typeld/@ root ="2.16.840.1.113883.1.3"		1..1		The OID for HL7® Registered models.
ClinicalDocument/ templated		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 templated that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA® Rendering Specification. Systems are not required to recognise any other 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/templated/@ root ="1.2.36.1.2001.1001.101.100.1002.136"		1..1		The healthcare context-specific name of the published Event Summary CDA® Implementation Guide.
ClinicalDocument/templated/@ extension ="1.3"		1..1		The identifier of the version that was used to create the document instance.
ClinicalDocument/ id	Represents the unique instance identifier of a clinical document.	1..1		See common pattern: id .
ClinicalDocument/ code	The code specifying the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note).	1..1		See common pattern: code .
ClinicalDocument/code/@ code ="34133-9"				A record, reported by a clinician, of one significant health care event involving the subject of care.
ClinicalDocument/code/@ codeSystem ="2.16.840.1.113883.6.1"				
ClinicalDocument/code/@ codeSystemName			The value SHOULD be "LOINC". See CodeSystem OIDs .	
ClinicalDocument/code/@ displayName ="Summary of episode note"				

CDA [®] Schema Data Element	Definition	Card	Vocab	Comments
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		See common pattern: time .
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> – <DIALECT> The <Language Code> SHALL be "en". The <DIALECT> SHOULD be "AU".
ClinicalDocument/setId	Represents an identifier that is common across all document revisions.	0..1	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	
ClinicalDocument/versionNumber/@value	An integer value used to version successive replacement documents.	0..1		
ClinicalDocument/ext:completionCode	The lifecycle status of a document.	1..1	NCTIS: Admin Codes - Document Status	See NEHTA CDA [®] extension: ClinicalDocument.completionCode .

Example

Example 5.1. ClinicalDocument Body XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument xmlns="urn:h17-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-ES-V1_3.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="1.3"/>
  <id root="8BC3406A-B93F-11DE-8A2B-6A1C56D89593"/>
  <code code="34133-9"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Summary 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	Occurrences (child within parent)
ClinicalDocument	1..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 LegalAuthenticator 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.

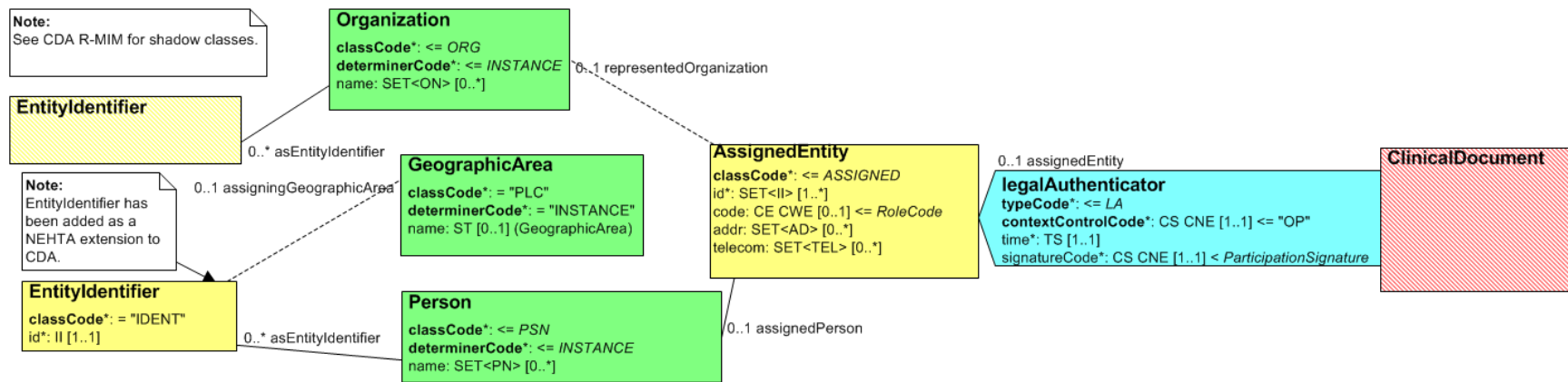


Figure 5.2. LegalAuthenticator

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.	1..1		
legalAuthenticator/time/@value	Indicates the time of authentication.	1..1		The time/@value SHALL include both a time and a date.
legalAuthenticator/signatureCode/@code="S"	Indicates that the signature has been affixed and is on file.	1..1		
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/code	The specific kind of role.	0..1	NS	See <code> for available attributes.
legalAuthenticator/assignedEntity/id	A unique identifier for the player entity in this role.	1..1	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
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 .

¹ <http://www.hl7.org/oid/index.cfm?ref=footer>

CDA® Schema Data Element	Definition	Card	Vocab	Comments
legalAuthenticator/assignedEntity/ representedOrganization	The entity scoping the role (assignedEntity).	0..1		
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 5.2. LegalAuthenticator XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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="200910201235+1000"/>
  <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, Revision 1"
displayName="General Medical Practitioner"/>

    <!-- Address -->
    <addr use="WP">
      <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>General</given>
      <family>Doctor</family>
    </name>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
      <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.800361156682112"/>
      <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
  </assignedPerson>

  <representedOrganization>
    <!-- Organisation Name -->
    <name>Good Health Clinic</name>
```

```

<!-- Entity Identifier -->
<ext:asEntityIdentifier classCode="IDENT">
  <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621566684455" />
  <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	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	Occurrences (child within parent)
ClinicalDocument	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 maps to the CDA® Header element custodian. The custodian participation class represents the organisation that is in charge of maintaining the document. The role is AssignedCustodian and is represented by the CustodianOrganization entity.

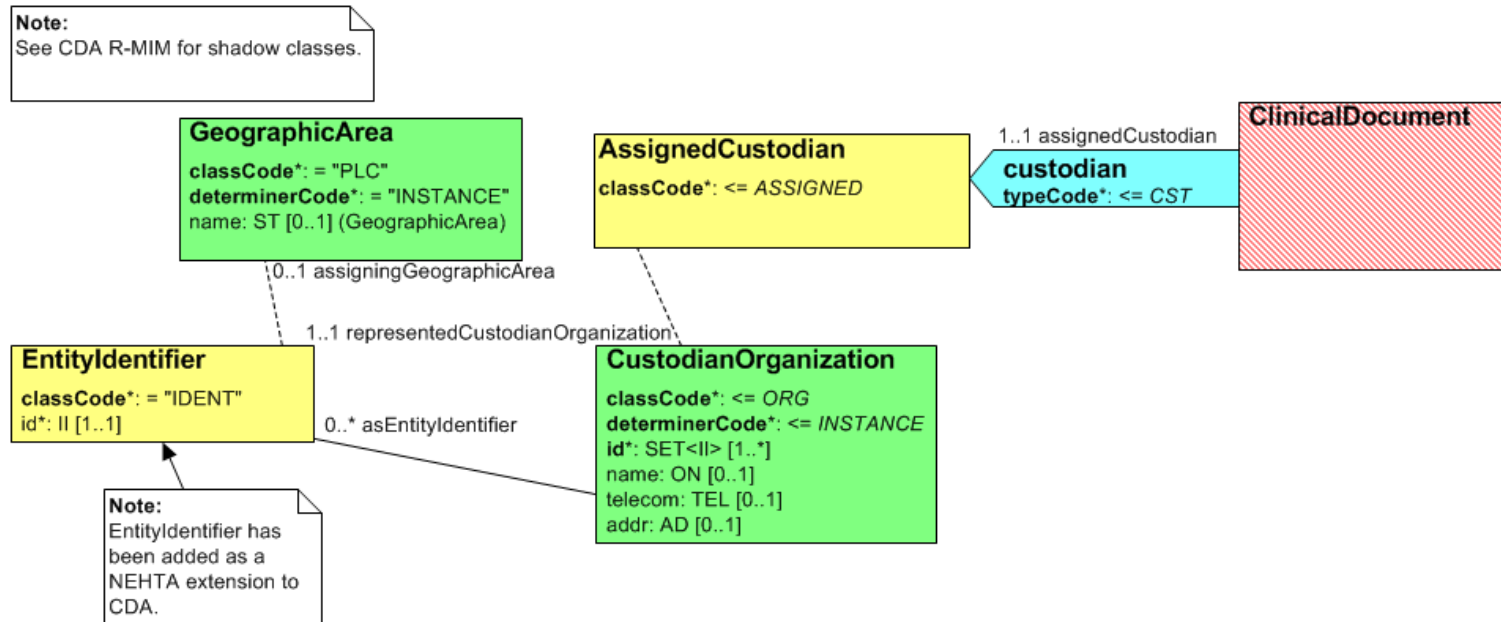


Figure 5.3. Custodian

CDA[®] Mapping

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

Example 5.3. Custodian Body XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 is used for system purposes such as matching -->
  <id root="c9c04faf-d7a8-4802-8c69-980b0ce4d798" />
  <name>Custodian</name>

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

  <!-- Address -->
  <addr use="WP">
  <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="PAI-0" root="1.2.36.1.2001.1007.1.8003640001000036" />
  <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

Data Type	Name	Occurrence
	SUBJECT OF CARE	1..1
	DOCUMENT AUTHOR	1..1
	ENCOUNTER	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.

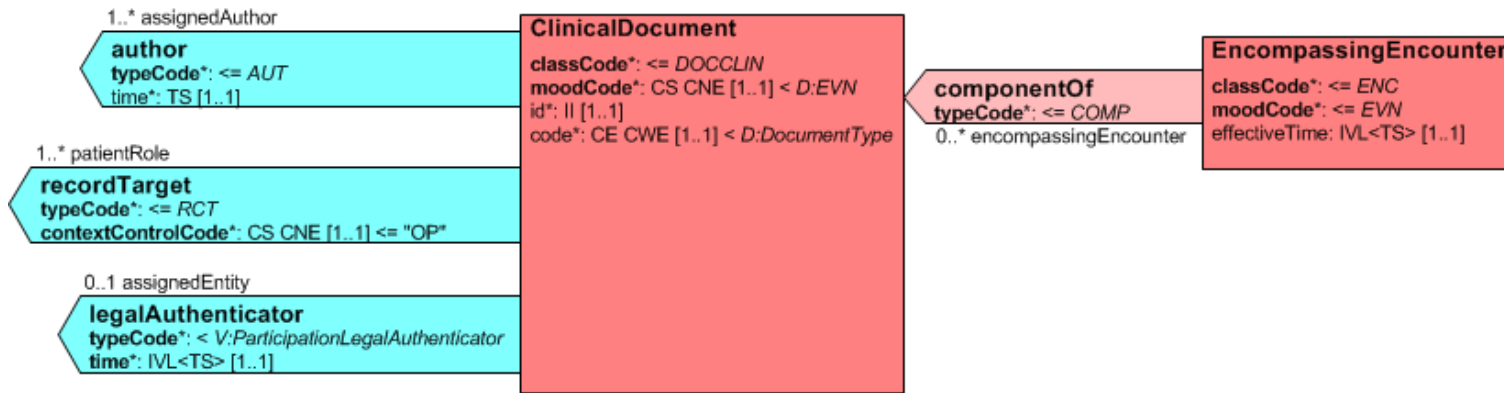


Figure 6.1. CDA Header Model for Event Summary Context

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		
Event Summary > SUBJECT OF CARE	Person who receives healthcare services.	1..1	See: SUBJECT OF CARE		
Event Summary > DOCUMENT AUTHOR	Composer of the document.	1..1	See: DOCUMENT AUTHOR		
Event Summary > DateTime Attested	The date and time that the document author or document authoriser or approver confirms that a document is complete and genuine.	1..1	ClinicalDocument/legalAuthenticator/time/@value	The time/@value SHALL include both a time and a date.	See <time> for available attributes.
Event Summary > ENCOUNTER	Encounter between a subject of care and a health system.	1..1	See: ENCOUNTER		
Event Summary > Document Instance Identifier	A globally unique identifier for each instance of an Event Summary document.	1..1	ClinicalDocument/id		See <id> for available attributes.
Event Summary > Document Type	Type of document.	1..1	ClinicalDocument/code		See <code> for available attributes.
			ClinicalDocument/code/@code="34133-9"		
			ClinicalDocument/code/@codeSystem="2.16.840.1.113883.6.1"		
			ClinicalDocument/code/@codeSystemName	The value SHOULD be "LOINC". See CodeSystem OIDs .	Optional CDA® element.
			ClinicalDocument/code/@displayName="Summary of episode note"		

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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-org:v3"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  ...
  >
  <!-- Document Instance Identifier -->
  <id root="8f281000-498d-11e2-bcfd-0800200c9a66"/>
  <!-- Document Type -->
  <code code="34133-9"
        codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC"
        displayName="Summary of episode note"/>

  <!-- Begin CDA Header -->
  ...
  <!-- Begin SUBJECT OF CARE -->
  <recordTarget>
  ...
  </recordTarget>
  <!-- End SUBJECT OF CARE -->

  <!-- Begin DOCUMENT AUTHOR -->
  <author>
  ...
  </author>
  <!-- End DOCUMENT AUTHOR -->

  <legalAuthenticator>
  <!-- DateTime Attested -->
  <time value="200910301030+1000"/>
  ...
  </legalAuthenticator>

  <!-- Begin ENCOUNTER -->
  <componentOf>
  <encompassingEncounter>
  ...
  </encompassingEncounter>
  </componentOf>
  <!-- End ENCOUNTER -->

  <!-- End CDA Header -->

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

<!-- 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	Occurrences (child within parent)
	EVENT SUMMARY	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 instantiated as PERSON (Healthcare Provider) 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 (NEHTA CDA® extension) and is associated to the assignedAuthorChoice.

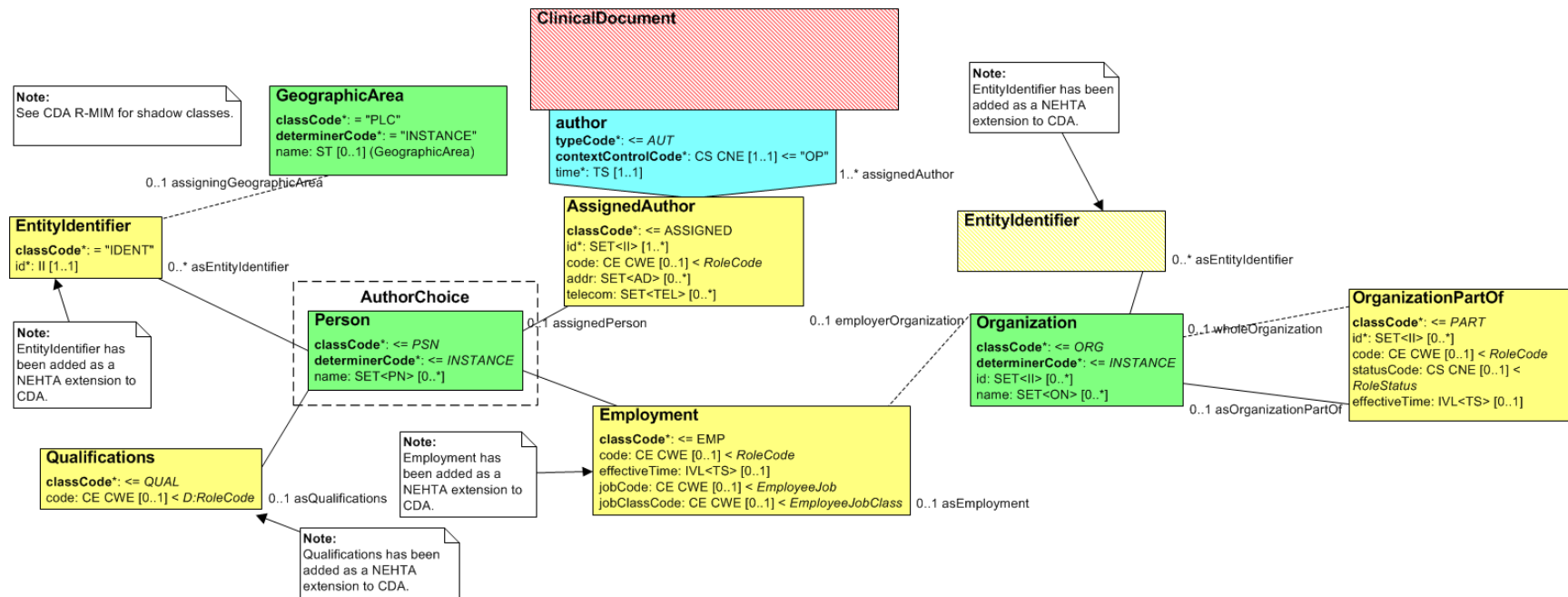


Figure 6.2. DOCUMENT AUTHOR

Figure 6.3 DOCUMENT AUTHOR - Entitlement 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.

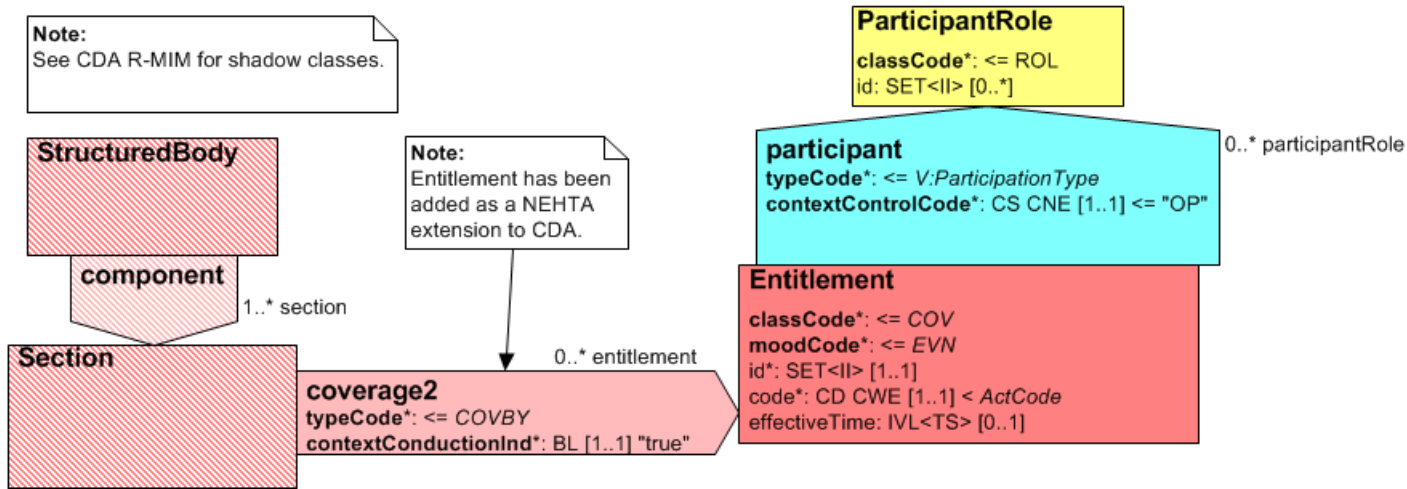


Figure 6.3. DOCUMENT AUTHOR - Entitlement

CDA® Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Header Data Elements			Context: ClinicalDocument/		
DOCUMENT AUTHOR	Composer of the document.	1..1	author		Document Author SHALL be filled with the Healthcare Provider who authored the document.
DOCUMENT AUTHOR > Participation Period	The time interval during which the participation in the health care event occurred.	1..1	author/time	This element SHALL hold the same value as Event Summary > DateTime Attested (ClinicalDocument/legalAuthentication/time). Although the definition of this element states that it is a time interval, the following applies: "The end of the participation period of a Document Author participation is the time associated with the completion of editing the content of a document.". Thus only the end time need be recorded.	Required CDA® element. The author/time element SHALL be implemented as either: <ul style="list-style-type: none"> a value attribute (populated with the end time of the authorship or encounter, as appropriate); or a high element AND a low element, both with value attributes and neither with a nullFlavor attribute.
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 value equivalent to "Document Author".	Not mapped directly; encompassed implicitly in author/typeCode="AUT" (optional, fixed value).
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, Revision 1 [ABS2009] . However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7® and publicly available MAY be used.	See <code> for available attributes.
n/a	n/a	1..1	author/assignedAuthor/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Required CDA® element.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
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.	0..*	author/assignedAuthor/ <Address>	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS. Address Purpose (addr/@use) SHALL be set to Business (see AS 5017-2006: Health Care Client Identifier Address Purpose).	See common pattern: Address .
DOCUMENT AUTHOR > Participant > Electronic Communication Detail	The electronic communication details of entities.	0..*	author/assignedAuthor/ <Electronic Communication Detail>	Electronic Communication Usage Code (telecom/@use) SHALL be set to Workplace (see HL7 [®] : TelecommunicationAddressUse).	See common pattern: Electronic Communication Detail .
DOCUMENT AUTHOR > Participant > Person or Organisation or Device	Represents a choice to be made at run-time between PERSON, ORGANISATION or DEVICE.	1..1	n/a	PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON.	This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
DOCUMENT AUTHOR > Participant > Person or Organisation or Device > Person	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly; encompassed implicitly in author/assignedAuthor/assignedPerson.
DOCUMENT AUTHOR > Participant > Person or Organisation or Device > Person > Person Name	The appellation by which an individual may be identified separately from any other within a social context.	1..*	author/assignedAuthor/assignedPerson/ <Person Name>		See common pattern: Person Name .
DOCUMENT AUTHOR > Participant > Person or Organisation or Device > Person > Employment Detail	A person's occupation and employer.	1..1	author/assignedAuthor/assignedPerson/ <Employment>		See common pattern: Employment .

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[admin_obs]/section/		
DOCUMENT AUTHOR > 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"		
			ext:coverage2/ext:entitlement		
			ext:coverage2/ext:entitlement/@classCode="COV"		
			ext:coverage2/ext:entitlement/@moodCode="EVN"		
			ext:coverage2/ext:entitlement/ext:participant/@typeCode="HLD"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/@classCode="ASSIGNED"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/ext:id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	This SHALL hold the same value as author/assignedAuthor/id.
DOCUMENT AUTHOR > 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		See <id> for available attributes.
DOCUMENT AUTHOR > 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	
DOCUMENT AUTHOR > 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.
CDA® Header Data Elements			Context: ClinicalDocument/		
DOCUMENT AUTHOR > Participant > Qualifications	A list of professional certifications, and certificates recognising having passed a course.	0..1	author/assignedAuthor/assignedPerson/ext:asQualifications		See NEHTA CDA® extension: Qualifications . Qualifications is a text field, so the text list is entered in the originalText field of the code element.
			author/assignedAuthor/assignedPerson/ext:asQualifications/@classCode="QUAL"		
			author/assignedAuthor/assignedPerson/ext:asQualifications/ext:code/originalText		

Example 6.2. DOCUMENT AUTHOR XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-org:v3"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  ...
  >

  ...

  <!-- Begin DOCUMENT AUTHOR -->
  <author>

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

    <assignedAuthor>

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

      <!-- Role -->
      <code code="253111" codeSystem="2.16.840.1.113883.13.62"
        codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1"
        displayName="General Medical Practitioner" />

      <!-- Address -->
      <addr use="WP">
        <streetAddressLine>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="1.2.36.1.2001.1003.0.8003619900015717" />
          <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
          </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
      </assignedPerson>
    </author>
  </ClinicalDocument>
```

```
</ext:assigningGeographicArea>
</ext:asEntityIdentifier>

<!-- Employment Details -->
<ext:asEmployment classCode="EMP">
  <!-- Position In Organisation -->
  <ext:code>
    <originalText>GP</originalText>
  </ext:code>

  <!-- Occupation -->
  <code code="253111" codeSystem="2.16.840.1.113883.13.62"
    codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1"
    displayName="General Medical Practitioner" />

  <!-- 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="1.2.36.1.2001.1003.0.8003621566684455" />
          <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
          </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
        <!-- Address -->
        <addr use="WP">
          <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" />
      </wholeOrganization>
    </asOrganizationPartOf>
  </ext:employerOrganization>
</ext:asEmployment>

<ext:asQualifications classCode="QUAL">
  <ext:code>
    <originalText>M.B.B.S</originalText>
  </ext:code>
</ext:asQualifications>

</assignedPerson>

</assignedAuthor>
</author>
<!-- End DOCUMENT AUTHOR -->
```

...

```
<component>
  <structuredBody>
    <!-- Begin Section Administrative Observations -->
  <component>
    <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>
      <!-- Begin Narrative text -->
      <text>
        <table>
          <tbody>
            <tr>
              <th>Australian Medicare Prescriber Number</th>
              <td>049960CT</td>
            </tr>
          </tbody>
        </table>
      </text>
      <!-- End Narrative text -->
      ...
    <!-- Begin Document Author Healthcare Provider Entitlement -->
    <ext:coverage2 typeCode="COVEY">
      <ext:entitlement classCode="COV" moodCode="EVN">
        <ext:id assigningAuthorityName="Medicare Prescriber number" root="1.2.36.174030967.0.3" extension="049960CT" />
        <ext:code code="10" codeSystem="1.2.36.1.2001.1001.101.104.16047" codeSystemName="NCTIS Entitlement Type Values"
          displayName="Medicare Prescriber Number" />
        <ext:effectiveTime>
          <low value="200501010101+1100" />
          <high value="202501010101+1100" />
        </ext:effectiveTime>
        <ext:participant typeCode="HLD">
          <ext:participantRole classCode="ASSIGNED">
            <!-- Same as the author (assignedAuthor) id -->
            <ext:id root="7FCB0EC4-0CD0-11E0-9DFC-8F50DFD72085" />
          </ext:participantRole>
        </ext:participant>
      </ext:entitlement>
    </ext:coverage2>
    <!-- End Document Author Healthcare Provider Entitlement -->
  </section>
</component>
<!-- End Section Administrative Observations -->
...
  </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	Occurrences (child within parent)
	EVENT SUMMARY	1..1

CDA[®] R-MIM Representation

Figure 6.4 SUBJECT OF CARE - Header Data Elements and Figure 6.5 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 with 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 a NEHTA CDA[®] extension.

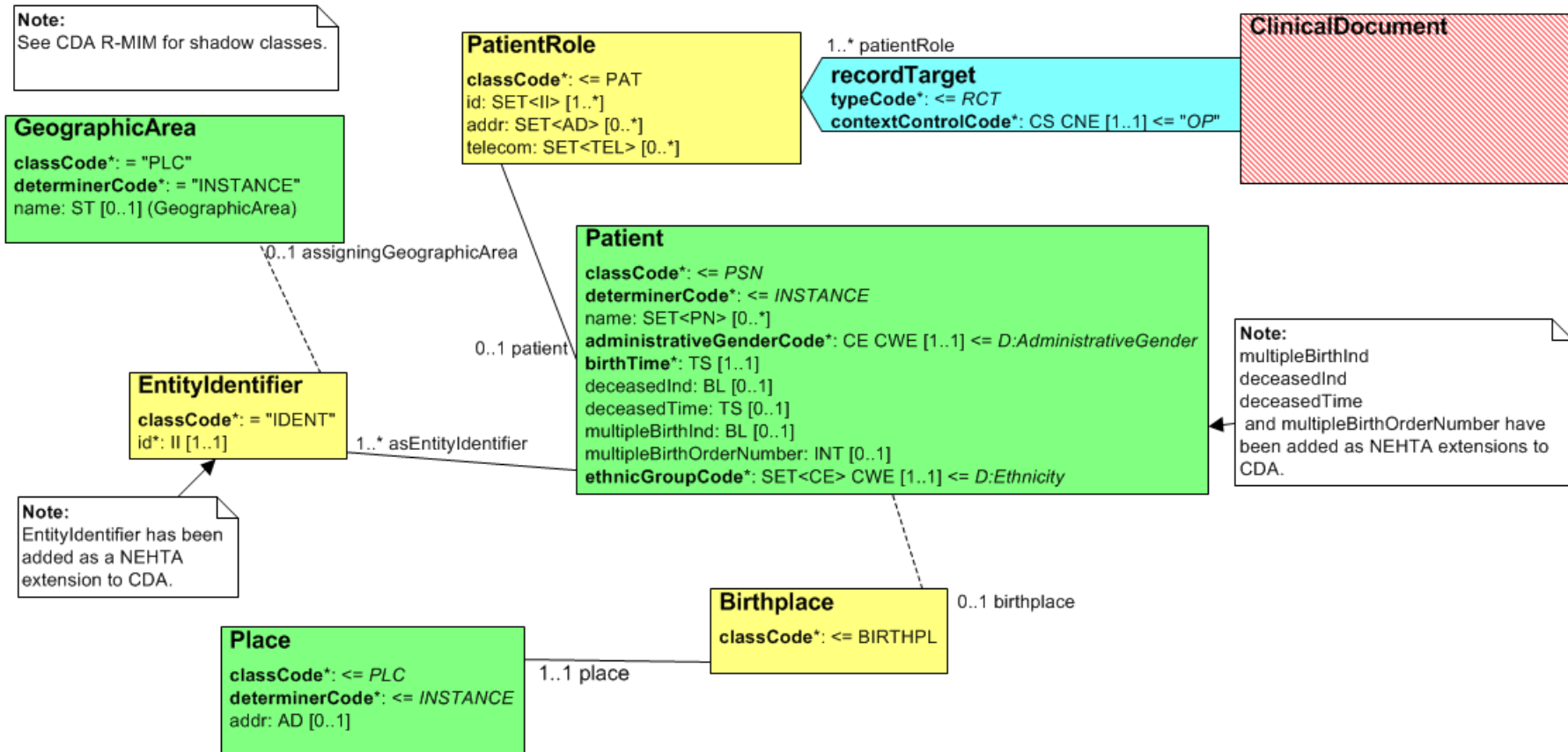


Figure 6.4. SUBJECT OF CARE - Header Data Elements



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*).

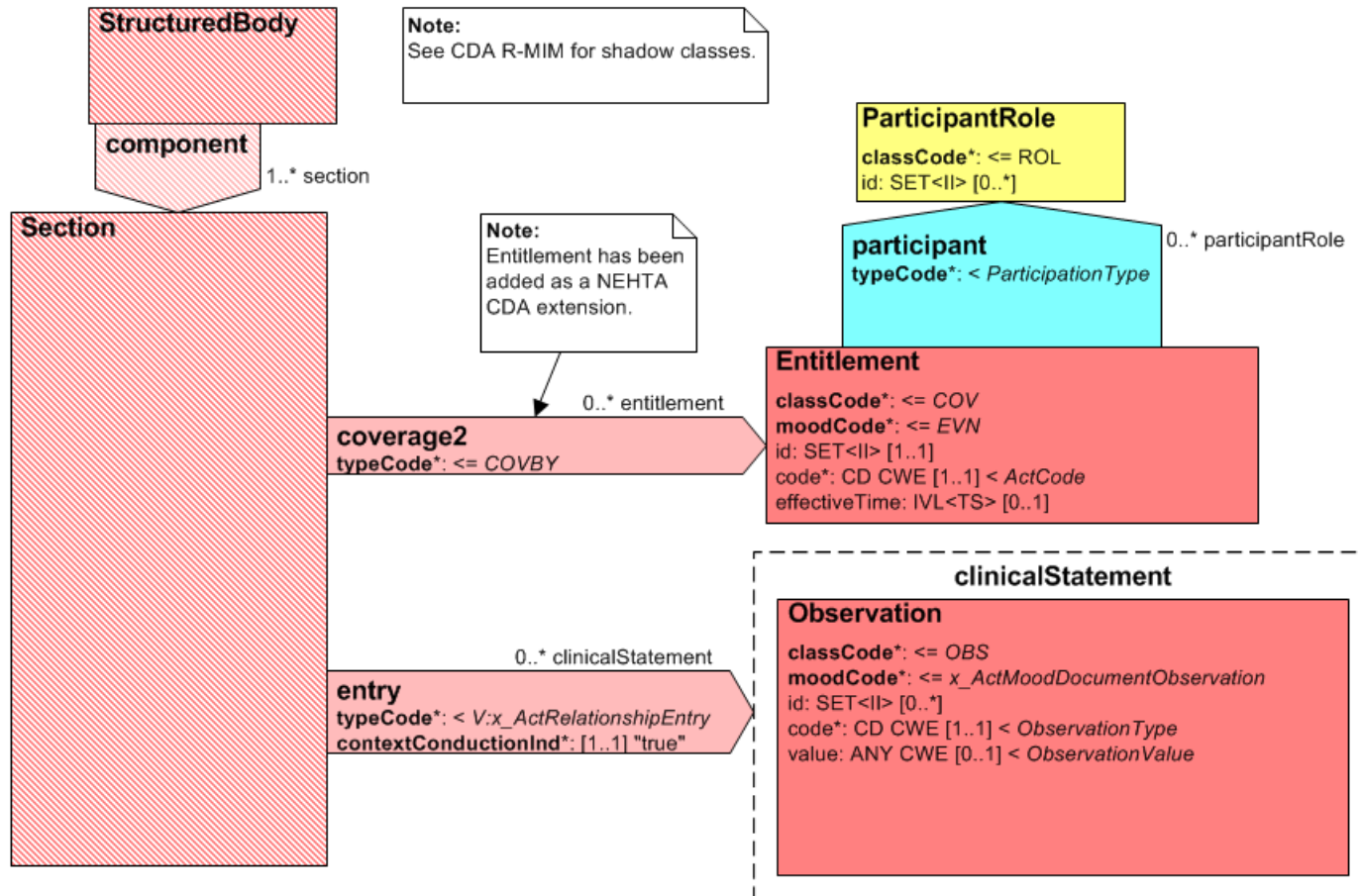


Figure 6.5. SUBJECT OF CARE - Body Data Elements

CDA[®] Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
CDA[®] Header Data Elements			Context: ClinicalDocument/		
SUBJECT OF CARE	Person who receives healthcare services.	1..1	recordTarget/patientRole		
n/a	n/a	1..1	recordTarget/patientRole/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Required CDA [®] element.
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 value equivalent to "Subject of Care".	Not mapped directly, encompassed implicitly in recordTarget/typeCode = "RCT" (optional, fixed value).
SUBJECT OF CARE > Role	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	n/a	Role SHALL have an implementation-specific value equivalent to "Patient".	Not mapped directly, encompassed implicitly in recordTarget/patientRole/classCode = "PAT".
SUBJECT OF CARE > Participant	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	recordTarget/patientRole/patient		
SUBJECT OF CARE > Participant > Entity Identifier	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	recordTarget/patientRole/patient/<Entity Identifier>	The value of one Entity Identifier SHALL be an Australian IHI.	See common pattern: Entity Identifier . The Subject of Care's Medicare card number is recorded in Entitlement, not Entity Identifier.
SUBJECT OF CARE > Participant > Address	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	recordTarget/patientRole/<Address>	Address Purpose (addr/@use) SHALL be set to either Residential or Temporary Accommodation (see AS 5017-2006: Health Care Client Identifier Address Purpose).	See common pattern: Address .

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
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 or DEVICE.	1..1	n/a	PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON.	This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in recordTarget/patientRole/patient.
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Person Name	The appellation by which an individual may be identified separately from any other within a social context.	1..*	recordTarget/patientRole/patient/ Person Name		See common pattern: Person Name .
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data	Additional characteristics of a person that may be useful for identification or other clinical purposes.	1..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Sex	The biological distinction between male and female. Where there is inconsistency between anatomical and chromosomal characteristics, sex is based on anatomical characteristics.	1..1	recordTarget/patientRole/patient/ administrativeGenderCode	AS 5017-2006 Health Care Client Identifier Sex	
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail	Details of the accuracy, origin and value of a person's date of birth.	1..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth	The date of birth of the person.	1..1	recordTarget/patientRole/patient/ birthTime		See <time> for available attributes.

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[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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
entry[calc_age]/observation/code/@displayName="Date of Birth is Calculated From Age"					
entry[calc_age]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.			
entry[calc_age]/observation/value:BL		If the date of birth has been calculated from age this is true, otherwise it is false.			

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

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 > 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).
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Age Detail	Details of the accuracy and value of a person's age.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Age Detail > Age	The age of a person/subject of care at the time.	1..1	entry[age]		
			entry[age]/ observation		
			entry[age]/observation/@classCode="OBS"		
			entry[age]/observation/@moodCode="EVN"		
			entry[age]/observation/code		
			entry[age]/observation/code/@code="103.20109"		
			entry[age]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[age]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[age]/observation/code/@displayName="Age"		
entry[age]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.			
entry[age]/observation/value:PQ					

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Birth Plurality	An indicator of multiple birth, showing the total number of births resulting from a single pregnancy.	0..1	entry[brth_plr]		
			entry[brth_plr]/observation		
			entry[brth_plr]/observation/@classCode="OBS"		
			entry[brth_plr]/observation/@moodCode="EVN"		
			entry[brth_plr]/observation/code		
			entry[brth_plr]/observation/code/@code="103.16249"		
			entry[brth_plr]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[brth_plr]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[brth_plr]/observation/code/@displayName="Birth Plurality"		
			entry[brth_plr]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
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 NEHTA CDA [®] extension: Multiple Birth .
			recordTarget/patientRole/patient/ext:multipleBirthOrderNumber		
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail	Details of the accuracy and value of a person's date of death.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.

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	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 NEHTA 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)		
SUBJECT OF CARE > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > Date of Death Accuracy Indicator	The level of certainty or estimation of a person's date of death.	0..1	entry[dod_acc]		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
			entry[dod_acc]/observation		
			entry[dod_acc]/observation/@classCode="OBS"		
			entry[dod_acc]/observation/@moodCode="EVN"		
			entry[dod_acc]/observation/code		
			entry[dod_acc]/observation/code/@code="102.16252"		
			entry[dod_acc]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[dod_acc]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[dod_acc]/observation/code/@displayName="Date of Death Accuracy Indicator"		
entry[dod_acc]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.			
entry[doc_acc]/observation/value:CS	AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator				

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 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).
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).

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 > Source of Death Notification	The person, location, organisation or other originator of information relating to the date of death.	0..1	entry[src_notif]		
			entry[src_notif]/ observation		
			entry[src_notif]/observation/@classCode="OBS"		
			entry[src_notif]/observation/@moodCode="EVN"		
			entry[src_notif]/observation/code		
			entry[src_notif]/observation/code/@code="103.10243"		
			entry[src_notif]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[src_notif]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[src_notif]/observation/code/@displayName="Source of Death Notification"		
entry[src_notif]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.			
entry[src_notif]/observation/value:CD	AS 5017-2006: Health Care Client Source of Death Notification	See <code> for available attributes.			

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 > Mother's Original Family Name	The original family name of the person's mother.	0..1	entry[mothers_name]		
			entry[mothers_name]/observation		
			entry[mothers_name]/observation/@classCode="OBS"		
			entry[mothers_name]/observation/@moodCode="EVN"		
			entry[mothers_name]/observation/code		
			entry[mothers_name]/observation/code/@code="103.10245"		
			entry[mothers_name]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[mothers_name]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[mothers_name]/observation/code/@displayName="Mother's Original Family Name"		
entry[mothers_name]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.			
entry[mothers_name]/observation/value:PN					
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	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	

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[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 NEHTA CDA® extension: Entitlement .
			ext:coverage2/ext:entitlement		
			ext:coverage2/ext:entitlement/@classCode="COV"		
			ext:coverage2/ext:entitlement/@moodCode="EVN"		
			ext:coverage2/ext:entitlement/ext:participant/@typeCode="BEN"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/@classCode="PAT"		
			ext:coverage2/ext:entitlement/ext:participant/ext:participantRole/ext:id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	SHALL hold the same value as ClinicalDocument/recordTarget/patientRole/id.
SUBJECT OF CARE > Participant > Entitlement > Entitlement Number	A number or code issued for the purpose of identifying the entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	1..1	ext:coverage2/ext:entitlement/ext:id		
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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-org:v3"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  ...
  >

  <!-- Begin SUBJECT OF CARE - Header Part -->
<recordTarget typeCode="RCT">
  <patientRole classCode="PAT">
    <!-- This system generated id is used for matching patient Entitlement -->
    <id root="7AA0BAAC-0CD0-11E0-9516-4350DFD72085"/>

    <!-- Address -->
    <addr use="H">
      <streetAddressLine>1 Patient 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 Sex"
        displayName="Female" />

      <!-- Date of Birth -->
      <birthTime value="20110712"/>

      <!-- Indigenous Status -->
      <ethnicGroupCode code="4" codeSystem="2.16.840.1.113883.3.879.291036" codeSystemName="METeOR Indigenous Status"
        displayName="Neither Aboriginal nor Torres Strait Islander origin" />

      <!-- Multiple Birth Indicator -->
      <ext:multipleBirthInd value="true"/>
      <ext:multipleBirthOrderNumber value="2"/>
    </patient>
  </patientRole>
</recordTarget>
</ClinicalDocument>
```



```

<!-- Date of Death -->
<ext:deceasedInd value="true"/>
<ext:deceasedTime value="20121112"/>

<!-- Country of Birth/State 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="1.2.36.1.2001.1003.0.8003608833357361"/>
  <ext:assigningGeographicArea classCode="PLC">
    <ext:name>National Identifier</ext:name>
  </ext:assigningGeographicArea>
</ext:asEntityIdentifier>
</patient>
</patientRole>
</recordTarget>
<!-- End SUBJECT OF CARE - 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>1</td>
            </tr>
            <tr>
              <th>Age Accuracy Indicator</th>
              <td>True</td>
            </tr>
          </tbody>
        </table>
      </text>
    </section>
  </structuredBody>
</component>

```

```

<tr>
  <th>Birth Plurality</th>
  <td>3</td>
</tr>
<tr>
  <th>Source of Death Notification</th>
  <td>Relative</td>
</tr>
<tr>
  <th>Mother's Maiden Name</th>
  <td>Smith</td>
</tr>
<tr>
  <th>Australian Medicare Card Number</th>
  <td>2296818481</td>
</tr>
...
</tbody>
</table>
</text>

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

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

<!-- Begin Age -->
<entry><!-- [age] -->
<observation classCode="OBS" moodCode="EVN">
  <id root="CCF0D55C-EFD0-11DF-BEA2-A6CCDFD72085"/>
  <code code="103.20109"
    codeSystem="1.2.36.1.2001.1001.101"
    codeSystemName="NCTIS Data Components"
    displayName="Age"/>
  <value xsi:type="PQ" value="1" unit="a"/>
</observation>
</entry><!-- [age] -->
<!-- End Age -->

```

```

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

<!-- Birth Plurality -->
<entry><!-- [birth_plr] -->
<observation classCode="OBS" moodCode="EVN">
  <id root="C1EE2646-EFD0-11DF-8D9C-95CCDFD72085"/>
  <code code="103.16249"
    codeSystem="1.2.36.1.2001.1001.101"
    codeSystemName="NCTIS Data Components"
    displayName="Birth Plurality"/>
  <value value="3" xsi:type="INT"/>
</observation>
</entry><!-- [birth_plr] -->

<!-- Begin Source of Death Notification-->
<entry>
<!-- [src_notif] -->
<observation classCode="OBS" moodCode="EVN">

  <!-- ID is used for system purposes such as matching -->
  <id root="C749A146-2789-11E1-90AC-74064824019B" />
  <code code="103.10243" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
    displayName="Source of Death Notification" />
  <value code="R" codeSystem="2.16.840.1.113883.13.64"
    codeSystemName="AS 5017-2006 Health Care Client Source of Death Notification" displayName="Relative"
    xsi:type="CD" />
</observation>
</entry>
<!-- [src_notif] -->
<!-- End Source of Death Notification-->

<!-- Begin Mother's Original Family Name -->
<entry>
<!-- [mothers_name] -->
<observation classCode="OBS" moodCode="EVN">

  <!-- ID is used for system purposes such as matching -->
  <id root="E432CD48-278C-11E1-BDA1-0F0A4824019B" />
  <code code="103.10245" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
    displayName="Mother's Original Family Name" />
  <value xsi:type="PN">
    <family>Smith</family>
  </value>
</observation>
</entry>
<!-- [mothers_name] -->
<!-- End Mother's Original Family Name -->

<!-- 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 assigningAuthorityName="Medicare Card Number" root="1.2.36.1.5001.1.0.7.1" extension="2296818481" />
    <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 SUBJECT OF CARE - Body -->
...

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

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


6.1.3 ENCOUNTER

Identification

Name	ENCOUNTER
Metadata Type	Data Group
Identifier	DG-16057

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	EVENT SUMMARY	1..1

CDA[®] R-MIM Representation

Figure 6.6 ENCOUNTER 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 ENCOUNTER data group maps to the CDA[®] Header element EncompassingEncounter. The EncompassingEncounter represents the setting of the clinical encounter during which the documented clinical information occurred. It is related to the ClinicalDocument by the Act_Relationship componentOf.

Note:
See CDA R-MIM for shadow classes.

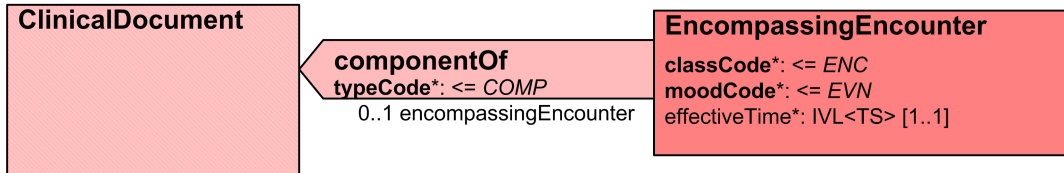


Figure 6.6. ENCOUNTER

CDA® Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
			Context: ClinicalDocument/		
ENCOUNTER	Encounter between a subject of care and a health system.	1..1	componentOf/encompassingEncounter		
ENCOUNTER > DateTime Health Event Started	The date or date and time that the health event to which the Event Summary document relates was started.	0..1	componentOf/encompassingEncounter/ effectiveTime/low/@value		See <time> for available attributes.
ENCOUNTER > DateTime Health Event Ended	The date or date and time that the health event to which the Event Summary document relates was completed.	1..1	componentOf/encompassingEncounter/ effectiveTime/high/@value		See <time> for available attributes.

Example 6.4. ENCOUNTER XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-org:v3"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  ...
  >

  <!-- Begin CDA Header -->
  ...

  <!-- Begin ENCOUNTER -->
  <componentOf>
    <encompassingEncounter>
      <effectiveTime>
        <!-- DateTime Health Event Started -->
        <low value="201112141100+1000" />
        <!-- DateTime Health Event Ended -->
        <high value="201112141130+1000" />
      </effectiveTime>

      </encompassingEncounter>
    </componentOf>
    <!-- End ENCOUNTER -->
    <!-- End CDA Header -->

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

      </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

Data Type	Name	Occurrence
	Event Details (EVENT OVERVIEW)	0..1
	Newly Identified Adverse Reactions (ADVERSE REACTIONS)	0..1
	Medications (MEDICATION ORDERS)	0..1
	Diagnoses/Interventions (MEDICAL HISTORY)	0..1
	IMMUNISATIONS	0..1
	DIAGNOSTIC INVESTIGATIONS	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 class, 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.

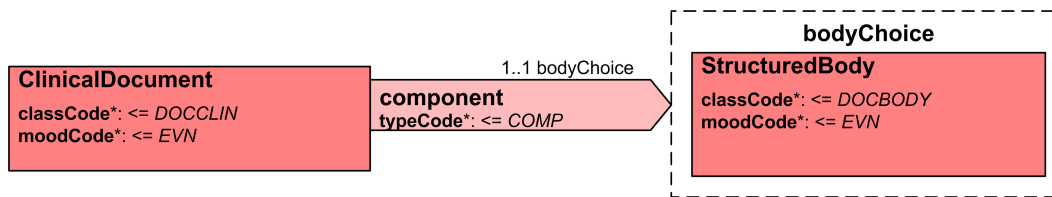


Figure 7.1. Event Summary

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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (EVENT OVERVIEW) -->
      ...
      <!-- End Event Details (EVENT OVERVIEW) -->
      <!-- Begin Newly Identified Adverse Reactions (ADVERSE REACTIONS) -->
      ...
      <!-- End Newly Identified Adverse Reactions (ADVERSE REACTIONS) -->
      <!-- Begin Medications (MEDICATION ORDERS) -->
      ...
      <!-- End Medications (MEDICATION ORDERS) -->
      <!-- Begin Diagnoses/Interventions (MEDICAL HISTORY) -->
      ...
      <!-- End Diagnoses/Interventions (MEDICAL HISTORY) -->
      <!-- Begin IMMUNISATIONS -->
      ...
      <!-- End IMMUNISATIONS -->
      <!-- Begin DIAGNOSTIC INVESTIGATIONS -->
      ...
      <!-- End DIAGNOSTIC INVESTIGATIONS -->
    </structuredBody>
  </component>
  <!-- End CDA Body -->
</ClinicalDocument>
```

7.1.1 Event Details (EVENT OVERVIEW)

Identification


Name	Event Details (EVENT OVERVIEW)
Metadata Type	Section
Identifier	S-16672

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

Data Type	Name	Occurrence
	Event Details (CLINICAL SYNOPSIS)	1..1

CDA[®] R-MIM Representation

Figure 7.2 Event Details (EVENT OVERVIEW) 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 Details (EVENT OVERVIEW) section is composed of a Section class related to its context ClinicalDocument.structuredBody by a component.

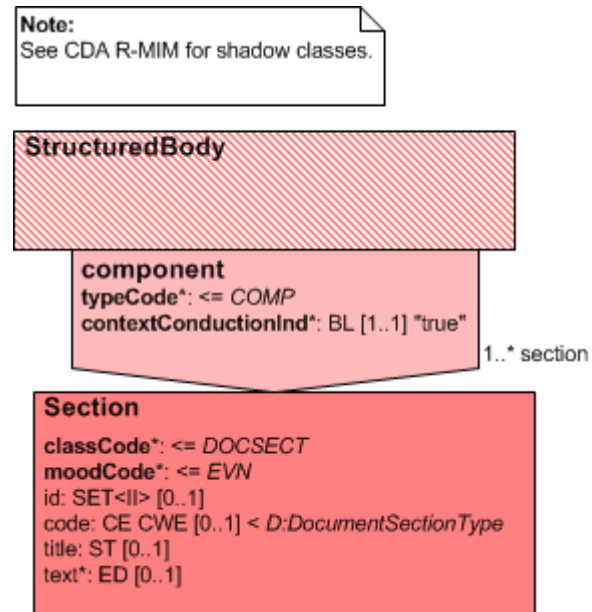


Figure 7.2. Event Details (EVENT OVERVIEW)

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 (EVENT OVERVIEW)	Summary information concerning the event.	0..1	component[evt_det]/section		
			component[evt_det]/section/title="Event Details"		
			component[evt_det]/section/text		Required CDA® element. See Appendix A, CDA® Narratives .
Event Details (EVENT OVERVIEW) > Event Overview Instance Identifier	A globally unique identifier for each instance of an Event Overview section.	0..1	component[evt_det]/section/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Event Details (EVENT OVERVIEW) > Section Type	Type of section.	1..1	component[evt_det]/section/code		
			component[evt_det]/section/code/@code="101.16672"		
			component[evt_det]/section/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[evt_det]/section/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[evt_det]/section/code/@displayName="Event Overview"		
Event Details (EVENT OVERVIEW) > Event Details (CLINICAL SYNOPSIS)	Summary information or comments about the clinical management of the patient, and the prognosis of diagnoses or problems identified during the health-care encounter. It may also include health-related information pertinent to the patient, and a clinical interpretation of relevant investigations and observations performed on the patient (including pathology and diagnostic imaging).	1..1	See: Event Details (CLINICAL SYNOPSIS)		

Example 7.2. Event Details (EVENT OVERVIEW) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (EVENT OVERVIEW) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          <!-- Event Overview Instance Identifier -->
          <id root="61583ded-ceab-4a6b-ae75-10c21b50d8f5" />
          <!-- Section Type -->
          <code code="101.16672" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Event Overview" />
          <title>Event Details</title>
          <!-- Narrative text -->
          <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>
          <!-- Begin Event Details (CLINICAL SYNOPSIS) -->
          <entry>
            <act classCode="ACT" moodCode="EVN">
              ...
            </act>
          </entry>
          <!-- End Event Details (CLINICAL SYNOPSIS) -->
        </section>
      </component>
      <!-- End Event Details (EVENT OVERVIEW) -->
      ...
    </structuredBody>
  </component>
  <!-- End CDA Body -->
</ClinicalDocument>
```



7.1.1.1 Event Details (CLINICAL SYNOPSIS)

Identification

Name	Event Details (CLINICAL SYNOPSIS)
Metadata Type	Data Group
Identifier	DG-15513

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Details (EVENT OVERVIEW)	1..1

CDA[®] R-MIM Representation

Figure 7.3 Event Details (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.

The Event Details (CLINICAL SYNOPSIS) data group is represented by an Act class that is related to its containing Section class by an entry. The text attribute of that Act class represents Clinical Synopsis Description.

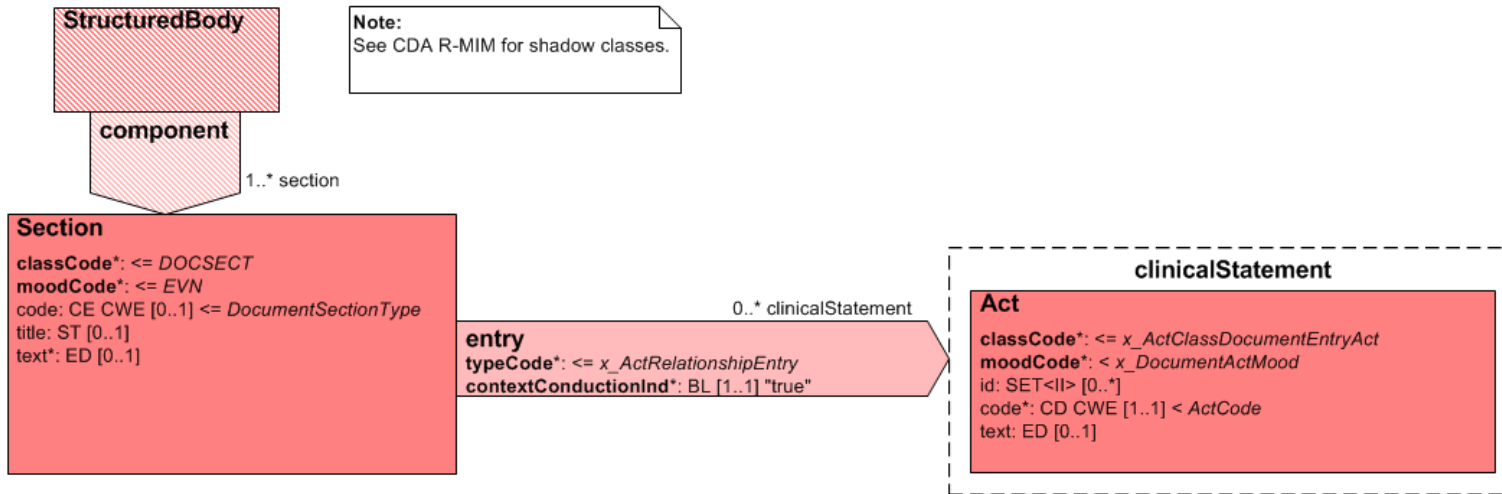


Figure 7.3. Event Details (CLINICAL SYNOPSIS)

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/					
Event Details (CLINICAL SYNOPSIS)	Summary information or comments about the clinical management of the patient, and the prognosis of diagnoses or problems identified during the health-care encounter. It may also include health-related information pertinent to the patient, and a clinical interpretation of relevant investigations and observations performed on the patient (including pathology and diagnostic imaging).	1..1	entry[synop]		
			entry[synop]/act		
			entry[synop]/act/@classCode="ACT"		
			entry[synop]/act/@moodCode="EVN"		
Event Details (CLINICAL SYNOPSIS) > Clinical Synopsis Instance Identifier	A globally unique identifier for each instance of a Clinical Synopsis evaluation.	1..1	entry[synop]/act/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Event Details (CLINICAL SYNOPSIS) > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	entry[synop]/act/code		
			entry[synop]/act/code/@code="102.15513"		
			entry[synop]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[synop]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[synop]/act/code/@displayName="Clinical Synopsis"		
Event Details (CLINICAL SYNOPSIS) > Clinical Synopsis Description	Short description, overview or summary of a clinical event and its reasons.	1..1	entry[synop]/act/text:ST		

Example 7.3. Event Details (CLINICAL SYNOPSIS) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (EVENT OVERVIEW) -->
    <component typeCode="COMP">
<section classCode="DOCSECT" moodCode="EVN">
...
<!-- Begin Event Details (CLINICAL SYNOPSIS) -->
<entry>
<act classCode="ACT" moodCode="EVN">
  <!-- Clinical Synopsis Instance Identifier -->
  <id root="4a8b424c-be62-4220-ad01-f1a927c401ad" />
  <!-- Detailed Clinical Model Identifier -->
  <code code="102.15513" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
  displayName="Clinical Synopsis" />
  <!-- 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>
</act>
</entry>
<!-- End Event Details (CLINICAL SYNOPSIS) -->
</section>
</component>
<!-- End Event Details (EVENT OVERVIEW) -->
...
</structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```


7.1.2 Newly Identified Adverse Reactions (ADVERSE REACTIONS)

Identification


Name	Newly Identified Adverse Reactions (ADVERSE REACTIONS)
Metadata Type	Section
Identifier	S-20113

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

Data Type	Name	Occurrence
	ADVERSE REACTION	1..*

CDA[®] R-MIM Representation

Figure 7.4 Newly Identified Adverse Reactions (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 Newly Identified Adverse Reactions (ADVERSE REACTIONS) section is composed of a Section class related to its context ClinicalDocument.structuredBody by a component.

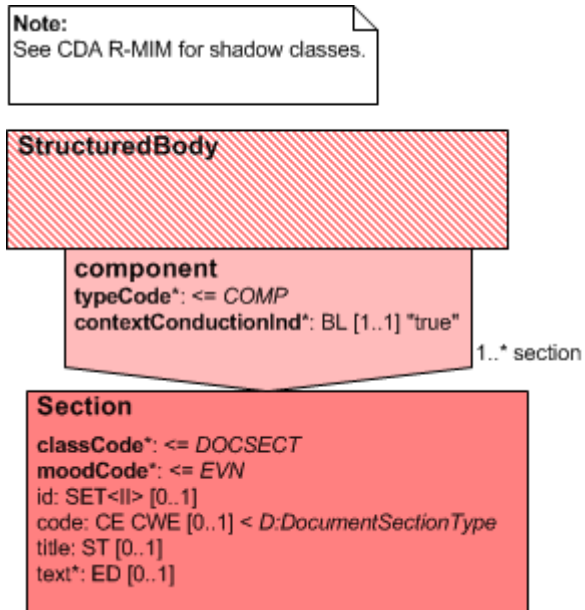


Figure 7.4. Newly Identified Adverse Reactions (ADVERSE REACTIONS)

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 (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.	0..1	component[adv_reacts]/ section		
			component[adv_reacts]/section/ title="Adverse Reactions"		
			component[adv_reacts]/section/ text		Required CDA® element. See Appendix A, CDA® Narratives .
Newly Identified Adverse Reactions (ADVERSE REACTIONS) > Adverse Reactions Instance Identifier	A globally unique identifier for each instance of an Adverse Reactions section.	0..1	component[adv_reacts]/section/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Newly Identified Adverse Reactions (ADVERSE REACTIONS) > Section Type	Type of section.	1..1	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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[adv_reacts]/section/code/ @displayName="Adverse Reactions"		
Newly Identified Adverse Reactions (ADVERSE REACTIONS) > ADVERSE REACTION	A harmful or undesirable effect associated with exposure to any substance or agent.	1..*	See: ADVERSE REACTION		

Example 7.4. Newly Identified Adverse Reactions (ADVERSE REACTIONS) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          <!-- Adverse Reactions Instance Identifier -->
          <id root="50846572-EFC7-11E0-8337-65094924019B" />
          <!-- Section Type -->
          <code code="101.20113" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Adverse Reactions" />
          <title>Adverse Reactions</title>
          <!-- Narrative text -->
          <text>Narrative.</text>
          <!-- Begin ADVERSE REACTION -->
          <entry>
            <act>
              ...
            </act>
          </entry>
          <!-- End ADVERSE REACTION -->
        </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	Occurrences (child within parent)
	Newly Identified Adverse Reactions (ADVERSE REACTIONS)	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.

The ADVERSE REACTION data group is represented by an Act class that is related to its containing Section class by an entry. Substance/Agent is represented by a ParticipantRole class related to the containing Act class by a participant.

Reaction Event is represented by an Observation class and is related to the containing Act class by an entryRelationship. Manifestation is represented by an Observation class related to the containing Observation (Reaction Event) class. Reaction Type is represented by the value attribute of the Manifestation Observation class.

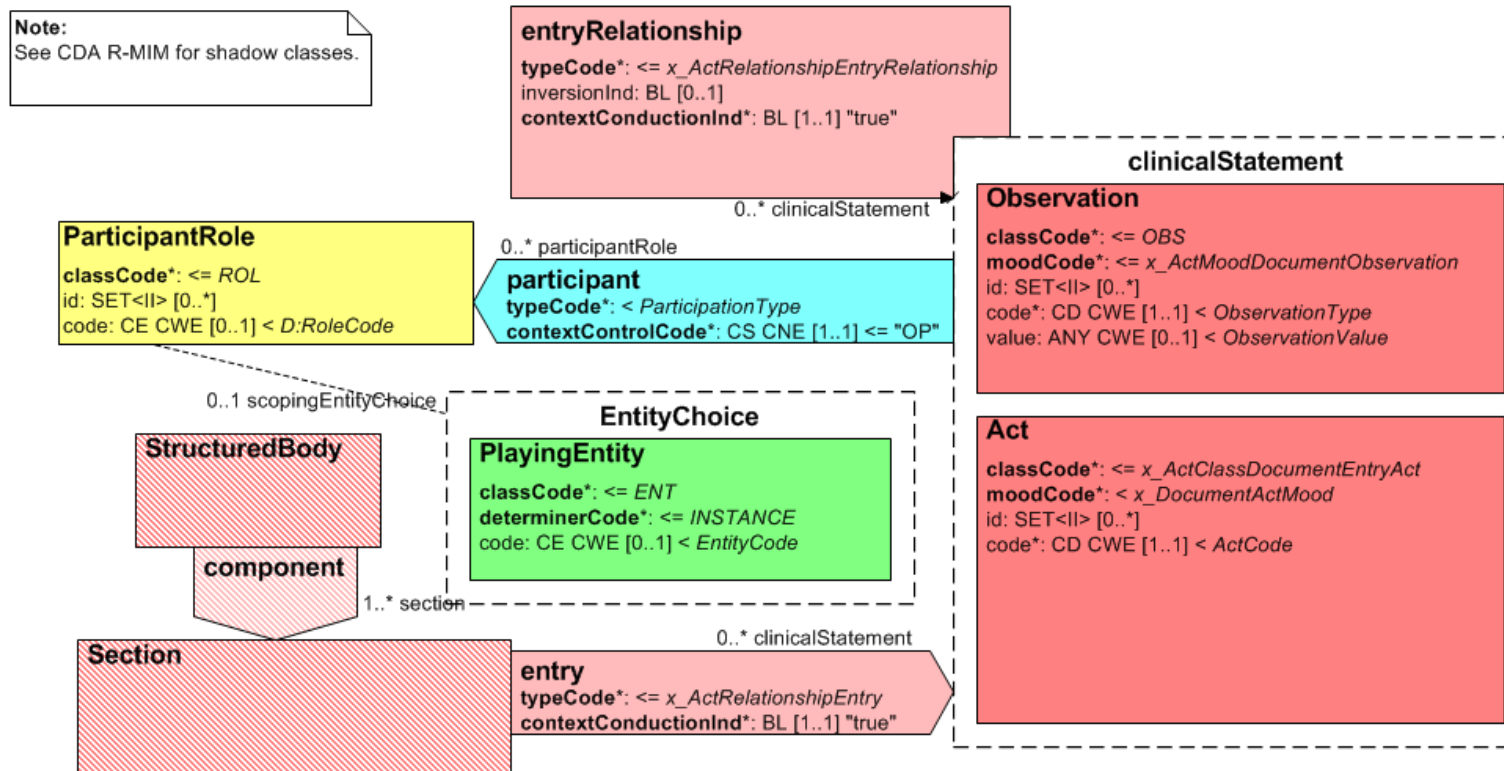


Figure 7.5. ADVERSE REACTION

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[adv_reacts]/section/		
ADVERSE REACTION	A harmful or undesirable effect associated with exposure to any substance or agent.	1..*	entry[adv_react]		
			entry[adv_react]/act		
			entry[adv_react]/act/@classCode="ACT"		
			entry[adv_react]/act/@moodCode="EVN"		
ADVERSE REACTION > Adverse Reaction Instance Identifier	A globally unique identifier for each instance of an Adverse Reaction evaluation.	1..1	entry[adv_react]/act/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
ADVERSE REACTION > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	entry[adv_react]/act/code		
			entry[adv_react]/act/code/@code="102.15517"		
			entry[adv_react]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[adv_react]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[adv_react]/act/code/@displayName="Adverse Reaction"		

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
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[adv_react]/act/ participant		
			entry[adv_react]/act/participant/@ typeCode="CAGNT"		
			entry[adv_react]/act/participant/ participantRole/playingEntity/code	SNOMED CT-AU: <ul style="list-style-type: none"> • 142321000036106 <i>Adverse reaction agent reference set</i> • 32570211000036100 <i>Substance foundation reference set</i> Australian Medicines Terminology (AMT): <ul style="list-style-type: none"> • 929360061000036106 <i>Medicinal product reference set</i> • 929360081000036101 <i>Medicinal product pack reference set</i> • 929360071000036103 <i>Medicinal product unit of use reference set</i> • 929360021000036102 <i>Trade product reference set</i> • 929360041000036105 <i>Trade product pack reference set</i> • 929360031000036100 <i>Trade product unit of use reference set</i> • 929360051000036108 <i>Containerized trade product pack reference set</i> 	See <code> for available attributes.

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[adv_react]/act/entryRelationship[rct_evnt]/@typeCode="CAUS"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/@classCode="OBS"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/@moodCode="EVN"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/code		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/code/@code="102.16474"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
entry[adv_react]/act/entryRelationship[rct_evnt]/observation/code/@displayName="Reaction Event"					
ADVERSE REACTION > REACTION EVENT > Manifestation	Presentation or exhibition of signs and symptoms of the adverse reaction expressed as a single word, phrase or brief description.	1..*	entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/@typeCode="MFST"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/@inversionInd="true"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/@classCode="OBS"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/@moodCode="EVN"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/entryRelationship[mfst]/observation/code	SNOMED CT-AU • 142341000036103 Clinical manifestation reference set • 32570071000036102 Clinical finding foundation reference set	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
ADVERSE REACTION > REACTION EVENT > Reaction Type	The type of reaction, as determined by the clinician.	0..1	entry[adv_react]/act/entryRelationship[rct_evnt]/observation/value: CD	SNOMED CT-AU: • 11000036103 <i>Adverse reaction type reference set</i>	See <code> for available attributes.
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/value/@ code		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/value/@ codeSystem = "2.16.840.1.113883.6.96"		
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/value/@ codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[adv_react]/act/entryRelationship[rct_evnt]/observation/value/@ displayName		

Example 7.5. ADVERSE REACTION XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin ADVERSE REACTION -->
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <!-- Adverse Reaction Instance Identifier -->
              <id root="547FC5C0-7F8A-11E0-AE79-EE2B4924019B" />
              <!-- Detailed Clinical Model Identifier -->
              <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="385420005"
                      codeSystem="2.16.840.1.113883.6.96"
                      codeSystemName="SNOMED CT"
                      displayName="Contrast media" />
                  </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" />
                </observation>
              </entryRelationship>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
  ...
  </ClinicalDocument>
```

```
<entryRelationship inversionInd="true" typeCode="MFST">
  <observation classCode="OBS" moodCode="EVN">
    <id root="547FF5C0-7F8A-11E0-AE79-EE2B4924019B" />

    <!-- Manifestation -->
    <code code="39579001"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Anaphylaxis" />

    <!-- Reaction Type -->
    <value code="419076005"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Allergic reaction" xsi:type="CD" />
    </observation>
  </entryRelationship>

</observation>
</entryRelationship>
<!-- End REACTION EVENT -->
</act>
</entry>
<!-- End ADVERSE REACTION -->

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

...

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



7.1.3 Medications (MEDICATION ORDERS)

Identification

Name	Medications (MEDICATION ORDERS)
Metadata Type	Section
Identifier	S-16146

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

Data Type	Name	Occurrence
	Known Medication (MEDICATION INSTRUCTION)	1..*

CDA[®] R-MIM Representation

Figure 7.6 Medications (MEDICATION ORDERS) 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 (MEDICATION ORDERS) section is composed of a Section class related to its context ClinicalDocument.structuredBody by a component.

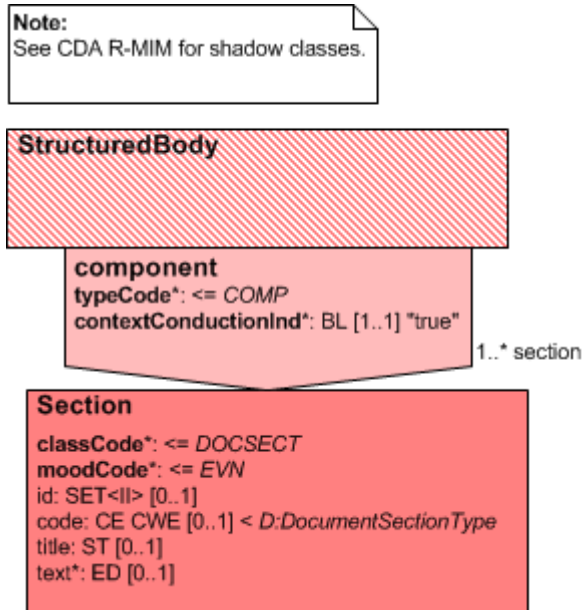


Figure 7.6. Medications (MEDICATION ORDERS)

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 (MEDICATION ORDERS)	Medicines that the subject of care is using.	0..1	component[meds]/ section		
			component[meds]/section/ title="Medications"		
			component[meds]/section/ text		Required CDA® element. See Appendix A, CDA® Narratives .
Medications (MEDICATION ORDERS) > Medication Orders Instance Identifier	A globally unique identifier for each instance of a Medication Orders section.	0..1	component[meds]/section/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Medications (MEDICATION ORDERS) > Section Type	Type of section.	1..1	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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[meds]/section/code/ @displayName="Medication Orders"		
Medications (MEDICATION ORDERS) > Known Medication (MEDICATION INSTRUCTION)	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	1..*	See: Known Medication (MEDICATION INSTRUCTION)		

Example 7.6. Medications (MEDICATION ORDERS) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICATION ORDERS) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          <!-- Medication Orders Instance Identifier -->
          <id root="50846572-EFC7-11E0-8337-65094924219B" />
          <!-- Section Type -->
          <code code="101.16146" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Medication Orders" />
          <title>Medications</title>
          <!-- Begin Narrative text -->
          <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>
          <!-- End Narrative text -->
          <!-- Begin Known Medication (MEDICATION INSTRUCTION) -->
          <entry>
```

```
<substanceAdministration>
...
</substanceAdministration>
</entry>
<!-- End Known Medication (MEDICATION INSTRUCTION) -->

</section>
</component>
  <!-- End Medications (MEDICATION ORDERS) -->
...
  </structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```

7.1.3.1 Known Medication (MEDICATION INSTRUCTION)

Identification

Name	Known Medication (MEDICATION INSTRUCTION)
Metadata Type	Data Group
Identifier	DG-16211

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Medications (MEDICATION ORDERS)	1..*

CDA® R-MIM Representation

[Figure 7.7 Known Medication \(MEDICATION INSTRUCTION\)](#) shows a subset of the CDA® R-MIM containing those classes being referred to in the CDA® Mapping. This data component maps to CDA® Body elements.

The Known Medication (MEDICATION INSTRUCTION) is represented by a SubstanceAdministration class that is related to its containing Section class by an entry. The text attribute of that SubstanceAdministration class represents Directions. Clinical Indication is represented by a reason Act class related to the containing SubstanceAdministration class by an entryRelationship. Medication Instruction Comment is represented by an Act class related the containing SubstanceAdministration class by an entryRelationship. Therapeutic Good Identification is represented by the code attribute of manufacturedMaterial.

Change Type is represented by a supporting Act class related to the containing SubstanceAdministration class by an entryRelationship. The text attribute of that supporting Act class represents Change Description. Change Status is represented by an Observation class related to the Change Type supporting Act class by an entryRelationship. Change Reason is represented by an Observation class related to the Change Type supporting Act class by an entryRelationship.

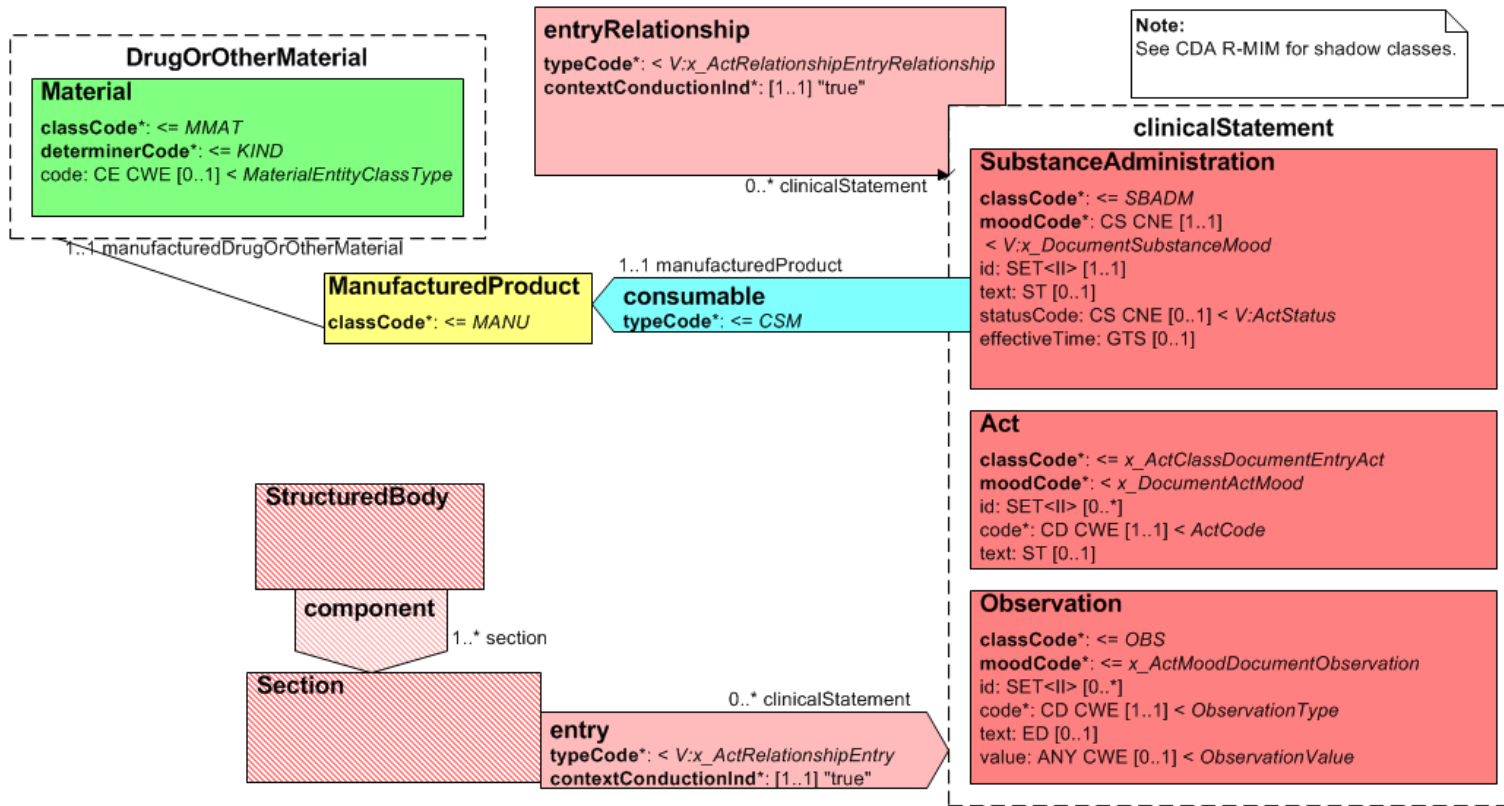


Figure 7.7. Known Medication (MEDICATION INSTRUCTION)

CDA® Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Body Level 3 Data Elements					
Context: ClinicalDocument/component/structuredBody/component[meds]/section/					
Known Medication (MEDICATION INSTRUCTION)	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	1..*	entry[med_inst]		The instantiation of a SubstanceAdministration class SHALL NOT include a negationInd attribute.
			entry[med_inst]/substanceAdministration		
			entry[med_inst]/substanceAdministration/@moodCode="EVN"		
			entry[med_inst]/substanceAdministration/@classCode="SBADM"		
Known Medication (MEDICATION INSTRUCTION) > Medication Instruction Instance Identifier	A globally unique object identifier for each instance of a Medication Instruction instruction.	1..1	entry[med_inst]/substanceAdministration/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Known Medication (MEDICATION INSTRUCTION) > Therapeutic Good Identification	The medicine, vaccine or other therapeutic good being ordered for, administered to or used by the subject of care.	1..1	entry[med_inst]/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code	Australian Medicines Terminology (AMT): <ul style="list-style-type: none"> 929360061000036106 <i>Medicinal product reference set</i> 929360081000036101 <i>Medicinal product pack reference set</i> 929360071000036103 <i>Medicinal product unit of use reference set</i> 929360021000036102 <i>Trade product reference set</i> 929360041000036105 <i>Trade product pack reference set</i> 929360031000036100 <i>Trade product unit of use reference set</i> 929360051000036108 <i>Containerized trade product pack reference set</i> 	See <code> for available attributes.
Known Medication (MEDICATION INSTRUCTION) > Directions	A complete narrative description of how much, when and how to use the medicine, vaccine or other therapeutic good.	1..1	entry[med_inst]/substanceAdministration/text:ST		

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Known Medication (MEDICATION INSTRUCTION) > 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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/code/@displayName="Clinical Indication"		
			entry[med_inst]/substanceAdministration/entryRelationship[cln_ind]/act/text:ST		
Known Medication (MEDICATION INSTRUCTION) > Medication Instruction Comment	Any additional information that may be needed to ensure the continuity of supply, rationale for current dose and timing, or safe and appropriate use.	0..1	entry[med_inst]/substanceAdministration/entryRelationship[cmts]/@typeCode="COMP"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/@classCode="INFRM"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/@moodCode="EVN"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/@code="103.16044"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/code/@displayName="Additional Comments"		
			entry[med_inst]/substanceAdministration/entryRelationship[cmts]/act/text:ST		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Known Medication (MEDICATION INSTRUCTION) > 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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/code/@displayName="Change Type"		
entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/value:CD	SNOMED CT-AU: • 15071000036100 <i>Change type reference set</i>	See <code> for available attributes.			

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Known Medication (MEDICATION INSTRUCTION) > Change Status	Identifies whether the change has already been made or is a recommendation that 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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/code/@displayName="Change Status"		
			entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[made]/observation/value:CD	SNOMED CT-AU: • 669181000168104 Change status reference set	See <code> for available attributes.
Known Medication (MEDICATION INSTRUCTION) > 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
Known Medication (MEDICATION INSTRUCTION) > Change or Recommendation 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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/code/@displayName="Change or Recommendation Reason"		
			entry[med_inst]/substanceAdministration/entryRelationship[change]/observation/entryRelationship[change_rsn]/act/text		
Known Medication (MEDICATION INSTRUCTION) > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	n/a		Not mapped directly, encompassed implicitly by CDA® in entry[med_inst]/substanceAdministration.

Example 7.7. Known Medication (MEDICATION INSTRUCTION) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICATION ORDERS) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin Known Medication (MEDICATION INSTRUCTION) -->
          <entry>
            <substanceAdministration classCode="SBADM" moodCode="EVN">
              <!-- Medication Instruction Instance Identifier -->
              <id root="461B6EF6-754C-11E0-A3C3-D19F4824019B" />
              <!-- Directions -->
              <text xsi:type="ST">2 tablets daily after breakfast</text>
              <consumable>
                <manufacturedProduct>
                  <manufacturedMaterial>
                    <!-- Therapeutic Good Identification -->
                    <code code="6647011000036101" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Panadeine Forte tablet: uncoated" />
                  </manufacturedMaterial>
                </manufacturedProduct>
              </consumable>
              <!-- 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 xsi:type="ST">Pain control.</text>
                </act>
              </entryRelationship>
              <!-- End Clinical Indication -->
              <!-- Begin Comment -->
              <entryRelationship typeCode="COMP">
                <act classCode="INFRM" moodCode="EVN">
                  <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Additional Comments" />
                  <text xsi:type="ST">Dosage to be reviewed in 10 days.</text>
                </act>
              </entryRelationship>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
  ...
  </ClinicalDocument>
```

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

<!-- Begin 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" />
    <!-- Change Description -->
    <text>New - prescribed.</text>
    <value code="105681000036100" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Prescribed" xsi:type="CD" />
    <!-- End Change Type -->

  <!-- Begin Change Status -->
  <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="Change Status" />
      <value code="703465008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Change made" xsi:type="CD" />
    </observation>
  </entryRelationship>
  <!-- End Change Status -->

  <!-- Begin Change or Recommendation 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 or Recommendation Reason" />
      <text xsi:type="ST">New - prescribed.</text>
    </act>
  </entryRelationship>
  <!-- End Change or Recommendation Reason -->

</observation>
</entryRelationship>

</substanceAdministration>
</entry>
<!-- End Known Medication (MEDICATION INSTRUCTION) -->

</section>
</component>
  <!-- End Medications (MEDICATION ORDERS) -->
  ...
</structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```


7.1.4 Diagnoses/Interventions (MEDICAL HISTORY)

Identification




Name	Diagnoses/Interventions (MEDICAL HISTORY)
Metadata Type	Section
Identifier	S-16117

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

Data Type	Name	Occurrence
	PROBLEM/DIAGNOSIS	0..*
	PROCEDURE	0..*
	UNCATEGORISED MEDICAL HISTORY ITEM	0..*

CDA® R-MIM Representation

Figure 7.8 Diagnoses/Interventions (MEDICAL HISTORY) shows a subset of the CDA® R-MIM containing those classes being referred to in the CDA® Mapping. This data component maps to CDA® Body elements.

The Diagnoses/Interventions (MEDICAL HISTORY) section is composed of a Section class related to its context ClinicalDocument.structuredBody by a component.

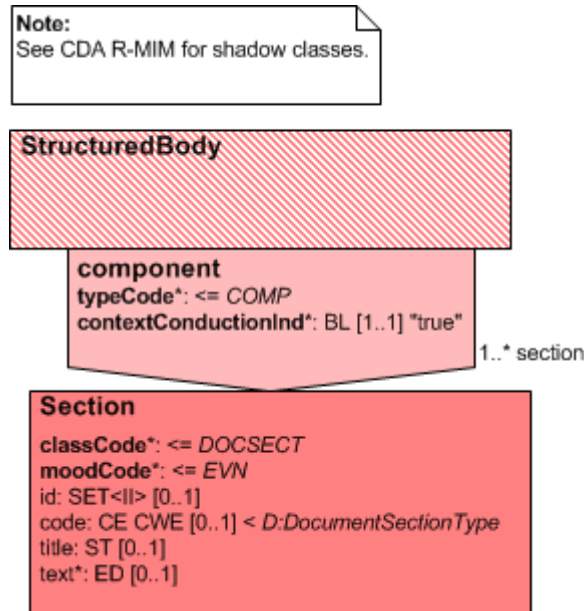


Figure 7.8. Diagnoses/Interventions (MEDICAL HISTORY)

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 (MEDICAL HISTORY)	Information about the subject of care's problems, diagnoses and medical or surgical procedures.	0..1	component[diag_int]/section		Each instance of this component[diag_int] SHALL contain at least one instance of : <ul style="list-style-type: none"> • PROBLEM/DIAGNOSIS or, • PROCEDURE or, • UNCATEGORISED MEDICAL HISTORY ITEM.
			component[diag_int]/section/title="Diagnoses/Interventions"		
			component[diag_int]/section/text		Required CDA [®] element. See Appendix A, CDA[®] Narratives .
Diagnoses/Interventions (MEDICAL HISTORY) > Medical History Instance Identifier	A globally unique identifier for each instance of a Medical History section.	0..1	component[diag_int]/section/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Diagnoses/Interventions (MEDICAL HISTORY) > Section Type	Type of section.	1..1	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	The value SHOULD be "NC-TIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
component[diag_int]/section/code/@displayName="Medical History"					
Diagnoses/Interventions (MEDICAL HISTORY) > PROBLEM/DIAGNOSIS	A health condition that, as determined by a clinician, may have impact on the physical, mental or social well-being of a person. A diagnosis is determined by scientific evaluation of pathological and pathophysiological findings identified from the patient's clinical history, family history, physical examination and diagnostic investigations.	0..*	See: PROBLEM/DIAGNOSIS		
Diagnoses/Interventions (MEDICAL HISTORY) > PROCEDURE	A clinical activity carried out for therapeutic, evaluative, investigative, screening or diagnostic purposes.	0..*	See: PROCEDURE		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Diagnoses/Interventions (MEDICAL HISTORY) > UNCATEGORISED MEDICAL HISTORY ITEM	A medical history entry that has not been categorised as either Procedure or Problem/Diagnosis.	0..*	See: UNCATEGORISED MEDICAL HISTORY ITEM		

Example 7.8. Diagnoses/Interventions (MEDICAL HISTORY) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICAL HISTORY) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          <!-- Medical History Instance Identifier -->
          <id root="50846572-EFC7-11E0-8337-65094944019B" />
          <!-- Section Type -->
          <code code="101.16117" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Medical History" />
          <title>Diagnoses/Interventions</title>
          <!-- Narrative text -->
          <text>Narrative.</text>
          <!-- Begin PROBLEM/DIAGNOSIS -->
          <entry>
            <observation>
              ...
            </observation>
          </entry>
          <!-- End PROBLEM/DIAGNOSIS -->
          <!-- Begin PROCEDURE -->
          <entry>
            <procedure>
              ...
            </procedure>
          </entry>
          <!-- End PROCEDURE -->
          <!-- Begin UNCATEGORISED MEDICAL HISTORY ITEM -->
          <entry>
            <act>
              ...
            </act>
          </entry>
          <!-- End UNCATEGORISED MEDICAL HISTORY ITEM -->
        </section>
      </component>
    <!-- End Diagnoses/Interventions (MEDICAL HISTORY) -->
  </structuredBody>
  </component>
  ...
</ClinicalDocument>
```

```
...  
</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	Occurrences (child within parent)
	Diagnoses/Interventions (MEDICAL HISTORY)	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.

The PROBLEM/DIAGNOSIS data group is represented by an Observation class related to its containing Section class by an entry. The value attribute of that Observation class represents Problem/Diagnosis Identification, and the effectiveTime attribute represents Date of Onset. Problem/Diagnosis Comment is represented by an Act class related to its containing Observation (PROBLEM/DIAGNOSIS) class by an entryRelationship.

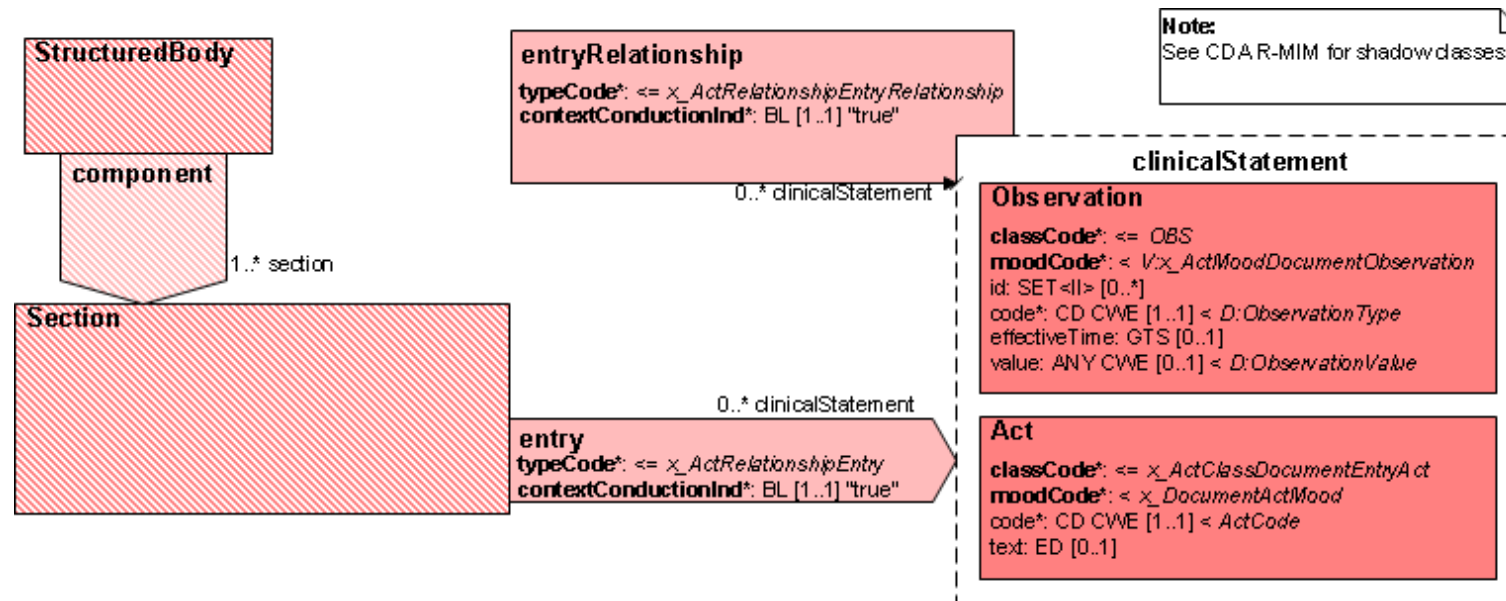


Figure 7.9. PROBLEM/DIAGNOSIS

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_int]/section/		
PROBLEM/DIAGNOSIS	A health condition that, as determined by a clinician, may have impact on the physical, mental or social well-being of a person. A diagnosis is determined by scientific evaluation of pathological and pathophysiological findings identified from the patient's clinical history, family history, physical examination and diagnostic investigations.	0..*	entry[prob]		
			entry[prob]/ observation		
			entry[prob]/observation/@ classCode ="OBS"		
			entry[prob]/observation/@ moodCode ="EVN"		
PROBLEM/DIAGNOSIS > Problem/Diagnosis Instance Identifier	A globally unique object identifier for each instance of a Problem/Diagnosis evaluation.	1..1	entry[prob]/observation/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
PROBLEM/DIAGNOSIS > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	entry[prob]/observation/ code		
			entry[prob]/observation/code/@ code ="282291009"		
			entry[prob]/observation/code/@ codeSystem ="2.16.840.1.113883.6.96"		
			entry[prob]/observation/code/@ codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
entry[prob]/observation/code/@ displayName ="Diagnosis interpretation"					
PROBLEM/DIAGNOSIS > Problem/Diagnosis Identification	Identification of the problem or diagnosis.	1..1	entry[prob]/observation/ value:CD	SNOMED CT-AU: • 32570581000036105 {Problem/Diagnosis reference set}	See <code> for available attributes.
PROBLEM/DIAGNOSIS > Date of Onset	Estimated or actual date the problem or diagnosis began, as indicated or identified by the clinician.	0..1	entry[prob]/observation/ effectiveTime		The value SHALL NOT include a time.
			entry[prob]/observation/effectiveTime/ low		
			entry[prob]/observation/effectiveTime/low/@ value		See <time> for available attributes.

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	The value SHOULD be "NC-TIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICAL HISTORY) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PROBLEM/DIAGNOSIS -->
          <entry>
            <observation classCode="OBS" moodCode="EVN">
              <!-- Problem/Diagnosis Instance Identifier -->
              <id root="74D29C88-706E-11E0-9726-5ABE4824019B" />
              <!-- Detailed Clinical Model Identifier -->
              <code code="282291009" codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT"
                displayName="Diagnosis interpretation" />
              <!-- Date of Onset -->
              <effectiveTime>
                <low value="20110410" />
              </effectiveTime>
              <!-- Problem/Diagnosis Identification -->
              <value code="85189001" codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT"
                displayName="Acute appendicitis" xsi:type="CD" />
              <!-- 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 xsi:type="ST">Problem/Diagnosis Comment goes here.</text>
                </act>
              </entryRelationship>
              <!-- End Problem/Diagnosis Comment -->
            </observation>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
  ...
  </ClinicalDocument>
```

```
</observation>
</entry>
<!-- End PROBLEM/DIAGNOSIS -->
...
</section>
</component>
  <!-- End Diagnoses/Interventions (MEDICAL HISTORY) -->
  ...
  </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	Occurrences (child within parent)
	Diagnoses/Interventions (MEDICAL HISTORY)	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 class related to its containing Section class by an entry. The code attribute of that Procedure class represents Procedure Name, and the effectiveTime attribute represents Procedure DateTime. Procedure Comment is represented by an Act class related to its containing Procedure class by an entryRelationship.

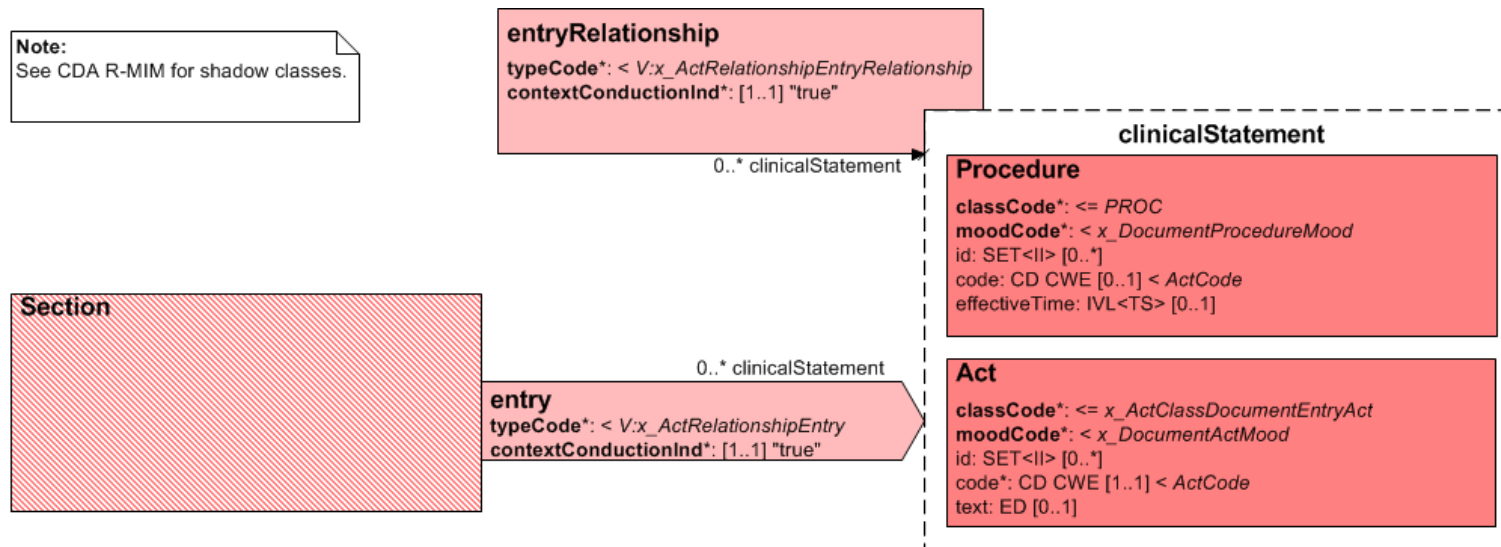


Figure 7.10. PROCEDURE

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[diag_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"		
PROCEDURE > Procedure Instance Identifier	A globally unique identifier for each instance of a Procedure action.	1..1	entry[proc]/procedure/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
PROCEDURE > Procedure Name	The name of the procedure (to be) performed.	1..1	entry[proc]/procedure/code	SNOMED CT-AU: • 32570141000036105 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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[proc]/procedure/entryRelationship[proc_cmt]/act/code/@displayName="Procedure Comment"		
entry[proc]/procedure/entryRelationship[proc_cmt]/act/text:ST					
PROCEDURE > Procedure DateTime	The date range during which the Procedure action occurred.	1..1	entry[proc]/procedure/effectiveTime		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
PROCEDURE > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	n/a		Not mapped directly, encompassed implicitly by CDA® in entry[proc]/procedure.

Example 7.10. PROCEDURE XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICAL HISTORY) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PROCEDURE -->
          <entry>
            <procedure classCode="PROC" moodCode="EVN">
              <!-- Procedure Instance Identifier -->
              <id root="B96A38C6-706C-11E0-AD2E-42BC4824019B" />
              <!-- Procedure Name -->
              <code code="80146002" codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT"
                displayName="Appendectomy" />
              <!-- Begin Procedure DateTime -->
              <effectiveTime xsi:type="IVL_TS">
                <low value="20130101"/>
                <high value="20130201"/>
              </effectiveTime>
              <!-- End Procedure DateTime -->
              <!-- 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 xsi:type="ST">Procedure Comment goes here.</text>
                </act>
              </entryRelationship>
              <!-- End Procedure Comment -->
            </procedure>
          </entry>
          <!-- End PROCEDURE -->
          ...
        </section>
      </component>
    </structuredBody>
  </component>
  ...
</ClinicalDocument>
```



```
</section>
</component>
  <!-- End Diagnoses/Interventions (MEDICAL HISTORY) -->
  ...
  </structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```


7.1.4.3 UNCATEGORISED MEDICAL HISTORY ITEM

Identification

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

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Diagnoses/Interventions (MEDICAL HISTORY)	0..*

CDA® R-MIM Representation

Figure 7.11 **UNCATEGORISED 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 UNCATEGORISED MEDICAL HISTORY ITEM data group is represented by an Act class related to its containing Section class by an entry relationship. The text attribute of that Act class represents Medical History Item Description, and the effectiveTime attribute represents Medical History Item TimeInterval. Medical History Item Comment is represented by an Act class related to its containing Act (UNCATEGORISED MEDICAL HISTORY ITEM) class by an entryRelationship.

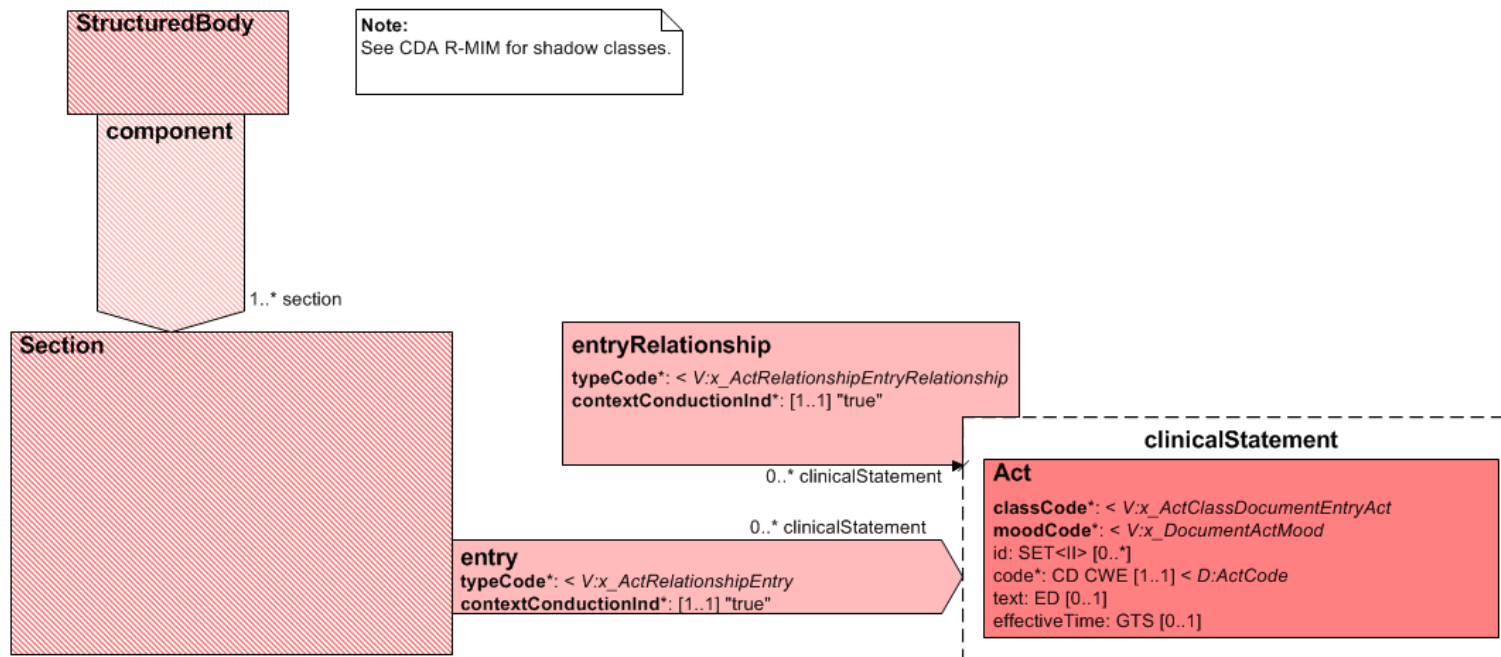


Figure 7.11. UNCATEGORISED MEDICAL HISTORY ITEM

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[diag_int]/section/		
UNCATEGORISED MEDICAL HISTORY ITEM	A medical history entry that has not been categorised as either Procedure or Problem/Diagnosis.	0..*	entry[med_hist_item]		
			entry[med_hist_item]/act		
			entry[med_hist_item]/act/@classCode="ACT"		
			entry[med_hist_item]/act/@moodCode="EVN"		
UNCATEGORISED MEDICAL HISTORY ITEM > Uncategorised Medical History Item Instance Identifier	A globally unique identifier for each instance of an Uncategorised Medical History Item evaluation.	1..1	entry[med_hist_item]/act/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
UNCATEGORISED MEDICAL HISTORY ITEM > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	entry[med_hist_item]/act/code		
			entry[med_hist_item]/act/code/@code="102.16627"		
			entry[med_hist_item]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[med_hist_item]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
entry[med_hist_item]/act/code/@displayName="Uncategorised Medical History Item"					
UNCATEGORISED MEDICAL HISTORY ITEM > Medical History Item Description	A description of the problem, diagnosis or procedure as a medical history item.	1..1	entry[med_hist_item]/act/text:ST		
UNCATEGORISED MEDICAL HISTORY ITEM > Medical History Item TimeInterval	The date range during which the problem or diagnosis is applied or the procedure occurred.	0..1	entry[med_hist_item]/act/effectiveTime		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
UNCATEGORISED MEDICAL HISTORY ITEM > Medical History Item Comment	Additional narrative about the problem, diagnosis or procedure.	0..1	entry[med_hist_item]/act/entryRelationship[cmt]/@typeCode="COMP"		
			entry[med_hist_item]/act/entryRelationship[cmt]/act		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/@classCode="INFRM"		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/@moodCode="EVN"		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/code		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/code/@code="103.16630"		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[med_hist_item]/act/entryRelationship[cmt]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entry[med_hist_item]/act/entryRelationship[cmt]/act/code/@displayName="Medical History Item Comment"		
entry[med_hist_item]/act/entryRelationship[cmt]/act/text:ST					

Example 7.11. UNCATEGORISED MEDICAL HISTORY ITEM XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 (MEDICAL HISTORY) -->
      <component typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin UNCATEGORISED MEDICAL HISTORY ITEM -->
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <!-- Uncategorised Medical History Item Instance Identifier -->
              <id root="0CBE0B42-7072-11E0-94B1-26C24824019B" />
              <!-- Detailed Clinical Model Identifier -->
              <code codes="102.16627" codeSystem="1.2.36.1.2001.1001.101"
                codeSystemName="NCTIS Data Components"
                displayName="Uncategorised Medical History Item" />
              <!-- Begin Medical History Item Time Interval -->
              <effectiveTime>
                <low value="201010131000+1000" />
                <high value="201010131030+1000" />
              </effectiveTime>
              <!-- End Medical History Item Time Interval -->
              <!-- Medical History Item Description -->
              <text xsi:type="ST">Other Medical History Item Description goes here.</text>
              <!-- Begin Medical History Item Comment -->
              <entryRelationship typeCode="COMP">
                <act classCode="INFRM" moodCode="EVN">
                  <code code="103.16630" codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components"
                    displayName="Medical History Item Comment" />
                  <text xsi:type="ST">Medical History Item Comment goes here.</text>
                </act>
              </entryRelationship>
              <!-- End Medical History Item Comment -->
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

```
</act>
</entry>
<!-- End UNCATEGORISED MEDICAL HISTORY ITEM -->
...
</section>
</component>
  <!-- End Diagnoses/Interventions (MEDICAL HISTORY) -->
  ...
  </structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```


7.1.5 IMMUNISATIONS

Identification


Name	IMMUNISATIONS
Metadata Type	Section
Identifier	S-16638

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

Data Type	Name	Occurrence
	Administered Immunisation (MEDICATION ACTION)	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 by a component.

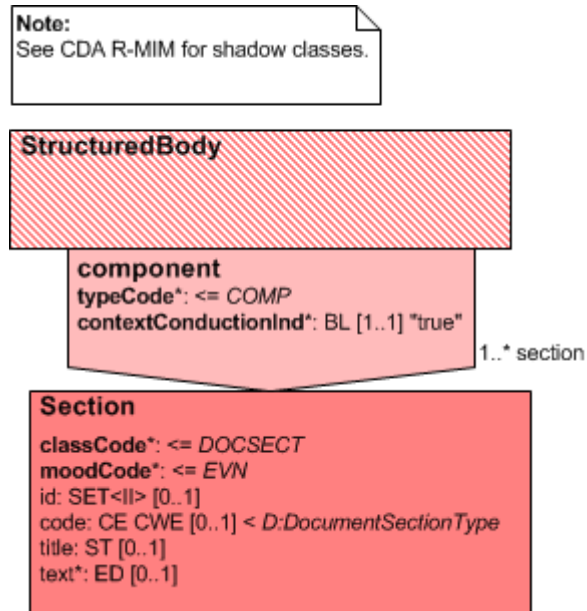


Figure 7.12. IMMUNISATIONS

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 vaccines given to the subject of care.	0..1	component[imms]/ section		
			component[imms]/section/ title="Immunisations"		
			component[imms]/section/ text		Required CDA [®] element. See Appendix A, CDA[®] Narratives .
IMMUNISATIONS > Immunisations Instance Identifier	A globally unique identifier for each instance of an Immunisations section.	0..1	component[imms]/section/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
IMMUNISATIONS > Section Type	Type of section.	1..1	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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[imms]/section/code/ @displayName="Immunisations"		
IMMUNISATIONS > Administered Immunisation (MEDICATION ACTION)	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 or to counter the effects of an infectious organism.	1..*	See: Administered Immunisation (MEDICATION ACTION)		

Example 7.12. IMMUNISATIONS XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument
  xmlns="urn:h17-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 Administered Immunisation (MEDICATION ACTION)

Identification

Name	Administered Immunisation (MEDICATION ACTION)
Metadata Type	Data Group
Identifier	DG-16210

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	IMMUNISATIONS	1..*

CDA[®] R-MIM Representation

Figure 7.13 Administered Immunisation (MEDICATION ACTION) 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 (MEDICATION ACTION) data group is represented by a SubstanceAdministration class that is related to its containing Section class by an entry. The effectiveTime attribute of that SubstanceAdministration class represents Medication Action DateTime. Therapeutic Good Identification is represented by the code attribute of manufacturedMaterial.

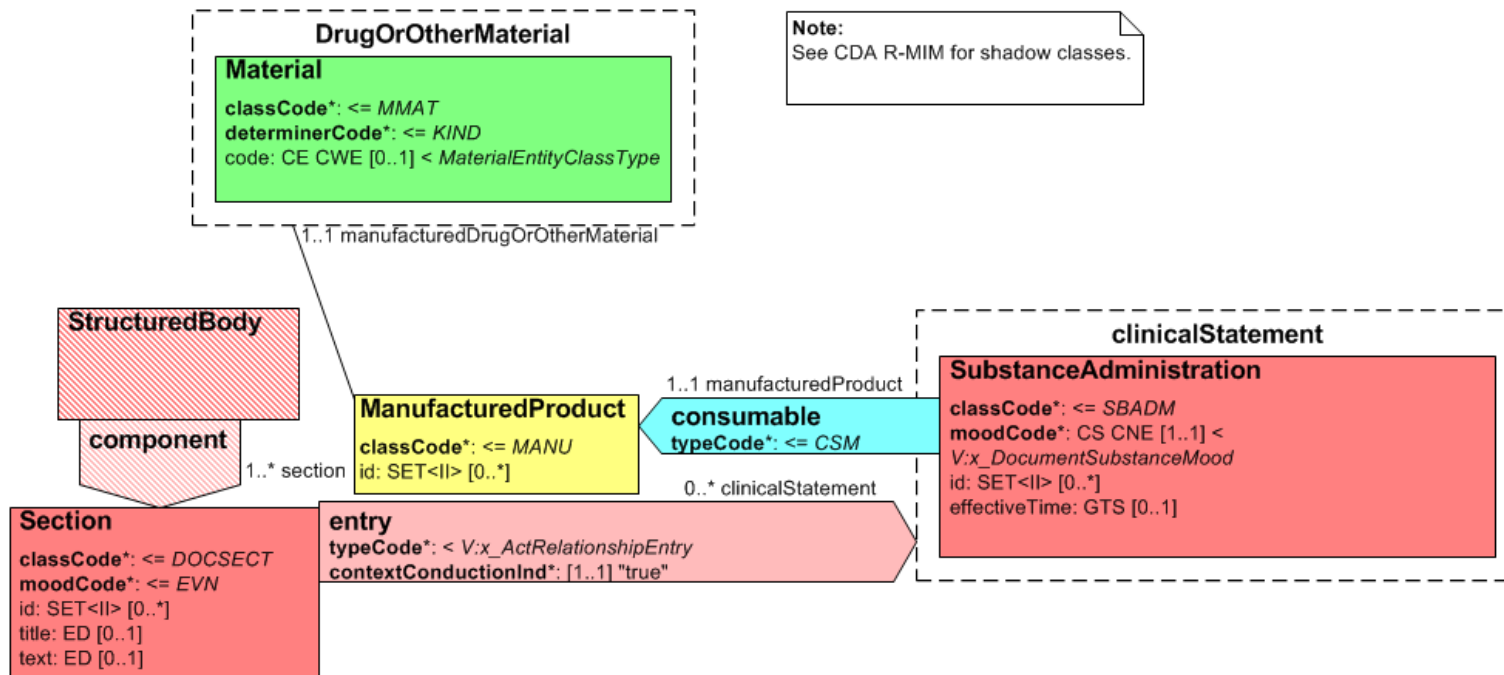


Figure 7.13. Administered Immunisation (MEDICATION ACTION)

CDA® Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[imms]/section/		
Administered Immunisation (MEDICATION ACTION)	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 or to counter the effects of an infectious organism.	1..*	entry[med_act] entry[med_act]/ substanceAdministration entry[med_act]/substanceAdministration/@classCode="SBADM" entry[med_act]/substanceAdministration/@moodCode="EVN"		
Administered Immunisation (MEDICATION ACTION) > Medication Action Instance Identifier	A globally unique identifier for each instance of Medication Action action.	1..1	entry[med_act]/substanceAdministration/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Administered Immunisation (MEDICATION ACTION) > Therapeutic Good Identification	The vaccine that was administered to or used by the subject of care.	1..1	entry[med_act]/substanceAdministration/ consumable/manufacturedProduct/manufacturedMaterial/code	Australian Medicines Terminology (AMT): <ul style="list-style-type: none"> 929360061000036106 <i>Medicinal product reference set</i> 929360081000036101 <i>Medicinal product pack reference set</i> 929360071000036103 <i>Medicinal product unit of use reference set</i> 929360021000036102 <i>Trade product reference set</i> 929360041000036105 <i>Trade product pack reference set</i> 929360031000036100 <i>Trade product unit of use reference set</i> 929360051000036108 <i>Containerized trade product pack reference set</i> 	See <code> for available attributes.
Administered Immunisation (MEDICATION ACTION) > Medication Action DateTime	Date, and optionally time, that the medication action is completed.	1..1	entry[med_act]/substanceAdministration/ effectiveTime		See <time> for available attributes.
Administered Immunisation (MEDICATION ACTION) > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	n/a		Not mapped directly, encompassed implicitly by CDA® in entry[med_act]/substanceAdministration.

Example 7.13. Administered Immunisation (MEDICATION ACTION) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin Administered Immunisation (MEDICATION ACTION) -->
          <entry>
            <substanceAdministration classCode="SBADM" moodCode="EVN">
              <!-- Medication Action Instance Identifier -->
              <id root="C5F9D7BA-A2B3-11E0-9C5E-5D194924019B" />

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

              <consumable>
                <manufacturedProduct>
                  <manufacturedMaterial>
                    <!-- Therapeutic Good Identification -->
                    <code code="162551000036100" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
                      displayName="Fluvax 2014 injection: suspension, 0.5 mL syringe" />
                  </manufacturedMaterial>
                </manufacturedProduct>
              </consumable>
            </substanceAdministration>
          </entry>
          <!-- End Administered Immunisation (MEDICATION ACTION) -->

        </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

Parent

Data Type	Name	Occurrences (child within parent)
	Event Summary	0..1

Children

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

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 by a component.

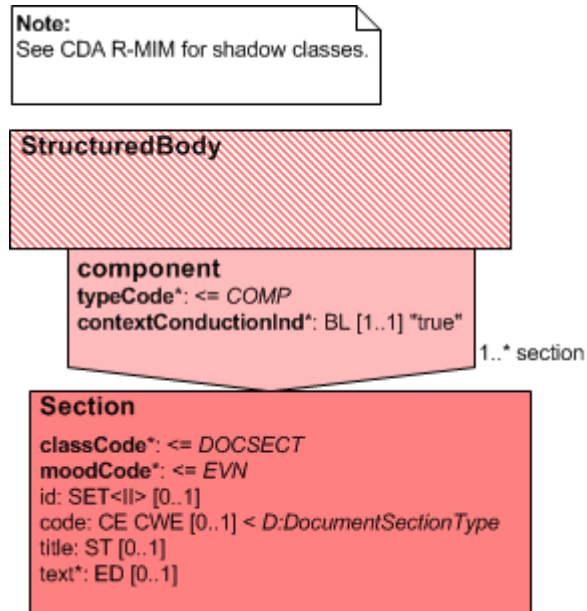


Figure 7.14. DIAGNOSTIC INVESTIGATIONS

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		Each instance of this component[diag_inv] SHALL contain at least one instance of: <ul style="list-style-type: none"> • PATHOLOGY TEST RESULT or, • IMAGING EXAMINATION RESULT or, • REQUESTED SERVICE.
			component[diag_inv]/section/ title="Diagnostic Investigations"		
			component[diag_inv]/section/ text		Required CDA [®] element. See Appendix A, CDA[®] Narratives .
DIAGNOSTIC INVESTIGATIONS > Diagnostic Investigations Instance Identifier	A globally unique identifier for each instance of a Diagnostic Investigations section.	0..1	component[diag_inv]/section/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
DIAGNOSTIC INVESTIGATIONS > Section Type	Type of section.	1..1	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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[diag_inv]/section/code/ @displayName="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		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          <!-- Diagnostic Investigations Identifier -->
          <id root="50846572-EFC7-11E0-8337-65094974019B" />
          <!-- Section Type -->
          <code code="101.20117" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Diagnostic Investigations" />
          <title>Diagnostic Investigations</title>
          <text />

          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section>
              ...
            </section>
          </component>
          <!-- End PATHOLOGY TEST RESULT -->

          <!-- Begin IMAGING EXAMINATION RESULT -->
          <component>
            <section>
              ...
            </section>
          </component>
          <!-- End IMAGING EXAMINATION RESULT -->

          <!-- Begin REQUESTED SERVICE -->
          <component>
            <section>
              ...
            </section>
          </component>
          <!-- End REQUESTED SERVICE -->
        </section>
      </component>
    </structuredBody>
  </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

Parent

Data Type	Name	Occurrences (child within parent)
	DIAGNOSTIC INVESTIGATIONS	0..*

Children

Data Type	Name	Occurrence
	Test Specimen Detail (SPECIMEN)	1..*
	Result Group (PATHOLOGY TEST RESULT GROUP)	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 represented by a Section class that is related to its containing Section class by a component. Pathology Test Result Name is represented by an Observation class related to the Section (PATHOLOGY TEST RESULT) class by an entry. The id attribute of that Observation class represents Laboratory Test Result Identifier, and the value attribute represents Test Result Representation.

There are four Observation classes related to the containing Observation (Pathology Test Result Name) class by entryRelationships: Diagnostic Service, Overall Pathology Test Result Status, Pathological Diagnosis, and Observation DateTime. Pathology Test Conclusion is represented by a reference Observation class related to the containing Pathology Test Result Observation class by an entryRelationship.

Clinical Information Provided is represented by an Act class that is related to the containing Observation (Pathology Test Result Name) class by an entryRelationship. Test Comment is represented by an Act class that is related to the containing Pathology Test Result Observation class by an entryRelationship.

TEST REQUEST DETAILS is represented by a subject Act class that is related to the containing Observation (Pathology Test Result Name) class by an entryRelationship. Test Requested Name is represented by an Observation class that is related to its containing Act (TEST REQUEST DETAILS) class by an entryRelationship.

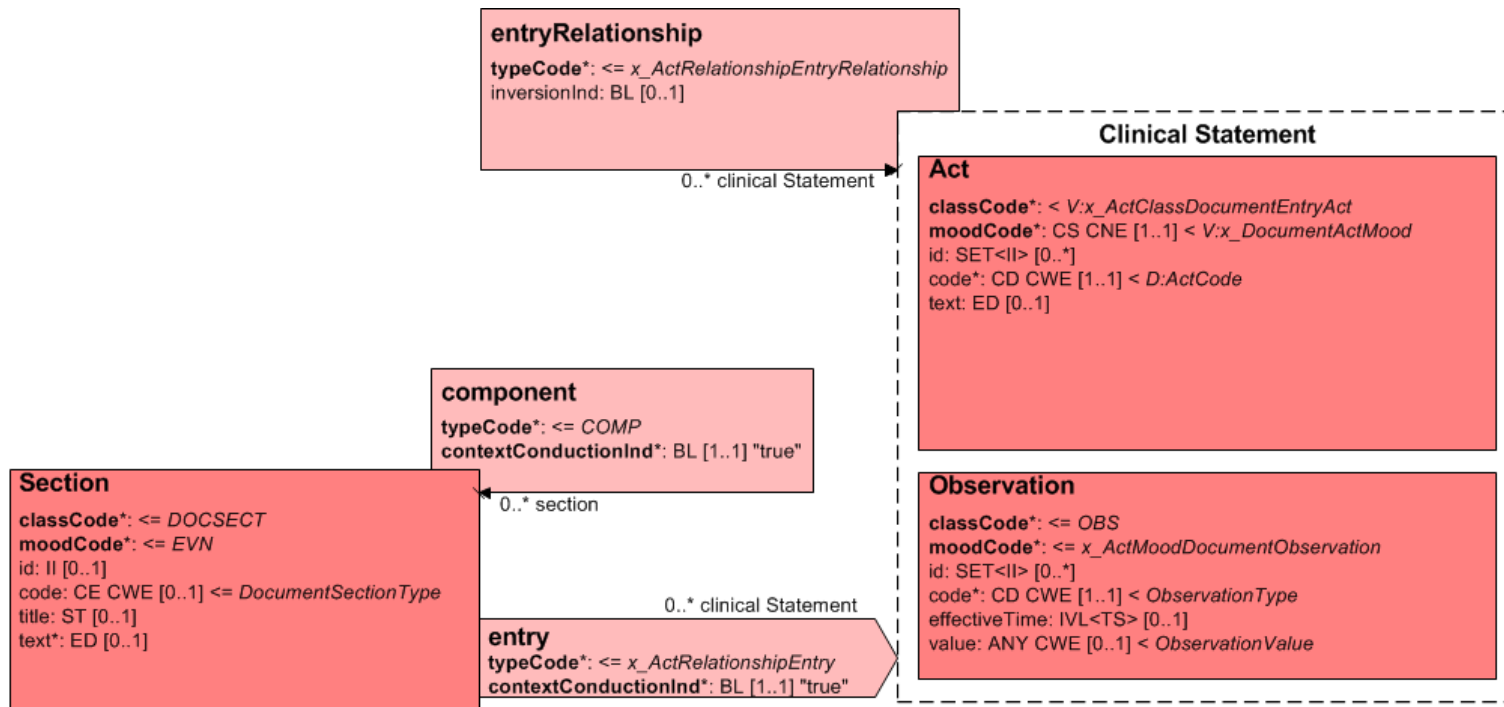


Figure 7.15. PATHOLOGY TEST RESULT

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](#)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 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/title="Pathology Test Result"		
			component[path_test]/section/text		Required CDA® element. See Appendix A, CDA® Narratives .
PATHOLOGY TEST RESULT > Pathology Test Result Instance Identifier	A globally unique identifier for each instance of a Pathology Test Result observation.	0..1	component[path_test]/section/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
PATHOLOGY TEST RESULT > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	component[path_test]/section/code		
			component[path_test]/section/code/@code="102.16144"		
			component[path_test]/section/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[path_test]/section/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[path_test]/section/code/@displayName="Pathology Test Result"		

¹ <http://www.hl7.org/oid/index.cfm?ref=footer>

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/		
PATHOLOGY TEST RESULT > Test Result Name (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:CD	The code SHOULD be from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia which can be found at the rcpa.edu.au ² website.	See <code> for available attributes. When a <i>Pathology Test Result</i> record contains only a single individual test, this name may be the same as the name of the individual test.
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 > Diagnostic Service	The diagnostic service that performs the examination.	0..1	entryRelationship[diag_serv]/@typeCode="COMP"		
			entryRelationship[diag_serv]/observation		
			entryRelationship[diag_serv]/observation/@classCode="OBS"		
			entryRelationship[diag_serv]/observation/@moodCode="EVN"		
			entryRelationship[diag_serv]/observation/code		
			entryRelationship[diag_serv]/observation/code/@code="310074003"		
			entryRelationship[diag_serv]/observation/code/@codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[diag_serv]/observation/code/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
			entryRelationship[diag_serv]/observation/code/@displayName="pathology service"		
entryRelationship[diag_serv]/observation/value:CD	HL7 [®] : Diagnostic Service Section ID	See <code> for available attributes.			
PATHOLOGY TEST RESULT > Test Specimen Detail (SPECIMEN)	Details about specimens to which this test result refers.	1..*	See: Test Specimen Detail (SPECIMEN)		

² <http://www.rcpa.edu.au/Library/Practising-Pathology/PTIS/APUTS-Downloads>

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
PATHOLOGY TEST RESULT > Overall Pathology Test Result Status	The status of the pathology test result as a whole.	1..1	entryRelationship[res_stat]/@typeCode="COMP"		
			entryRelationship[res_stat]/observation		
			entryRelationship[res_stat]/observation/@classCode="OBS"		
			entryRelationship[res_stat]/observation/@moodCode="EVN"		
			entryRelationship[res_stat]/observation/id	UUID	See <id> for available attributes.
			entryRelationship[res_stat]/observation/code	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.	
			entryRelationship[res_stat]/observation/code/@code="308552006"		
			entryRelationship[res_stat]/observation/code/@codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[res_stat]/observation/code/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[res_stat]/observation/code/@displayName="report status"		
entryRelationship[res_stat]/observation/value:CD	NCTIS: Admin Codes - Result Status	See <code> for available attributes.			
PATHOLOGY TEST RESULT > Clinical Information Provided	Description or summary of relevant, prior clinical information that may help in determining the test(s) to be performed, or interpreting the result when compiling or reading the report.	0..1	entryRelationship[clin_info_prov]/@typeCode="COMP"		
			entryRelationship[clin_info_prov]/act		
			entryRelationship[clin_info_prov]/act/@classCode="INFRM"		
			entryRelationship[clin_info_prov]/act/@moodCode="EVN"		
			entryRelationship[clin_info_prov]/act/code		
			entryRelationship[clin_info_prov]/act/code/@code="55752-0"		
			entryRelationship[clin_info_prov]/act/code/@codeSystem="2.16.840.1.113883.6.1"		
			entryRelationship[clin_info_prov]/act/code/@codeSystemName	The value SHOULD be "LOINC". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[clin_info_prov]/act/code/@displayName="Clinical information"		
			entryRelationship[clin_info_prov]/act/text:ST		

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
PATHOLOGY TEST RESULT > Result Group (PATHOLOGY TEST RESULT GROUP)	A group of results that form all or part of a recognizable pathology test.	0..*	See: Result Group (PATHOLOGY TEST RESULT GROUP)		
PATHOLOGY TEST RESULT > Pathological Diagnosis	Single word, phrase or brief description representing the diagnostic statement as asserted by the reporting pathologist.	0..*	entryRelationship[path_diag]/@typeCode="REFR"		
			entryRelationship[path_diag]/ observation		
			entryRelationship[path_diag]/observation/ @classCode="OBS"		
			entryRelationship[path_diag]/observation/ @moodCode="EVN"		
			entryRelationship[path_diag]/observation/ code		
			entryRelationship[path_diag]/observation/code/ @code="88101002"		
			entryRelationship[path_diag]/observation/code/ @codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[path_diag]/observation/code/ @codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
entryRelationship[path_diag]/observation/code/ @displayName="pathology diagnosis"					
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 > Conclusion (Pathology Test Conclusion)	Concise and clinically contextualised narrative interpretation of the pathology test results.	0..1	entryRelationship[path_conc]/@typeCode="REFR"		
			entryRelationship[path_conc]/observation		
			entryRelationship[path_conc]/observation/@classCode="OBS"		
			entryRelationship[path_conc]/observation/@moodCode="EVN"		
			entryRelationship[path_conc]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[path_conc]/observation/code		
			entryRelationship[path_conc]/observation/code/@code="386344002"		
			entryRelationship[path_conc]/observation/code/@codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[path_conc]/observation/code/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[path_conc]/observation/code/@displayName="laboratory findings data interpretation"		
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.	0..1	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 that is not captured in other fields.	0..1	entryRelationship[tst_cmt]/@typeCode="COMP"		
			entryRelationship[tst_cmt]/act		
			entryRelationship[tst_cmt]/act/@classCode="INFRM"		
			entryRelationship[tst_cmt]/act/@moodCode="EVN"		
			entryRelationship[tst_cmt]/act/code		
			entryRelationship[tst_cmt]/act/code/@code="103.16468"		
			entryRelationship[tst_cmt]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[tst_cmt]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entryRelationship[tst_cmt]/act/code/@displayName="Test Comment"		
			entryRelationship[tst_cmt]/act/text:ST		
PATHOLOGY TEST RESULT > TEST REQUEST DETAILS	Details concerning a single requested pathology test.	0..*	entryRelationship[req_dets]/@typeCode="SUBJ"		
			entryRelationship[req_dets]/@inversionInd="true"		
			entryRelationship[req_dets]/act		
			entryRelationship[req_dets]/act/@classCode="ACT"		
			entryRelationship[req_dets]/act/@moodCode="EVN"		
			entryRelationship[req_dets]/act/code		
			entryRelationship[req_dets]/act/code/@code="102.16160"		
			entryRelationship[req_dets]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[req_dets]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			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 the pathology test which was requested.	0..*	entryRelationship[req_dets]/act/entryRelationship[req_name]/@typeCode="COMP"		This logical NEHTA data component SHOULD NOT be present if its value is equal to the value of the Pathology Test Result Name (entry[path_test_res]/observation/code).
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/@classCode="OBS"		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/@moodCode="RQO"		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/@code="103.16404"		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	
entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/code/@displayName="Test Requested Name"					
entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/value:CD	The code SHOULD be from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia which can be found at the rcpa.edu.au ³ website.				
PATHOLOGY TEST RESULT > TEST REQUEST DETAILS > Laboratory Test Result Identifier	The identifier given to the laboratory test result of a pathology investigation.	0..1	id		See <id> for available attributes.

³ <http://www.rcpa.edu.au/Library/Practising-Pathology/PTIS/APUTS-Downloads>

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
PATHOLOGY TEST RESULT > Observation DateTime	Date, and optionally time, when an observation is clinically significant to the condition of the subject of the observation.	1..1	entryRelationship[tst_date]/@typeCode="COMP"		
			entryRelationship[tst_date]/ observation		
			entryRelationship[tst_date]/observation/@ classCode="OBS"		
			entryRelationship[tst_date]/observation/@ moodCode="EVN"		
			entryRelationship[tst_date]/observation/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[tst_date]/observation/ code		Observation DateTime is mapped to Pathology Test Result DateTime and retains the original OID and displayName of that concept for backwards compatibility.
			entryRelationship[tst_date]/observation/code/@ code="103.16605"		
			entryRelationship[tst_date]/observation/code/@ codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[tst_date]/observation/code/@ codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs . Optional CDA [®] element.	
			entryRelationship[tst_date]/observation/code/@ displayName="Pathology Test Result DateTime"		
entryRelationship[tst_date]/observation/ effectiveTime		See <time> for available attributes.			

Example 7.15. PATHOLOGY TEST RESULT XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument xmlns="urn:h17-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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              <!-- Pathology Test Instance Identifier - used for system purposes such as matching -->
              <id root="CCF0D55C-EFD0-11DF-BEA2-AACCFD72085" />
              <!-- Detailed Clinical Model Identifier -->
              <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>
                      <th>DateTime</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>
                      <td>12/02/2013</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>
    <td>12/02/2013</td>
  </tr>
</tbody>
</table>
<paragraph>
  <linkHtml href="pathresult.pdf">Attached Pathology Result</linkHtml>
</paragraph>
</text>
<entry>
<observation classCode="OBS" moodCode="EVN">

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

  <!-- Test Result Name (Pathology Test Result Name) -->
  <code code="275711006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Serum Chemistry Test" xsi:type="CD" />

  <!-- Begin Test Result Representation -->
  <value mediaType="application/pdf" xsi:type="ED">
    <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" displayName="pathology service" />
      <value codes="CH" codeSystem="2.16.840.1.113883.12.74" codeSystemName="HL7 Diagnostic service section ID" displayName="Chemistry" xsi:type="CD" />
    </observation>
  </entryRelationship>
  <!-- End Diagnostic Service -->

  <!-- Begin Test Specimen Detail (SPECIMEN) -->
  <entryRelationship typeCode="SUBJ">
    <observation classCode="OBS" moodCode="EVN">
      ...
    </observation>
  </entryRelationship>
  <!-- End Test Specimen Detail (SPECIMEN) -->

  <!-- Begin Overall Pathology Test Result Status -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      <!-- ID is used for system purposes such as matching -->
      <id root="7AA9BAAC-0CD0-11E0-9516-4350DFD72085" />
      <code code="308552006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
        displayName="report status" />
      <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
        codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
    </observation>
  </entryRelationship>
  <!-- End Overall Pathology Test Result Status -->

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

```

```
<text>Bloods for evaluation.</text>
</act>
</entryRelationship>
<!-- End Clinical Information Provided -->

<!-- Begin Result Group (PATHOLOGY TEST RESULT GROUP) -->
<entryRelationship typeCode="COMP">
  <organizer classCode="BATTERY" moodCode="EVN">
    ...
  </organizer>
</entryRelationship>
<!-- End Result Group (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"
      displayName="pathology diagnosis" />
    <value code="301011002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
      displayName="Escherichia coli urinary tract infection" xsi:type="CD" />
    <value code="197940006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
      displayName="Microscopic haematuria" 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"
      displayName="laboratory findings data interpretation" />
    <value xsi:type="ST">Chronic problems.</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 inversionInd="true" typeCode="SUBJ">
  <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="103.16404" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Test Requested Name" />
        <value code="401324008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
          displayName="Urinary microscopy, culture and sensitivities" xsi:type="CD" />
      </observation>
    </entryRelationship>
  </act>
</entryRelationship>
<!-- End Test Requested Name -->
  </act>
</entryRelationship>
<!-- End TEST REQUEST DETAILS -->

```

```
<!-- End Test Requested Name -->

</act>
</entryRelationship>
<!-- End Test TEST REQUEST DETAILS -->

<!-- Begin Observation DateTime -->
<entryRelationship typeCode="COMP">
<observation classCode="OBS" moodCode="EVN">
  <!-- ID is used for system purposes such as matching -->
  <id root="CCFPD55C-EFD0-11DF-BEA2-A6CCDFD72085" />
  <code code="103.16605" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
    displayName="Pathology Test Result DateTime" />
  <effectiveTime value="201310201235+1000" />
</observation>
</entryRelationship>
<!-- End Observation 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 (SPECIMEN)

Identification

Name	Test Specimen Detail (SPECIMEN)
Metadata Type	Data Group
Identifier	DG-16156

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	PATHOLOGY TEST RESULT	1..*

CDA[®] R-MIM Representation

Figure 7.16 Test Specimen Detail (SPECIMEN) 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 Test Specimen Detail (SPECIMEN) data group is represented by an Observation class that is related to its containing Observation (Pathology Test Result Name) class by an entryRelationship. The methodCode attribute of that Observation (SPECIMEN) class represents Collection Procedure, the effectiveTime attribute represents Collection DateTime, and targetSiteCode represents the ANATOMICAL LOCATION data elements.

Specimen Identifier is represented by the id attribute of a specimenRole which is related to its containing Observation (Pathology Test Result Name) class by a specimen participation. PHYSICAL PROPERTIES OF AN OBJECT is represented by a specimenPlayingEntity of the containing specimenRole. The code attribute of that specimenPlayingEntity represents Specimen Tissue Type, the quantity attribute represents Weight or Volume, and the desc attribute represents Object Description. Container Identifier is represented by the Container NEHTA CDA[®] extension.

Anatomical Location Image and Image are both represented by a supporting ObservationMedia class related to the containing Observation (SPECIMEN) class by an entryRelationship.

There are four component Observation classes related to the containing Observation (SPECIMEN) class by entryRelationships: Sampling Preconditions, Collection Setting, DateTime Received, and Parent Specimen Identifier.

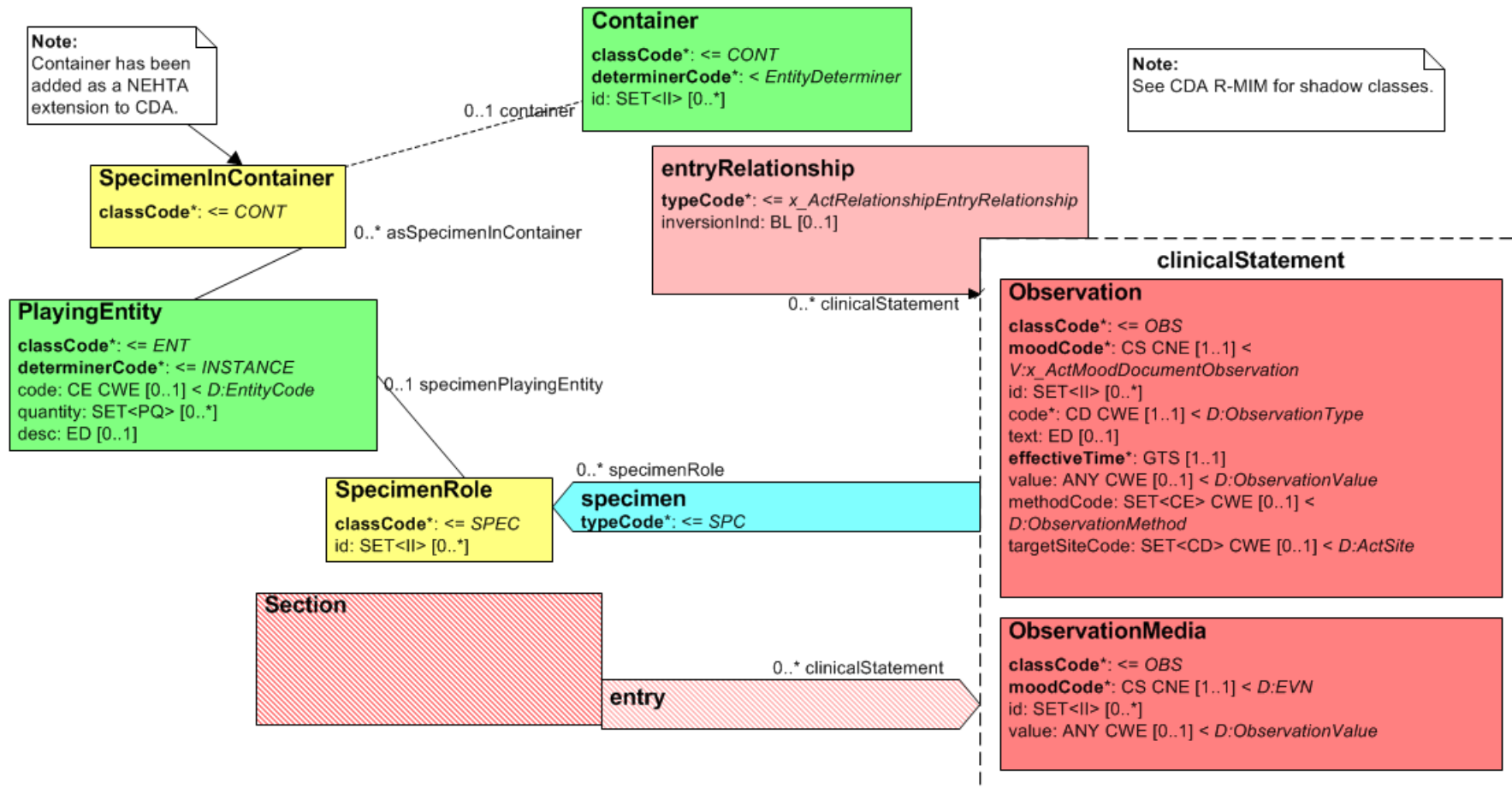


Figure 7.16. Test Specimen Detail (SPECIMEN)

CDA® Mapping



Note

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

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/		
Test Specimen Detail (SPECIMEN)	Details about specimens to which this test result refers.	1..*	entryRelationship[specimen]/@typeCode="SUBJ"		
			entryRelationship[specimen]/observation		
			entryRelationship[specimen]/observation/@classCode="OBS"		
			entryRelationship[specimen]/observation/@moodCode="EVN"		
			entryRelationship[specimen]/observation/code		
			entryRelationship[specimen]/observation/code/@code="102.16156.136.2.1"		
			entryRelationship[specimen]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[specimen]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[specimen]/observation/code/@displayName="Specimen"		
Test Specimen Detail (SPECIMEN) > Specimen Tissue Type	The type of specimen to be collected.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/code	NS	See <code> for available attributes.
Test Specimen Detail (SPECIMEN) > Collection Procedure	The method of collection to be used.	0..1	entryRelationship[specimen]/observation/methodCode	NS	See <code> for available attributes.
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION)	Details about the anatomical locations to which this examination result refers.	0..*	n/a	Each instance of Anatomical Site (ANATOMICAL LOCATION) SHALL contain either one instance of SPECIFIC LOCATION or one instance of Anatomical Location Description.	This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.

⁴ <http://www.hl7.org/oid/index.cfm?ref=footer>

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Anatomical Location Name	The name of the anatomical location.	0..1	entryRelationship[specimen]/observation/ targetSiteCode	SNOMED CT-AU: • 32570061000036105 <i>Body structure foundation reference set</i>	See <code> for available attributes.
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Side	The laterality of the anatomical location.	0..1	entryRelationship[specimen]/observation/targetSiteCode/ qualifier		
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/ name		
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/name/ @code="272741003"		
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/name/ @codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/name/ @codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/name/ @displayName="Laterality"		
			entryRelationship[specimen]/observation/targetSiteCode/qualifier/ value:CD	SNOMED CT-AU: • 32570611000036103 <i>Laterality reference set</i>	See <code> for available attributes.
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Description	Description of the anatomical location.	0..1	entryRelationship[specimen]/observation/targetSiteCode/ originalText		Anatomical Location Description is an instance of targetSiteCode with only an originalText element.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Test Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Image	An image or images used to identify a location.	0..*	entryRelationship[specimen]/observation/entryRelationship[ana_im]/@typeCode="SPRT"		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[specimen]/observation/entryRelationship[ana_im]/observationMedia		
			entryRelationship[specimen]/observation/entryRelationship[ana_im]/observationMedia/@classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[ana_im]/observationMedia/@moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[ana_imc]/observationMedia/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
entryRelationship[specimen]/observation/entryRelationship[ana_im]/observationMedia/value					
Test Specimen Detail (SPECIMEN) > 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..*	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity		
Test Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Weight	Property of a body – commonly, but inadequately, defined as the quantity of matter in it – to which its inertia is ascribed, and expressed as the weight of the body divided by the acceleration due to gravity.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/quantity:PQ		Either Weight or Volume SHALL be present. Weight and Volume SHALL be mutually exclusive.
Test Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > DIMENSIONS	The dimensions of the object.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Test Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > VOLUME	Size, measure or amount of anything in three dimensions; space occupied by a body or substance measured in cubic units.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/quantity:PQ		Either Weight or Volume SHALL be present. Weight and Volume SHALL be mutually exclusive.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Test Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Description (Object Description)	A description of the physical characteristics of the object other than weight and volume.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ desc:ST		
Test Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Image	A picture of the object.	0..1	entryRelationship[specimen]/observation/ entryRelationship[spec_im]/@typeCode="SPRT"		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[specimen]/observation/entryRelationship[spec_im]/ observationMedia		
			entryRelationship[specimen]/observation/entryRelationship[spec_im]/observationMedia/ @classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[spec_im]/observationMedia/ @moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[spec_im]/observationMedia/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	
			entryRelationship[specimen]/observation/entryRelationship[spec_im]/observationMedia/ value		
Test Specimen Detail (SPECIMEN) > COLLECTION AND HANDLING	Collection and handling requirements.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Test Specimen Detail (SPECIMEN) > COLLECTION AND HANDLING > Sampling Preconditions	Any conditions to be met before the sample should be taken.	0..1	entryRelationship[specimen]/observation/entryRelationship[smp_pre]/@typeCode="COMP"		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/@classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/@moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/code		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/code/@code="103.16171"		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/code/@displayName="Sampling Preconditions"					
			entryRelationship[specimen]/observation/entryRelationship[smp_pre]/observation/value:CD	NS	See <code> for available attributes.
Test Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING	Workflow of specimen processing or handling.	1..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Test Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING > Date and Time of Collection (Collection DateTime)	The date and time that the collection has been ordered to take place or has taken place.	1..1	entryRelationship[specimen]/observation/effectiveTime		See <time> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Test Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING > Collection Setting	Identification of the setting at which the specimen was collected from a subject of care.	0..1	entryRelationship[specimen]/observation/entryRelationship[coll_set]/@typeCode="COMP"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/@classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/@moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/code		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/code/@code="103.16529"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/code/@displayName="Collection Setting"		
			entryRelationship[specimen]/observation/entryRelationship[coll_set]/observation/value:ST		
Test Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING > Date and Time of Receipt (DateTime Received)	The date and time that the sample was received at the laboratory.	0..1	entryRelationship[specimen]/observation/entryRelationship[date_rec]/@typeCode="COMP"		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/@classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/@moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/code		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/code/@code="103.11014"		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[specimen]/observation/entryRelationship[date_rec]/observation/code/@displayName="DateTime Received"		
			entryRelationship[specimen]/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 (SPECIMEN) > IDENTIFIERS	Sample identifications.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Test Specimen Detail (SPECIMEN) > IDENTIFIERS > Specimen Identifier	Unique identifier of the specimen, normally assigned by the laboratory.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/id		See <id> for available attributes.
Test Specimen Detail (SPECIMEN) > Specimen Identifier > Parent Specimen Identifier	Unique identifier of the parent specimen where the specimen is split into sub-samples.	0..1	entryRelationship[specimen]/observation/entryRelationship[prnt_id]/@typeCode="COMP"		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/@classCode="OBS"		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/@moodCode="EVN"		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/code		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/code/@code="103.16187"		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entryRelationship[specimen]/observation/entryRelationship[prnt_id]/observation/code/@displayName="Parent Specimen Identifier"		
Test Specimen Detail (SPECIMEN) > Specimen Identifier > Container Identifier	Unique identifier given to the container in which the specimen is transported or processed.	0..1	entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer		See NEHTA CDA [®] extension: Container
			entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/@classCode="CONT"		
			entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container		
			entryRelationship[specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id		See <id> for available attributes.

Example 7.16. Test Specimen Detail (SPECIMEN) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument xmlns="urn:h17-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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Test Specimen Detail (SPECIMEN) -->
                  <entryRelationship typeCode="SUBJ">
                    <observation classCode="OBS" moodCode="EVN">
                      <!-- ID is used for system purposes such as matching -->
                      <id root="CCC0D55C-EFD0-11DF-BEA2-A6CCDFD72085" />
                      <code code="102.16156.136.2.1" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Specimen" />
                      <!-- Date and Time of Collection (Collection DateTime) -->
                      <effectiveTime value="201310201235+1000" />

                      <!-- Collection Procedure -->
                      <methodCode code="48635004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
                        displayName="Fine needle biopsy" />

                      <!-- Anatomical Site (ANATOMICAL LOCATION) :: Examples provided of all three allowed variants. These variants are mutually exclusive -->
                      <!-- Begin Example with complete SPECIFIC LOCATION -->
                      <!-- Begin SPECIFIC LOCATION -->
                      <!-- Name of Location (Anatomical Location Name) -->
                      <targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax">

                      <!-- Begin Side -->
                      <qualifier>
                        <name code="272741003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Laterality" />
                        <value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="left" xsi:type="CD" />
                    
```

```

</qualifier>
<!-- End Side -->

</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with complete SPECIFIC LOCATION -->

<!-- Begin Example with partial SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax" />
<!-- End SPECIFIC LOCATION -->
<!-- End Example with partial SPECIFIC LOCATION -->

<!-- Begin Example with Description -->
<targetSiteCode>
  <!-- Description (Anatomical Location Description) -->
  <originalText>Chest/Thorax</originalText>
</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with Description -->
<!-- End Anatomical Site (ANATOMICAL LOCATION) -->

<!-- Begin Physical Details -->
<specimen>
  <specimenRole>
    <!-- Specimen Identifier -->
    <id root="1538103e-845b-4f86-95ed-33b62e7589d0" />

    <!-- Begin Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) -->
    <specimenPlayingEntity>
      <!-- Specimen Tissue Type -->
      <code code="258442002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Fluid sample" />

      <!-- Begin Weight/Volume -->
      <quantity unit="mL" value="5" />
      <!-- End Weight/Volume -->

      <!-- Begin Description (Object Description) -->
      <desc xsi:type="ST">5 mL</desc>
      <!-- End Description (Object Description) -->

      <!-- Begin Container Identifier -->
      <ext:asSpecimenInContainer classCode="CONT">
        <ext:container>
          <ext:id extension="CNH45218964" root="CA54FD22-76B8-11E0-AC87-0EE34824019B" />
        </ext:container>
      </ext:asSpecimenInContainer>
      <!-- End Container Identifier -->

    </specimenPlayingEntity>
    <!-- End Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) -->
  </specimenRole>
</specimen>
<!-- End Physical Details -->

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="SPRT">
  <observationMedia classCode="OBS" moodCode="EVN">
    <id root="3953A078-0365-11E1-B90D-41D04724019B" />
    <value mediaType="image/jpeg" >
      <reference value="location.jpeg" />
    </value>
  </observationMedia>
</entryRelationship>

```

```
</observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Begin Image -->
<entryRelationship typeCode="SPRT">
  <observationMedia classCode="OBS" moodCode="EVN">
    <id root="1d64bb51-c5b3-4048-9a9f-e753f4e3c203" />
    <value mediaType="image/jpeg" >
      <reference value="specimen.jpeg" />
    </value>
  </observationMedia>
</entryRelationship>
<!-- End Image -->

<!-- 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="16985007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
      displayName="Fasting" xsi:type="CD" />
  </observation>
</entryRelationship>
<!-- End Sampling Preconditions -->

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

<!-- Begin Date and Time of Receipt (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 Date and Time of Receipt (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="7013b12a-f9d0-4197-9726-88a6803d4d13" />
      </specimenRole>
    </specimen>
  </observation>
</entryRelationship>
<!-- End Parent Specimen Identifier -->

</observation>
</entryRelationship>
<!-- End Test Specimen Detail (SPECIMEN) -->
```

```
...
<!-- Begin Result Group (PATHOLOGY TEST RESULT GROUP) -->
<entryRelationship typeCode="COMP">
  <organizer classCode="BATTERY" moodCode="EVN">
    ...

    </organizer>
  </entryRelationship>
<!-- End Result Group (PATHOLOGY TEST RESULT GROUP) -->

...

<!-- Begin TEST REQUEST DETAILS -->
<entryRelationship inversionInd="true" typeCode="SUBJ">
  <act classCode="ACT" moodCode="EVN">
    ...

    </act>
  </entryRelationship>
<!-- End Test TEST REQUEST DETAILS -->

...

  </observation>
</entry>
</section>
</component>
<!-- End PATHOLOGY TEST RESULT -->

...

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

...

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


7.1.6.1.2 Result Group (PATHOLOGY TEST RESULT GROUP)

Identification



Name	Result Group (PATHOLOGY TEST RESULT GROUP)
Metadata Type	Data Group
Identifier	DG-16469

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	PATHOLOGY TEST RESULT	0..*

Children

Data Type	Name	Occurrence
	Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	0..1
	Result Group Specimen Detail (SPECIMEN)	0..1

CDA[®] R-MIM Representation

Figure 7.17 Result Group (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.

Result Group (PATHOLOGY TEST RESULT GROUP) is represented by an Organizer class related to its containing Observation class by an entryRelationship. The code attribute of that Organizer class represents Pathology Test Result Group Name.

Each INDIVIDUAL PATHOLOGY TEST RESULT data group is represented by an Observation class related to the containing Organizer class by a component. The code attribute of that Observation (INDIVIDUAL PATHOLOGY TEST RESULT) class represents Individual Pathology Test Result Name and the value attribute represents Individual Pathology Test Result Value.

There are two Act classes related to the containing Observation (INDIVIDUAL PATHOLOGY TEST RESULT) class by an entryRelationship: Individual Pathology Test Result Comment and Individual Pathology Test Result Reference Range Guidance. Individual Pathology Test Result Status is represented by an Observation class related to the containing Observation (INDIVIDUAL PATHOLOGY TEST RESULT) class by an entryRelationship.

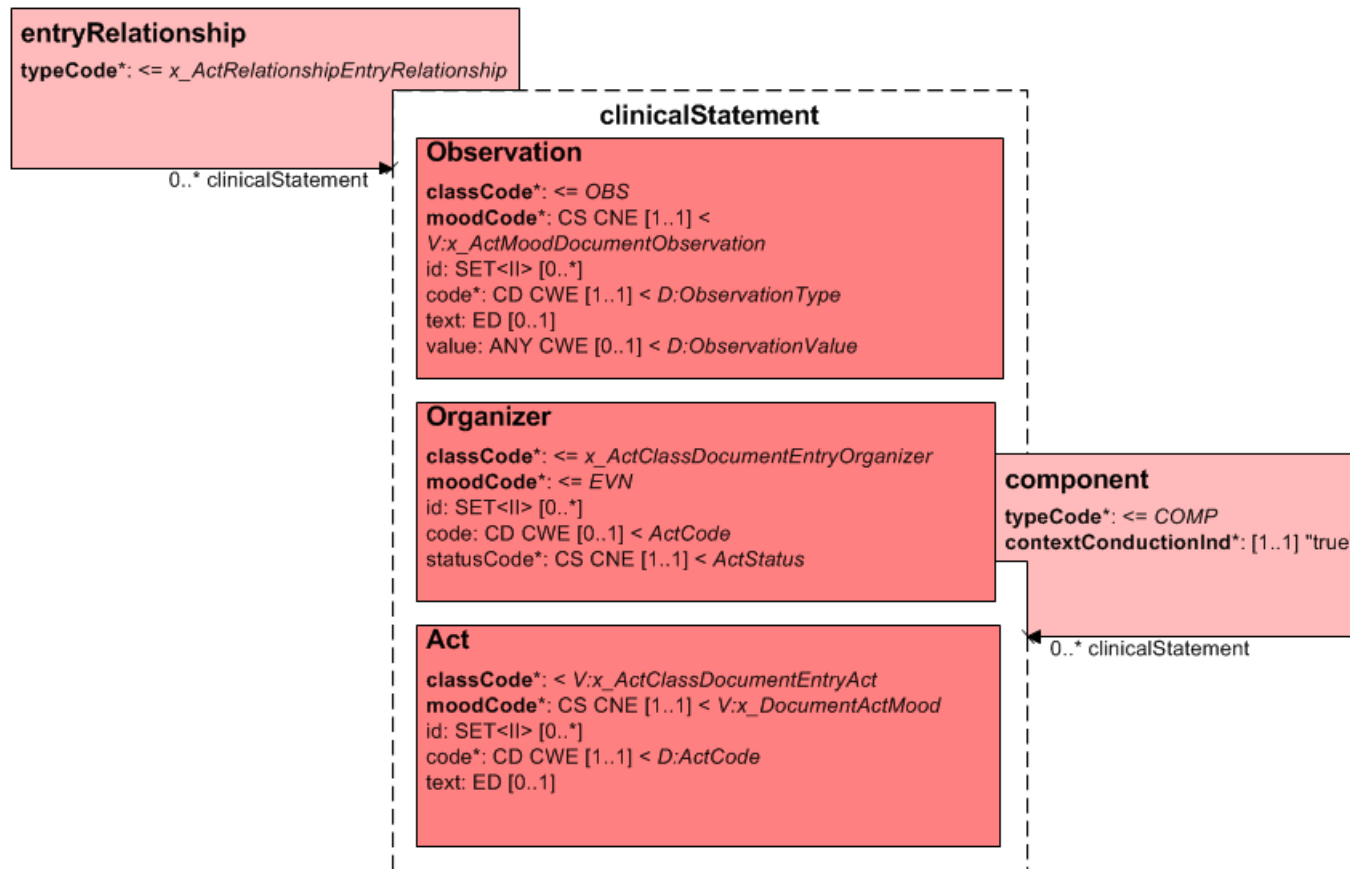


Figure 7.17. Result Group (PATHOLOGY TEST RESULT GROUP)

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/		
Result Group (PATHOLOGY TEST RESULT GROUP)	A group of results that form all or part of a recognisable pathology test.	0..*	entryRelationship[res_gp]/@typeCode="COMP"		
			entryRelationship[res_gp]/organizer		
			entryRelationship[res_gp]/organizer/@classCode="BATTERY"		
			entryRelationship[res_gp]/organizer/@moodCode="EVN"		
			entryRelationship[res_gp]/organizer/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[res_gp]/organizer/statusCode/@code="completed"		Required CDA [®] element.
Result Group (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	The code SHOULD be from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia which can be found at the rcpa.edu.au ⁵ website.	See <code> for available attributes.

⁵ <http://www.rcpa.edu.au/Library/Practising-Pathology/PTIS/APUTS-Downloads>

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT)	Specific detailed result of a pathology test, including both the value of the result item, and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[res_gp]/organizer/component[ind_res]/		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/@classCode="OBS"		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/@moodCode="EVN"		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (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	The code SHOULD be from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia which can be found at the rcpa.edu.au ⁶ website.	See <code> for available attributes.
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT) > Result Value (INDIVIDUAL PATHOLOGY TEST RESULT VALUE)	Value of the result, with reference range information.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT) > Result Value (INDIVIDUAL PATHOLOGY TEST RESULT VALUE) > Individual Pathology Test Result Value	The actual value of the result.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/value		Although value is of datatype ANY only CD, PQ, BL, ST, INT, RTO, IVL_PQ or PPD SHALL be used.

⁶ <http://www.rcpa.edu.au/Library/Practising-Pathology/PTIS/APUTS-Downloads>

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT) > Result Value (INDIVIDUAL PATHOLOGY TEST RESULT VALUE) > Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	One or more reference ranges applicable to the Individual Pathology Test Result Value.	0..1	See: Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)		
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (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/ @codeSystemName 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	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (INDIVIDUAL PATHOLOGY TEST RESULT) > Individual Pathology Test Result 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/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			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
Result Group (PATHOLOGY TEST RESULT GROUP) > Result (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/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
			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.			
Result Group (PATHOLOGY TEST RESULT GROUP) > Result Group Specimen Detail (SPECIMEN)	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 (SPECIMEN)		

Example 7.17. Result Group (PATHOLOGY TEST RESULT GROUP) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Test Specimen Detail (SPECIMEN) -->
                  <entryRelationship typeCode="SUBJ">
                    <observation classCode="OBS" moodCode="EVN">
                      ...
                    </observation>
                  </entryRelationship>
                  <!-- End Test Specimen Detail (SPECIMEN) -->
                ...
              </entry>
            </section>
          </component>
          <!-- Begin Result Group (PATHOLOGY TEST RESULT GROUP) -->
          <entryRelationship typeCode="COMP">
            <organizer classCode="BATTERY" moodCode="EVN">
              <id root="9BE931D2-F085-11E0-9831-1E7C4824019B" />
              ...
              <!-- Pathology Test Result Group Name -->
              <code code="18719-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
                displayName="Chemistry studies (set)" />
              <statusCode code="completed" />
              ...
            </organizer>
          </entryRelationship>
          <!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->
          <component>
```

```

<observation classCode="OBS" moodCode="EVN">
  <id root="3802BA7A-F086-11E0-8A74-147D4824019B" />
  <!-- Individual Pathology Test Result Name -->
  <code code="14682-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Serum Creatinine" />
  <!-- Individual Pathology Test Result Value -->
  <value unit="mmol/L" value="0.06" xsi:type="PQ" />

  ...

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

  <!-- Begin Individual Pathology Test Result 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"
        displayName="reference range comments" />
      <text xsi:type="ST">Within normal range +/- 5%.</text>
    </act>
  </entryRelationship>
  <!-- End Individual Pathology Test Result 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"
        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 REFERENCE RANGE DETAILS -->
  <referenceRange typeCode="REFV">
    <!-- Begin REFERENCE RANGE -->
    <observationRange classCode="OBS" moodCode="EVN.CRT">
      ...

      </observationRange>
    <!-- End REFERENCE RANGE -->
  </referenceRange>
  <!-- End REFERENCE RANGE DETAILS -->

</observation>
</component>
<!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->

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

```

```
    </observation>
  </component>
  <!-- End Result Group Specimen Detail (SPECIMEN) -->

  </organizer>
</entryRelationship>
<!-- End Result Group (PATHOLOGY TEST RESULT GROUP) -->

...

<!-- Begin TEST REQUEST DETAILS -->
<entryRelationship inversionInd="true" typeCode="SUBJ">
  <act classCode="ACT" moodCode="EVN">
    ...

  </act>
</entryRelationship>
<!-- End Test TEST REQUEST DETAILS -->

...

  </observation>
</entry>
</section>
</component>
<!-- End PATHOLOGY TEST RESULT -->

...

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

...

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


7.1.6.1.2.1 Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)

Identification

Name	Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)
Metadata Type	Data Group
Identifier	DG-16325

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Result Group (PATHOLOGY TEST RESULT GROUP)	0..1

CDA® R-MIM Representation

Figure 7.18 Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE 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 REFERENCE RANGE DETAILS data group is represented by an ObservationRange class that is related to its containing Observation class by a referenceRange relationship. Normal Status is represented by the interpretationCode attribute of the containing Observation class. The code attribute of the ObservationRange class represents Reference Range Meaning, and the value attribute represents Reference Range.

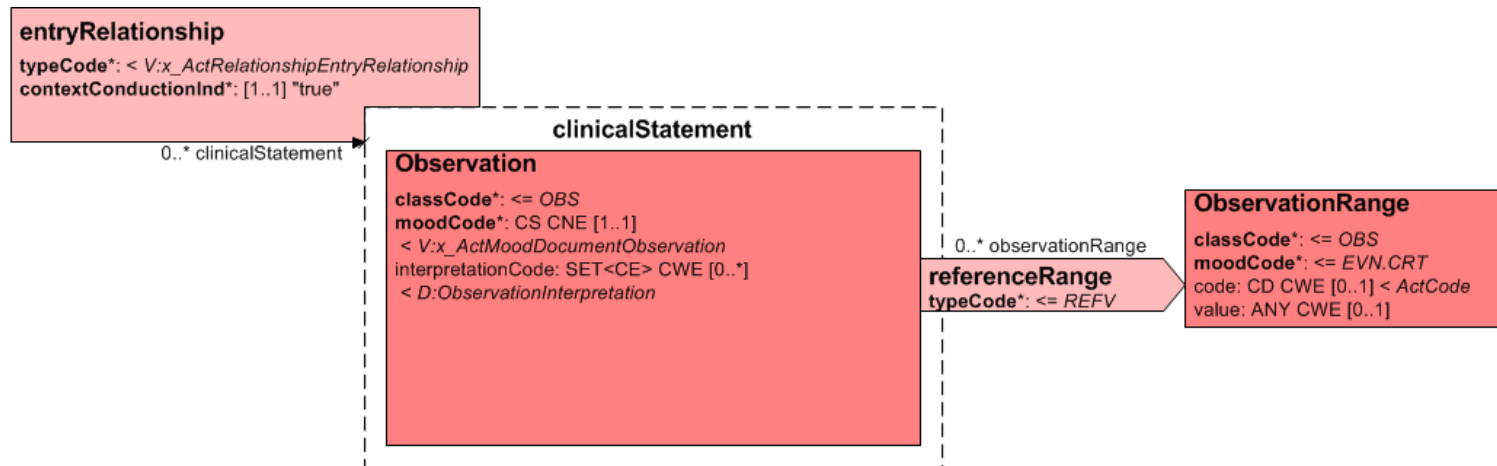


Figure 7.18. Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)

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[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/component[ind_res]/observation/		
Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	One or more reference ranges applicable to the Individual Pathology Test Result Value.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . See Known Issues .
Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) > Normal Status	An indication of the degree of diagnostically significant abnormality of the value, based on available clinical information (including but not limited to the reference range).	0..1	interpretationCode	HL7 [®] V3: Observation-InterpretationNormality	See <code> for available attributes.
Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE	A named range to be associated with any quantity datum.	0..*	referenceRange/@typeCode="REFV"		
			referenceRange/observationRange		
			referenceRange/observationRange/@classCode="OBS"		
			referenceRange/observationRange/@moodCode="EVN.CRT"		
Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE > Reference Range Meaning	Term whose value indicates the meaning of this range.	1..1	referenceRange/observationRange/code	NS	See <code> for available attributes.
Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE > Reference Range	The data range for the associated Reference Range Meaning data element.	1..1	referenceRange/observationRange/value:IVL_PQ		

⁷ <http://www.hl7.org/oid/index.cfm?ref=footer>

Example 7.18. Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Result Group (PATHOLOGY TEST RESULT GROUP) -->
                  <entryRelationship typeCode="COMP">
                    <organizer classCode="BATTERY" moodCode="EVN">
                      ...
                      <!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->
                      <component>
                        <observation classCode="OBS" moodCode="EVN">
                          ...
                          <!-- Normal Status -->
                          <interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality"
                            codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />
                          ...
                          <!-- Begin Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->
                          <referenceRange typeCode="REFV">
                            <!-- Begin REFERENCE RANGE -->
                            <observationRange classCode="OBS" moodCode="EVN.CRT">
                              <!-- Reference Range Meaning -->
                              <code codes="260395002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
                                displayName="normal range" />
                            ...
                          ...
                        ...
                      ...
                    ...
                  ...
                ...
              ...
            ...
          ...
        ...
      ...
    ...
  ...

```

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

</observationRange>
<!-- End REFERENCE RANGE -->
</referenceRange>
<!-- End Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->

</observation>
</component>
<!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->

...

</organizer>
</entryRelationship>
<!-- End Result Group (PATHOLOGY TEST RESULT GROUP) -->

...

</observation>
</entry>
</section>
</component>
<!-- End PATHOLOGY TEST RESULT -->

...

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

...

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


7.1.6.1.2.2 Result Group Specimen Detail (SPECIMEN)

Identification

Name	Result Group Specimen Detail (SPECIMEN)
Metadata Type	Data Group
Identifier	DG-16156

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Result Group (PATHOLOGY TEST RESULT GROUP)	0..1

CDA[®] R-MIM Representation

Figure 7.19 Result Group Specimen Detail (SPECIMEN) 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 Result Group Specimen Detail (SPECIMEN) data group is represented by an Observation class that is related to its containing Section class by a component. The methodCode attribute of that Observation (SPECIMEN) class represents Collection Procedure, the effectiveTime attribute represents Collection DateTime, and targetSiteCode represents the ANATOMICAL LOCATION data elements.

Specimen Identifier is represented by the id attribute of a specimenRole which is related to its containing Observation (Pathology Test Result Name) class by a specimen participation. PHYSICAL PROPERTIES OF AN OBJECT is represented by a specimenPlayingEntity of the containing specimenRole. The code attribute of that specimenPlayingEntity represents Specimen Tissue Type, the quantity attribute represents Weight or Volume, and the desc attribute represents Object Description. Container Identifier is represented by the Container NEHTA CDA[®] extension.

Anatomical Location Image and Image are both represented by a supporting ObservationMedia class related to the containing Observation (SPECIMEN) class by an entryRelationship.

There are four component Observation classes related to the containing Observation (SPECIMEN) class by entryRelationships: Sampling Preconditions, Collection Setting, DateTime Received, and Parent Specimen Identifier.

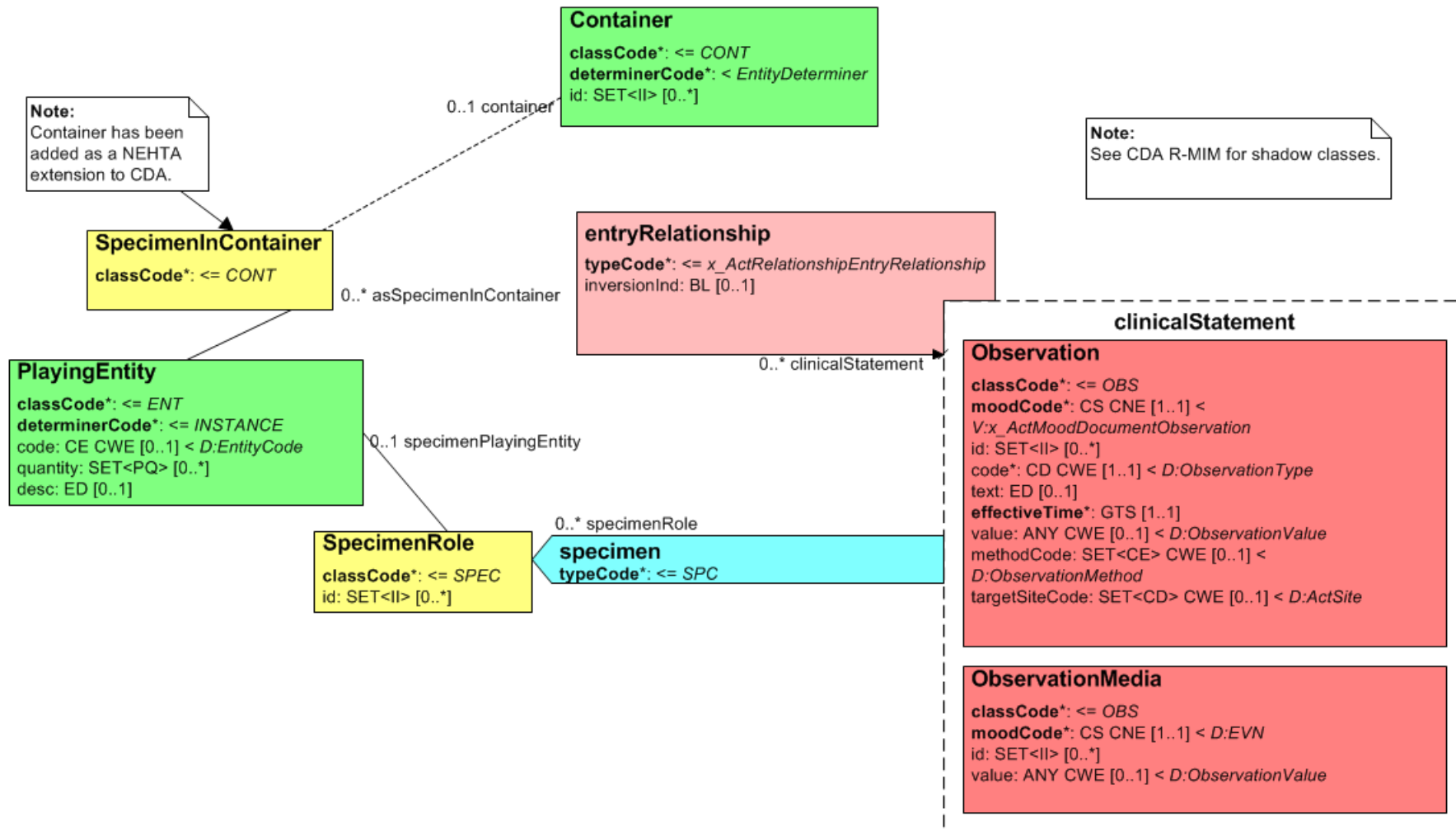


Figure 7.19. Result Group Specimen Detail (SPECIMEN)

CDA[®] Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the [HL7[®] code set registration procedure](#)⁸ with an appropriate object identifier (OID), and **SHALL** be publicly available.

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

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
CDA[®] Body Level 3 Data Elements			ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/		
Result Group Specimen Detail (SPECIMEN)	Details about the individual specimen to which these result group test results refer, where testing of multiple specimens is required.	0..1	component[gp_specimen]		
			component[gp_specimen]/ observation		
			component[gp_specimen]/observation/ @classCode="OBS"		
			component[gp_specimen]/observation/ @moodCode="EVN"		
			component[gp_specimen]/observation/ code		
			component[gp_specimen]/observation/code/ @code="102.16156.136.2.2"		
			component[gp_specimen]/observation/code/ @codeSystem="1.2.36.1.2001.1001.101"		
			component[gp_specimen]/observation/code/ @codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
component[gp_specimen]/observation/code/ @displayName="Specimen"					
Result Group Specimen Detail (SPECIMEN) > Specimen Tissue Type	The type of specimen to be collected.	0..1	component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ code	NS	See <code> for available attributes.
Result Group Specimen Detail (SPECIMEN) > Collection Procedure	The method of collection to be used.	0..1	component[gp_specimen]/observation/ methodCode	NS	See <code> for available attributes.

⁸ <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 (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION)	Details about the anatomical locations to which this examination result refers.	0..*	n/a	Each instance of Anatomical Site (ANATOMICAL LOCATION) SHALL contain either one instance of SPECIFIC LOCATION or one instance of Description (Anatomical Location Description).	This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
Result Group Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
Result Group Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Anatomical Location Name	The name of the anatomical location.	0..1	component[gp_specimen]/observation/targetSiteCode	SNOMED CT-AU: • 32570061000036105 Body structure foundation reference set	See <code> for available attributes.
Result Group Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Side	The laterality of the anatomical location.	0..1	component[gp_specimen]/observation/targetSiteCode/qualifier		
			component[gp_specimen]/observation/targetSiteCode/qualifier/name		
			component[gp_specimen]/observation/targetSiteCode/qualifier/name/@code="272741003"		
			component[gp_specimen]/observation/targetSiteCode/qualifier/name/@codeSystem="2.16.840.1.113883.6.96"		
			component[gp_specimen]/observation/targetSiteCode/qualifier/name/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			component[gp_specimen]/observation/targetSiteCode/qualifier/name/@displayName="Laterality"		
			component[gp_specimen]/observation/targetSiteCode/qualifier/value	SNOMED CT-AU: • 32570611000036103 Laterality reference set	See <code> for available attributes.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Result Group Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Description	Description of the anatomical location.	0..1	component[gp_specimen]/observation/targetSiteCode/ originalText		Anatomical Location Description is an instance of targetSiteCode with only an originalText element.
Result Group Specimen Detail (SPECIMEN) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Image	An image or images used to identify a location.	0..*	component[gp_specimen]/observation/entryRelationship[ana_im]/@typeCode="SPRT"		The image may or may not be attested to and is therefore mapped to observationMedia.
			component[gp_specimen]/observation/entryRelationship[ana_im]/ observationMedia		
			component[gp_specimen]/observation/entryRelationship[ana_im]/observationMedia/@classCode="OBS"		
			component[gp_specimen]/observation/entryRelationship[ana_im]/observationMedia/@moodCode="EVN"		
			component[gp_specimen]/observation/entryRelationship[ana_im]/observationMedia/id	UUID	See <id> for available attributes. 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.
component[gp_specimen]/observation/entryRelationship[ana_im]/observationMedia/value					
Result Group Specimen Detail (SPECIMEN) > 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[gp_specimen]/observation/ specimen/specimenRole/specimenPlayingEntity		
Result Group Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Weight	Property of a body – commonly, but inadequately, defined as the quantity of matter in it – to which its inertia is ascribed, and expressed as the weight of the body divided by the acceleration due to gravity.	0..1	component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ quantity:PQ		Either Weight or Volume SHALL be present. Weight and Volume SHALL be mutually exclusive.
Result Group Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > DI-MENSIONS	The dimensions of the object.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Result Group Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > DIMENSIONS > Volume	Size, measure or amount of anything in three dimensions; space occupied by a body or substance measured in cubic units.	0..1	component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ quantity:PQ		Either Weight or Volume SHALL be present. Weight and Volume SHALL be mutually exclusive.
Result Group Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Description (Object Description)	A description of the physical characteristics of the object other than weight and volume.	0..1	component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ desc:ST		
Result Group Specimen Detail (SPECIMEN) > Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) > Image	A picture of the object.	0..1	component[gp_specimen]/observation/ entryRelationship[spec_im]/@typeCode="SPRT"		The image may or may not be attested to and is therefore mapped to observationMedia.
			component[gp_specimen]/observation/ entryRelationship[spec_im]/observationMedia		
			component[gp_specimen]/observation/ entryRelationship[spec_im]/observationMedia/@classCode="OBS"		
			component[gp_specimen]/observation/ entryRelationship[spec_im]/observationMedia/@moodCode="EVN"		
			component[gp_specimen]/observation/ entryRelationship[spec_im]/observationMedia/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			component[gp_specimen]/observation/ entryRelationship[spec_im]/observationMedia/value		
Result Group Specimen Detail (SPECIMEN) > COLLECTION AND HANDLING	Collection and handling requirements.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Result Group Specimen Detail (SPECIMEN) > COLLECTION AND HANDLING > Sampling Preconditions	Any conditions to be met before the sample should be taken.	0..1	component[gp_specimen]/observation/entryRelationship[smp_pre]/@typeCode="COMP"		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/@classCode="OBS"		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/@moodCode="EVN"		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/code		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/code/@code="103.16171"		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/code/@displayName="Sampling Preconditions"		
component[gp_specimen]/observation/entryRelationship[smp_pre]/observation/value:CD	NS	See <code> for available attributes.			
Result Group Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING	Workflow of specimen processing or handling.	1..1	N/A		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Result Group Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING > Date and Time of Collection (Collection DateTime)	The date and time that the collection has been ordered to take place or has taken place.	1..1	component[gp_specimen]/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 (SPECIMEN) > HANDLING AND PROCESSING > Collection Setting	Identification of the setting at which the specimen was collected from a subject of care.	0..1	component[gp_specimen]/observation/entryRelationship[coll_set]/@typeCode="COMP"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/@classCode="OBS"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/@moodCode="EVN"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/code		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/code/@code="103.16529"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/code/@displayName="Collection Setting"		
			component[gp_specimen]/observation/entryRelationship[coll_set]/observation/value:ST		
Result Group Specimen Detail (SPECIMEN) > HANDLING AND PROCESSING > Date and Time of Receipt (DateTime Received)	The date and time that the sample was received at the laboratory.	0..1	component[gp_specimen]/observation/entryRelationship[date_rec]/@typeCode="COMP"		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/@classCode="OBS"		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/@moodCode="EVN"		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/code		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/code/@code="103.11014"		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			component[gp_specimen]/observation/entryRelationship[date_rec]/observation/code/@displayName="DateTime Received"		
			component[gp_specimen]/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
Result Group Specimen Detail (SPECIMEN) > IDENTIFIERS	Sample identifications.	0..1	N/A		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Result Group Specimen Detail (SPECIMEN) > IDENTIFIERS > Specimen Identifier	Unique identifier of the specimen, normally assigned by the laboratory.	0..1	component[gp_specimen]/observation/specimen/specimenRole/id		See <id> for available attributes.
Result Group Specimen Detail (SPECIMEN) > IDENTIFIERS > Parent Specimen Identifier	Unique identifier of the parent specimen where the specimen is split into sub-samples.	0..1	component[gp_specimen]/observation/entryRelationship[prnt_id]/@typeCode="COMP"		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/@classCode="OBS"		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/@moodCode="EVN"		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/code		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/code/@code="103.16187"		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/code/@displayName="Parent Specimen Identifier"		
component[gp_specimen]/observation/entryRelationship[prnt_id]/observation/specimen/specimenRole/id			See <id> for available attributes.		
Result Group Specimen Detail (SPECIMEN) > IDENTIFIERS > Container Identifier	Unique identifier given to the container in which the specimen is transported or processed.	0..1	component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer		See NEHTA CDA [®] extension: Container
			component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/@classCode="CONT"		
			component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container		
			component[gp_specimen]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id		See <id> for available attributes.

Example 7.19. Result Group Specimen Detail (SPECIMEN) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin PATHOLOGY TEST RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Result Group (PATHOLOGY TEST RESULT GROUP) -->
                  <entryRelationship typeCode="COMP">
                    <organizer classCode="BATTERY" moodCode="EVN">
                      ...
                      <!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->
                      <component>
                        <observation classCode="OBS" moodCode="EVN">
                          ...
                        </observation>
                      </component>
                    <!-- Begin Result (INDIVIDUAL PATHOLOGY TEST RESULT) -->
                    <!-- Begin Test Specimen Detail (SPECIMEN) -->
                    <component>
                      <observation classCode="OBS" moodCode="EVN">
                        <!-- ID is used for system purposes such as matching -->
                        <id root="CCC0D55C-EFD0-11DF-BEA2-A6CCDFD72085" />
                        <code code="102.16156.136.2.2" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Specimen" />
                        <!-- Date and Time of Collection (Collection DateTime) -->
                        <effectiveTime value="201310201235+1000" />
                      </observation>
                    </component>
                  </entryRelationship>
                </observation>
              </entry>
            </section>
          </component>
        </section>
      </component>
    </structuredBody>
  </component>
  ...
  </CDA Body -->
  ...
  </ClinicalDocument>
```

```

<!-- Collection Procedure -->
<methodCode code="48635004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
  displayName="Fine needle biopsy" />

<!-- Anatomical Site (ANATOMICAL LOCATION) :: Examples provided of all three allowed variants. These variants are mutually exclusive -->
<!-- Begin Example with complete SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax">

  <!-- Begin Side -->
  <qualifier>
    <name code="272741003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Laterality" />
    <value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="left" xsi:type="CD" />
  </qualifier>
  <!-- End Side -->

</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with complete SPECIFIC LOCATION -->

<!-- Begin Example with partial SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax" />
<!-- End SPECIFIC LOCATION -->
<!-- End Example with partial SPECIFIC LOCATION -->

<!-- Begin Example with Description -->
<targetSiteCode>
  <!-- Description (Anatomical Location Description) -->
  <originalText>Chest/Thorax</originalText>
</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with Description -->
<!-- End Anatomical Site (ANATOMICAL LOCATION) -->

<!-- Begin Physical Details -->
<specimen>
  <specimenRole>
    <!-- Specimen Identifier -->
    <id root="1538103e-845b-4f86-95ed-33b62e7589d0" />

    <!-- Begin Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) -->
    <specimenPlayingEntity>
      <!-- Specimen Tissue Type -->
      <code code="258442002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Fluid sample" />

      <!-- Begin Weight/Volume -->
      <quantity unit="mL" value="5" />
      <!-- End Weight/Volume -->

      <!-- Begin Description (Object Description) -->
      <desc xsi:type="ST">5 mL</desc>
      <!-- End Description (Object Description) -->

      <!-- Begin Container Identifier -->
      <ext:asSpecimenInContainer classCode="CONT">
        <ext:container>
          <ext:id extension="CNH45218964" root="CA54FD22-76B8-11E0-AC87-0EE34824019B" />
        </ext:container>
      </ext:asSpecimenInContainer>
      <!-- End Container Identifier -->
    
```



```
</specimenPlayingEntity>
<!-- End Physical Details (PHYSICAL PROPERTIES OF AN OBJECT) -->
</specimenRole>
</specimen>
<!-- End Physical Details -->

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="SPRT">
<observationMedia classCode="OBS" moodCode="EVN">
<id root="3953A078-0365-11E1-B90D-41D04724019B" />
<value mediaType="image/jpeg" >
<reference value="location.jpeg" />
</value>
</observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Begin Image -->
<entryRelationship typeCode="SPRT">
<observationMedia classCode="OBS" moodCode="EVN">
<id root="1d64bb51-c5b3-4048-9a9f-e753f4e3c203" />
<value mediaType="image/jpeg" >
<reference value="specimen.jpeg" />
</value>
</observationMedia>
</entryRelationship>
<!-- End Image -->

<!-- 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="16985007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
displayName="Fasting" xsi:type="CD" />
</observation>
</entryRelationship>
<!-- End Sampling Preconditions -->

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

<!-- Begin Date and Time of Receipt (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 Date and Time of Receipt (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="7013b12a-f9d0-4197-9726-88a6803d4d13" />
  </specimenRole>
</specimen>
</observation>
</entryRelationship>
<!-- End Parent Specimen Identifier -->

</observation>
</component>
<!-- End Test Specimen Detail (SPECIMEN) -->

</organizer>
</entryRelationship>
<!-- End Result Group (PATHOLOGY TEST RESULT GROUP) -->

...

</observation>
</entry>
</section>
</component>
<!-- End PATHOLOGY TEST RESULT -->

...

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

...

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


7.1.6.2 IMAGING EXAMINATION RESULT

Identification



Name	IMAGING EXAMINATION RESULT
Metadata Type	Data Group
Identifier	DG-16145

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	DIAGNOSTIC INVESTIGATIONS	0..*

Children

Data Type	Name	Occurrence
	Result Group (IMAGING EXAMINATION RESULT GROUP)	0..*
	EXAMINATION REQUEST DETAILS	0..*

CDA[®] R-MIM Representation

Figure 7.20 **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 represented by a Section class that is related to its containing Section class by a component. Imaging Examination Result Name is represented by an Observation class related to the Section (IMAGING EXAMINATION RESULT) class by an entry. The methodCode attribute of that Observation class represents Imaging Modality, the text attribute represents Examination Result Representation, and targetSiteCode represents the ANATOMICAL LOCATION data elements.

Anatomical Location Image and Image are both represented by a supporting ObservationMedia class related to the containing Observation (Imaging Examination Result Name) class by an entryRelationship.

There are three Observation classes related to the containing Observation (Imaging Examination Result Name) class: Observation DateTime, Findings, and Imaging Examination Result Status. Clinical Information Provided is represented by an Act class that is related to the containing Observation (Imaging Examination Result Name) class by an entryRelationship.

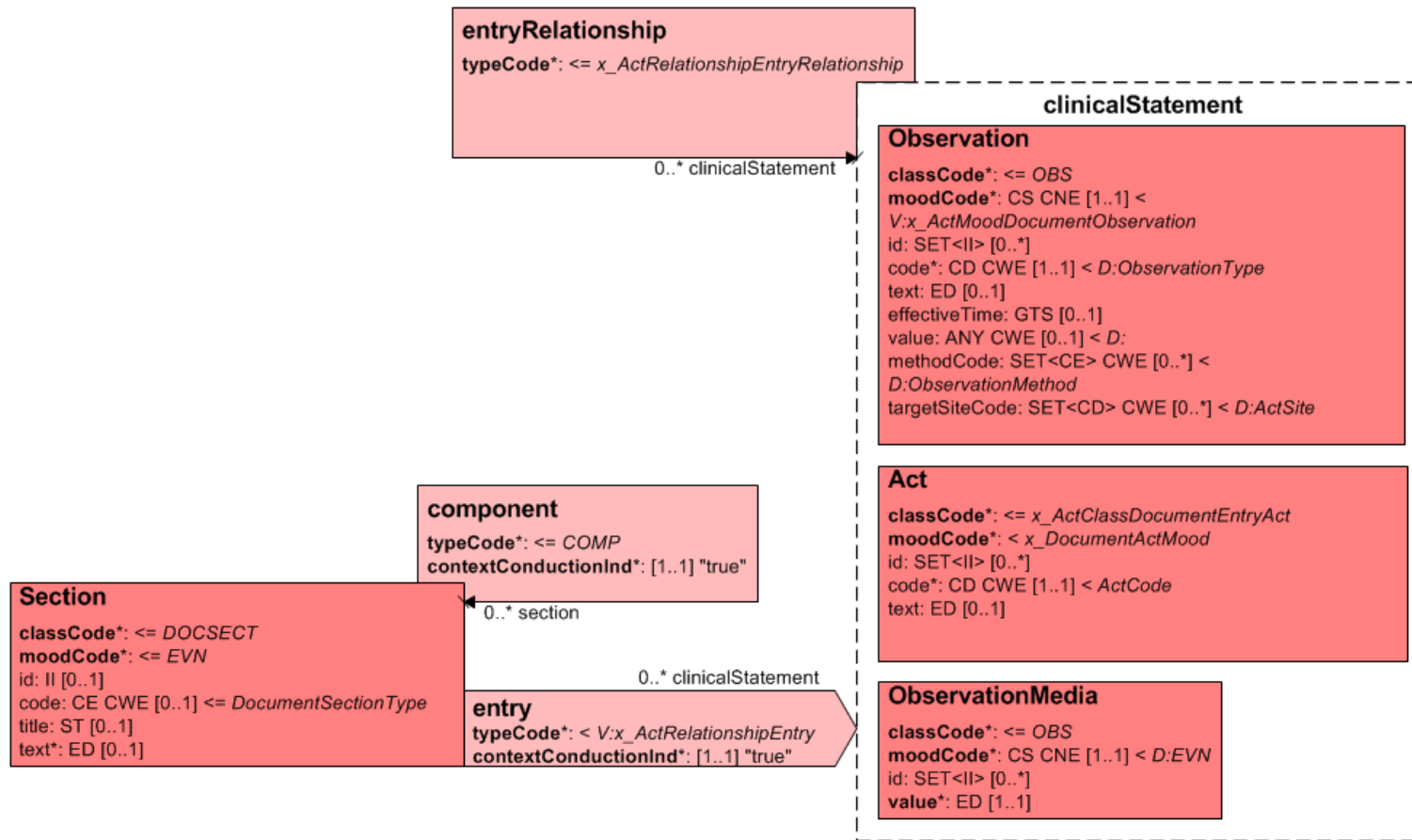


Figure 7.20. IMAGING EXAMINATION RESULT

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](#)⁹ 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/title="Imaging Examination Result"		
			component[img_exam]/section/text		Required CDA [®] element. See Appendix A, CDA[®] Narratives .
IMAGING EXAMINATION RESULT > Imaging Examination Result Instance Identifier	A globally unique identifier for each instance of an Imaging Examination Result observation.	0..1	component[img_exam]/section/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
IMAGING EXAMINATION RESULT > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	component[img_exam]/section/code		
			component[img_exam]/section/code/@code="102.16145"		
			component[img_exam]/section/code/@codeSystem="1.2.36.1.2001.1001.101"		
			component[img_exam]/section/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[img_exam]/section/code/@displayName="Imaging Examination Result"		

⁹ <http://www.hl7.org/oid/index.cfm?ref=footer>

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/		
IMAGING EXAMINATION RESULT > Examination Result Name (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	UUID	Optional CDA® element. See <id> for available attributes.
			entry[img_exam_res]/observation/code	NS	See <code> for available attributes.
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 > Imaging Modality	The imaging method used to perform the examination.	0..1	methodCode	NS	See <code> for available attributes.
IMAGING EXAMINATION RESULT > Anatomical Site (ANATOMICAL LOCATION)	Details about the anatomical locations to which this examination result refers.	0..*	n/a	Each instance of Anatomical Site (ANATOMICAL LOCATION) SHALL contain exactly one instance of SPECIFIC LOCATION or exactly one instance of Anatomical Location Description.	This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
IMAGING EXAMINATION RESULT > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
IMAGING EXAMINATION RESULT > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Anatomical Location Name	The name of the anatomical location.	0..1	targetSiteCode	SNOMED CT-AU: • 32570061000036105 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 > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Side	The laterality of the anatomical location.	0..1	targetSiteCode/qualifier		
			targetSiteCode/qualifier/name		
			targetSiteCode/qualifier/name/@code="272741003"		
			targetSiteCode/qualifier/name/@codeSystem="2.16.840.1.113883.6.96"		
			targetSiteCode/qualifier/name/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
			targetSiteCode/qualifier/name/@displayName="Laterality"		
			targetSiteCode/qualifier/value:CD	SNOMED CT-AU: • 32570611000036103 [Laterality reference set]	See <code> for available attributes.
IMAGING EXAMINATION RESULT > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Description	Description of the anatomical location.	0..1	targetSiteCode/originalText		Anatomical Location Description is an instance of targetSiteCode with only an originalText element.
IMAGING EXAMINATION RESULT > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Image	An image or images used to identify a location.	0..*	entryRelationship[img]/@typeCode="REFR"		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[img]/observationMedia		
			entryRelationship[img]/observationMedia/@classCode="OBS"		
			entryRelationship[img]/observationMedia/@moodCode="EVN"		
			entryRelationship[img]/observationMedia/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Optional CDA [®] element. See <id> for available attributes.
			entryRelationship[img]/observationMedia/value		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
IMAGING EXAMINATION RESULT > Imaging Examination Result Status	The status of the examination result as a whole.	1..1	entryRelationship[res_stat]/@typeCode="COMP"		
			entryRelationship[res_stat]/observation		
			entryRelationship[res_stat]/observation/@classCode="OBS"		
			entryRelationship[res_stat]/observation/@moodCode="EVN"		
			entryRelationship[res_stat]/observation/id	UUID	Optional CDA® element. See <id> for available attributes.
			entryRelationship[res_stat]/observation/code		
			entryRelationship[res_stat]/observation/code/@code="308552006"		
			entryRelationship[res_stat]/observation/code/@codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[res_stat]/observation/code/@codeSystemName	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[res_stat]/observation/code/@displayName="report status"		
entryRelationship[res_stat]/observation/value:CD	NCTIS: Admin Codes - Result Status	See <code> for available attributes.			
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	entryRelationship[clin_inf]/@typeCode="COMP"		
			entryRelationship[clin_inf]/act		
			entryRelationship[clin_inf]/act/@classCode="INFRM"		
			entryRelationship[clin_inf]/act/@moodCode="EVN"		
			entryRelationship[clin_inf]/act/code		
			entryRelationship[clin_inf]/act/code/@code="55752-0"		
			entryRelationship[clin_inf]/act/code/@codeSystem="2.16.840.1.113883.6.1"		
			entryRelationship[clin_inf]/act/code/@codeSystemName	The value SHOULD be "LOINC". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[clin_inf]/act/code/@displayName="Clinical information"		
			entryRelationship[clin_inf]/act/text:ST		

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
IMAGING EXAMINATION RESULT > Findings	Clinical assessment and opinion based on one or more observations and examinations.	0..1	entryRelationship[find]/@typeCode="REFR"		
			entryRelationship[find]/ observation		
			entryRelationship[find]/observation/@classCode="OBS"		
			entryRelationship[find]/observation/@moodCode="EVN"		
			entryRelationship[find]/observation/ id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Optional CDA [®] element. See <id> for available attributes.
			entryRelationship[find]/observation/ code		
			entryRelationship[find]/observation/code/@code="103.16503"		
			entryRelationship[find]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[find]/observation/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entryRelationship[find]/observation/code/@displayName="Findings"		
entryRelationship[find]/observation/ text:ST					
IMAGING EXAMINATION RESULT > Result Group (IMAGING EXAMINATION RESULT GROUP)	A group of structured results.	0..*	See: Result Group (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	text		Used for results unable to be sent and/or received as structured information. Multiple formats are allowed but they SHALL be semantically equivalent.
IMAGING EXAMINATION RESULT > EXAMINATION REQUEST DETAILS	Details concerning a single requested examination.	0..*	See: EXAMINATION REQUEST DETAILS		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
IMAGING EXAMINATION RESULT > Observation DateTime	Date, and optionally time, when an observation is clinically significant to the condition of the subject of the observation.	1..1	entryRelationship[res_date]/@typeCode="COMP"		Observation DateTime is mapped to Imaging Examination Result DateTime and retains the original OID and displayName of that concept for backwards compatibility.
			entryRelationship[res_date]/ observation		
			entryRelationship[res_date]/observation/ @classCode="OBS"		
			entryRelationship[res_date]/observation/ @moodCode="EVN"		
			entryRelationship[res_date]/observation/ code		
			entryRelationship[res_date]/observation/code/ @code="103.16589"		
			entryRelationship[res_date]/observation/code/ @codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[res_date]/observation/code/ @codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[res_date]/observation/code/ @displayName="Imaging Examination Result DateTime"		
entryRelationship[res_date]/observation/ effectiveTime		See <time> for available attributes.			

Example 7.20. IMAGING EXAMINATION RESULT XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin IMAGING EXAMINATION RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              <!-- Imaging Examination Result Instance Identifier -->
              <id root="50006572-EFC7-11E0-8337-65094924019B" />
              <!-- Detailed Clinical Model Identifier -->
              <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>
              <!-- Begin Narrative Text -->
              <text>
                <table>
                  <thead>
                    <tr>
                      <th>Imaging Examination</th>
                      <th>Modality</th>
                      <th>Status</th>
                      <th>Anatomical Location</th>
                      <th>Examination Procedure</th>
                      <th>Date of Image</th>
                    </tr>
                  </thead>
                  <tbody>
                    <tr>
                      <td>Chest X-ray</td>
                      <td>x-ray</td>
                      <td>Left, Chest</td>
                      <td>Final results; results stored and verified. Can only be changed with a corrected result.</td>
                      <td>The examination was carried out using the particular procedure.</td>
                      <td>20th October 2013</td>
                    </tr>
                  </tbody>
                </table>
              </text>
            </section>
          </component>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

```
<paragraph>
<linkHtml href="imagingresult.pdf">Attached Imaging Result</linkHtml>
</paragraph>
</text>
<!-- End Narrative Text -->

<entry>
<observation classCode="OBS" moodCode="EVN">
<!-- ID is used for system purposes such as matching -->
<id root="CCF0D55C-EFD0-10DF-BEA2-A6CCDFD72085" />

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

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

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

<!-- NOTE: The instance of Anatomical Site (ANATOMICAL LOCATION) has been duplicated at the Examination Group level for illustrative purposes only. -->
<!-- Anatomical Site (ANATOMICAL LOCATION) :: Examples provided of all three allowed variants. These variants are mutually exclusive -->
<!-- Begin Example with complete SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax">

<!-- Begin Side -->
<qualifier>
<name code="272741003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Laterality" />
<value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="left" xsi:type="CD" />
</qualifier>
<!-- End Side -->

</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with complete SPECIFIC LOCATION -->

<!-- Begin Example with partial SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax" />
<!-- End SPECIFIC LOCATION -->
<!-- End Example with partial SPECIFIC LOCATION -->

<!-- Begin Example with Description -->
<targetSiteCode>
<!-- Description (Anatomical Location Description) -->
<originalText>Chest/Thorax</originalText>
</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with Description -->
<!-- End Anatomical Site (ANATOMICAL LOCATION) -->

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="REFR">
<observationMedia classCode="OBS" moodCode="EVN">
<id root="e66fef7e-0d84-45d7-bb38-f12adbl6d9cb" />
<value mediaType="image/jpeg" xsi:type="ED">
<reference value="location.jpeg" />
</value>
</observationMedia>
</entryRelationship>
</entry>
</observation>
</entry>
```

```

    </value>
  </observationMedia>
</entryRelationship>
<!-- End Anatomical Location Image -->

<!-- Begin Imaging Examination Result Status -->
<entryRelationship typeCode="COMP">
<observation classCode="OBS" moodCode="EVN">
  <!-- ID is used for system purposes such as matching -->
  <id root="e4691ff9-acee-4d6a-9db6-0318a400bd72" />
  <code code="308552006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="report status" />
  <value code="F" codeSystem="2.16.840.1.113883.12.123" codeSystemName="HL7 Result Status" displayName="Final results; results stored and verified. Can only be changed with a corrected result." 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 xsi:type="ST">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 xsi:type="ST">The lungs and pleura appear clear. Cardiac and mediastinal contours are within normal
    limits.</text>
</observation>
</entryRelationship>
<!-- End Findings -->

<!-- Begin Result Group (IMAGING EXAMINATION RESULT GROUP) -->
<entryRelationship typeCode="COMP">
<organizer classCode="BATTERY" moodCode="EVN">
  ...
</organizer>
</entryRelationship>
<!-- End Result Group (IMAGING EXAMINATION RESULT GROUP) -->

<!-- Begin EXAMINATION REQUEST DETAILS -->
<entryRelationship inversionInd="true" typeCode="SUBJ">
<act classCode="ACT" moodCode="EVN">
  ...
</act>
</entryRelationship>
<!-- End EXAMINATION REQUEST DETAILS -->

<!-- Begin Observation 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="201310201235+1000" />
</observation>
</entryRelationship>

```

```
<!-- End Observation DateTime -->
</observation>
</entry>
</section>
</component>
<!-- End IMAGING EXAMINATION RESULT -->
...
</section>
</component>
<!-- End DIAGNOSTIC INVESTIGATIONS -->
...
</structuredBody>
</component>
<!-- End CDA Body -->
</ClinicalDocument>
```


7.1.6.2.1 Result Group (IMAGING EXAMINATION RESULT GROUP)

Identification


Name	Result Group (IMAGING EXAMINATION RESULT GROUP)
Metadata Type	Data Group
Identifier	DG-16504

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	IMAGING EXAMINATION RESULT	0..*

Children

Data Type	Name	Occurrence
	Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	0..1

CDA® R-MIM Representation

Figure 7.21 Result Group (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 Result Group (IMAGING EXAMINATION RESULT GROUP) is represented by an Organizer class related to its containing Observation class by an entryRelationship. The code attribute of that Organizer class represents Imaging Examination Result Group Name.

Each INDIVIDUAL IMAGING EXAMINATION RESULT data group is represented by an Observation class related to the containing Organizer class by a component. The code attribute of that Observation (INDIVIDUAL IMAGING EXAMINATION RESULT) class represents Individual Imaging Examination Result Name, the value attribute represents Individual Imaging Examination Result Value, and targetSiteCode represents the ANATOMICAL LOCATION data elements. Result Comment is represented by an Act class that is related to the containing Observation (Imaging Examination Result Name) class by an entryRelationship.

Anatomical Location Image and Image are both represented by a supporting ObservationMedia class related to the containing Observation (Imaging Examination Result Name) class by an entryRelationship.

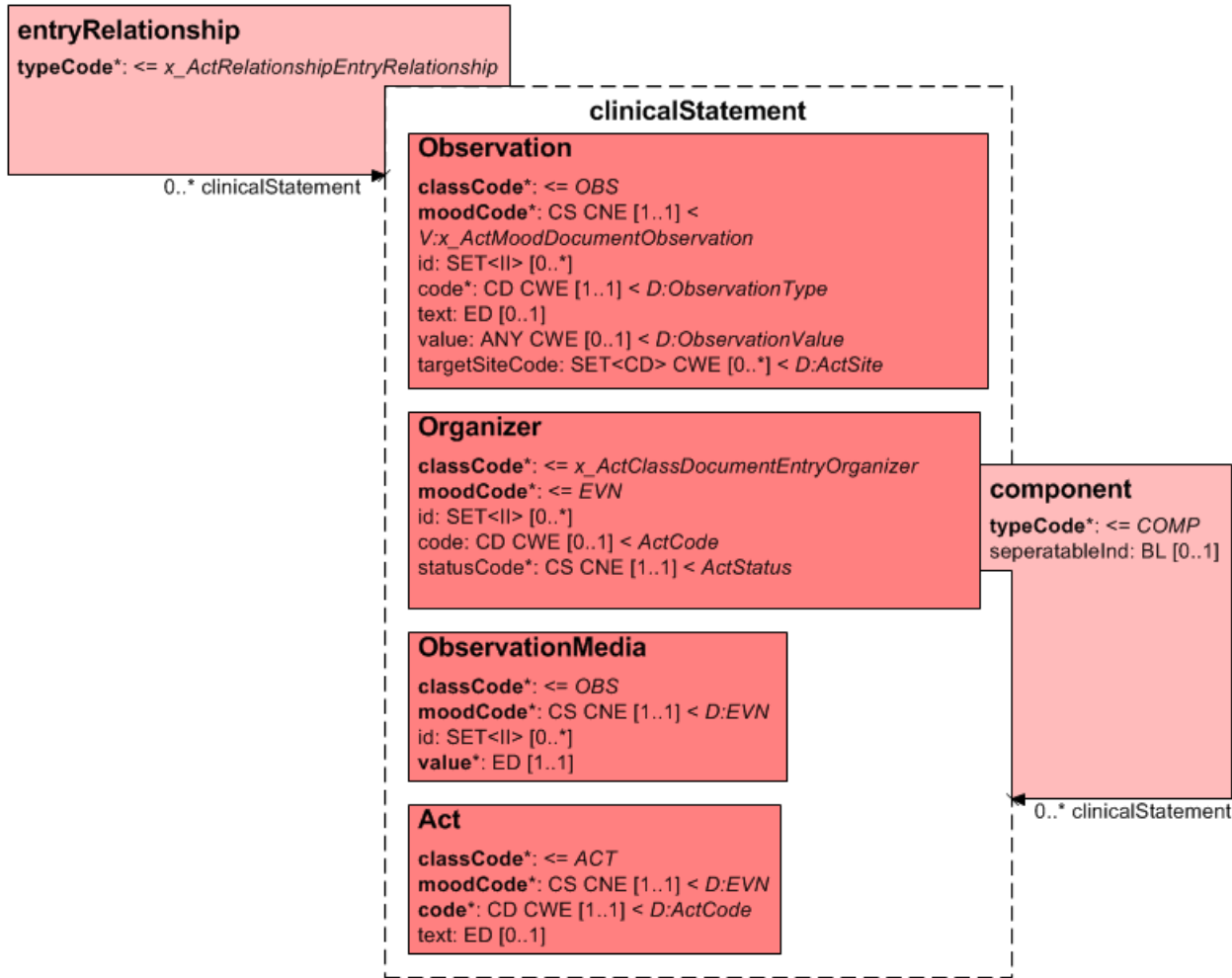


Figure 7.21. Result Group (IMAGING EXAMINATION RESULT GROUP)

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](#)¹⁰ 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/		
Result Group (IMAGING EXAMINATION RESULT GROUP)	A group of structured results.	0..*	entryRelationship[im_res_gp]/@typeCode="COMP"		
			entryRelationship[im_res_gp]/organizer		
			entryRelationship[im_res_gp]/organizer/@classCode="BATTERY"		
			entryRelationship[im_res_gp]/organizer/@moodCode="EVN"		
			entryRelationship[im_res_gp]/organizer/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[im_res_gp]/organizer/statusCode		Required CDA® element.
			entryRelationship[im_res_gp]/organizer/statusCode/@code="completed"		
Result Group (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.

¹⁰ <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 (IMAGING EXAMINATION RESULT GROUP) > Result (INDIVIDUAL IMAGING EXAMINATION RESULT)	Specific detailed result of an imaging examination, including both the value of the result item and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/@classCode="OBS"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/@moodCode="EVN"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
Result Group (IMAGING EXAMINATION RESULT GROUP) > Result (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.
Result Group (IMAGING EXAMINATION RESULT GROUP) > Result (INDIVIDUAL IMAGING EXAMINATION RESULT) > Result Value (IMAGING EXAMINATION RESULT VALUE)	Value of the result, with reference range information.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/value		Although value is of datatype ANY only CD or PQ SHALL be used.
Result Group (IMAGING EXAMINATION RESULT GROUP) > Result (INDIVIDUAL IMAGING EXAMINATION RESULT) > Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	One or more reference ranges applicable to the Imaging Examination Result Value.	0..1	See: Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)		

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Result Group (IMAGING EXAMINATION RESULT GROUP) > Result (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[res_cmt]/@typeCode="COMP"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/@classCode="INFRM"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/@moodCode="EVN"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/code		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/code/@code="281296001"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/code/@codeSystem="2.16.840.1.113883.6.96"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/code/@codeSystemName		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/code/@displayName="result comments"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[res_cmt]/act/text:ST		
			Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (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
Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION	Specific and identified anatomical location.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Anatomical Location Name	The name of the anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/ targetSiteCode	SNOMED CT-AU: <ul style="list-style-type: none"> 32570061000036105 Body structure foundation reference set 	See <code> for available attributes.
Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (ANATOMICAL LOCATION) > SPECIFIC LOCATION > Side	The laterality of the 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="272741003"		
			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	The value SHOULD be "SNOMED CT". See CodeSystem OIDs .	Optional CDA [®] element.
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/ @displayName="Laterality"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/ value	SNOMED CT-AU: <ul style="list-style-type: none"> 32570611000036103 Laterality reference set 	See <code> for available attributes.
Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Description	Description of the anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/ originalText		Anatomical Location Description is an instance of targetSiteCode with only an originalText element.

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
Result Group (IMAGING EXAMINATION RESULT GROUP) > Anatomical Site (ANATOMICAL LOCATION) > Anatomical Location Image	An image or images used to identify a location.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/@typeCode="REFR"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/@classCode="OBS"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/@moodCode="EVN"		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/value		

Example 7.21. Result Group (IMAGING EXAMINATION RESULT GROUP) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin IMAGING EXAMINATION RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Result Group (IMAGING EXAMINATION RESULT GROUP) -->
                  <entryRelationship typeCode="COMP">
                    <organizer classCode="BATTERY" moodCode="EVN">
                      <id root="061116F4-F097-11E0-BF4C-10914824019B" />
                      <!-- Imaging Examination Result Group Name -->
                      <code code="399208008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
                        displayName="chest x-ray" />
                      <statusCode code="completed" />
                    </organizer>
                    <!-- Begin Result (INDIVIDUAL IMAGING EXAMINATION RESULT) -->
                    <component>
                      <observation classCode="OBS" moodCode="EVN">
                        <id root="2C60DDA-F09A-11E0-9BDE-8D944824019B" />
                        <!-- Individual Imaging Examination Result Name -->
                        <code nullFlavor="UNK">
                          <originalText>Cardiothoracic Ratio</originalText>
                        </code>
                        <!-- Result Value (IMAGING EXAMINATION RESULT VALUE)-->
                        <value value="0.45" xsi:type="PQ" />
                      </observation>
                    </component>
                  </entryRelationship>
                </entry>
              </section>
            </component>
          </section>
        </component>
      </structuredBody>
    </component>
  </component>
  ...
  <!-- Anatomical Site (ANATOMICAL LOCATION) :: Examples provided of all three allowed variants. These variants are mutually exclusive -->
```



```
<!-- Begin Example with complete SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax">

  <!-- Begin Side -->
  <qualifier>
    <name code="272741003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Laterality" />
    <value code="7771000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="left" xsi:type="CD" />
  </qualifier>
  <!-- End Side -->

</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with complete SPECIFIC LOCATION -->

<!-- Begin Example with partial SPECIFIC LOCATION -->
<!-- Begin SPECIFIC LOCATION -->
<!-- Name of Location (Anatomical Location Name) -->
<targetSiteCode code="51185008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="thorax" />
<!-- End SPECIFIC LOCATION -->
<!-- End Example with partial SPECIFIC LOCATION -->

<!-- Begin Example with Description -->
<targetSiteCode>
  <!-- Description (Anatomical Location Description) -->
  <originalText>Chest/Thorax</originalText>
</targetSiteCode>
<!-- End SPECIFIC LOCATION -->
<!-- End Example with Description -->
<!-- End Anatomical Site (ANATOMICAL LOCATION) -->

<!-- Begin Anatomical Location Image -->
<entryRelationship typeCode="REFR">
  <observationMedia classCode="OBS" moodCode="EVN">
    <id root="218F125E-F304-11E0-99C9-46DC4824019B" />
    <value mediaType="image/jpeg" xsi:type="ED">
      <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"
      displayName="result comments" />
    <text>CTR within normal limits.</text>
  </act>
</entryRelationship>
<!-- End Result Comment -->

<!-- Begin Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->
<referenceRange typeCode="REFV">
  <!-- Begin REFERENCE RANGE -->
  <observationRange classCode="OBS" moodCode="EVN.CRT">

    ...

  </observationRange>
  <!-- End REFERENCE RANGE -->
```

```
    </referenceRange>
    <!-- End Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->

    </observation>
  </component>
  <!-- End Result (INDIVIDUAL IMAGING EXAMINATION RESULT) -->

  </organizer>
</entryRelationship>
<!-- End Result Group (IMAGING EXAMINATION RESULT GROUP) -->

<!-- Begin EXAMINATION REQUEST DETAILS -->
<entryRelationship inversionInd="true" typeCode="SUBJ">
  <act classCode="ACT" moodCode="EVN">
    ...

  </act>
</entryRelationship>
<!-- End EXAMINATION REQUEST DETAILS -->

...

</observation>
</entry>

</section>
</component>
<!-- End IMAGING EXAMINATION RESULT -->

...

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

...

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


7.1.6.2.1.1 Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)

Identification

Name	Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)
Metadata Type	Data Group
Identifier	DG-16325

Relationships

Parent

Data Type	Name	Occurrences (child within parent)
	Result Group (IMAGING EXAMINATION RESULT GROUP)	0..1

CDA[®] R-MIM Representation

Figure 7.18 Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE 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 REFERENCE RANGE DETAILS data group is represented by an ObservationRange class that is related to its containing Observation class by a referenceRange relationship. Normal Status is represented by the interpretationCode attribute of the containing Observation class. The code attribute of the ObservationRange class represents Reference Range Meaning, and the value attribute represents Reference Range.

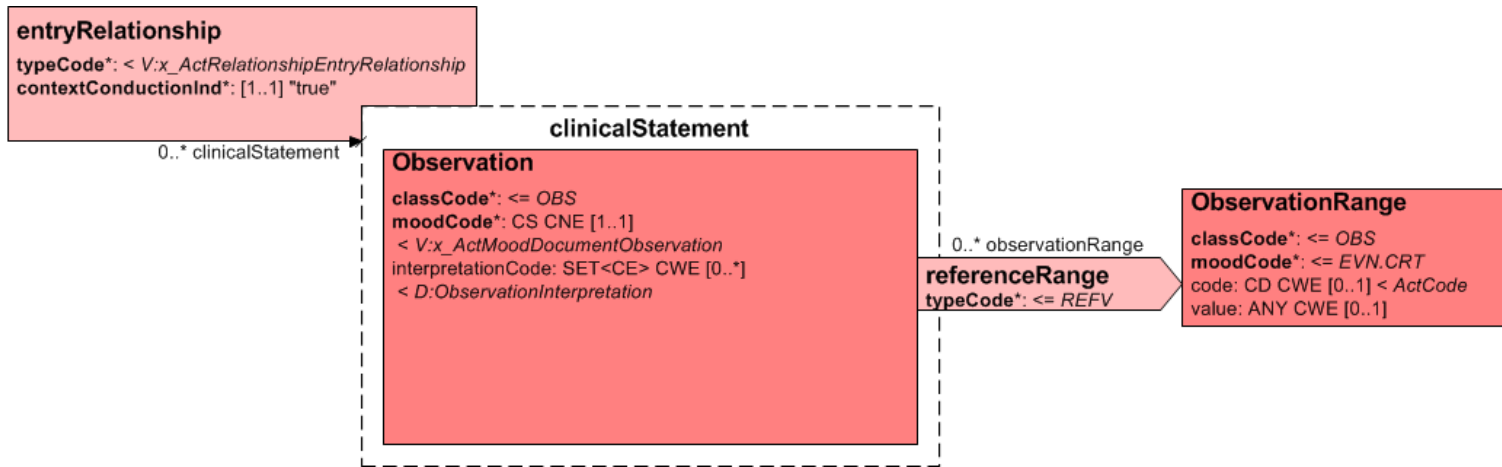


Figure 7.22. Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)

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](#)¹¹ 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/ccomponent[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/		
Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	One or more reference ranges applicable to the Imaging Examination Result Value.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. See Known Issues .
Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) > Normal Status	An indication of the degree of diagnostically significant abnormality of the value, based on available clinical information (including but not limited to the reference range).	0..1	interpretationCode	HL7® V3: Observation-InterpretationNormality	See <code> for available attributes.
Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE	A named range to be associated with any quantity datum.	0..*	referenceRange/@typeCode="REFV"		
			referenceRange/observationRange		
			referenceRange/observationRange/@classCode="OBS"		
			referenceRange/observationRange/@moodCode="EVN.CRT"		
Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE > Reference Range Meaning	Term whose value indicates the meaning of this range.	1..1	referenceRange/observationRange/code	NS	See <code> for available attributes.
Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) > REFERENCE RANGE > Reference Range	The data range for the associated Reference Range Meaning data element.	1..1	referenceRange/observationRange/value:IVL_PQ		

¹¹ <http://www.hl7.org/oid/index.cfm?ref=footer>

Example 7.22. Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin IMAGING EXAMINATION RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Result Group (IMAGING EXAMINATION RESULT GROUP) -->
                  <entryRelationship typeCode="COMP">
                    <organizer classCode="BATTERY" moodCode="EVN">
                      ...
                      <!-- Begin Result (INDIVIDUAL IMAGING EXAMINATION RESULT) -->
                      <component>
                        <observation classCode="OBS" moodCode="EVN">
                          ...
                          <!-- Normal Status -->
                          <interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality"
                            codeSystem="2.16.840.1.113883.5.83"
                            displayName="Normal" />
                          ...
                          <!-- Begin Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->
                          <referenceRange typeCode="REFV">
                            <!-- Begin REFERENCE RANGE -->
                            <observationRange classCode="OBS" moodCode="EVN.CRT">
                              ...
                              <!-- Begin Reference Range Meaning -->
```

```

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

    <!-- Begin Reference Range -->
    <value xsi:type="IVL_PQ">
      <low value="0.25" />
      <high value="0.50" />
    </value>
    <!-- End Reference Range -->

  </observationRange>
  <!-- End REFERENCE RANGE -->
</referenceRange>
<!-- End Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS) -->

</observation>
</component>
<!-- End Result (INDIVIDUAL IMAGING EXAMINATION RESULT) -->

</organizer>
</entryRelationship>
<!-- End Result Group (IMAGING EXAMINATION RESULT GROUP) -->

...

</observation>
</entry>

</section>
</component>
<!-- End IMAGING EXAMINATION RESULT -->

...

</section>
</component>
<!-- End DIAGNOSTIC 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	Occurrences (child within parent)
	IMAGING EXAMINATION RESULT	0..*

CDA® R-MIM Representation

Figure 7.23 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 is represented by an Act class related to its containing Observation class by an entryRelationship. Examination Requested Name is represented by a reference Observation class related to the containing Act class by an entryRelationship. DICOM Study Identifier is represented by a subject Act class related to the containing Act class by an entryRelationship. Report Identifier is represented by a component Observation class related to the containing Act class by an entryRelationship.

IMAGE DETAILS is represented by an Observation class related to its containing Act (DICOM Study Identifier) class by an entryRelationship. The id attribute of that Observation (IMAGE DETAILS) class represents Image Identifier, the value attribute represents Image View Name and the effectiveTime attribute represents Image DateTime. DICOM Series Identifier is represented by a reference Act class that is related to its containing Observation (IMAGE DETAILS) class by an entryRelationship. Subject Position is represented by a reference Act class that is related to its containing Observation (IMAGE DETAILS) class by an entryRelationship. Image is represented by an ObservationMedia class related to its containing Observation (IMAGE DETAILS) class by an entryRelationship.

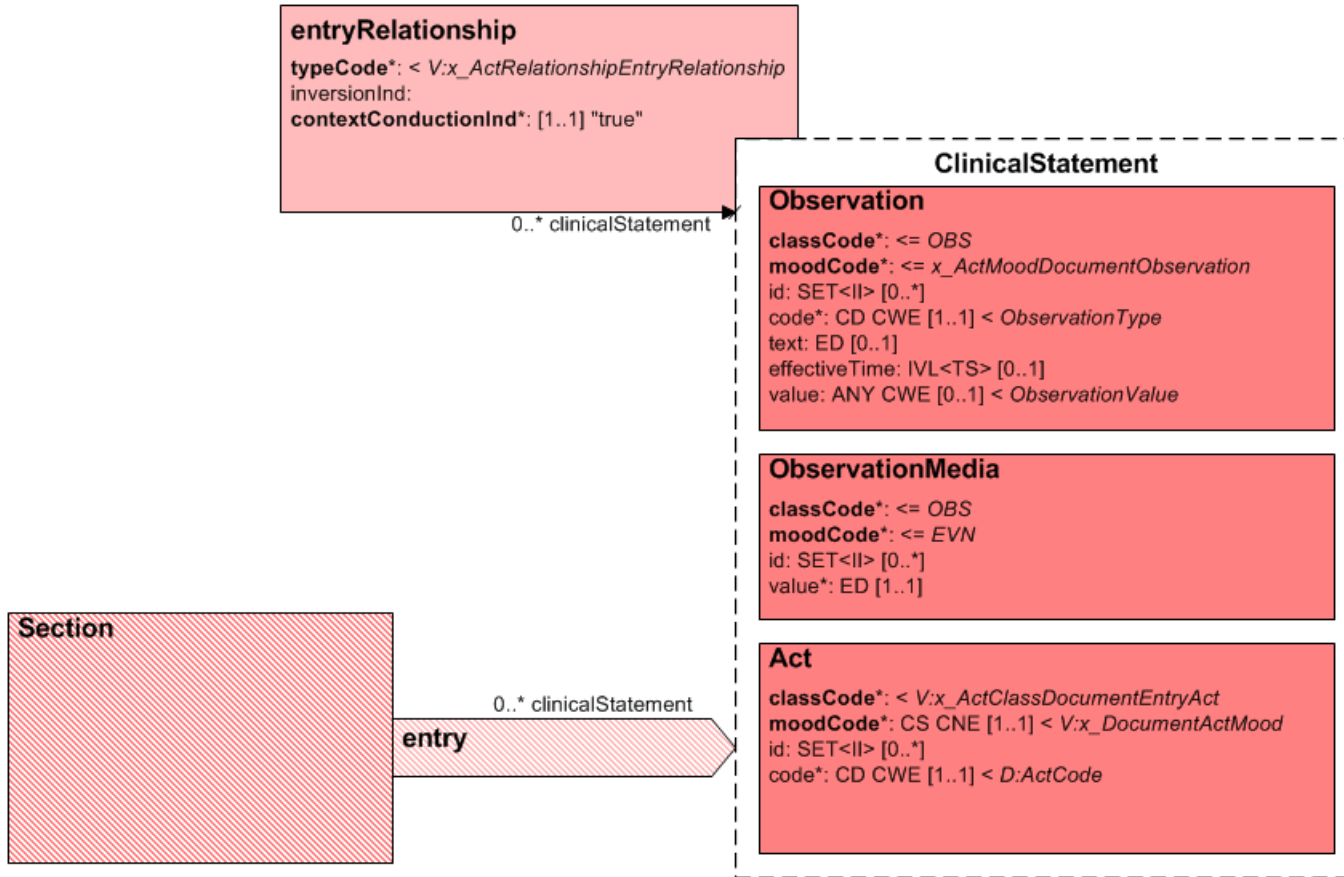


Figure 7.23. EXAMINATION REQUEST DETAILS

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](#)¹² 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 requested examination.	0..*	<code>entryRelationship[exam_req]/@typeCode="SUBJ"</code>		
			<code>entryRelationship[exam_req]/@inversionInd="true"</code>		
			<code>entryRelationship[exam_req]/act</code>		
			<code>entryRelationship[exam_req]/act/@classCode="ACT"</code>		
			<code>entryRelationship[exam_req]/act/@moodCode="EVN"</code>		
			<code>entryRelationship[exam_req]/act/code</code>		
			<code>entryRelationship[exam_req]/act/code/@code="102.16511"</code>		
			<code>entryRelationship[exam_req]/act/code/@codeSystem="1.2.36.1.2001.1001.101"</code>		
			<code>entryRelationship[exam_req]/act/code/@codeSystemName</code>	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			<code>entryRelationship[exam_req]/act/code/@displayName="Examination Request Details"</code>		

¹² <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 the imaging examination which was requested.	0..*	entryRelationship[exam_req]/act/entryRelationship[im_req_exam_nm]/@typeCode="REFR"		This logical NEHTA data component SHOULD NOT be present if its value is equal to the value of the Imaging Examination Result Name (entry[img_exam_res]/observation/code).
			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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	
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					
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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	
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[im_rep_id]/@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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[exam_req]/act/entryRelationship[im_rep_id]/observation/code/@displayName="Report Identifier"		
EXAMINATION REQUEST DETAILS > IMAGE DETAILS	Images referenced 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="102.16515"		
			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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/code/@displayName="Image Details"		

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
EXAMINATION REQUEST DETAILS > IMAGE DETAILS > Image Identifier	Unique identifier of this image allocated by the imaging service.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/ id		See <id> for available attributes.
EXAMINATION REQUEST DETAILS > IMAGE DETAILS > DICOM Series Identifier	Unique identifier of this series allocated by the imaging service.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/ entryRelationship[dicom_ser]/@typeCode="REFR"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/ act		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/ @classCode="ACT"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/ @moodCode="EVN"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/ id		See <id> for available attributes. NB. The DICOM Series Identifier is placed in the root attribute.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/ code		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/ @code="103.16517"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/ @codeSystem="1.2.36.1.2001.1001.101"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/code/ @codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
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.	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 imaging examination was performed.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[sub_pos]/@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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA® element.
			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	Date, and optionally 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[img]/@typeCode="SPRT"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[img]/ 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[img]/ observationMedia/@classCode="OBS"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[img]/ observationMedia/@moodCode="EVN"		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[img]/ observationMedia/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[img]/ observationMedia/value:ED		

Example 7.23. EXAMINATION REQUEST DETAILS XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin IMAGING EXAMINATION RESULT -->
          <component>
            <section classCode="DOCSECT" moodCode="EVN">
              ...
              <entry>
                <observation classCode="OBS" moodCode="EVN">
                  ...
                  <!-- Begin Result Group (IMAGING EXAMINATION RESULT GROUP) -->
                  <entryRelationship typeCode="COMP">
                    <organizer classCode="BATTERY" moodCode="EVN">
                      ...
                      </organizer>
                    </entryRelationship>
                  <!-- End Result Group (IMAGING EXAMINATION RESULT GROUP) -->
                  <!-- 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 xsi:type="ST">Chest X-ray</text>
                        </observation>
                      </entryRelationship>
                      <!-- End Examination Requested Name -->
                    </act>
                  </entryRelationship>
                </observation>
              </section>
            </component>
          </section>
        </component>
      </structuredBody>
    </component>
  </component>
</ClinicalDocument>
```

```

<!-- 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 DETAILS -->
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Image Identifier -->
      <id root="1.2.3.4.5.123654789654" />
      <code code="102.16515" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Image Details" />

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

      <!-- 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" />

      <!-- 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" xsi:type="ED">
            <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 -->

...

</observation>
</entry>

</section>
</component>
<!-- End IMAGING EXAMINATION RESULT -->

...

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

Parent

Data Type	Name	Occurrences (child within parent)
	DIAGNOSTIC INVESTIGATIONS	0..*

Children

Data Type	Name	Occurrence
	SERVICE PROVIDER	0..1

CDA® R-MIM Representation

Figure 7.24 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® Body elements.

The REQUESTED SERVICE data group is represented by a Section class that is related to its containing Section class by a component. Requested Service Description is represented by an Act class that is related to its containing Section (REQUESTED SERVICE) class by an entry. The moodCode of that Act class represents the Service Booking Status. The effectiveTime attribute of that Act class represents either Date/Time Service Scheduled or Service Commencement Window.

Subject of Care Instruction Description is represented by an Act class related to the containing Act (Requested Service Description) class by an entryRelationship. Requested Service Date/Time is represented by an Act class related to the containing Act (Requested Service Description) class by an entryRelationship.

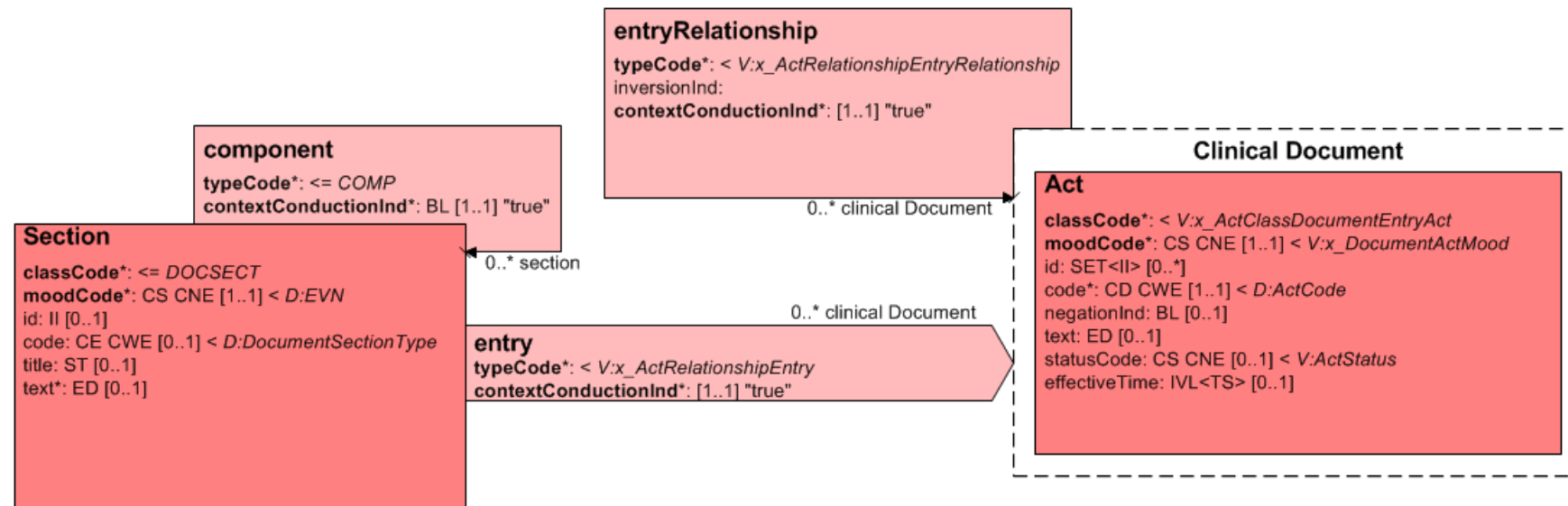


Figure 7.24. REQUESTED SERVICE

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](#)¹³ 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/		
REQUESTED SERVICE	A request for a diagnostic investigation of the subject of care.	0..*	component[req_serv]/section		
			component[req_serv]/section/title="Requested Service"		
			component[req_serv]/section/text		Required CDA [®] element. See Appendix A, CDA[®] Narratives .
REQUESTED SERVICE > Requested Service Instance Identifier	A globally unique identifier for each instance of a Requested Service action.	0..1	component[req_serv]/section/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
REQUESTED SERVICE > Detailed Clinical Model Identifier	A globally unique identifier for this Detailed Clinical Model.	1..1	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	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			component[req_serv]/section/code/@displayName="Requested Service"		

¹³ <http://www.hl7.org/oid/index.cfm?ref=footer>

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/		
REQUESTED SERVICE > Requested Service Description	Describes the service arranged for, or provided to, the subject of care.	1..1	entry[service]		
			entry[service]/act		
			entry[service]/act/@classCode="ACT"		
			entry[service]/act/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	See <id> for available attributes.
			entry[service]/act/code	NS	See <code> for available attributes.
REQUESTED SERVICE > DateTime Service Scheduled	The date and, optionally, time at which the arranged service is scheduled to be provided to the subject of care.	0..1	entry[service]/act/effectiveTime:TS		See <time> for available attributes. DateTime Service Scheduled SHALL NOT be present if Service Commencement Window is present. DateTime Service Scheduled is used when the booking has occurred, i.e. Service Booking Status(moodCode)="EVN".
REQUESTED SERVICE > Service Commencement Window	The datetime or date range at or during which the arranged service is scheduled to be provided to the subject of care.	0..1	entry[service]/act/effectiveTime:IVL_TS		See <time> for available attributes. Service Commencement Window SHALL NOT be present if DateTime Service Scheduled is present. Service Commencement Window is used before the booking has occurred, i.e. Service Booking Status(moodCode)="INT".
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.mood-Code	

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 or information that has been given to the subject of care from a healthcare provider in relation to the requested service.	0..1	entry[service]/act/entryRelationship[instruct]		
			entry[service]/act/entryRelationship[instruct]/@typeCode="COMP"		
			entry[service]/act/entryRelationship[instruct]/act		
			entry[service]/act/entryRelationship[instruct]/act/@classCode="INFRM"		
			entry[service]/act/entryRelationship[instruct]/act/@moodCode="EVN"		
			entry[service]/act/entryRelationship[instruct]/act/code		
			entry[service]/act/entryRelationship[instruct]/act/code/@code="103.10146"		
			entry[service]/act/entryRelationship[instruct]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[service]/act/entryRelationship[instruct]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[service]/act/entryRelationship[instruct]/act/code/@displayName="Subject of Care Instruction Description"		
entry[service]/act/entryRelationship[instruct]/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	Date, and optionally time, that the Requested Service action is completed.	1..1	entry[service]/act/entryRelationship[serv_date]/@typeCode="COMP"		
			entry[service]/act/entryRelationship[serv_date]/act		
			entry[service]/act/entryRelationship[serv_date]/act/@classCode="ACT"		
			entry[service]/act/entryRelationship[serv_date]/act/@moodCode="EVN"		
			entry[service]/act/entryRelationship[serv_date]/act/code		
			entry[service]/act/entryRelationship[serv_date]/act/code/@code="103.16635"		
			entry[service]/act/entryRelationship[serv_date]/act/code/@codeSystem="1.2.36.1.2001.1001.101"		
			entry[service]/act/entryRelationship[serv_date]/act/code/@codeSystemName	The value SHOULD be "NCTIS Data Components". See CodeSystem OIDs .	Optional CDA [®] element.
			entry[service]/act/entryRelationship[serv_date]/act/code/@displayName="Requested Service DateTime"		
entry[service]/act/entryRelationship[serv_date]/act/effectiveTime		See <time> for available attributes.			

Example 7.24. REQUESTED SERVICE XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<ClinicalDocument xmlns="urn:h17-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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...

          <!-- Begin REQUESTED SERVICE -->
          <component>
            <section>
              <!-- Requested Service Instance Identifier - used for system purposes such as matching -->
              <id root="40dd5b94-9b84-4389-aad5-0bde41b12c2" />
              <!-- Detailed Clinical Model Identifier -->
              <code code="101.20158" 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>
```

```

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

  <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" />
  <!-- End Requested Service Description -->

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

  <!-- Begin SERVICE PROVIDER - Examples provided below are the possible mutually exclusive 'SERVICE PROVIDER' instantiation choices.-->
  <!-- Begin Service Provider as a Healthcare Person -->
  <performer typeCode="PRF">
    ...
  </performer>
  <!-- End Service Provider as a Healthcare Person -->

  <!-- Begin Service Provider as an Organisation -->
  <performer typeCode="PRF">
    ...
  </performer>
  <!-- End Service Provider as an Organisation -->
  <!-- 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>Drip dry.</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 -->

<!-- Begin Service Provider as a Healthcare Person Entitlement -->
<ext:coverage2 typeCode="COVBY">
  <ext:entitlement classCode="COV" moodCode="EVN">
    ...
  </ext:entitlement>
</ext:coverage2>
<!-- End Service Provider as a Healthcare Person Entitlement -->

</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	Occurrences (child within parent)
	REQUESTED SERVICE	0..1

Author Choices



Note

Mentioned below are the possible mutually exclusive 'SERVICE PROVIDER' instantiation choices.

Data Type	Name
	Service Provider as a Healthcare Person
	Service Provider as an Organisation

7.1.6.3.1.1 Service Provider as a Healthcare Person

CDA® R-MIM Representation

Figure 7.25 SERVICE PROVIDER 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 instantiated as PERSON is represented by the performer participation of the ClinicalStatement. The performer is a person in the role of assignedEntity (AssignedEntity class). The entity playing the role is Person. The Entity Identifier of the participant is mapped to the EntityIdentifier NEHTA CDA® extension and is associated to Person.

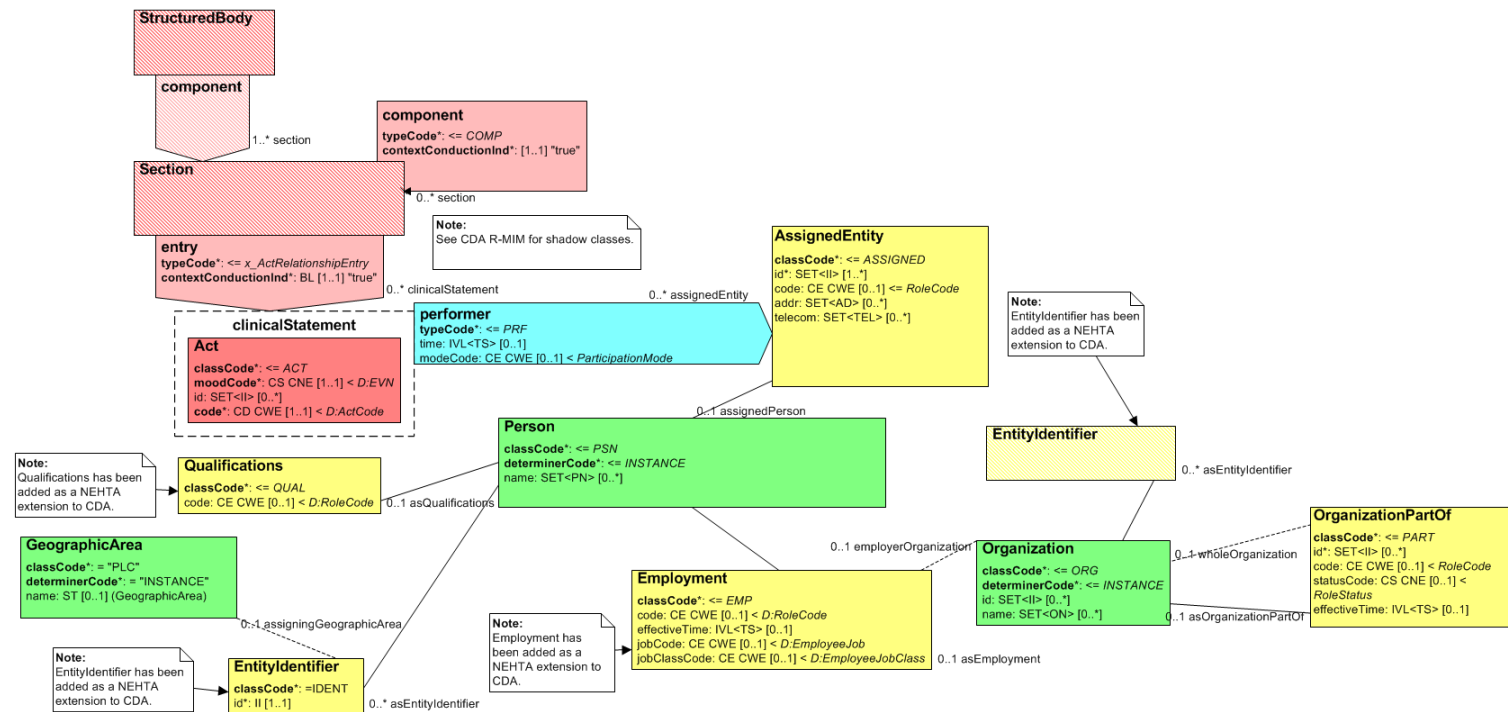


Figure 7.25. SERVICE PROVIDER

Figure 7.26 SERVICE PROVIDER - Entitlement 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.

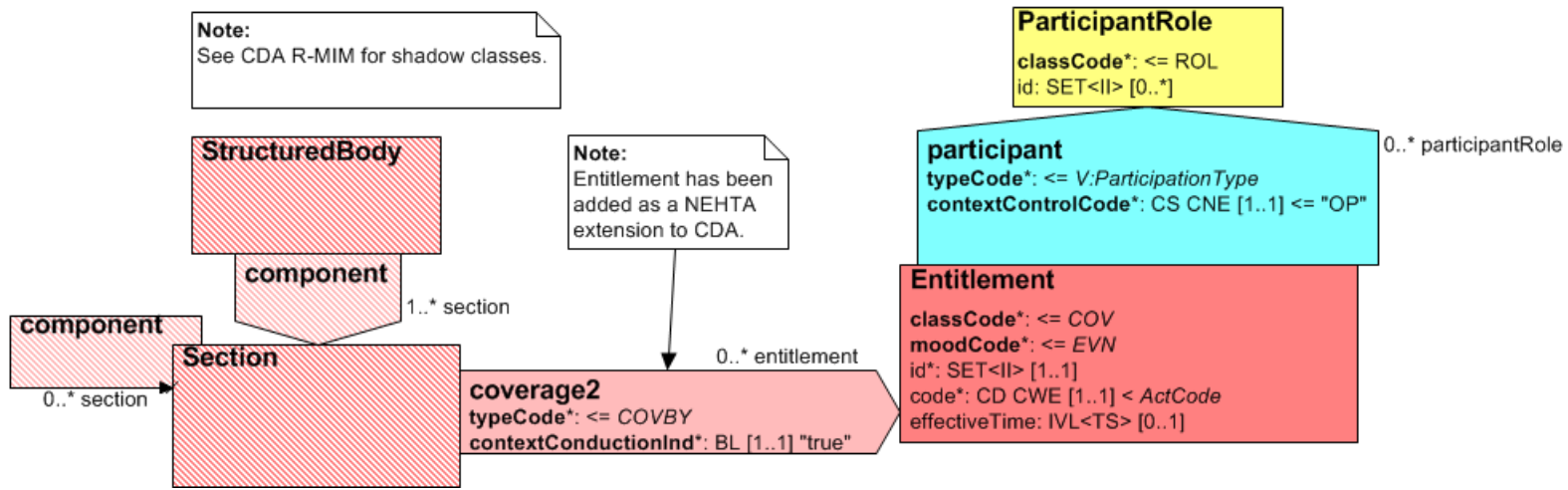


Figure 7.26. SERVICE PROVIDER - Entitlement

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	The provider (individual or organisation) that 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, Revision 1 [ABS2009] . However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7® and publicly available MAY be used.	See <code> for available attributes.
n/a	n/a	1..1	performer/assignedEntity/id	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	Required CDA® element.
SERVICE PROVIDER > Participant	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	performer/assignedEntity/assignedPerson		
SERVICE PROVIDER > Participant > Entity Identifier	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/assignedPerson/<Entity Identifier>	The value of one Entity Identifier SHALL be an Australian HPI-I.	See common pattern: Entity Identifier .

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
SERVICE PROVIDER > Participant > Address	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	performer/assignedEntity/⟨ Address ⟩	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS. Address Purpose (addr/@use) SHALL be set to Business (see AS 5017-2006: Health Care Client Identifier Address Purpose).	See common pattern: Address .
SERVICE PROVIDER > Participant > Electronic Communication Detail	The electronic communication details of entities.	0..*	performer/assignedEntity/⟨ Electronic Communication Detail ⟩	Electronic Communication Usage Code (telecom/@use) SHALL be set to Workplace (see HL7 [®] : TelecommunicationAddressUse).	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 or DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON. This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in performer/assignedEntity/assignedPerson.
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Person Name	The appellation by which an individual may be identified separately from any other within a social context.	1..*	performer/assignedEntity/assignedPerson/⟨ Person Name ⟩		See common pattern: Person Name .
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail	A person's occupation and employer.	0..1	performer/assignedEntity/assignedPerson/ext:as Employment		See common pattern: Employment .

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Employer Organisation	The organisation that the individual is working for in respect to the role they are playing in the nominated participation.	1..*	performer/assignedEntity/assignedPerson/ext:asEmployment/ext:employerOrganization		There is a known issue in the NEHTA Participation Data Specification [NE-HT2011v] for this logical data component's cardinality. Furthermore the corresponding CDA® elements ext:asEmployment and ext:employerOrganization do not allow the cardinality to be '0..*/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'. performer/assignedEntity/assignedPerson/ext:asEmployment/@classCode="EMP"
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Employer Organisation > Entity Identifier	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/assignedPerson/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 .
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > 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 ssignedPerson/ext:asEmployment/employerOrganization.
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Employer Organisation > Organisation > Organisation Name	The name by which an organisation is known or called.	1..1	performer/assignedEntity/assignedPerson/ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/ name		
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > 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	performer/assignedEntity/assignedPerson/ext:asEmployment/ext:employerOrganization/ name		
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Employer Organisation > Organisation > Organisation Name Usage	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	performer/assignedEntity/assignedPerson/ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/name/@ use	AS 4846-2006: Health Care Provider Organisation Name Usage	

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Employment Type	The basis on which the person is employed by the employer organisation.	0..1	performer/assignedEntity/assignedPerson/ext:asEmployment/ ext:jobClassCode	NS	
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Occupation	A descriptor of the class of job based on similarities in the tasks undertaken.	0..*	performer/assignedEntity/assignedPerson/ext:asEmployment/ ext:jobCode	1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1 [ABS2009]	The corresponding CDA [®] element ext:jobCode does not allow the cardinality to be '0..*/multiple'. The cardinality SHALL be interpreted as '0..1' instead of '0..*'. SHALL
SERVICE PROVIDER > Participant > Person or Organisation or Device > Person > Employment Detail > Position In Organisation	A descriptor of the job or the job role based on the management hierarchy of the organisation.	0..1	performer/assignedEntity/assignedPerson/ext:asEmployment/ ext:code	NS	
CDA[®] Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section/		
SERVICE PROVIDER > 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"		
			ext:coverage2/ ext:entitlement		
			ext:coverage2/ext:entitlement/ @classCode="COV"		
			ext:coverage2/ext:entitlement/ @moodCode="EVN"		
			ext:coverage2/ext:entitlement/ ext:participant/@typeCode="HLD"		
			ext:coverage2/ext:entitlement/ ext:participant/@classCode="ASSIGNED"		
			ext:coverage2/ext:entitlement/ext:participant/ ext:participantRole/@classCode="ASSIGNED"	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID MAY be used.	This SHALL hold the same value as performer/assignedEntity/id.
SERVICE PROVIDER > 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		See <id> for available attributes.
SERVICE PROVIDER > 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	

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
SERVICE PROVIDER > 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.
CDA® Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section/entry[service]/act/		
SERVICE PROVIDER > Participant > Qualifications	A list of professional certifications, and certificates recognising having passed a course.	0..1	performer/assignedEntity/assignedPerson/ext: asQualifications		See NEHTA CDA® extension: Qualifications .
			performer/assignedEntity/assignedPerson/ext:asQualifications/@ classCode="QUAL"		
			performer/assignedEntity/assignedPerson/ext:asQualifications/ext: code/originalText	Qualifications is a text field, so the text list is entered in the originalText field of the code element.	

Example 7.25. SERVICE PROVIDER - Person XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin REQUESTED SERVICE -->
          <component>
            <section>
              ...
              <!-- Begin Narrative text -->
              <text>
                <table>
                  <tbody>
                    <tr>
                      <th>Australian Medicare Prescriber Number</th>
                      <td>049960CT</td>
                    </tr>
                  </tbody>
                </table>
              </text>
              <!-- End Narrative text -->
            </section>
          </component>
          <!-- Begin Requested Service Description -->
          <entry>
            <!-- Service Booking Status (moodCode) -->
            <act classCode="ACT" moodCode="APT">
              ...
              <!-- Begin Service Provider as a Healthcare Person -->
              <performer typeCode="PRF">
                ...
                <!-- Begin Participation Period -->
                <time>
                  <low value="201212301000+1000" />
                  <high value="201212301030+1000" />
                </time>
                <!-- End Participation Period -->
              </performer>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

```
<assignedEntity>
<!-- ID is used for system purposes such as matching -->
<id root="43c26c57-5cc0-4f43-b11c-44f917c152af" />

<!-- Role -->
<code code="253917" 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="Diagnostic and Interventional Radiologist" />

<!-- 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 -->

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

<assignedPerson>

<!-- Begin Person Name -->
<name use="I">
<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="1.2.36.1.2001.1003.0.8003619900015717" />
<ext:assigningGeographicArea classCode="PLC">
<ext:name>National Identifier</ext:name>
</ext:assigningGeographicArea>
</ext:asEntityIdentifier>
<!-- End Entity Identifier -->

<!-- Employment Details -->
<ext:asEmployment classCode="EMP">

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

<!-- Occupation -->
<ext:jobCode code="253917" 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="Diagnostic and Interventional Radiologist" />

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

<!-- Begin Employer Organisation -->
<ext:employerOrganization>
<!-- Department/Unit -->
```

```

<name>Radiology Specialists</name>

<asOrganizationPartOf>
  <wholeOrganization>

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

    <!-- Being Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
      <ext:id assigningAuthorityName="HPI-O"
        root="1.2.36.1.2001.1003.0.8003621566684455" />
      <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
    <!-- End Entity Identifier -->

  </wholeOrganization>
</asOrganizationPartOf>
</ext:employerOrganization>
<!-- End Employer Organisation -->
</ext:asEmployment>

<!-- Begin Qualifications -->
<ext:asQualifications classCode="QUAL">
  <ext:code>
    <originalText>M.B.B.S</originalText>
  </ext:code>
</ext:asQualifications>
<!-- End Qualifications -->

</assignedPerson>
</assignedEntity>
</performer>
<!-- End Service Provider as a Healthcare Person -->
...

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

<!-- Begin Service Provider as a Healthcare Person Entitlement -->
  <ext:coverage2 typeCode="COVBY">
    <ext:entitlement classCode="COV" moodCode="EVN">
      <ext:id assigningAuthorityName="Medicare Prescriber number"
        root="1.2.36.174030967.0.3"
        extension="049960CT" />
      <ext:code code="10" codeSystem="1.2.36.1.2001.1001.101.104.16047"
        codeSystemName="NCTIS Entitlement Type Values"
        displayName="Medicare Prescriber Number" />
      <ext:effectiveTime>
        <low value="20050101"/>
        <high value="20250101"/>
      </ext:effectiveTime>
      <ext:participant typeCode="HLD">
        <ext:participantRole classCode="ASSIGNED">
          <!-- Same as the Service Provider (performer) id -->
          <ext:id root="43c26c57-5cc0-4f43-b11c-44f917c152af" />
        </ext:participantRole>
      </ext:participant>
    </ext:entitlement>
  </ext:coverage2>

```

```
        <!-- End Service Provider as a Healthcare Person Entitlement -->
        ...

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

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

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

7.1.6.3.1.2 Service Provider as an Organisation

CDA[®] R-MIM Representation

Figure 7.27 SERVICE PROVIDER (ORGANISATION) shows a subset of the CDA[®] R-MIM containing those classes being referred to in the CDA[®] Mapping. This data component maps to CDA[®] Body elements.

The SERVICE PROVIDER data group instantiated as ORGANISATION is represented by the participant participation of the AssociatedEntity Organization relationship. The entity identifier of the participant is mapped to the EntityIdentifier class (NEHTA CDA[®] extension)

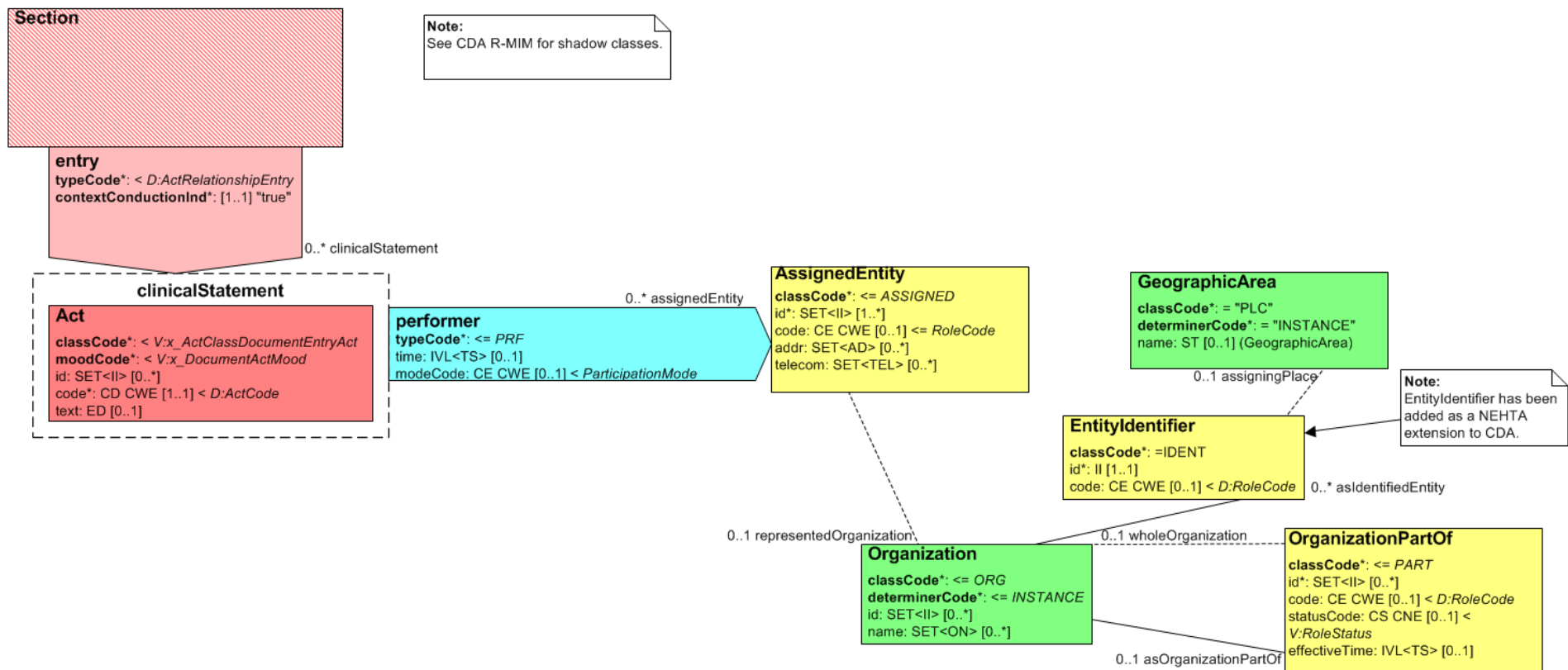


Figure 7.27. SERVICE PROVIDER (ORGANISATION)

CDA® Mapping

NEHTA SCS Data Component	Data Component Definition	Card	CDA® Schema Data Element	Vocab	Comments
CDA® Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[req_serv]/section/entry[service]/act/		
SERVICE PROVIDER	The provider (individual or organisation) that 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 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 or DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as an ORGANISATION. This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
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/representedOrganization.
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 7.26. SERVICE PROVIDER - Organisation XML Fragment

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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 typeCode="COMP">
        <section classCode="DOCSECT" moodCode="EVN">
          ...
          <!-- Begin REQUESTED SERVICE -->
          <component>
            <section>
              ...
              <!-- Begin Requested Service Description -->
              <entry>
                <!-- Service Booking Status (moodCode) -->
                <act classCode="ACT" moodCode="APT">
                  ...
                  <!-- Begin Service Provider as an Organisation -->
                  <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="43c26c57-5cc0-4f43-b11c-44f917c152af" />
                      <!-- Role -->
                      <code code="309964003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
                        displayName="radiology department" />
                      <!-- Begin Address -->
                      <addr use="WP">
```

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

<!-- Electronic Communication Detail -->
<telecom value="tel:0788324888" />

<representedOrganization>
  <asOrganizationPartOf>
    <wholeOrganization>
      <!-- Organisation Name -->
      <name use="ORGB">Private Radiology Clinic</name>

      <!-- Begin Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621566684455" />
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
      <!-- End Entity Identifier -->

    </wholeOrganization>
  </asOrganizationPartOf>
</representedOrganization>
</assignedEntity>
</performer>
<!-- End Service Provider as an 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.org¹.

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 by, typed by or displayed to 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 implementation guide and no suitable code can be found, the *originalText* element **SHALL** be used to carry the full text as selected by, typed by or displayed to the author of this statement.

¹ <http://www.hl7.org>

If a vocabulary is specified in this implementation 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 by, typed by or displayed to 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 by, typed by or displayed to 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. 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"
  codeSystemVersion="20101130"
  displayName="skin rash" />

<!-- Alternate code system in use and a translation into the specified code system is available -->
<code
  code="J45.9"
  codeSystem="2.16.840.1.113883.6.135"
  codeSystemName="icd10am"
  displayName="Asthma, unspecified">
  <originalText>Asthma</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="J45.9"
  codeSystem="2.16.840.1.113883.6.135"
  codeSystemName="icd10am"
  displayName="Asthma, unspecified">
  <originalText>Asthma</originalText>
</code>

<!-- No suitable code can be found or there is no code system in use -->
<code
  <originalText>Asthma</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 *assigningAuthorityName*
- a *root* and an *assigningAuthorityName*
- a *root* and an *assigningAuthorityName* and a *displayable*
- a *root* and an *extension* and a *displayable*
- a *root* and an *extension* and an *assigningAuthorityName* and a *displayable*
- a *root* and a *displayable*

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 **SHALL** 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 **RECOMMENDED**.

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 SCSs, 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 **SHALL** always be the same identifier in all versions of the record, and it **SHALL** be globally unique per the rules of the II data type.

Throughout the specification, these identifiers are labelled 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="1.2.36.1.2001.1003.0.8003621566684455" />
```


8.3 time

When a time value is supplied it **SHALL** include hours and minutes.

When a time value is supplied it **MAY** include seconds and fractions of seconds.

When a time value is supplied it **SHALL** include a time zone.

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 can either have a nullFlavor attribute or child components following allowed patterns.

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 as 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="wk" />  
</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 NEHTA CDA® extension: Entity-Identifier .
			ext:asEntityIdentifier/@classCode="IDENT"		
			ext:asEntityIdentifier/ext:id		
			ext:asEntityIdentifier/ext:id/@root	Attribute @root SHALL be used, SHALL be an OID and SHALL NOT be a UUID. Attribute @root SHALL be a globally unique object identifier (i.e. 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 SHOULD be used and, if it is used, SHALL be 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, SHALL be the range and extent that the identifier applies to the object with which it is associated that is populated directly from the geographic area. This SHOULD NOT be used for machine readability purposes. For details see: AS 5017-2006: Health Care Client Identifier Geographic Area .				

Example 8.8. Entity Identifier

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA@ Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA@ Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<!-- person -->
<xs:asEntityIdentifier classCode="IDENT">
  <xs:id root="1.2.36.1.2001.1003.0.8003608833357361" assigningAuthorityName="IHI" />
  <xs:assigningGeographicArea classCode="PLC">
    <xs:name>National Identifier</xs:name>
  </xs:assigningGeographicArea>
</xs:asEntityIdentifier>

<xs:asEntityIdentifier classCode="IDENT">
  <xs:id root="1.2.36.1.2001.1005.29.8003621566684455" 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-0" root="1.2.36.1.2001.1003.0.8003621566684455" />
  <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	A code for representing "preferred name" has been requested from HL7® International but is not currently available.	If both Preferred Name Indicator and Person Name Usage have been provided, the use attribute SHALL include them as space separated list of codes.
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	If both Preferred Name Indicator and Person Name Usage have been provided, the use attribute SHALL include them as space separated list of codes.

Example 8.9. Person Name

```
<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only.
Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid.
While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and
may not be indicative of the expected values in a clinical document.
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 will 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		<p>In an event where the Address of the Subject of Care is 'Unknown' or 'Masked / Not to be disclosed for privacy reason', the following conditions SHOULD be applied.</p> <p>The nullFlavor = "UNK" SHOULD be permitted if the value of address is not known and the value of 'No Fixed Address Indicator' is false.</p> <p>The nullFlavor = "MSK" SHOULD be permitted if the value of address is masked and the value of 'No Fixed Address Indicator' is false.</p> <p>The nullFlavor = "NA" SHOULD be permitted if value of 'No Fixed Address Indicator' is true. (This is the same as the current CDA® IG constraint).</p> <p>The value of the <addr> data group SHALL be populated in all other circumstances.</p>
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.

NEHTA SCS Data Component	Data Component Definition	Card	CDA [®] Schema Data Element	Vocab	Comments
Address > Australian or International Address	Represents a choice to be made at run-time between an AUSTRALIAN ADDRESS and an INTERNATIONAL ADDRESS.	1..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Address > Australian or International Address > International Address	The description of a non-Australian location where an entity is located or can be otherwise reached or found.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Address > Australian or International Address > International Address > International Address Line	A composite of address details comprising a low level geographical/physical description of a location that, used in conjunction with the other high level address components, i.e. international state/province, international post-code 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		
Address > Australian or International Address > International Address > Country	The country component of the address.	0..1	addr/country	Australia Bureau of Statistics, Standard Australian Classification of Countries (SACC) Cat. No. 1269 [ABS2008]	Use the name, not the numbered code.
Address > Australian or International Address > Australian Address	The description of an Australian location where an entity is located or can be otherwise reached or found.	0..1	n/a		This logical NEHTA data component has no mapping to CDA [®] . The cardinality of this component propagates to its children.
Address > Australian or International Address > Australian Address > Unstructured Australian Address Line	A composite of one or more low level standard address components describing a geographical/physical location that, used in conjunction with the other high level address components, e.g. Australian suburb/town/locality name, Australian postcode and Australian State/Territory, forms a complete geographical/physical address.	0..*	addr/streetAddressLine		

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	The standard low level address components describing a geographical/physical location that, used in conjunction with the other high level address components, i.e. Australian suburb/ town/locality name, Australian postcode and Australian State/Territory, form a complete geographical/physical address.	0..1	n/a		This logical NEHTA data component has no mapping to CDA®. The cardinality of this component propagates to its children.
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Unit Type	The specification of the type of a separately identifiable portion within a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/unitType	AS 5017 (2006) - Healthcare Client Identification: Australian Unit Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Unit Type [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Unit Number	The specification of the number or identifier of a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/unitID		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Address Site Name	The full name used to identify the physical building or property as part of its location.	0..1	addr/additionalLocator		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Level Type	Descriptor used to classify the type of floor or level of a multistorey building/complex.	0..1	addr/additionalLocator	AS 5017 (2006) - Healthcare Client Identification: Australian Level Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Level Type [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Level Number	Descriptor used to identify the floor or level of a multistorey 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		

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 Street Type	A code that identifies the type of public thoroughfare.	0..1	addr/streetNameType	AS 5017 (2006) - Healthcare Client Identification: Australian Street Type Code [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Street Type Code [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Street Suffix	Term used to qualify Australian Street Name used for directional references.	0..1	addr/direction	AS 5017 (2006) - Healthcare Client Identification: Australian Street Suffix [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Street Suffix [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Postal Delivery Type	Identification for the channel of postal delivery.	0..1	addr/deliveryAddressLine	AS 5017 (2006) - Healthcare Client Identification: Australian Postal Delivery Type Code [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Postal Delivery Type Code [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > Australian Postal Delivery Number	Identification number for the channel of postal delivery.	0..1	addr/deliveryAddressLine		
Address > Australian or International Address > Australian Address > Australian Suburb/Town/Locality	The full name of the general locality contained within the specific address.	0..1	addr/city	Values in this data element should comply with descriptions in the Australia Post Postcode File (see www.auspost.com.au/postcodes).	
Address > Australian or International Address > Australian Address > Australian State/Territory	The identifier of the Australian state or territory.	0..1	addr/state	AS 5017-2006 Australian State/Territory Identifier - Postal	
Address > Australian or International Address > Australian Address > Australian Postcode	The numeric descriptor for a postal delivery area (as defined by Australia Post), aligned with locality, suburb or place for the address.	0..1	addr/postalCode	Values in this data element should comply with descriptions in the Australia Post Postcode File (see www.auspost.com.au/postcodes).	
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

<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will 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.
Electronic Communication Detail > Electronic Communication Usage Code	The manner of use that is applied to an electronic communication medium.	0..1	telecom/@use	HL7[®]: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse	Space separated list of codes. The section AS 5017-2006: Health Care Client Electronic Communication Usage Code explains how to map AS 5017-2006 to HL7 [®] Telecommunication-AddressUse (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		Makes up part of the value attribute as 'tel:phone number', 'mailto:email address', 'http:URL', etc.

Example 8.11. Electronic Communication Detail

```
<!-- This xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only.
Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid.
While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and
may not be indicative of the expected values in a clinical document.
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 will 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.	1..*	ext:asEmployment/ext:employerOrganization		There is a known issue in the NEHTA Participation Data Specification [NE-HT2011v] for this logical data component's cardinality. Furthermore the corresponding CDA [®] elements ext:asEmployment and ext:employerOrganization do not 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 > 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..*	ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/(<Address>	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address .
Employment Detail > Employer Organisation > Electronic Communication Detail	The electronic communication details of entities.	1..*	ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/(<Electronic Communication Detail>		See common pattern: Electronic Communication Detail .
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, Revision 1 [ABS2009]	The corresponding CDA® element ext:jobCode does not allow the cardinality to 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 xml fragment is provided to demonstrate an example instance of each structured element in the CDA® Mapping table. It is illustrative only. Logical model constraints on allowed combinations of child components are ignored in order to provide coverage of structured elements. This fragment cannot be treated as clinically valid. While the values in the fragment are conformant with the CDA® Mapping table they are typically exaggerated to highlight the semantic meaning of the structured elements and may not be indicative of the expected values in a clinical document. 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 will take precedence. -->

```
<!-- Employment Details -->
<ext:asEmployment classCode="EMP">

  <!-- Position In Organisation -->
  <ext:code>
    <originalText>Chief 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, Revision 1"
    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>Oncology Ward</name>
    <asOrganizationPartOf>
      <wholeOrganization>

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

        <!-- Entity Identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
          <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621566684455"/>
          <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
          </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>

        <!-- Address -->
        <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>

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

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


</ext:asEmployment>

9 NEHTA 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 NEHTA CDA® extension represented.

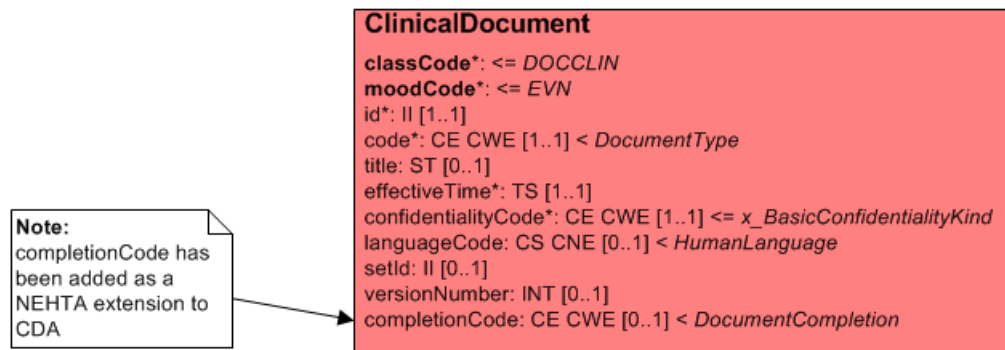


Figure 9.1. CDA® R-MIM Representation

9.2 EntityIdentifier

Figure 9.2 CDA[®] R-MIM Representation shows a subset of the CDA[®] R-MIM containing those classes with the relevant NEHTA CDA[®] extension represented.

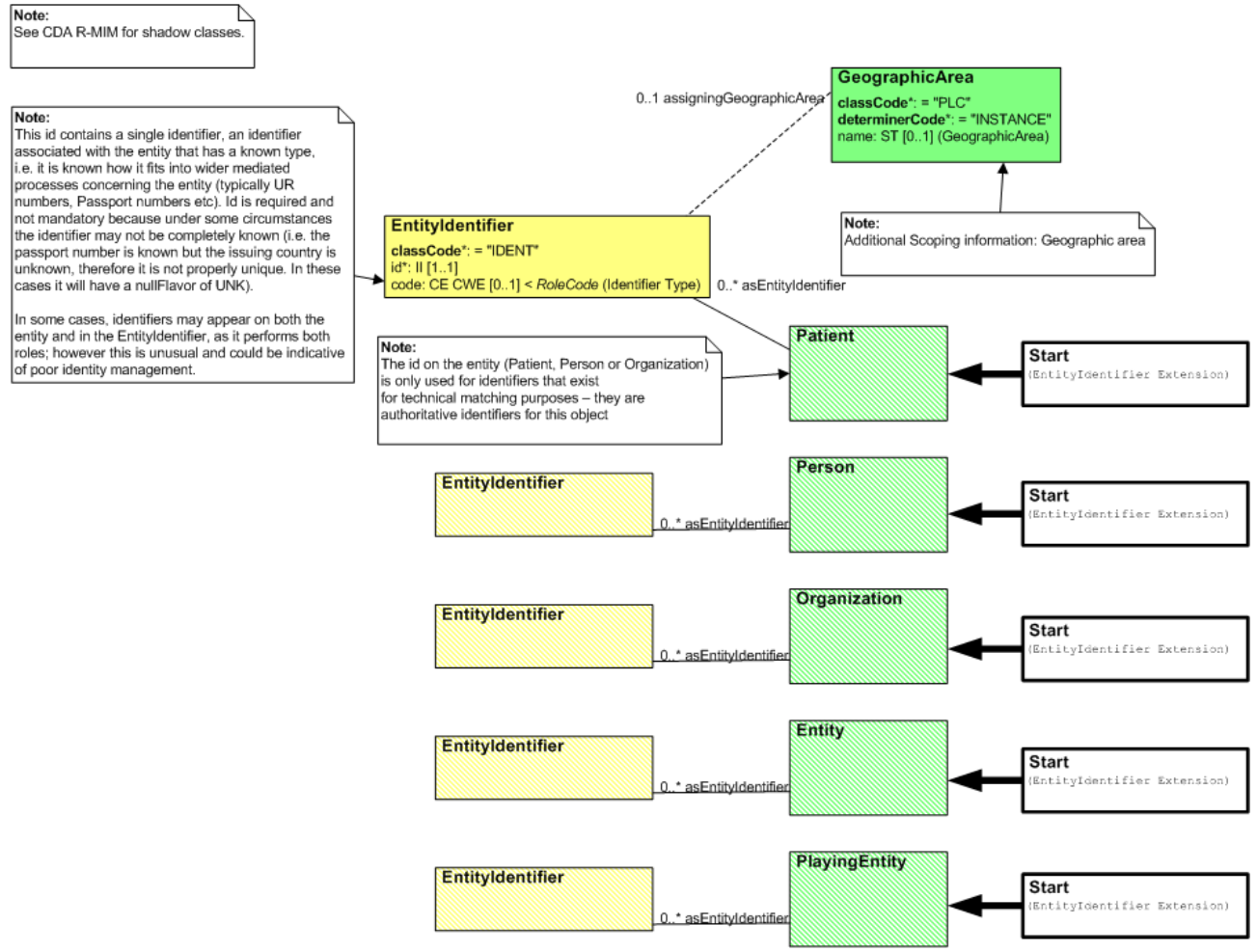


Figure 9.2. CDA[®] R-MIM Representation

9.3 Entitlement

Figure 9.3 CDA® R-MIM Representation shows a subset of the CDA® R-MIM containing those classes with the relevant NEHTA CDA® extension represented.

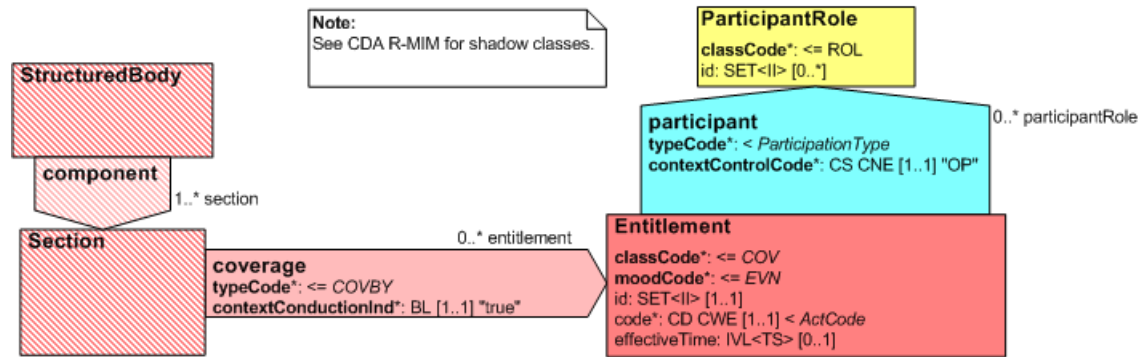


Figure 9.3. CDA® R-MIM Representation

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 NEHTA CDA[®] extension represented.

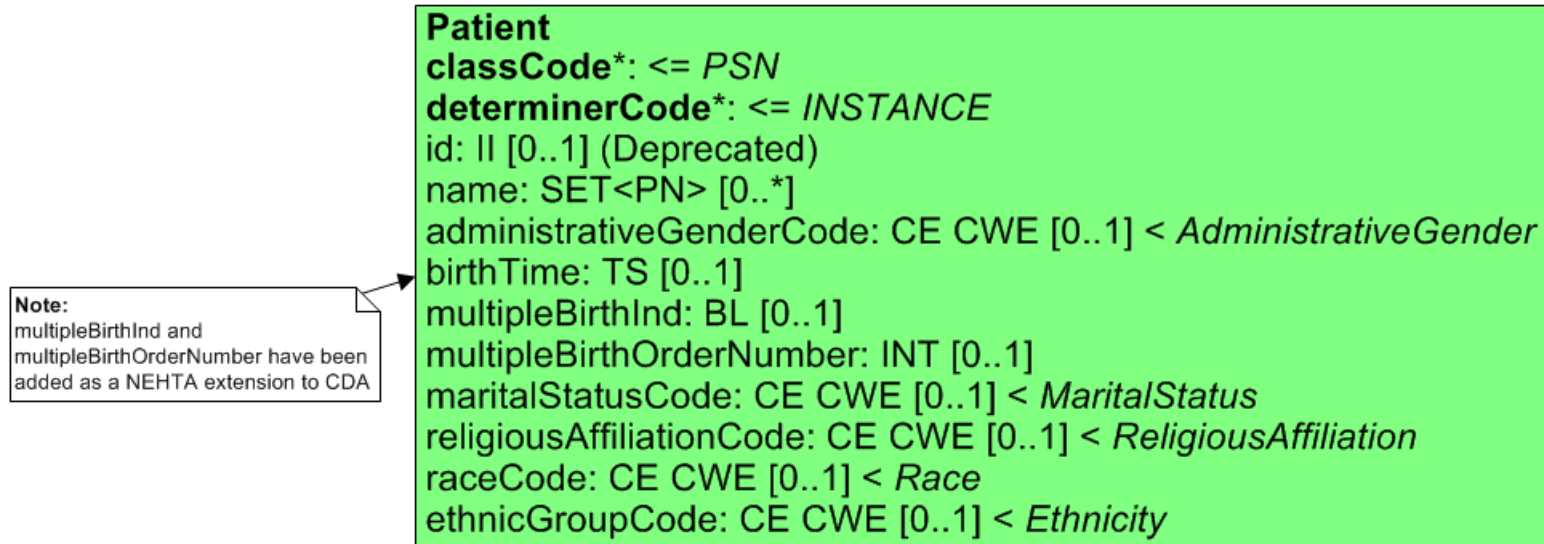


Figure 9.4. CDA[®] R-MIM Representation

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 NEHTA CDA® extension represented.

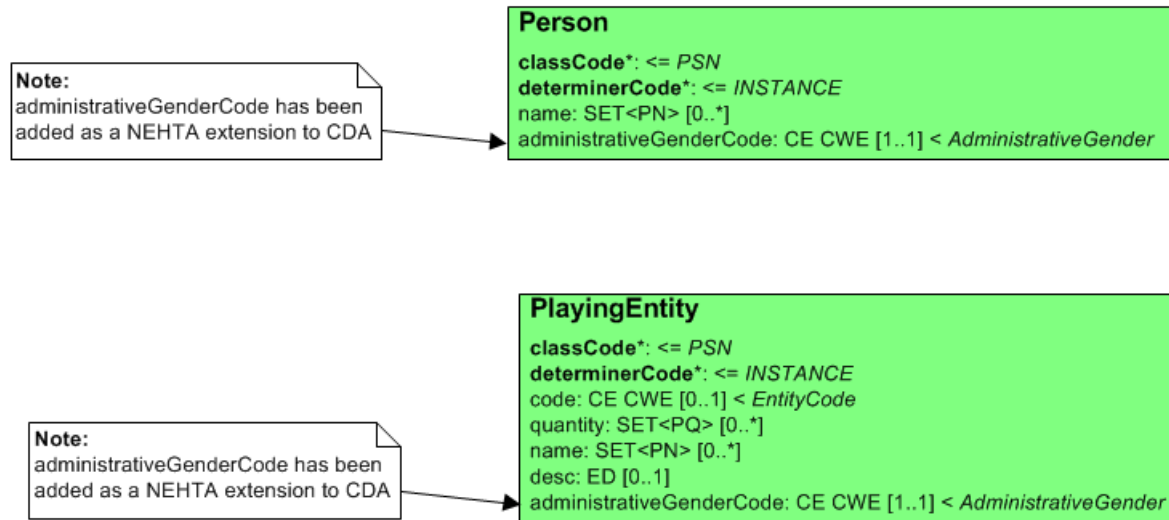


Figure 9.5. CDA® R-MIM Representation

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 NEHTA CDA[®] extension represented.

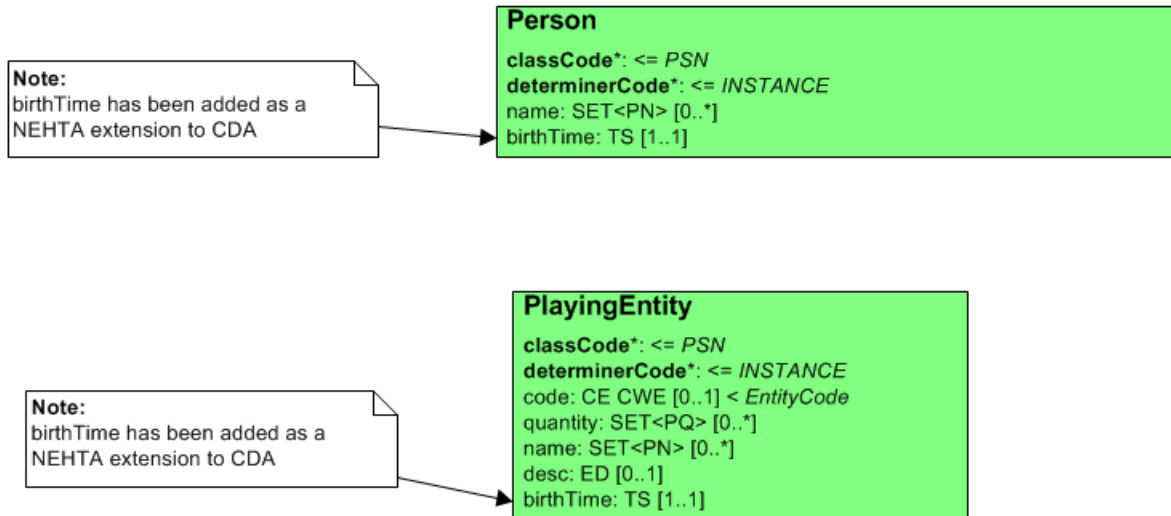


Figure 9.6. CDA[®] R-MIM Representation

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 NEHTA CDA® extension represented.

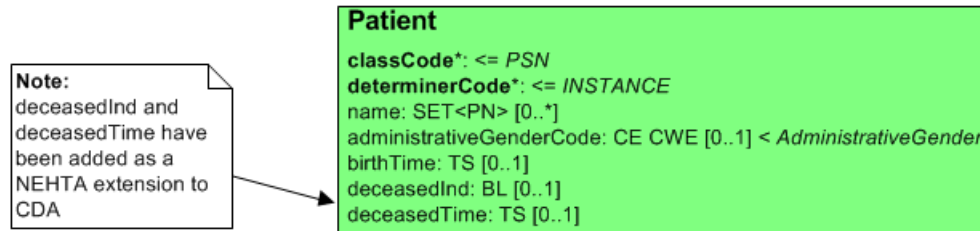


Figure 9.7. CDA® R-MIM Representation

9.8 Employment

Figure 9.8 CDA[®] R-MIM Representation shows a subset of the CDA[®] R-MIM containing those classes with the relevant NEHTA CDA[®] extension represented.

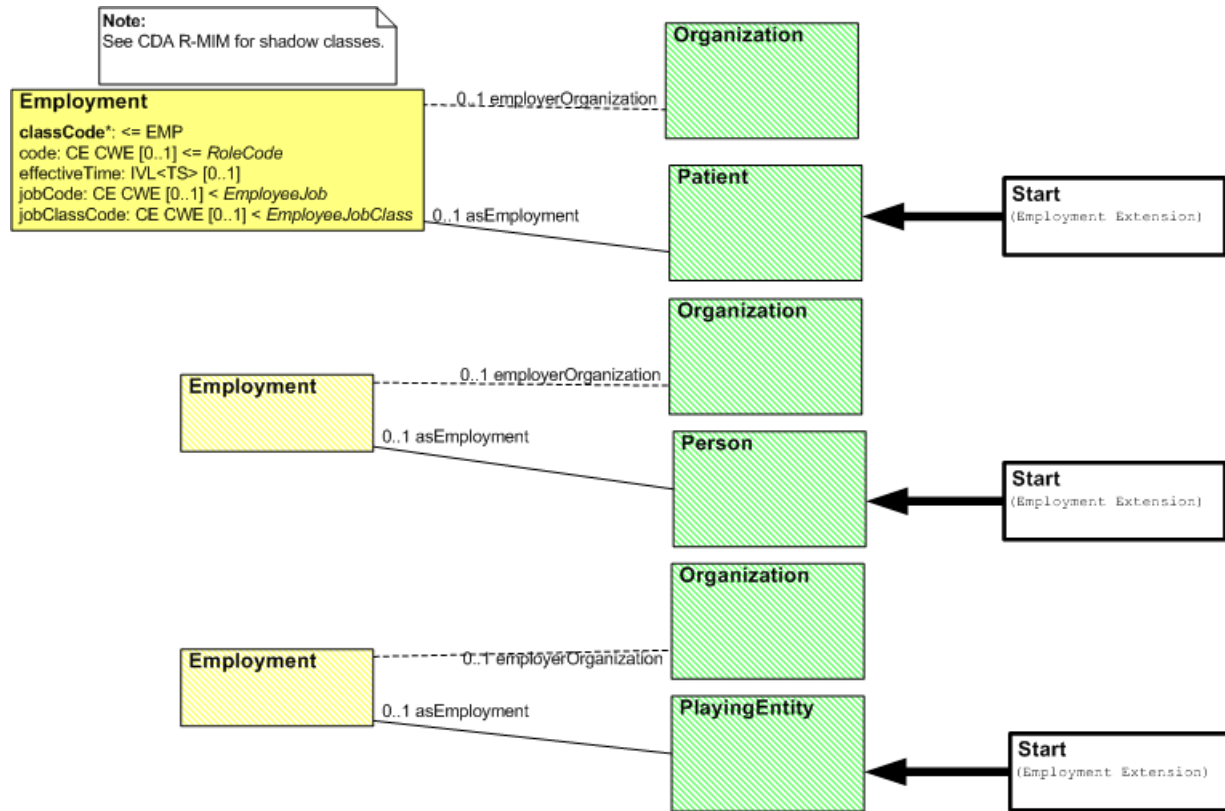


Figure 9.8. CDA[®] R-MIM Representation

9.9 Qualifications

Figure 9.9 CDA® R-MIM Representation shows a subset of the CDA® R-MIM containing those classes with the relevant NEHTA CDA® extension represented.

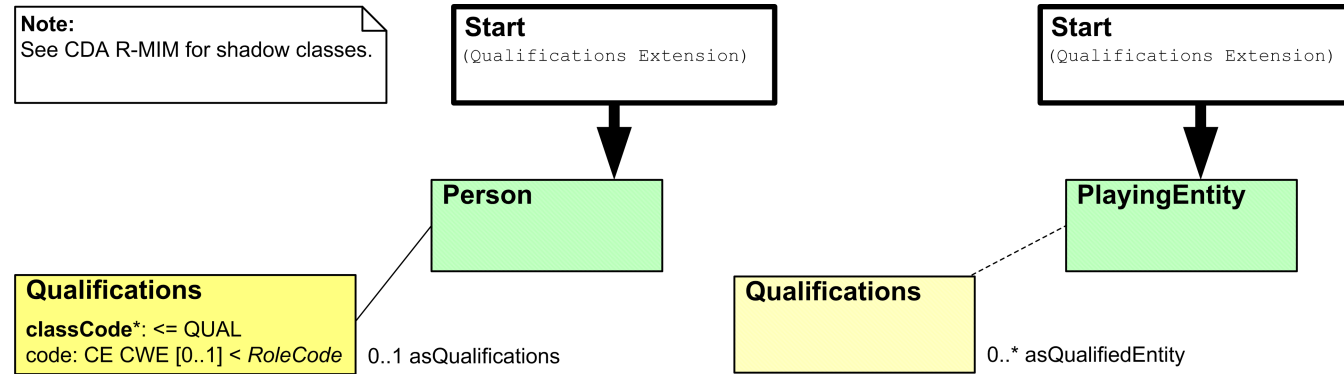


Figure 9.9. CDA® R-MIM Representation

9.10 Container

Figure 9.10 CDA[®] R-MIM Representation shows a subset of the CDA[®] R-MIM containing those classes with the relevant NEHTA CDA[®] extension represented.

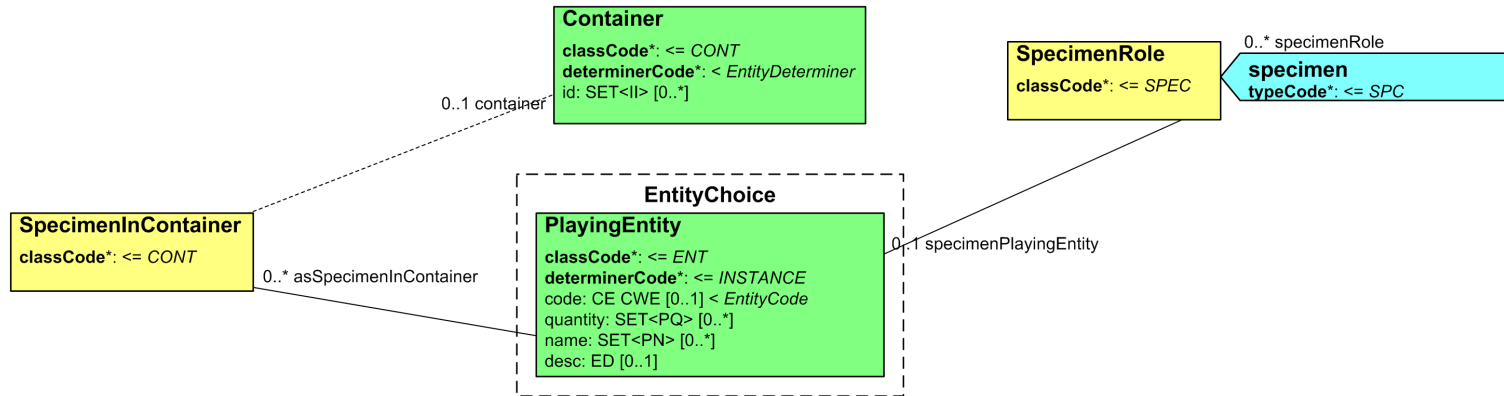


Figure 9.10. CDA[®] R-MIM Representation

9.11 Participant Entity Organization

Figure 9.11 CDA® R-MIM Representation shows a subset of the CDA® R-MIM containing those classes with the relevant NEHTA CDA® extension represented.

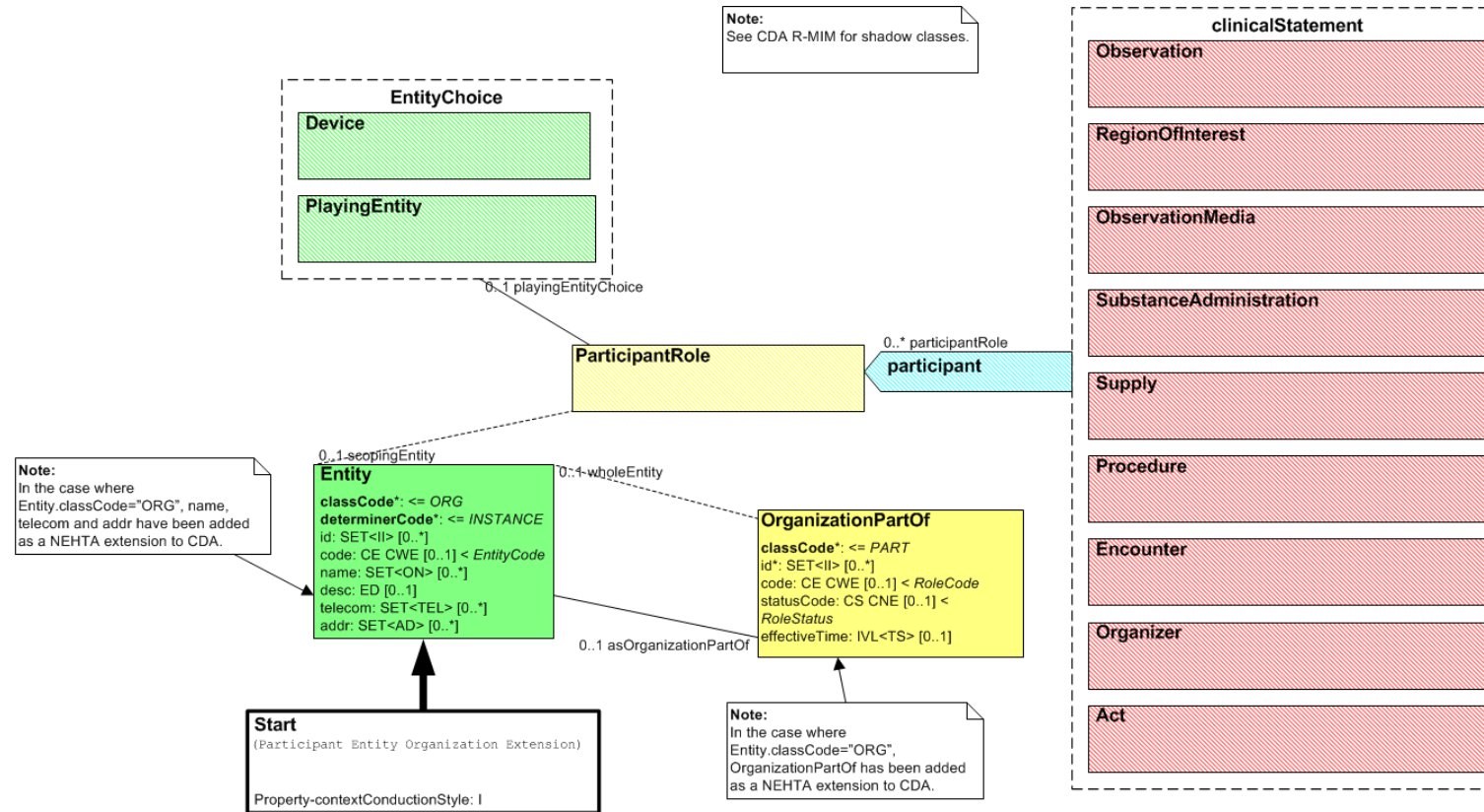


Figure 9.11. CDA® R-MIM Representation

10 Vocabularies and Code Sets

This product includes all or a portion of the HL7 Vocabulary, or is derived from the HL7 Vocabulary, subject to a license from Health Level Seven International. Your use of the HL7 Vocabulary also is subject to this license, a copy of which is accessible through the following link: <http://www.hl7.org/permalink/?VocabTables>. The current complete HL7 Vocabulary is also available through this link. The HL7 Vocabulary is copyright © 1989-2010, Health Level Seven International. All rights reserved. THE HL7 VOCABULARY IS PROVIDED "AS IS." ANY EXPRESS OR IMPLIED WARRANTIES ARE DISCLAIMED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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="I">
  {name}
</name>
```

10.1 HL7[®]: TelecommunicationAddressUse

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

Code	Value
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[®] Entity Name Use Code

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.



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[®] Entity Name Use R1 code set. In these cases (marked R2), an HL7[®] Entity 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 [®] Entity Name Use Code	HL7 [®] Entity 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

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.



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® AddressUse Code

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.

AS 5017-2006 Code	AS 5017-2006 Alternative Code	AS 5017-2006 Descriptor	HL7® AddressUse Code	HL7® AddressUse Name	HL7® AddressUse 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

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.

AS 5017-2006 Code	AS 5017-2006 Descriptor	AS 5017-2006 Alternative Code	HL7® URLScheme Code	HL7® URLScheme Name	HL7® URLScheme Definition
1	Telephone (excluding mobile telephone)	T	tel	Telephone	A voice telephone number.
2	Mobile (cellular) telephone NOTE: Mobile will also need a Telecommunication-Address Use code of MC (Mobile Contact) (see HL7®: TelecommunicationAddressUse)	M	tel	Telephone	A voice telephone number.
3	Facsimile machine	F	fax	Fax	A telephone number served by a fax device.
4	Pager NOTE: Pager will also need a TelecommunicationAddress Use code of PG (Pager) (see HL7®: 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. 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.
			mlp	MLLP	The traditional HL7 [®] Minimal Lower Layer Protocol. The URL has the form of a common IP URL e.g., mlp://<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

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.

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.

The data elements that use this value set contain 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

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

10.12 NCTIS: Admin Codes - Document Status

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

10.13 NCTIS: Admin Codes - 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

10.14 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 Re- quest	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).

10.15 HL7[®] v3 CDA[®]: RelatedDocument.typeCode

Code	Value	Definition
RPLC	Replace	The current document is a replacement of the ParentDocument.
XFRM	Transform	The current document is a transformation of the ParentDocument.

10.16 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

10.17 NCTIS: Admin Codes - Result Status

displayName	definition	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

10.18 CodeSystem OIDs



Note

The entries in the codeSystem (Name) column enable identification of the codeSystem OID to be used, but may not be the proper name of that codeSystem, i.e. the value of the codeSystemName attribute. The value of codeSystemName **SHOULD** be the name associated with the OID in the [HL7® OID Registry](http://www.hl7.org/oid/index.cfm?ref=footer)¹.

codeSystem (OID)	codeSystem (Name)
1.2.36.1.2001.1001.101	NCTIS Data Components
2.16.840.1.113883.13.62	1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1
2.16.840.1.113883.13.65	AIHW Mode of Separation
2.16.840.1.113883.6.96	SNOMED CT
2.16.840.1.113883.6.96	SNOMED CT-AU
1.2.36.1.2001.1004.100	Australian Medicines Terminology (AMT) v2
2.16.840.1.113883.6.96	Australian Medicines Terminology (AMT) v3
2.16.840.1.113883.6.1	LOINC

¹ <http://www.hl7.org/oid/index.cfm?ref=footer>

10.19 HL7[®] V3: ObservationInterpretationNormality

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

10.20 HL7®: Diagnostic Service Section ID

displayName	code	codeSystemName	codeSystem
Audiology	AU	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Bedside ICU Monitoring	ICU	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Blood Bank	BLB	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Blood Gases	BG	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Cardiac Catheterization	CTH	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Cardiac Ultrasound	CUS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
CAT Scan	CT	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Chemistry	CH	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Cineradiograph	XRC	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Cytopathology	CP	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Electrocardiac (e.g., EKG, EEC, Holter)	EC	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Electroneuro (EEG, EMG,EP,PSG)	EN	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Hematology	HM	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Immunology	IMM	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Laboratory	LAB	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Microbiology	MB	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Mycobacteriology	MCB	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Mycology	MYC	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Nuclear Magnetic Resonance	NMR	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Nuclear Medicine Scan	NMS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Nursing Service Measures	NRS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
OB Ultrasound	OUS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Occupational Therapy	OT	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74

displayName	code	codeSystemName	codeSystem
Other	OTH	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Outside Lab	OSL	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Pharmacy	PHR	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Physical Therapy	PT	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Physician (Hx. Dx, admission note, etc.)	PHY	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Pulmonary Function	PF	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Radiation Therapy	RT	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Radiograph	RX	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Radiology	RAD	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Radiology Ultrasound	RUS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Respiratory Care (therapy)	RC	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Serology	SR	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Surgical Pathology	SP	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Toxicology	TX	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Vascular Ultrasound	VUS	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74
Virology	VR	HL7 Diagnostic service section ID	2.16.840.1.113883.12.74

Appendix A. CDA[®] Narratives

CDA[®] requires that each section in its body include a narrative block, containing a clinically complete version of the section's encoded content using custom hypertext markup defined by HL7[®]. The narrative is the human-readable and attestable part of a CDA[®] document, and **SHALL** stand alone as an accurate representation of the content of the document without any need to consult entries in the body.

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

- The narrative block **SHALL** be encapsulated within the text component of the CDA[®] section.
- The narrative contents **SHALL** conform to the requirements specified in the CDA[®] Rendering Specification.
 - In accordance with the requirement to completely represent section contents, values of codedText or codeableText data elements defined in the SCS **SHALL** include an originalText or a displayName component (or both). Where available, the originalText **SHOULD** be found in the narrative, otherwise the displayName **SHOULD** be found in the narrative.
- The narrative contents **SHALL** completely and accurately represent the clinical information encoded in the section. Content **SHALL NOT** be omitted from the narrative.
- The narrative **SHALL** conform to the content requirements of the CDA[®] specification [[HL7CDAR2](#)] and the XML Schema.

Clinical judgement is required to determine the appropriate presentation for narrative. NEHTA may release additional guidance in this regard. The examples provided in sections of this document offer some guidance for narrative block markup and may be easily adapted as boilerplate markup.

This page is intentionally left blank.

Appendix B. Log of Changes

This appendix lists the major changes and normative changes applied to this CDA® Implementation Guide resulting from validation and feedback. A single change is likely to be listed multiple times, as changes are listed in order of appearance and categorised by location in the document. For example, a cardinality change may appear in both the Data Hierarchy and CDA® Mapping table.



Note

This specification includes typographical, stylistic, and editorial corrections.

All XML fragments have been reviewed and updated to align with the semantic changes defined in the CDA® Mapping tables.

All CDA® R-MIM representations have been reviewed and updated to align with the semantic changes defined in the CDA® Mapping tables.

A number of technical identifiers have been included in the Data Hierarchy; many of these were already present in the mappings but not explicitly identified as logical data elements.

Changes from Version 1.2 07 Mar 2012 to Version 1.3 10 Apr 2015

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed	
	Section	Section Name						
1	3	Event Summary Data Hierarchy	Normative Impact to Mappings	Replaced logical data element Encounter Period with two logical data elements: DateTime Health Event Started and DateTime Health Event Ended.	NEHTA	Requirements Change. Alignment with updates to the logical model (SCS).	04 Dec 2014	
				Added new logical data element Reaction Type 0..1.				
				Renamed OTHER MEDICAL HISTORY ITEM to UNCATEGORISED MEDICAL HISTORY ITEM.				
				Added new technical identifier Event Overview Instance Identifier 0..1.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).		04 Dec 2014
				Added new technical identifier Adverse Reactions Instance Identifier 0..1.				
				Added new technical identifier Medication Orders Instance Identifier 0..1.				
				Added new technical identifier Medical History Instance Identifier 0..1.				
				Added new technical identifier Immunisations Instance Identifier 0..1.				
				Added new technical identifier Diagnostic Investigations Instance Identifier 0..1.				
				Added new technical identifier Pathology Test Result Instance Identifier 0..1.				
				Added new technical identifier Imaging Examination Result Instance Identifier 0..1.				
				Added new technical identifier Requested Service Instance Identifier 0..1.				

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed	
	Section	Section Name						
2	3	Event Summary Data Hierarchy	No Normative Impact to Mappings	Replaced logical data element Start Date/Time (DateTime Started) with logical data element Procedure DateTime in data group PROCEDURE - already present in the mapping table.	NEHTA	Alignment with updates to the logical model (SCS).	12 Feb 2015	
				Added container data group ENCOUNTER to the Context.				
				Added data element DateTime Attested - already present in the mapping table.				
				Added new container data group INDIVIDUAL PATHOLOGY TEST RESULT VALUE in PATHOLOGY TEST RESULT.				
				Replaced data group RESULT VALUE REFERENCE RANGE DETAILS and its child data components with a new data group REFERENCE RANGE DETAILS and its child data components in PATHOLOGY TEST RESULT.				
				Replaced data element Result Value Normal Status and with a new child data component Normal Status in the new data group REFERENCE RANGE DETAILS in PATHOLOGY TEST RESULT.				
				Replaced logical data element Pathology Test Result DateTime with logical data element Observation DateTime in PATHOLOGY TEST RESULT - still mapped to Pathology Test Result DateTime to ensure backwards compatibility.				
				Added new container data group IMAGING EXAMINATION RESULT VALUE in IMAGING EXAMINATION RESULT.				
				Added new container data group REFERENCE RANGE DETAILS in IMAGING EXAMINATION RESULT.				
				Replaced logical data element Imaging Examination Result DateTime with logical data element Observation DateTime in IMAGING EXAMINATION RESULT - still mapped to Imaging Examination Result DateTime to ensure backwards compatibility.				
					Added technical identifier Document Instance Identifier 1..1 - already present in the mapping table.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
					Added technical identifier Document Type 1..1 - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section Event Details (EVENT OVERVIEW) - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section Newly Identified Adverse Reactions (ADVERSE REACTIONS) - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section Medications (MEDICATION ORDERS) - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section Past and Current Medical History (MEDICAL HISTORY) - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section IMMUNISATIONS - already present in the mapping table.			
					Added new technical identifier Section Type 1..1 in section DIAGNOSTIC INVESTIGATIONS - already present in the mapping table.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
3	3	Event Summary Data Hierarchy	No Normative Impact to Mappings	Added technical identifier Document Instance Identifier 1..1 - already present in the mapping table.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added technical identifier Adverse Reaction Instance Identifier 1..1 - already present in the mapping table.			
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group ADVERSE REACTION - already present in the mapping table.			
				Added technical identifier Medication Instruction Instance Identifier 1..1 - already present in the mapping table.			
				Added new technical identifier Detailed Clinical Model Identifier 1..1 in data group Known Medication (MEDICATION INSTRUCTION) - not mapped.			
				Added technical identifier Problem/Diagnosis Instance Identifier 1..1 - already present in the mapping table.			
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group PROBLEM/DIAGNOSIS - already present in the mapping table.			
				Added technical identifier Procedure Instance Identifier 1..1 - already present in the mapping table.			
				Added new technical identifier Detailed Clinical Model Identifier 1..1 in data group PROCEDURE - not mapped.			
				Added technical identifier Uncategorised Medical History Item Instance Identifier 1..1 - already present in the mapping table.			
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group UNCATEGORISED MEDICAL HISTORY ITEM - already present in the mapping table.			
				Added technical identifier Medication Action Instance Identifier 1..1 - already present in the mapping table.			
				Added new technical identifier Detailed Clinical Model Identifier 1..1 in data group Administered Immunisation (MEDICATION ACTION) - not mapped.			
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group PATHOLOGY TEST RESULT - already present in the mapping table.			
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group IMAGING EXAMINATION RESULT - already present in the mapping table.			
Added technical identifier Detailed Clinical Model Identifier 1..1 in data group REQUESTED SERVICE - already present in the mapping table.							
4	4	Administrative Observations	Normative Impact to Mappings	Cardinality of component/section[admin_obs]/text changed to 0..1	NEHTA	Change Request	09 Jan 2015
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
5	5	CDA [®] Header	Normative Impact to Mappings	LegalAuthenticator cardinality corrected to 1..1	NEHTA	Defect Correction Improved Guidance	23 Dec 2014
				ClinicalDocument/code: displayName updated to current displayName of code as defined by LOINC.			
				ClinicalDocument/templateId/@extension updated to "1.3"			
				ClinicalDocument/languageCode constraints applied to require the format of the value to be <Language Code> – <DIALECT> with Language set to "en" and the Dialect should be "AU".			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
6	5.1.1	LegalAuthenticator	Normative Impact to Mappings	LegalAuthenticator cardinality corrected to 1..1	NEHTA	Defect Correction	04 Dec 2014
				Added a constraint to legalAuthenticator/time/@value to require the value to include both a time and a date.			
7	6.1	EVENT SUMMARY	Normative Impact to Mappings	DateTime Attested: Added a constraint to require the value to include both a time and a date.	NEHTA	Alignment with updates to the logical model (SCS).	04 Dec 2014
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
8	6.1	EVENT SUMMARY	No Normative Impact to Mappings	Added technical identifier Document Instance Identifier 1..1 - already present in the mapping table as ClinicalDocument/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added technical identifier Document Type 1..1 - already present in the mapping table as ClinicalDocument/code.			
9	6.1.1	DOCUMENT AUTHOR	Normative Impact to Mappings	Participation Period: Added constraint defining the allowed attributes and elements of author/time.	NEHTA	Requirements Change.	03 Feb 2015
				Address: Changed cardinality from 1..* to 0..*.			
				Address: Added constraint, addr/@use SHALL be set to "WP".			
				Electronic Communication Detail: Changed cardinality from 1..* to 0..*.			
				Electronic Communication Detail: Added constraint, telecom/@use SHALL be set to "WP".			
				Added Entitlement as 0..*.			
Added Qualifications as 0..1.							
10	6.1.1	DOCUMENT AUTHOR	No Normative Impact to Mappings	Participation Period: Reworded the constraint requiring author/time to hold the same value as Date Time Attested.	NEHTA	Improved guidance.	24 Feb 2015
11	6.1.2	SUBJECT OF CARE	Normative Impact to Mappings	Added Source of Death Notification as 0..1.	NEHTA	Requirements Change.	22 Dec 2014
				Added Mother's Original Family as 0..1.			
				Address: Added missing constraint from SCS "Address Purpose (addr/@use) SHALL be set to either Residential or Temporary Accommodation".			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
12	6.1.3	ENCOUNTER	Normative Impact to Mappings	Replaced logical data element Encounter Period with two logical data elements: DateTime Health Event Started and DateTime Health Event Ended.	NEHTA	Alignment to logical model.	22 Dec 2014
				Added Mother's Original Family as 0..1.			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
13	7.1.1	Event Details (EVENT OVERVIEW)	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[evt_det]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
14	7.1.1	Event Details (EVENT OVERVIEW)	Normative Impact to Mappings	Corrected value of displayName from "Event Details" to "Event Overview" in order to match the value in the OID register.	NEHTA	Defect Correction.	07 Jan 2015
				Added new technical identifier Event Overview Instance Identifier 0..1 as component[evt_det]/section/id.			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
15	7.1.1.1	Event Details (CLINICAL SYNOPSIS)	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Improved guidance.	04 Dec 2014
16	7.1.1.1	Event Details (CLINICAL SYNOPSIS)	No Normative Impact to Mappings	Added technical identifier Clinical Synopsis Instance Identifier 1..1 - already present in the mapping table as entry[synop]/act/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added new technical identifier Detailed Clinical Model Identifier 1..1 - not mapped to CDA®.			
17	7.1.1	Newly Identified Adverse Reactions (ADVERSE REACTIONS)	Normative Impact to Mappings	Added new technical identifier Adverse Reactions Instance Identifier 0..1 as component[adv_reacts]/section/id.	NEHTA	Alignment to logical model.	04 Dec 2014
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
18	7.1.2	Newly Identified Adverse Reactions (ADVERSE REACTIONS)	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[adv_reacts]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
19	7.1.2.1	ADVERSE REACTION	Normative Impact to Mappings	Substance/Agent: Added SNOMED CT-AU reference set 142321000036106 Adverse reaction agent reference set to the permissible values.	NEHTA	Change Request Requirements Change Alignment to logical model.	04 Dec 2014
				Manifestation: Added SNOMED CT-AU reference set 142341000036103 Clinical manifestation reference set to the permissible values.			
				Manifestation: Added a row for entryRelationship[mfst]/observation/id.			
				Added new logical data element Reaction Type 0..1 as entryRelationship[rct_evt]/observation/value.			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
20	7.1.2.1	ADVERSE REACTION	No Normative Impact to Mappings	Added technical identifier Adverse Reaction Instance Identifier 1..1 - already present in the mapping table as component[adv_react]/section/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as component[adv_react]/section/code.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
21	7.1.3	Medications (MEDICATION ORDERS)	Normative Impact to Mappings	Added new technical identifier Medication Orders Instance Identifier 0..1 as component[meds]/section/id.	NEHTA	Alignment to logical model.	04 Dec 2014
				Corrected component[meds]/section/code/@displayName from "Medications" to "Medication Orders".			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
22	7.1.3	Medications (MEDICATION ORDERS)	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[meds]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
23	7.1.3.1	Known Medication (MEDICATION INSTRUCTION)	Normative Impact to Mappings	Added constraint prohibiting the use of the negationInd element for the substanceAdministration class.	NEHTA	Change request.	06 Mar 2015
				Corrected value of displayName from "Comment" to "Additional Comments" to align across the set of Continuity of Care specifications.			
				Corrected value of displayName from "Comment" to "Additional Comments" to align across the set of Continuity of Care specifications.			
				Change Type: Replaced NCTIS: Change Type Values with SNOMED CT-AU reference set 15071000036100 [Change type reference set].			
				Change Type: Removed the constraint requiring the use of negationInd for a given value of this element.			
				Change Status: Replaced NCTIS: Admin Codes - Recommendation or Change Values with SNOMED CT-AU reference set 669181000168104 [Change status reference set].			
24	7.1.3.1	Known Medication (MEDICATION INSTRUCTION)	No Normative Impact to Mappings	Added technical identifier Medication Instruction Instance Identifier 1..1 - already present in the mapping table as entry[med_inst]/substanceAdministration/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added new technical identifier Detailed Clinical Model Identifier 1..1 - not mapped to CDA®.			
25	7.1.4	Past and Current Medical History (MEDICAL HISTORY)	Normative Impact to Mappings	Added constraints on allowed combinations of child components: There must be at least once child instantiated.	NEHTA	Alignment to logical model.	04 Dec 2014
				Corrected the value of displayName from "Diagnoses/Interventions" to "Medical History" to match the OID register.			
				Added new technical identifier Medical History Instance Identifier 0..1 as component[med_hist]/section/id.			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
26	7.1.4	Past and Current Medical History (MEDICAL HISTORY)	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[med_hist]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
27	7.1.4.1	PROBLEM/DIAGNOSIS	Normative Impact to Mappings	Date of Onset: Added a constraint that the value SHALL NOT include a time.	NEHTA	Requirements Change.	04 Dec 2014
				Date of Onset: Changed mapping to be more specific; from (entry[prob]/observation/effectiveTime) to (entry[prob]/observation/effectiveTime/low/@value).			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
28	7.1.4.1	PROBLEM/DIAGNOSIS	No Normative Impact to Mappings	Added technical identifier Problem/Diagnosis Instance Identifier 1..1 - already present in the mapping table as entry[prob]/observation/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as entry[prob]/observation/code.			
29	7.1.4.2	PROCEDURE	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Inclusion of technical identifiers from the logical model (SCS). Alignment with updates to the logical model (SCS).	04 Dec 2014
30	7.1.4.2	PROCEDURE	No Normative Impact to Mappings	Added technical identifier Procedure Instance Identifier 1..1 - already present in the mapping table as entry[proc]/procedure/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS). Alignment with updates to the logical model (SCS).	04 Dec 2014
				Added technical identifier Detailed Clinical Model Identifier 1..1 in data group PROCEDURE - not mapped to CDA®.			
				Replaced logical data element Start Date/Time (DateTime Started) with logical data element Procedure DateTime in data group PROCEDURE - already present in the mapping table as entry[proc]/procedure/effectiveTime.			
31	7.1.4.3	UNCATEGORISED MEDICAL HISTORY ITEM	Normative Impact to Mappings	Renamed OTHER MEDICAL HISTORY ITEM to UNCATEGORISED MEDICAL HISTORY ITEM, the value for @displayName changed from "Other Medical History Item" to "Uncategorised Medical History Item".	NEHTA	Change Request Alignment to logical model.	04 Dec 2014
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
32	7.1.4.3	UNCATEGORISED MEDICAL HISTORY ITEM	No Normative Impact to Mappings	Added technical identifier Uncategorised Medical History Item Instance Identifier 1..1 - already present in the mapping table as entry[med_hist_item]/act/id.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as entry[med_hist_item]/act/code.			
33	7.1.5	IMMUNISATIONS	Normative Impact to Mappings	Added new technical identifier Immunisations Instance Identifier 0..1 as component[imms]/section/id.	NEHTA	Alignment to logical model.	04 Dec 2014
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
34	7.1.5	IMMUNISATIONS	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[imms]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
35	7.1.5.1	Administered Immunisation (MEDICATION ACTION)	Normative Impact to Mappings	Therapeutic Good Identification: Added AMT reference set 929360071000036103 <i>Medicinal product unit of use reference set</i> to the permissible values.	NEHTA	Change Request Alignment to logical model.	04 Dec 2014
				Therapeutic Good Identification: Added AMT reference set 929360031000036100 <i>Trade product unit of use reference set</i> to the permissible values.			
				Therapeutic Good Identification: Added AMT reference set 929360051000036108 <i>Contained trade product pack reference set</i> to the permissible values.			
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
36	7.1.5.1	Administered Immunisation (MEDICATION ACTION)	No Normative Impact to Mappings	Added technical identifier Medication Action Instance Identifier 1..1 - already present in the mapping table as entry[med_act]/substanceAdministration/id. Added new technical identifier Detailed Clinical Model Identifier 1..1 - not mapped to CDA®.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
37	7.1.6	DIAGNOSTIC INVESTIGATIONS	No Normative Impact to Mappings	Added new technical identifier Section Type 1..1 - already present in the mapping table as component[diag_int]/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
38	7.1.6	DIAGNOSTIC INVESTIGATIONS	Normative Impact to Mappings	Added constraints on allowed combinations of child components: There must be at least once child instantiated. Added new technical identifier Diagnostic Investigations Instance Identifier 0..1 as component[diag_int]/section/id. Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Alignment to logical model.	07 Jan 2015
39	7.1.6.1	PATHOLOGY TEST RESULT	Normative Impact to Mappings	Added new technical identifier Pathology Test Result Instance Identifier 0..1 as component[path_test]/section/id. Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided. Test Result Name (Pathology Test Result Name): Added constraint, the code should be sourced from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia. Diagnostic Service: Removed mapping row of attribute @codeSystemVersion. Overall Pathology Test Result Status: Removed mapping row of attribute @codeSystemVersion. Pathological Diagnosis: Removed mapping row of attribute @codeSystemVersion. Conclusion (Pathology Test Conclusion): Removed mapping row of attribute @codeSystemVersion. Test Comment: Removed mapping row of attribute @codeSystemVersion. TEST REQUEST DETAILS: Corrected the value of @code from "103.11017" to "102.16160". Test Requested Name: Added constraint, the code should be sourced from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia. Test Requested Name: Added constraint, this data element should not be present if the value is the same as that of Pathology Test Result Name.	NEHTA	Change Request Alignment to logical model.	11 Mar 2015
40	7.1.6.1	PATHOLOGY TEST RESULT	No Normative Impact to Mappings	Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as component[path_test]/section/code. Replaced logical data element Pathology Test Result DateTime with logical data element Observation DateTime - still mapped to Pathology Test Result DateTime to ensure backwards compatibility.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	12 Feb 2015

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
41	7.1.6.1.1	Test Specimen Detail (SPECIMEN)	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Change Request Alignment to logical model.	27 Jan 2015
				Test Specimen Detail: Corrected the value of code from "102.16156.2.2.1" to "02.16156.136.2.1" to correctly conform to the OID namespace rules.			
				Test Specimen Detail: Corrected the value of displayName from "Test Specimen Detail" to "Specimen" to match the OID register.			
				Side: Replaced values for @code and @displayName (now deprecated) with @code="272741003" and @displayName="Laterality".			
				Side: Removed mapping row of attribute @codeSystemVersion.			
				Anatomical Site (ANATOMICAL LOCATION): Added missing constraint, SPECIFIC LOCATION and Anatomical Location Description are mutually exclusive.			
				Weight: Reworded comment to be a normative constraint.			
				Volume: Reworded comment to be a normative constraint.			
42	7.1.6.1.2	Result Group (PATHOLOGY TEST RESULT GROUP)	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Change Request Alignment to logical model.	28 Jan 2015
				Pathology Test Result Group Name: Added constraint, the code should be sourced from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia.			
				Individual Pathology Test Result Name: Added constraint, the code should be sourced from the set of codes recommended for pathology terminology by the Royal College of Pathologists of Australasia.			
				Result Value (INDIVIDUAL PATHOLOGY TEST RESULT VALUE): Reworded comment to be a normative constraint.			
				Individual Pathology Test Result Comment: Removed mapping row of attribute @codeSystemVersion.			
				Individual Pathology Test Result Status Removed mapping row of attribute @codeSystemVersion.			
43	7.1.6.1.2	Result Group (PATHOLOGY TEST RESULT GROUP)	No Normative Impact to Mappings	Added new container data group INDIVIDUAL PATHOLOGY TEST RESULT VALUE.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	28 Jan 2015
				Replaced data group RESULT VALUE REFERENCE RANGE DETAILS and its child data components with a new data group REFERENCE RANGE DETAILS.			
				Moved the reference range data components into a separate chapter (7.1.6.1.2.1 REFERENCE RANGE DETAILS).			
				Replaced data element Result Value Normal Status and with a new child data component Normal Status in the new data group REFERENCE RANGE DETAILS.			
44	7.1.6.1.2.1	Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)	No Normative Impact to Mappings	Moved the reference range data components into a new separate chapter (7.1.6.1.2.1 Individual Pathology Test Result Value Reference Ranges (REFERENCE RANGE DETAILS)).	NEHTA	Alignment to logical model.	05 Jan 2015

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
45	7.1.6.1.2.2	Result Group Specimen Detail (SPECIMEN)	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Change Request Alignment to logical model.	28 Jan 2015
				Result Group Specimen Detail: Corrected the value of code from "102.16156.2.2.2" to "02.16156.136.2.2" to correctly conform to the OID namespace rules.			
				Result Group Specimen Detail: Corrected the value of displayName from "Result Group Specimen Detail" to "Specimen" to match the OID register.			
				Side: Replaced values for @code and @displayName (now deprecated) with @code="272741003" and @displayName="Laterality".			
				Side: Removed mapping row of attribute @codeSystemVersion.			
				Anatomical Site (ANATOMICAL LOCATION): Added missing constraint, SPECIFIC LOCATION and Anatomical Location Description are mutually exclusive.			
				Weight: Reworded comment to be a normative constraint.			
				Volume: Reworded comment to be a normative constraint.			
46	7.1.6.2	IMAGING EXAMINATION RESULT	Normative Impact to Mappings	Added new technical identifier Imaging Examination Result Instance Identifier 0..1 as component <img_exam] id.<="" section="" td=""> <td rowspan="6">NEHTA</td> <td rowspan="6">Change Request Alignment to logical model.</td> <td rowspan="6">28 Jan 2015</td> </img_exam]>	NEHTA	Change Request Alignment to logical model.	28 Jan 2015
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
				Side: Replaced values for @code and @displayName (now deprecated) with @code="272741003" and @displayName="Laterality".			
				Side: Removed mapping row of attribute @codeSystemVersion.			
				Anatomical Site (ANATOMICAL LOCATION): Added missing constraint, SPECIFIC LOCATION and Anatomical Location Description are mutually exclusive.			
				Imaging Examination Result Status: Removed mapping row of attribute @codeSystemVersion.			
47	7.1.6.2	IMAGING EXAMINATION RESULT	No Normative Impact to Mappings	Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as component <img_exam] code.<="" section="" td=""> <td rowspan="2">NEHTA</td> <td rowspan="2">Inclusion of technical identifiers from the logical model (SCS).</td> <td rowspan="2">29 Jan 2015</td> </img_exam]>	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	29 Jan 2015
				Replaced logical data element Imaging Examination Result DateTime with logical data element Observation DateTime - still mapped to Imaging Examination Result DateTime to ensure backwards compatibility.			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
48	7.1.6.2.1	Result Group (IMAGING EXAMINATION RESULT GROUP)	Normative Impact to Mappings	Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.	NEHTA	Change Request Alignment to logical model.	29 Jan 2015
				Side: Replaced values for @code and @displayName (now deprecated) with @code="272741003" and @displayName="Laterality".			
				Side: Removed mapping row of attribute @codeSystemVersion.			
				Anatomical Site (ANATOMICAL LOCATION): Added missing constraint, SPECIFIC LOCATION and Anatomical Location Description are mutually exclusive.			
				Result Value (IMAGING EXAMINATION RESULT VALUE): Reworded comment to be a normative constraint.			
Result Comment: Removed mapping row of attribute @codeSystemVersion.							
49	7.1.6.2.1	Result Group (IMAGING EXAMINATION RESULT GROUP)	No Normative Impact to Mappings	Added new container data group INDIVIDUAL IMAGING EXAMINATION RESULT VALUE.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	29 Jan 2015
				Replaced data group RESULT VALUE REFERENCE RANGE DETAILS and its child data components with a new data group REFERENCE RANGE DETAILS.			
				Moved the reference range data components into a separate chapter (7.1.6.1.2.1 REFERENCE RANGE DETAILS).			
				Replaced data element Result Value Normal Status and with a new child data component Normal Status in the new data group REFERENCE RANGE DETAILS.			
50	7.1.6.2.1.1	Imaging Examination Result Value Reference Ranges (REFERENCE RANGE DETAILS)	No Normative Impact to Mappings	Moved the reference range data components into a new separate chapter (7.1.6.1.2.1 REFERENCE RANGE DETAILS).	NEHTA	Alignment to logical model.	29 Jan 2015
51	7.1.6.2.2	EXAMINATION REQUEST DETAILS	Normative Impact to Mappings	Examination Requested Name: Added constraint, this data element should not be present if the value is the same as that of Imaging Examination Result Name.	NEHTA	Alignment to logical model.	11 Mar 2015
				Image Details: Corrected the value of @code from "103.16515" to "102.16515".			
52	7.1.6.3	REQUESTED SERVICE	Normative Impact to Mappings	Added new technical identifier Requested Service Instance Identifier 0..1 as component{req_serv}/section/id.	NEHTA	Change Request Alignment to logical model.	26 Feb 2015
				Identified codeSystemName attribute as optional. A link to a table of code system names and OIDs is provided.			
				Date Time Service Scheduled: Changed mapping to be more specific; from entry[service]/act/effectiveTime to entry[service]/act/effectiveTime:TS.			
				Date Time Service Scheduled: Added missing constraints from the SCS.			
				Service Commencement Window: Changed mapping to be more specific; from entry[service]/act/effectiveTime to entry[service]/act/effectiveTime:IVL_TS.			
				Service Commencement Window: Added missing constraints from the SCS.			
53	7.1.6.3	REQUESTED SERVICE	No Normative Impact to Mappings	Added technical identifier Detailed Clinical Model Identifier 1..1 - already present in the mapping table as component{req_serv}/section/code.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	29 Jan 2015

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
54	7.1.6.3.1.1	Service Provider as a Healthcare Person	Normative Impact to Mappings	Participant Entity Identifier: Tightened constraint on Entity Identifier to be "SHALL be an Australian HPI-O."	NEHTA	Alignment to logical model.	16 Feb 2015
				Employer Organisation Entity Identifier: Tightened constraint on Entity Identifier to be "SHALL be an Australian HPI-O."			
				Address: Added constraint, addr/@use SHALL be set to "WP".			
				Electronic Communication Detail: Added constraint, telecom/@use SHALL be set to "WP".			
				Employment Organisation: Changed cardinality from 0..* to 1..*.			
				Added Entitlement as 0..*.			
				Added Qualifications as 0..1.			
55	7.1.6.3.1.1	Service Provider as a Healthcare Person	No Normative Impact to Mappings	Replaced the link to 8.8 Employment with the actual mapping rows instantiated in this section.	NEHTA	Alignment to logical model.	16 Feb 2015
56	7.1.6.3.1.2	Service Provider as an Organisation	Normative Impact to Mappings	Participant Entity Identifier: Tightened constraint on Entity Identifier to be "SHALL be an Australian HPI-O."	NEHTA	Alignment to logical model.	16 Feb 2015
57	8.4	Entity Identifier	No Normative Impact to Mappings	ext:asEntityIdentifier/ext:id/@assigningAuthorityName: Changed from "MAY be used" to "SHOULD be used".	NEHTA	Improved Guidance	04 Dec 2014
58	8.5	Person Name	Normative Impact to Mappings	Preferred Name Indicator: Removed the statement that this is represented by "L" and replaced with a known issue that a code for this has been requested from HL7 [®] International but is not currently available.	NEHTA	Defect Correction	04 Dec 2014
59	8.5	Person Name	No Normative Impact to Mappings	Preferred Name Indicator: Reworded constraint on representation to unambiguously require a space separated list of codes.	NEHTA	Inclusion of technical identifiers from the logical model (SCS).	04 Dec 2014
				Person Name Usage: Reworded constraint on representation to unambiguously require a space separated list of codes.			
60	8.6	Address	No Normative Impact to Mappings	Address: Added information on the use of nullFlavors for Address.	NEHTA	Improved Guidance	04 Dec 2014
61	8.7	Electronic Communication Detail	No Normative Impact to Mappings	Electronic Communication Medium: Removed duplicate inapplicable row for telecom/@use.	NEHTA	Defect Correction	04 Dec 2014
62	8.8	Employment	Normative Impact to Mappings	Employer Organisation: Changed cardinality from 0..* to 1..*.	NEHTA	Defect Correction Requirements Change	04 Dec 2014
				Added row for Address 1..*.			
				Address: Added constraint, addr/@use should be set to "WP".			
				Added row for Electronic Communication Detail 1..*.			
				Electronic Communication Detail: Added constraint, telecom/@use should be set to "WP".			

ID	Document Ref		Change Type	Change Detail	Change Initiated By	Rationale For Change	Date Changed
	Section	Section Name					
63	10	Vocabularies and Code Sets	No Normative Impact to Mappings	Removed superseded vocabulary: section 10.21 NCTIS: Change Type Values.	NEHTA	Defect Correction	18 Dec 2014
				Removed superseded vocabulary: section 10.12 NCTIS: Admin Codes - Recommendation or Change Values.			
				Removed unused vocabulary: section 10.14 NCTIS: Admin Codes - Global Statement Values.			
				Added missing section for HL7® Diagnostic Service Values (table 0074) 10.21 HL7®: Diagnostic Service Section ID.			
64	10.18	CodeSystem OIDs	No Normative Impact to Mappings	Corrected the name displayed in the table for code system 2.16.840.1.113883.13.62 to the registered name "1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1".	NEHTA	Defect Correction Updates to terminology over time.	04 Dec 2014
				Added the registered name of code system 2.16.840.1.113883.6.96 to the list "SNOMED CT".			
				Added "Australian Medicines Terminology (AMT) v3" to the list of code system names.			
				Corrected the name displayed in the table for code system 1.2.36.1.2001.1004.100 to the registered name "Australian Medicines Terminology (AMT) v2".			
				Added the code system 1.2.36.1.2001.1001.101 NCTIS Data Components to the list.			

Reference List

- [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>
- [ABS2009] Australian Bureau of Statistics, 25 June 2009, *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1*, accessed 28 August 2013.
<http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/-E8A05691E35F4376CA257B9500138A52?opendocument>
- [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 13 March 2015.
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=7
- [HL7RIM] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard – Reference Information Model*, accessed 13 March 2015.
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=77
- [HL7V3] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard*, accessed 13 March 2015.
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=186
- [HL7V3DT] Health Level Seven, Inc., January 2010, *HL7 V3 RIM, Data types and Vocabulary*, accessed 26 August 2014.
<http://www.hl7.org/memonly/downloads/v3edition.cfm>
- [IHTS2010] 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>
- [ISO2004a] International Organization for Standardization, 2004, *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
- [ISO2008a] International Organization for Standardization, 2008, *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
- [NEHT2005a] National E-Health Transition Authority, 25 May 2005, *NEHTA Acronyms, Abbreviations & Glossary of Terms*, Version 1.2, accessed 17 July 2014.
http://www.nehta.gov.au/component/docman/doc_download/8-clinical-information-glossary-v12
- [NEHT2007b] National E-Health Transition Authority, 17 August 2007, *Interoperability Framework*, Version 2.0, accessed 17 July 2014.
<http://www.nehta.gov.au/implementation-resources/ehealth-foundations/EP-1144-2007/NEHTA-1146-2007>
- [NEHT2010c] National E-Health Transition Authority, September 2010, *Data Types in NEHTA Specifications: A Profile of the ISO 21090 Specification*, Version 1.0, accessed 20 July 2014.
<https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1135-2010/NEHTA-1136-2010>
- [NEHT2011v] National E-Health Transition Authority, 20 July 2011, *Participation Data Specification*, Version 3.2, accessed 20 Jul 2014.
<https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1224-2011/NEHTA-0794-2011>

- [NEHT2012s] National E-Health Transition Authority, 07 March 2012, *CDA Rendering Specification*, Version 1.0.
<http://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1094-2011/NEHTA-1199-2012>
- [NEHT2014ag] National E-Health Transition Authority, 8 July 2014, *Australian Medicines Terminology v3 Model - Editorial Rules v2.0*, Version 2.0, accessed 8 August 2014.
<https://www.nehta.gov.au/implementation-resources/ehealth-foundations/EP-1805-2014/NEHTA-1716-2014>
- [NEHT2015a] National E-Health Transition Authority, 10 April 2015, *Event Summary Information Requirements*, Version 1.2.
<https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1817-2015/NEHTA-1845-2015>
- [NEHT2015b] National E-Health Transition Authority, 10 April 2015, *Event Summary Structured Content Specification*, Version 1.2.
<https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1817-2015/NEHTA-1847-2015>
- [RFC2119] Network Working Group, 1997, *RFC2119 - Key words for use in RFCs to Indicate Requirement Levels*, accessed 17 July 2014.
<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) – Health Care Provider Identification*, accessed 17 July 2014.
<http://infostore.saiglobal.com/store/Details.aspx?ProductID=318554>
- [SA2006b] Standards Australia, 2006, *AS 5017 (2006) – Health Care Client Identification*, accessed 17 July 2014.
<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/>