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e-Discharge Summary

CDA Implementation Guide

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Final

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Document Information

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Document Owner
The National Clinical Terminology and Information Service

Related documents

Name	Version/Release Date
e-Discharge Summary Structured Document Template	Version 3.4, Issued To be published
Business Requirements Specification	Discharge Summary Release 1.0 Version 0.14, Issued 31 July 2009
e-Discharge Summary - Core Information Components	Version 1.0, Release 1.1, Issued 30 August 2010
Pathology Result Report Structured Document Template	Version 1.0, Issued 30 June 2009
Participation Data Specification	Version 3.2, Issued 20 July 2011

Table of Contents

1. Introduction 1
1.1. Document Purpose and Scope 1
1.2. e-Discharge 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 7
2.1. Clinical Document Architecture Release 2 7
2.2. Mapping Interpretation 9
2.3. CDA Extensions 19
2.4. W3C XML Schema 20
2.5. Schematron 21
2.6. Implementation Strategies 22
3. e-Discharge Summary Data Hierarchy 23
4. Administrative Observations 33
5. CDA Header 37
5.1. ClinicalDocument 37
5.1.1. LegalAuthenticator 42
5.1.2. InformationRecipient 48
5.1.3. Custodian 54
6. Context Data Specification - CDA Mapping 59
6.1. e-Discharge Summary 59
6.1.1. DOCUMENT AUTHOR 63
6.1.2. SUBJECT OF CARE 70
6.1.3. FACILITY 87
7. Content Data Specification - CDA Mapping 93
7.1. e-Discharge Summary 93
7.1.1. EVENT 97
7.1.1.1. ENCOUNTER 101
7.1.1.1.1. RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE 108
7.1.1.1.2. OTHER PARTICIPANT 115
7.1.1.2. PROBLEMS/DIAGNOSES THIS VISIT 123
7.1.1.2.1. EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES 127
7.1.1.2.2. PROBLEM/DIAGNOSIS 132
7.1.1.3. CLINICAL INTERVENTIONS PERFORMED THIS VISIT 137
7.1.1.4. CLINICAL SYNOPSIS 142
7.1.1.5. DIAGNOSTIC INVESTIGATIONS 147
7.1.1.5.1. PATHOLOGY TEST RESULT 151
7.1.1.5.1.1. TEST SPECIMEN DETAIL 163
7.1.1.5.1.2. PATHOLOGY TEST RESULT GROUP 175
7.1.1.5.1.2.1. RESULT GROUP SPECIMEN DETAIL 185
7.1.1.5.2. IMAGING EXAMINATION RESULT 197
7.1.1.5.2.1. IMAGING EXAMINATION RESULT GROUP 208
7.1.1.5.2.2. EXAMINATION REQUEST DETAILS 217
7.1.2. MEDICATIONS 228
7.1.2.1. CURRENT MEDICATIONS ON DISCHARGE 232
7.1.2.1.1. EXCLUSION STATEMENT - MEDICATIONS 236
7.1.2.1.2. THERAPEUTIC GOOD 241
7.1.2.2. CEASED MEDICATIONS 253
7.1.2.2.1. EXCLUSION STATEMENT - MEDICATIONS 257
7.1.2.2.2. THERAPEUTIC GOOD 262
7.1.3. HEALTH PROFILE 271
7.1.3.1. HEALTHCARE PROVIDERS 275
7.1.3.1.1. NOMINATED PRIMARY HEALTHCARE PROVIDER 277

7.1.3.1.1.1. NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON 278
7.1.3.1.1.2. NOMINATED PRIMARY HEALTHCARE PROVIDER - ORGANISATION 283
7.1.3.2. ADVERSE REACTIONS 288
7.1.3.2.1. EXCLUSION STATEMENT - ADVERSE REACTION 292
7.1.3.2.2. ADVERSE REACTION 298
7.1.3.3. ALERTS 305
7.1.4. PLAN 311
7.1.4.1. ARRANGED SERVICES 315
7.1.4.1.1. PROTOCOL 321
7.1.4.1.1.1. SERVICE PROVIDER 323
7.1.4.1.1.1.1. SERVICE PROVIDER - PERSON 324
7.1.4.1.1.1.2. SERVICE PROVIDER - ORGANISATION 330
7.1.4.2. RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED 335
7.1.4.2.1. RECOMMENDATIONS PROVIDED 339
7.1.4.2.1.1. RECOMMENDATION RECIPIENT 344
7.1.4.2.1.1.1. RECOMMENDATION RECIPIENT - PERSON 345
7.1.4.2.1.1.2. RECOMMENDATION RECIPIENT - ORGANISATION 351
7.1.4.2.2. INFORMATION PROVIDED 356
8. **Common Patterns** 361
8.1. code 361
8.2. id 363
8.3. time 364
8.4. Entity Identifier 366
8.5. Person Name 368
8.6. Address 370
8.7. Electronic Communication Detail 375
8.8. Employment 377
9. **Australian CDA Extensions** 381
9.1. ClinicalDocument.completionCode 381
9.2. EntityIdentifier 382
9.3. Entitlement 384
9.4. Multiple Birth 385
9.5. Administrative Gender Code 386
9.6. Birth Time 387
9.7. Deceased Time 388
9.8. Employment 389
9.9. Qualifications 390
9.10. Container 391
10. **Vocabularies/Code Sets** 393
10.1. HL7 v3: TelecommunicationAddressUse 393
10.2. AS 5017-2006 Health Care Client Identifier Sex 394
10.3. AS 5017-2006: Health Care Client Name Usage 395
10.4. AS 4846-2006: Health Care Provider Organisation Name Usage 396
10.5. AS 5017-2006: Health Care Client Source of Death Notification 397
10.6. AS 5017-2006: Health Care Client Identifier Address Purpose 398
10.7. AS 5017-2006: Health Care Client Identifier Geographic Area 399
10.8. AS 5017-2006: Health Care Client Electronic Communication Medium 400
10.9. AS 5017-2006: Health Care Client Electronic Communication Usage Code 402
10.10. AS 5017-2006 Australian State/Territory Identifier - Postal 403
10.11. AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator 404
10.12. NCTIS: Admin Codes - Document Status 406
10.13. NCTIS: Admin Codes - Global Statement Values 407
10.14. NCTIS: Admin Codes - Entitlement Type 408
10.15. HL7 v2.4: Table 0123 Result Status 409
10.16. HL7 v3 CDA: Act.moodCode 410
10.17. HL7 v3 CDA: RelatedDocument.typeCode 411
10.18. OIDs 412
10.19. METeOR 291036: Indigenous Status 413
10.20. NCTIS: Admin Codes - Result Status 414
10.21. HL7 V3: ObservationInterpretationNormality 415

A. CDA Narratives 417
B. Log of Changes 419
Reference List 443

List of Examples

2.1. Mapping Interpretation 16
4.1. Administrative Observations XML Fragment 36
5.1. ClinicalDocument Body XML Fragment 41
5.2. LegalAuthenticator XML Fragment 46
5.3. InformationRecipient XML Fragment 52
5.4. Custodian Body XML Fragment 57
6.1. e-Discharge Summary Context XML Fragment 62
6.2. Document Author XML Fragment 68
6.3. Subject of Care XML Fragment 83
6.4. Facility XML Fragment 91
7.1. e-Discharge Summary Body XML Fragment 96
7.2. Event XML Fragment 100
7.3. Encounter XML Fragment 106
7.4. Responsible Health Professional at Time of Discharge XML Fragment 113
7.5. Other Participant XML Fragment 120
7.6. Problems Diagnoses This Visit XML Fragment 126
7.7. Exclusion Statement - Problems and Diagnoses XML Fragment 130
7.8. Problem/Diagnosis XML Fragment 135
7.9. Clinical Interventions Performed This Visit XML Fragment 140
7.10. Clinical Synopsis XML Fragment 145
7.11. Diagnostic Investigations XML Fragment 150
7.12. Pathology Test Result XML Fragment 159
7.13. Test Specimen Detail XML Fragment 171
7.14. Pathology Test Result Group XML Fragment 181
7.15. Result Group Specimen Detail XML Fragment 193
7.16. Imaging Examination Result XML Fragment 204
7.17. Imaging Examination Result Group XML Fragment 214
7.18. Imaging Examination Result XML Fragment 225
7.19. Medications XML Fragment 231
7.20. Current Medications on Discharge XML Fragment 235
7.21. Exclusion Statement - Medications XML Fragment 239
7.22. Therapeutic Good XML Fragment 250
7.23. Ceased Medications XML Fragment 256
7.24. Exclusion Statement - Medications XML Fragment 260
7.25. Therapeutic Good XML Fragment 269
7.26. Health Profile XML Fragment 274
7.27. Nominated Primary Healthcare Provider - Person XML Fragment 281
7.28. Nominated Primary Healthcare Provider - Organisation XML Fragment 286
7.29. Adverse Reactions XML Fragment 291
7.30. Exclusion Statement - Adverse Reaction XML Fragment 296
7.31. Adverse Reaction XML Fragment 302
7.32. Alerts XML Fragment 309
7.33. Plan XML Fragment 314
7.34. Arranged Services XML Fragment 319
7.35. Service Provider - Person XML Fragment 327
7.36. Service Provider - Organisation XML Fragment 333
7.37. Record of Recommendations and Information Provided XML Fragment 338
7.38. Recommendations Provided XML Fragment 342
7.39. Recommendation Recipient - Person XML Fragment 348
7.40. Recommendation Recipient - Organisation XML Fragment 354
7.41. Information Provided XML Fragment 359
8.1. code 362
8.2. id 363
8.3. Simple timestamp 364
8.4. Low time 364
8.5. Interval timestamp 1 364
8.6. Interval timestamp 2 365
8.7. Width time 365

8.8. Entity Identifier 367
8.9. Person Name 369
8.10. Address 374
8.11. Electronic Communication Detail 376
8.12. Employment 379
10.1. All values 393
10.2. One value 393

1 Introduction

1.1 Document Purpose and Scope

The purpose of this document is to provide a guide to implementing the 'logical' model detailed by NEHTA's e-Discharge Summary Structured Document Template (eDS SDT) as an HL7 Clinical Document Architecture Release 2 (CDA) XML document. This guide is based on Version 3.3 of the eDS SDT [NEHT2011br]. The primary aim of the guide is to take implementers step by step through mapping each data component of the eDS SDT to a corresponding CDA attribute or element.

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

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

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

1.2 e-Discharge Summary Definition

A e-Discharge Summary is defined in eDS SDT [NEHT2011br] as:

> A collection of information about events during care by a provider or organisation, which is released when the subject of care is discharged from the care of the provider organisation.

1.3 HL7 Clinical Document Architecture

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

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

Some of the advantages of CDA are:

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

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

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

1.4 Intended Audience

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

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

1.5 Document Map

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

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

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

3. e-Discharge Summary – Structured Document Template [NEHT2011br] – clinical content specification describing the logical data structures, data components, and value domains which constitute an e-Discharge Summary.

1.6 Acronyms

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

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

1.7 Keywords

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

Keywords used in this document

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

1.8 Conformance

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

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

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

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

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

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

- Allowing the use of alternative value sets in place of the value sets specified in this document
- Allowing the use of alternative identifiers in place of the HI Service identifiers
- Making required data elements and/or section divisions optional

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

1.9 Known Issues

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

Reference	Description
Document Status	As a NEHTA Managed Specification, the contents of this document are the result of extensive clinical collaboration and editorial review, and the specification is considered to be 'Final'. Nonetheless, as software implementations and standards review of this specification progress, normative updates may be required.
See the section called "CDA Mapping" > Relationship to Subject of Care	Relationship to Subject of Care is currently not mapped.
See the section called "CDA Mapping" > Care Setting	This data group is currently not mapped to CDA.
See the section called "CDA Mapping" > Health Event Identification	This data group is currently not mapped to CDA.
AS 5017-2006: Health Care Client Identifier Geographic Area	The Health Care Client Identifier Geographic Area vocabulary table lists displayName, code, codeSystem-Name and codeSystem while only the displayName is used in the mapping. Verification of using only the display-Name needs to be performed.
Throughout document	Australian vs American spelling - in cases where definitions have been taken from HL7 documentation, the American spelling has been preserved, e.g. organization rather than organisation.
Thoughout document	While every effort has been taken to ensure that the examples are consistent with consistent with the normative mappings in this message specification, care need to be taken when copying XML examples for implementation and validation.

2 Guide for Use

This document describes how to properly implement the Australian eDS SDT as a conformant HL7 CDA XML document. The e-Discharge Summary is built in two parts:

1. A *Structured Document Template* (SDT), which, in conjunction with its related documents (see Document Map), describes the e-Discharge 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 e-Discharge Summary as a hierarchy of data components, and provides documentation concerning their use and meaning.

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

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

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

2.1 Clinical Document Architecture Release 2

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

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

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

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

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

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

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

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

- CDA specification: [HL7CDAR2]

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

2.2 Mapping Interpretation

The core of this guide is a mapping from the eDS SDT to the CDA document representation.

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

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

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

x.x ITEM NAME

Identification (normative)

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

Relationships (normative)

Children Not Included in Mapping for This Section

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

Parent

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

CDA R-MIM Representation

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

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

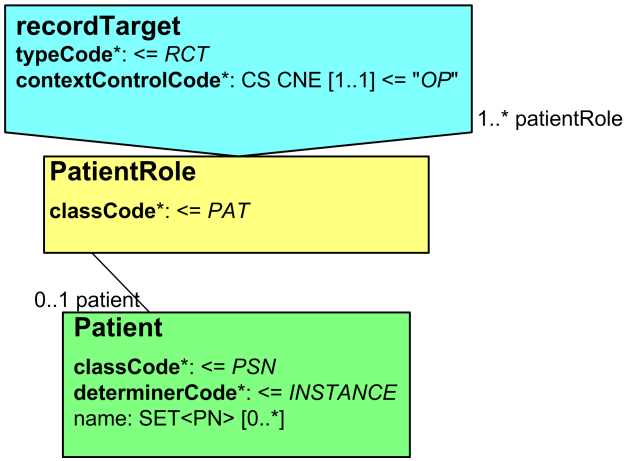

Figure 2.1. Example - Header Part

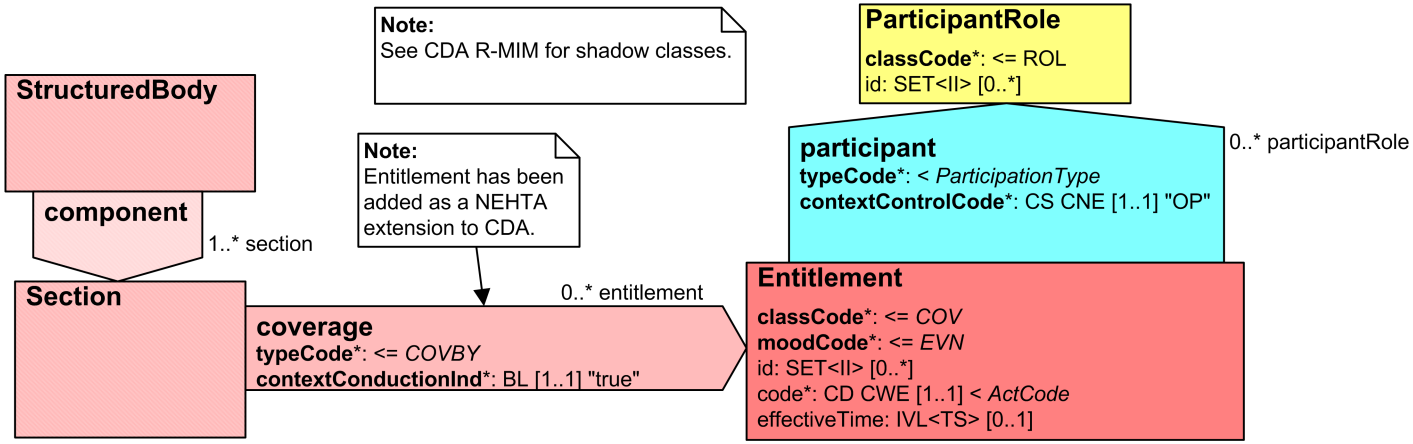

Figure 2.2. Example - Body Part

CDA Mapping (normative)

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

How to interpret the following example mapping:

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

The Subject of Care (Patient) section is part of the context section of the SDT (as opposed to being part of the content section of the SDT). Although it is located in the context section of the SDT, 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 SDT (as opposed to a content element), information about it and its child elements can be located in the SDT 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 SDT, 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 SDT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

See comments in the example below.

Example 2.1. Mapping Interpretation

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

      …

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

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

         …

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

            …

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

…

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

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

               …

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

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

              …

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

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

2.3 CDA Extensions

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

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

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

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

Version 3.0 of these extensions are incorporated in the namespace <http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0> as shown in the CDA example output throughout this document. Future versions of will be versioned as per the following example:

<http://ns.electronichealth.net.au/Ci/Cda/Extensions/4.0>

2.4 W3C XML Schema

This document refers to an accompanying e-Discharge Summary CDA W3C XML Schema (referred to in this document as the eDS CDA Schema). This schema differs from the base HL7 CDA W3C XML Schema (referred to in this document as the HL7 CDA Schema) in two ways:

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

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

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

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

2.5 Schematron

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

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

2.6 Implementation Strategies

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

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

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

3 e-Discharge Summary Data Hierarchy

The data hierarchy below provides a logical representation of the data structure of the eDS SDT data components.

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

e-Discharge Summary					1..1
CONTEXT					
	DateTime Attested				1..1
	DOCUMENT AUTHOR				1..1
	SUBJECT OF CARE				1..1
	FACILITY				1..1
	Care Setting				0..1
	Health Event Identification				0..1
		Health Event Identifier			0..1
		DateTime Health Event Started			1..1
		DateTime Health Event Ended			0..1
CONTENT					
	EVENT				1..1
		ENCOUNTER			1..1
			Encounter Period		1..1
			Separation Mode		1..1
			Specialty		1..*
			Location of Discharge		1..1
			RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE		1..1
			OTHER PARTICIPANT		0..*
		PROBLEMS/DIAGNOSES THIS VISIT			1..1
			EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES		0..1
				Global Statement	1..1

				PROBLEM/DIAGNOSIS					0..*
					Problem Diagnosis Type				1..1
					Problem Diagnosis Description				1..1
			CLINICAL INTERVENTIONS PERFORMED THIS VISIT						0..1
				Clinical Intervention					1..*
					Clinical Intervention Description				1..1
			CLINICAL SYNOPSIS						1..1
				Clinical Synopsis Description					1..1
			DIAGNOSTIC INVESTIGATIONS						0..1
				PATHOLOGY TEST RESULT					0..*
					Pathology Test Result Name				1..1
					Diagnostic Service				0..1
					TEST SPECIMEN DETAIL				1..*
						Specimen Tissue Type			0..1
						Collection Procedure			0..1
						Anatomical Location			0..*
							Specific Location		0..1
								Anatomical Location Name	0..1
								Side	0..1
							Anatomical Location Description		0..1
							Anatomical Location Image		0..*
						Physical Properties of an Object			0..*
							Weight		0..1
							Dimensions		0..1
								Volume	0..1

							Object Description	0..1
							Image	0..1
						Collection and Handling		0..1
							Sampling Preconditions	0..1
						Handling and Processing		1..1
							Collection DateTime	1..1
							Collection Setting	0..1
							DateTime Received	0..1
						Identifiers		0..1
							Specimen Identifier	0..1
							Parent Specimen Identifier	0..1
							Container Identifier	0..1
					Overall Pathology Test Result Status			1..1
					Clinical Information Provided			0..1
					PATHOLOGY TEST RESULT GROUP			0..*
						Pathology Test Result Group Name		1..1
						Individual Pathology Test Result		1..*
							Individual Pathology Test Result Name	1..1
							Individual Pathology Test Result Value	0..1
							Individual Pathology Test Result Value Normal Status	0..1
							Individual Pathology Test Result Value Reference Range Details	0..*
							Individual Pathology Test Result Value Reference Range Meaning	1..1
							Individual Pathology Test Result Value Reference Range	1..1
							Individual Pathology Test Result Comment	0..*

											Individual Pathology Reference Range Guidance		0..1
											Individual Pathology Test Result Status		1..1
										RESULT GROUP SPECIMEN DETAIL			0..1
											Specimen Tissue Type		0..1
											Collection Procedure		0..1
											Anatomical Location		0..*
												Specific Location	0..1
													Anatomical Location Name 0..1
													Side 0..1
												Anatomical Location Description	0..1
												Anatomical Location Image	0..*
											Physical Properties Of An Object		0..*
												Weight	0..1
												Dimensions	0..1
													Volume 0..1
												Object Description	0..1
												Image	0..1
											Collection And Handling		0..1
												Sampling Preconditions	0..1
											Handling And Processing		1..1
												Collection DateTime	1..1
												Collection Setting	0..1
												DateTime Received	0..1
											Identifiers		0..1
												Specimen Identifier	0..1

								Parent Specimen Identifier	0..1
								Container Identifier	0..1
						Pathological Diagnosis			0..*
						Pathology Test Conclusion			0..1
						Test Result Representation			0..1
						Test Comment			0..1
						Test Request Details			0..*
							Test Requested Name		0..*
							Laboratory Test Result Identifier		0..1
						Pathology Test Result DateTime			1..1
				IMAGING EXAMINATION RESULT					0..*
						Imaging Examination Result Name			1..1
						Imaging Modality			0..1
						Anatomical Location			0..*
							Specific Location		0..1
								Anatomical Location Name	0..1
								Side	0..1
							Anatomical Location Description		0..1
							Anatomical Location Image		0..*
						Imaging Examination Result Status			1..1
						Clinical Information Provided			0..1
						Findings			0..1
						IMAGING EXAMINATION RESULT GROUP			0..*
							Imaging Examination Result Group Name		1..1
							Individual Imaging Examination Result		1..*

							Individual Imaging Examination Result Name	1..1
							Individual Imaging Examination Result Value	0..1
							Imaging Examination Result Value Normal Status	0..1
							Imaging Examination Result Value Reference Range Details	0..*
							Imaging Examination Result Value Reference Range Meaning	1..1
							Imaging Examination Result Value Reference Range	1..1
							Result Comment	0..*
						Anatomical Location		0..1
							Specific Location	0..1
							Anatomical Location Name	0..1
							Side	0..1
							Anatomical Location Description	0..1
							Anatomical Location Image	0..*
					Examination Result Representation			0..1
					Examination Request Details			0..*
						Examination Requested Name		0..*
						DICOM Study Identifier		0..1
						Report Identifier		0..1
						Image Details		0..*
							Image Identifier	0..1
							DICOM Series Identifier	0..1
							Image View Name	0..1
							Subject Position	0..1
							Image DateTime	0..1

							Image	0..1
					Imaging Examination Result DateTime			1..1
	MEDICATIONS							1..1
		CURRENT MEDICATIONS ON DISCHARGE						1..1
			EXCLUSION STATEMENT - MEDICATIONS					0..1
				Global Statement				1..1
			THERAPEUTIC GOOD					0..*
				Therapeutic Good Identification				1..1
				Dosage				1..1
					Dose Instruction			1..1
				Unit Of Use Quantity Dispensed				0..1
				Reason For Therapeutic Good				0..1
				Additional Comments				0..1
				Medication History				1..1
					Item Status			1..1
					Change Detail			0..1
						Changes Made		1..1
						Reason For Change		0..1
					Medication Duration			0..1
		CEASED MEDICATIONS						1..1
			EXCLUSION STATEMENT - MEDICATIONS					0..1
				Global Statement				1..1
			THERAPEUTIC GOOD					0..*
				Therapeutic Good Identification				1..1

					Medication History								1..1
						Item Status							1..1
						Change Detail							1..1
							Changes Made						1..1
							Reason For Change						1..1
	HEALTH PROFILE												1..1
		HEALTHCARE PROVIDERS											0..1
			NOMINATED PRIMARY HEALTHCARE PROVIDER										1..*
		ADVERSE REACTIONS											1..1
			EXCLUSION STATEMENT - ADVERSE REACTION										0..1
				Global Statement									1..1
			ADVERSE REACTION										0..*
				Agent Description									1..1
				Adverse Reaction Type									1..1
				Reaction Detail									0..*
					Reaction Description								1..1
		ALERTS											0..1
			Alert										1..*
				Alert Type									1..1
				Alert Description									1..1
	PLAN												1..1
		ARRANGED SERVICES											0..1
			Arranged Service										1..*
				Arranged Service Description									1..1
				Service Commencement Window									0..1

					Service Booking Status	1..1
					Protocol	0..1
					SERVICE PROVIDER	0..1
			RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED			1..1
				Recommendations Provided		1..*
					RECOMMENDATION RECIPIENT	1..1
					Recommendation Note	1..1
				Information Provided		0..1
					Information Provided To Subject Of Care and/or Relevant Parties	1..1

4 Administrative Observations

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

CDA R-MIM Representation

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

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

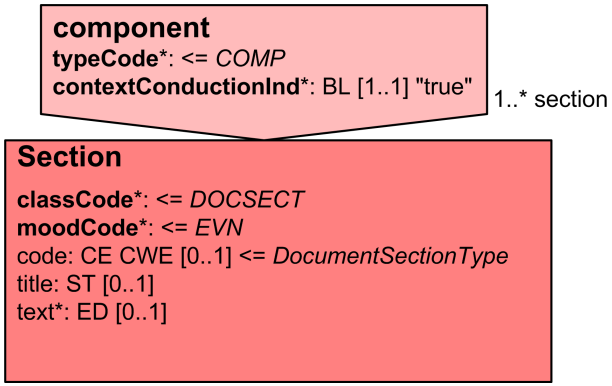

Figure 4.1. Administrative Observations

CDA Mapping

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

Example 4.1. Administrative Observations XML Fragment

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

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

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->

   …

   <component>
      <structuredBody>

         …

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

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

     …

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

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

5 CDA Header

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

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

5.1 ClinicalDocument

Identification

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

Relationships

Children Not Included in Mapping for This Section

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

CDA R-MIM Representation

Figure 5.1, “ClinicalDocument”

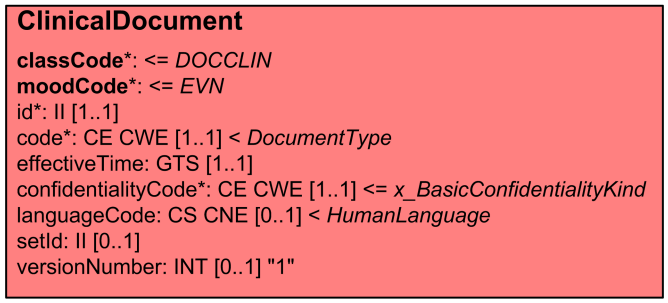

Figure 5.1. ClinicalDocument

CDA Mapping

CDA Schema Data Element	Definition	Card	Vocab	EPS Element	Comments
Context: /					
ClinicalDocument	The ClinicalDocument class is the entry point into the CDA R-MIM, and corresponds to the <ClinicalDocument> XML element that is the root element of a CDA document.	1..1			
ClinicalDocument/**typeId**	A technology-neutral explicit reference to this CDA, Release Two specification.	1..1			
ClinicalDocument/typeId/**@extension="POCD_HD000040"**		1..1			The unique identifier for the CDA, Release Two Hierarchical Description.
ClinicalDocument/typeId/**@root="2.16.840.1.113883.1.3"**		1..1			The OID for HL7 Registered models.
ClinicalDocument/**templateId**		1..*			One or more template identifiers that indicate constraints on the CDA document that this document conforms to. One of the identifiers must be the templateId that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA Rendering Specification. Systems are not required to recognise any other the template identifiers than the one below in order to understand the document as a [type] but these identifiers may influence how the document must be handled.
ClinicalDocument/templateId/**@root="1.2.36.1.2001.1001.101.100.1002.4"**		1..1		docType	The healthcare context-specific name of the published e-Discharge Summary CDA Implementaion Guide.
ClinicalDocument/templateId/**@extension="3.4"**		1..1			The identifier of the version that was used to create the document instance.
ClinicalDocument/**id**	Represents the unique instance identifier of a clinical document.	1..1		docId	

CDA Schema Data Element	Definition	Card	Vocab	EPS Element	Comments
ClinicalDocument/**code**	The code specifying the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note).	1..1			A collection of information about events during care by a provider or organisation, which is released when the subject of care is discharged from the care of the provider organisation.
ClinicalDocument/code/**@code="18842-5"**					
ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**					
ClinicalDocument/code/**@codeSystemName="LOINC"**					
ClinicalDocument/code/**@displayName="Discharge Summarization Note"**					
ClinicalDocument/**effectiveTime**	Signifies the document creation time, when the document first came into being. Where the CDA document is a transform from an original document in some other format, the ClinicalDocument.effectiveTime is the time the original document is created.	1..1		creationTime	
ClinicalDocument/**confidentialityCode/@nullFlavor="NA"**	Codes that identify how sensitive a piece of information is and/or that indicate how the information may be made available or disclosed.	1..1			
ClinicalDocument/**languageCode**		0..1	[RFC3066] – Tags for the Identification of Languages		<Language Code> – <COUNTRY CODE>
ClinicalDocument/**setId**	Represents an identifier that is common across all document revisions.	0..1	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.		
ClinicalDocument/**versionNumber/@value**	An integer value used to version successive replacement documents.	0..1			
ClinicalDocument/**ext:completionCode**	The lifecycle status of a document.	1..1	NCTIS: Admin Codes - Document Status	docStatus	See Australian CDA extension: ClinicalDocument.completionCode

Example

Example 5.1. ClinicalDocument Body XML Fragment

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

<ClinicalDocument xmlns="urn:hl7-org:v3"
      xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
      xmlns:xs="http://www.w3.org/2001/XMLSchema"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="CDA-eDS-V3_0.xsd">
 <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
 <templateId root="1.2.36.1.2001.1001.101.100.1002.4" extension="3.4"/>
 <id root="8BC3406A-B93F-11DE-8A2B-6A1C56D89593"/>
 <code code="18842-5"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Discharge Summarization Note"/>
 <effectiveTime value="200910201235"/>
 <confidentialityCode nullFlavor="NA"/>
 <languageCode code="en-AU"/>
 <setId root="6C6BA56C-BC92-11DE-A170-D85556D89593"/>
 <versionNumber value="1"/>
 <ext:completionCode code="F"
        codeSystem="1.2.36.1.2001.1001.101.104.20104"
        codeSystemName="NCTIS Document Status Values"
       displayName="Final"/>

 <!-- Begin CDA Header -->

   ...

   <!-- End CDA Header -->

 <!-- Begin CDA Body -->

 ...

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

5.1.1 LegalAuthenticator

Identification

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

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Optional	0..1

CDA R-MIM Representation

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

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

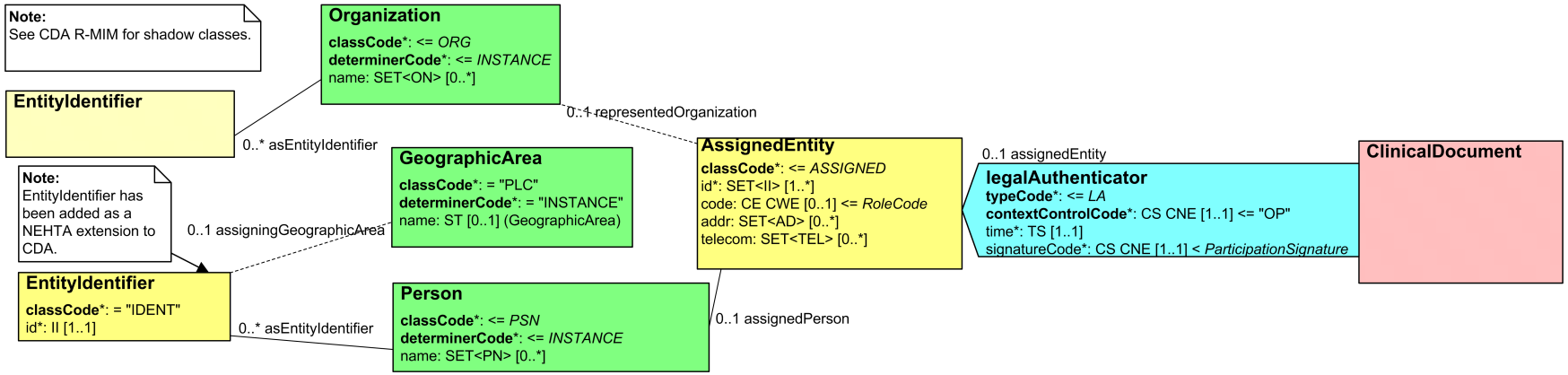

Figure 5.2. LegalAuthenticator

CDA Mapping

Note

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

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

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

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

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

Example

Example 5.2. LegalAuthenticator XML Fragment

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

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

 …

 <!-- Begin CDA Header -->

 …

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

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

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

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

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

```
    <representedOrganization>

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

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

 …

 <!-- End CDA Header -->

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

 …

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

5.1.2 InformationRecipient

Identification

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

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Optional	0..*

CDA R-MIM Representation

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

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

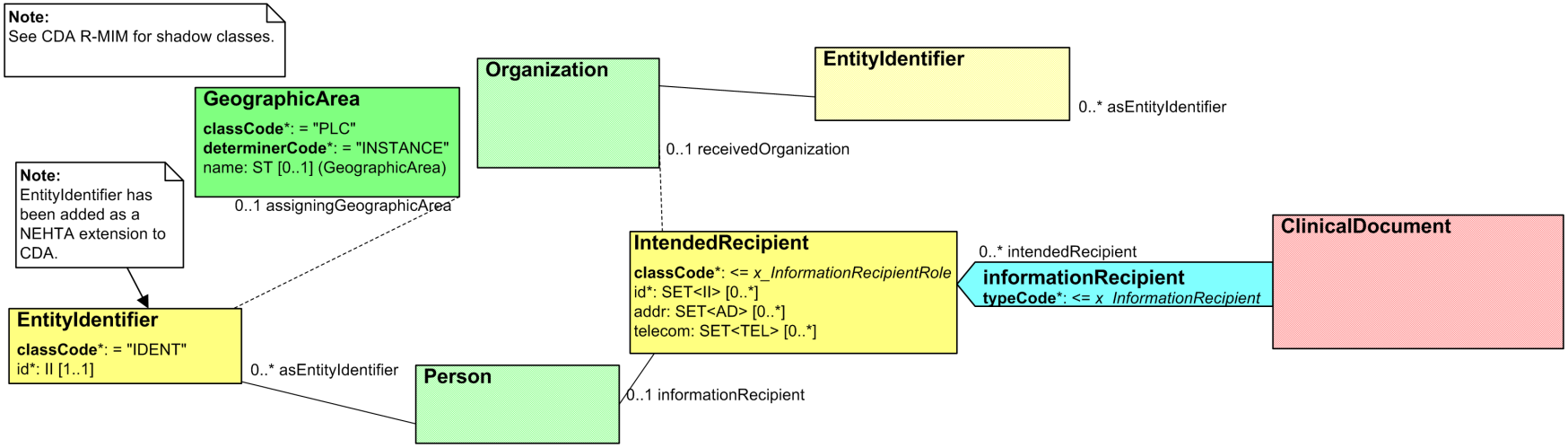

Figure 5.3. InformationRecipient

CDA Mapping

Note

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

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

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
informationRecipient	Represents a recipient who should receive a copy of the document.	0..*		
informationRecipient/**@typeCode**	Type of recipient	1..1	**PRCP** (primary recipient) [default]: Recipient to whom the document is primarily directed. **TRC** (secondary recipient): A secondary recipient to whom the document is directed.	
informationRecipient/intendedRecipient/**id**	A unique identifier for the player entity in this role.	0..*	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	
informationRecipient/**intendedRecipient**	A informationRecipient is a person in the role of an assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).	1..1		
informationRecipient/intendedRecipient/**informationRecipient**	The entity playing the role (intendedRecipient) is a person.	0..1		
informationRecipient/intendedRecipient/informationRecipient/**<Entity Identifier>**	The entity identifier of the person.	0..*		See common pattern: Entity Identifier.
informationRecipient/intendedRecipient/**<Address>**	A postal address for the entity (informationRecipient) while in the role (intendedRecipient).	0..*		See common pattern: Address.
informationRecipient/intendedRecipient/**<Electronic Communication Detail>**	A telecommunication address for the entity (informationRecipient) while in the role (intendedRecipient).	0..*		See common pattern: Electronic Communication Detail.

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

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

Example

Example 5.3. InformationRecipient XML Fragment

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

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

 …

 <!-- Begin CDA Header -->

 …

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

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

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

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

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

   </informationRecipient>

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

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

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

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

  …

  <!-- End CDA Header -->

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

  …

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

5.1.3 Custodian

Identification

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

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Essential	1..1

CDA R-MIM Representation

Figure 5.4, “Custodian”shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

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

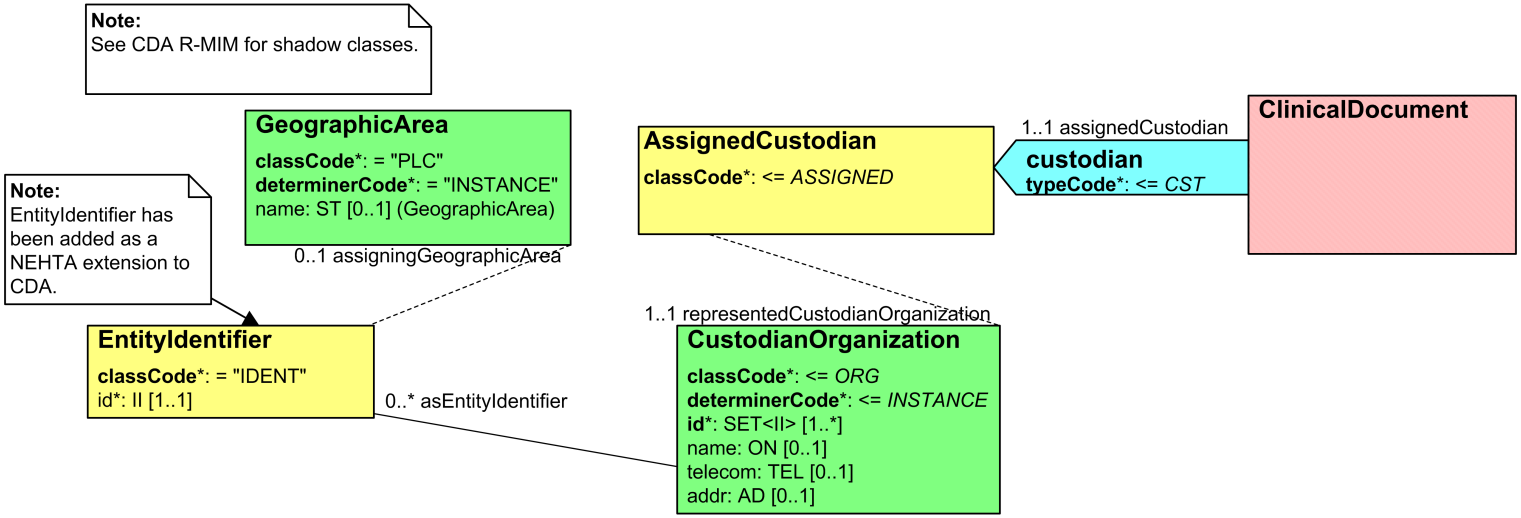

Figure 5.4. Custodian

CDA Mapping

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

Example

Example 5.4. Custodian Body XML Fragment

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

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

   …

   <!-- Begin CDA Header -->

   …

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

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

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

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

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

   …

   <!-- End CDA Header -->

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

```
        …

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

6 Context Data Specification - CDA Mapping

6.1 e-Discharge Summary

Identification

Name	DISCHARGE SUMMARY
Metadata Type	Structured Document
Identifier	SD-20000

Relationships

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

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

CDA R-MIM Representation

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

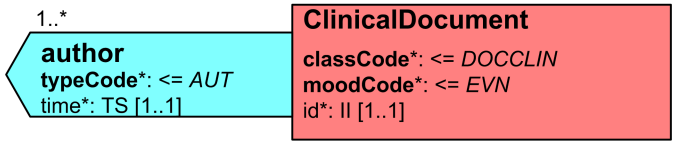

Figure 6.1. CDA Header Model for e-Discharge Summary Context

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
e-Discharge Summary	A collection of information about events during care by a provider or organisation, which is released when the subject of care is discharged from the care of the provider organisation.	1..1	ClinicalDocument/**code**		
			ClinicalDocument/code/**@code="18842-5"**		
			ClinicalDocument/code/**@codeSystem="2.16.840.1.113883.6.1"**		
			ClinicalDocument/code/**@codeSystemName="LOINC"**		
			ClinicalDocument/code/**@displayName="Discharge Summarization Note"**		
			ClinicalDocument/**effectiveTime**		Document creation time.
e-Discharge Summary > **DateTime Attested**	The date (and time if known) that the document author or document authoriser/approver confirms (usually by signature) that a document is complete and genuine.	1..1	ClinicalDocument/**legalAuthenticator/time**		See <time> for available attributes.
e-Discharge Summary > ***Subject of Care***	See: SUBJECT OF CARE				
e-Discharge Summary > ***Document Author***	See: DOCUMENT AUTHOR				
e-Discharge Summary > ***Facility***	See: FACILITY				
e-Discharge Summary > **Care Setting**	A description of the type of care setting within which health care services have been provided to the subject of care.	0..1	See: Known Issues		
e-Discharge Summary > **Health Event Identification**	Identifies or labels a health story or focus against which one or more related healthcare events can be grouped.	0..1	See: Known Issues		
e-Discharge Summary > Health Event Identification > **Health Event Identifier**	The unique label/identifier for a specific health story or focus to which the clinical document is linked or with which it is associated.	0..1	See: Known Issues		This is used for local definition and local use cases and is not used by a national IHI Service.
e-Discharge Summary > Health Event Identification > **DateTime Health Event Started**	The date and time of the start of the healthcare event/encounter/clinical interaction that the document or document set relates to.	1..1	See: Known Issues		
e-Discharge Summary > Health Event Identification > **DateTime Health Event Ended**	The date and time of the end of the health event that the document or document set relates to.	0..1	See: Known Issues		

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

Example 6.1. e-Discharge Summary Context XML Fragment

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

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

 …

 <code code="18842-5"
   codeSystem="2.16.840.1.113883.6.1"
   codeSystemName="LOINC"
   displayName="Discharge Summarization Note"/>
 <effectiveTime value="200910201235"/>
 >

   …

   <!-- Begin CDA Header -->

   …

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

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

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

   …

   <!-- End CDA Header -->

   <!-- Begin CDA Body -->

               …

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

6.1.1 DOCUMENT AUTHOR

Identification

Name	DOCUMENT AUTHOR
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

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

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

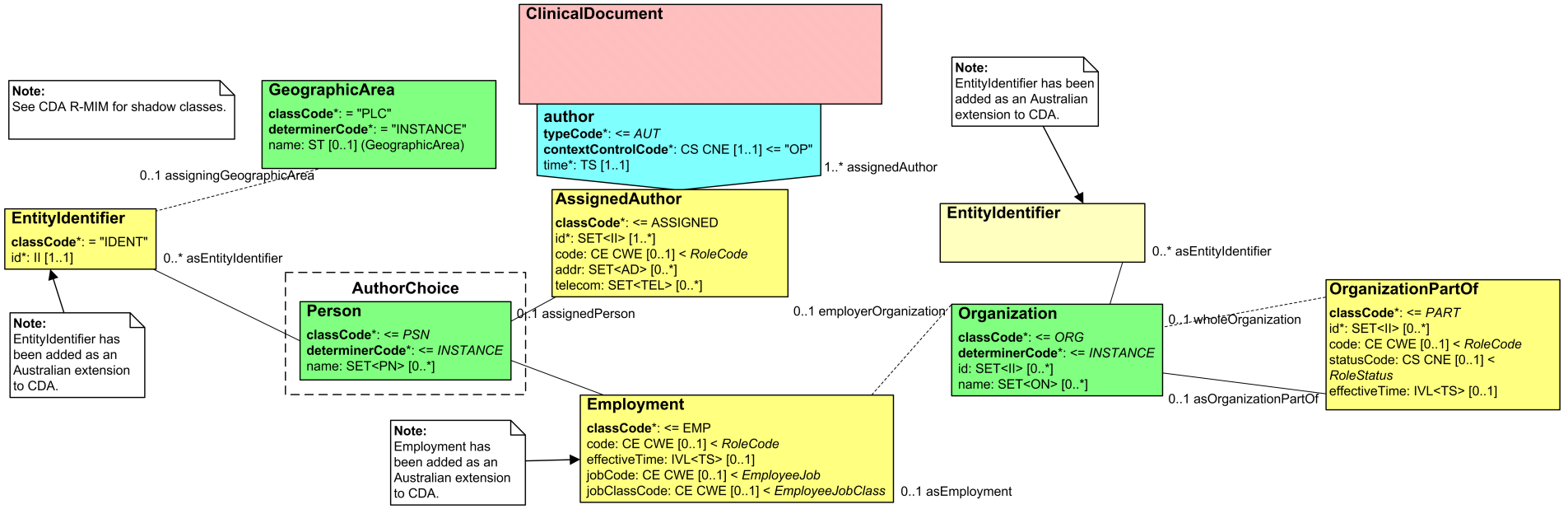

Figure 6.2. Document Author

CDA Mapping

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Document Author > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	author/**assignedAuthor/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
n/a	n/a	1..1	author/assignedAuthor/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Document Author > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	author/assignedAuthor/**assignedPerson**		
Document Author > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	author/assignedAuthor/assignedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Document Author > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	0..*	author/assignedAuthor/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS **SHALL** be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Document Author > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	author/assignedAuthor/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Document Author > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a	PERSON OR ORGANISATION OR DEVICE SHALL be instantiated as a PERSON.	This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Document Author > Participant > Person or Organisation or Device > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in author/assignedAuthor/assignedPerson.
Document Author > Participant > Person or Organisation or Device > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	author/assignedAuthor/assignedPerson/**<Person Name>**		See common pattern: Person Name.
Document Author > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	author/assignedAuthor/assignedPerson/**<Employment**		See common pattern: Employment.

Example 6.2. Document Author XML Fragment

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

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

 …

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

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

  <assignedAuthor>

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

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

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

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

   <!-- Participant -->
   <assignedPerson>

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

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

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

```
      <!-- Position In Organisation -->
      <ext:code>
       <originalText>Senior Intensive Care Specialist</originalText>
      </ext:code>

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

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

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

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

       <asOrganizationPartOf>
        <wholeOrganization>

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

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

        </wholeOrganization>
       </asOrganizationPartOf>
      </ext:employerOrganization>
     </ext:asEmployment>
    </assignedPerson>
   </assignedAuthor>
  </author>
  <!-- End Document Author -->

    …

  <component>
   <structuredBody>

    …

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

6.1.2 SUBJECT OF CARE

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

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

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

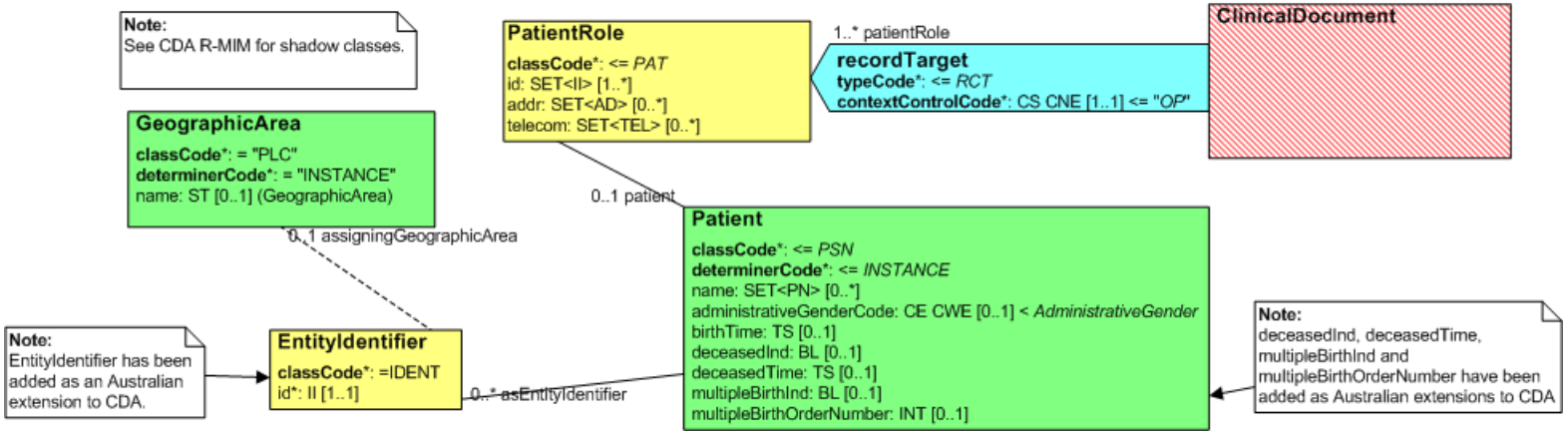

Figure 6.3. Subject of Care - Header Data Elements

Note

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

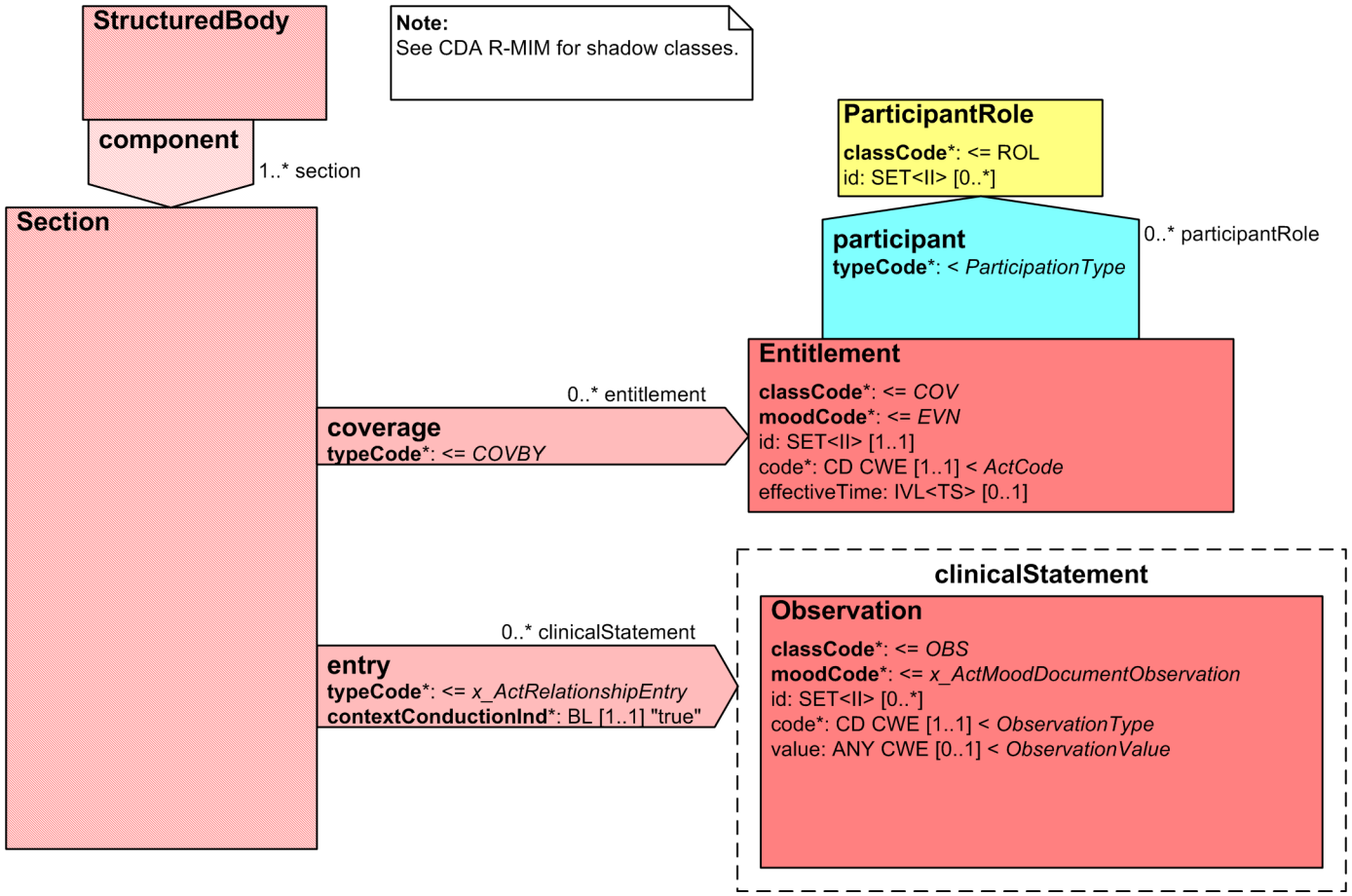

Figure 6.4. Subject of Care - Body Data Elements

CDA Mapping

Note

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

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

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

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

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

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

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

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

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

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

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

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

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

Example 6.3. Subject of Care XML Fragment

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

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

      …

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

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

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

   <!-- Participant -->
   <patient>

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

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

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

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

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

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

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

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

…

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

        …

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

    <title>Administrative Observations</title>

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

```
   ...

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

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

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

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

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

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

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

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

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

        <!-- Begin Entitlement -->
        <ext:coverage2 typeCode="COVBY">
         <ext:entitlement classCode="COV" moodCode="EVN">
          <ext:id root="To Be Advised" extension="1234567892" assigningAuthorityName="Australian Medicare number" />
          <ext:code code="1" codeSystem="1.2.36.1.2001.1001.101.104.16047" codeSystemName="NCTIS Entitlement Type Values" displayName="Medicare Benefits"/>
          <ext:effectiveTime>
           <low value="20090101"/>
           <high value="20110101"/>
          </ext:effectiveTime>
          <ext:participant typeCode="BEN">
           <ext:participantRole classCode="PAT">
            <ext:id root="7AA0BAAC-0CD0-11E0-9516-4350DFD72085" />
           </ext:participantRole>
          </ext:participant>
         </ext:entitlement>
        </ext:coverage2>
        <!-- End Entitlement -->

       <!-- End Patient – Body -->

       ...

      </section>

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

     ...

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

6.1.3 FACILITY

Identification

Name	FACILITY
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

Figure 6.5, “Facility” 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 FACILITY data group is mapped to the location class. The location participant relates a healthcare facility (HealthCareFacility class) to an encounter (Context: ClinicalDocument/componentOf/encompassingEncounter) to indicate where the encounter took place. The entity scoping the HealthCareFacility role is an organisation (Organization class). The department/unit name is mapped to serviceProviderOrganization.name (Organization class) and the organisation name is mapped to the wholeOrganization (Organization class) which represents a whole-part relationship using the OrganizationPartOf role. The organisation entity identifier is represented by the EntityIdentifier class (Australian CDA extension) which is associated to the wholeOrganization.

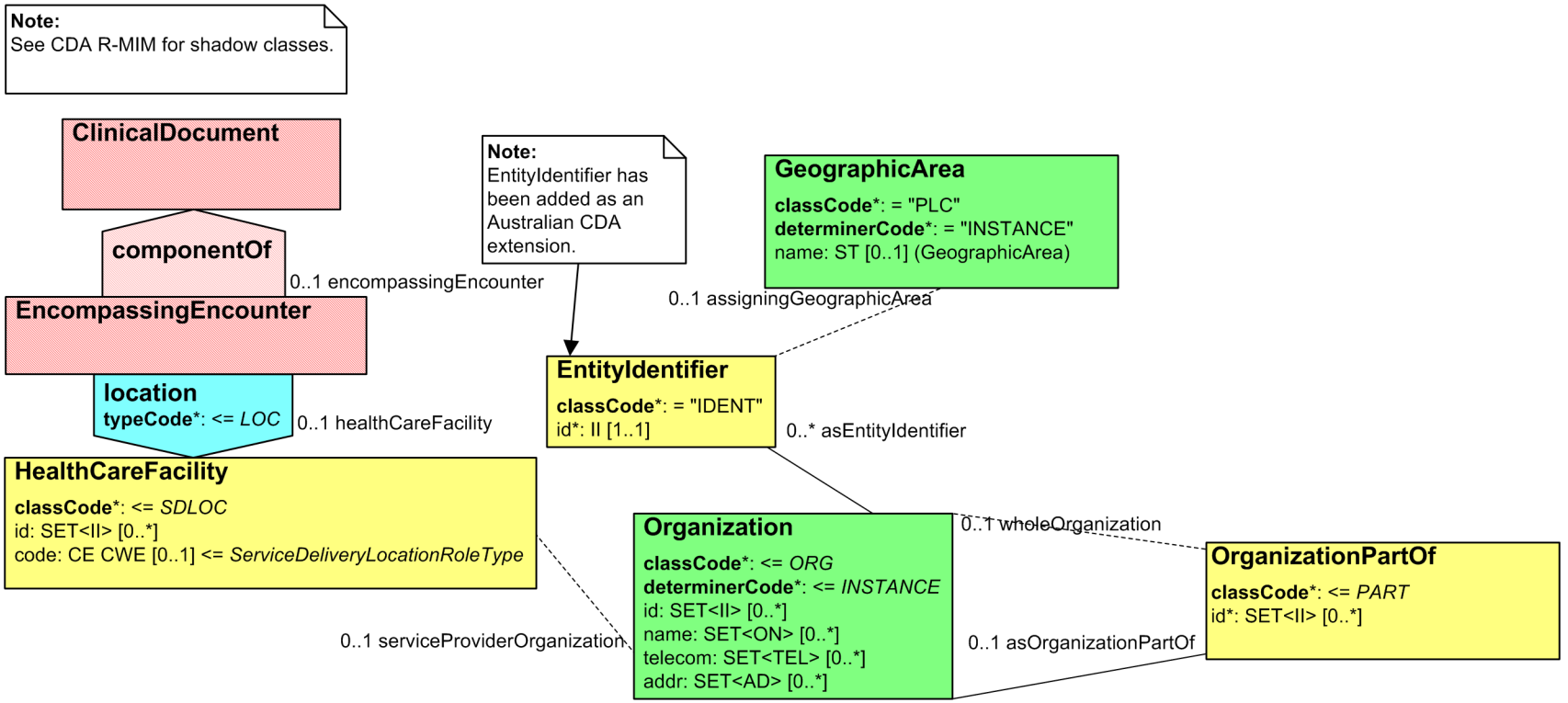

Figure 6.5. Facility

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument/componentOf/encompassingEncounter		
Facility	Details pertaining to the identification of a Healthcare Organisation/Facility which is involved in or associated with the delivery of the healthcare services to the patient, or caring for his/her wellbeing.	1..1	**location**		
Facility > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	n/a	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Facility".	Not mapped directly, encompassed implicitly in location/typeCode="LOC" (optional, fixed value).
n/a	n/a	0..1	location/healthCareFacility/**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.
Facility > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	location/healthCareFacility/**code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	
Facility > **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	location/healthCareFacility/**serviceProviderOrganization/asOrganizationPartOf/wholeOrganization**		
Facility > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Facility > 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..*	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Address>**		Australian or International Address **SHALL** be instantiated as an Australian Address. See common pattern: Address.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Facility > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Electronic Communication Detail>**	The value of at least one Electronic Communication Medium **SHALL** be “Telephone” or “Mobile telephone”. The value of at least one Electronic communication Medium **SHALL** be "Facsimile machine".	See common pattern: Electronic Communication Detail.
Facility > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children. PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a ORGANISATION.
Facility > 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 location/ healthCareFacility/ serviceProviderOrganization/ asOrganizationPartOf/ wholeOrganization.
Facility > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**name**		
Facility > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	location/healthCareFacility/serviceProviderOrganization/**name**		
Facility > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 6.4. Facility XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

   <!-- Begin Encounter -->
 <componentOf>
  <encompassingEncounter>

   ...

   <!-- Begin Facility -->
   <location>
    <healthCareFacility>

     <!-- ID is used for system purposes such as matching -->
     <id root="9B63D0F4-0CE8-11E0-95F4-6E69DFD72085"/>

     <!-- Role -->
     <code code="HOSP"
       codeSystem="2.16.840.1.113883.1.11.17660"
       codeSystemName="HL7 ServiceDeliveryLocatonRoleType"
       displayName="Hospital"/>

     <!-- Participant -->
     <serviceProviderOrganization>

      <!-- Department/Unit -->
      <name>Emergency Department</name>

      <asOrganizationPartOf>

       <!-- ID is used for system purposes such as matching -->
       <id root="A5D3F450-0CD0-11E0-9272-C850DFD72085"/>
       <wholeOrganization>

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

        <!-- Electronic Communication Detail -->
        <telecom use="WP" value="tel:0799999999"/>

        <!-- Address -->
        <addr>
         <streetAddressLine>1 Hospital Street</streetAddressLine>
         <city>Nehtaville</city>
         <state>QLD</state>
         <postalCode>5555</postalCode>
         <additionalLocator>32568931</additionalLocator>
         <country>Australia</country>
        </addr>
```

```
        <!-- Entity Identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
         <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003633771167888"/>
         <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
         </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>

       </wholeOrganization>
      </asOrganizationPartOf>
     </serviceProviderOrganization>
    </healthCareFacility>
   </location>
   <!-- End Facility -->

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


 <!-- Begin CDA Body -->

 ...

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

7 Content Data Specification - CDA Mapping

7.1 e-Discharge Summary

Identification

Name	DISCHARGE SUMMARY
Metadata Type	Structured Document
Identifier	SD-20000

Relationships

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

Data Type	Name	Obligation	Occurrence
	EVENT	Essential	1..1
	MEDICATIONS	Essential	1..1
	HEALTH PROFILE	Essential	1..1
	PLAN	Essential	1..1

CDA R-MIM Representation

Figure 7.1, “e-Discharge 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 e-Discharge Summary is composed of a ClinicalDocument, which is the entry point into the CDA R-MIM. The ClinicalDocument is associated with the bodyChoice through the component relationship. The structuredBody class represents a CDA document body that is comprised of one or more document sections.

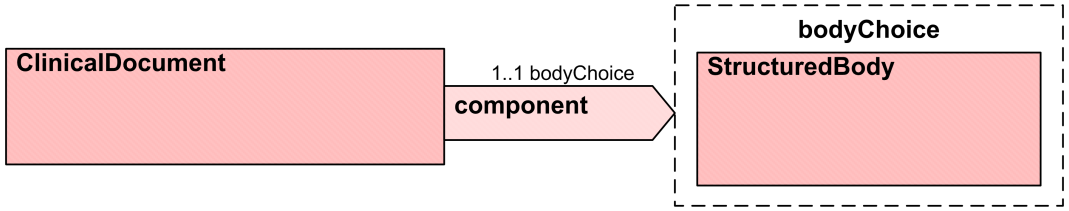

Figure 7.1. e-Discharge Summary

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
e-Discharge Summary	A collection of information about events during care by a provider or organisation, which is released when the subject of care is discharged from the care of the provider organisation.	1..1	**ClinicalDocument**		
CDA Body Level 2 Data Elements					
e-Discharge Summary (Body)	See above.	1..1	ClinicalDocument/**component/structuredBody**		

Example 7.1. e-Discharge Summary Body XML Fragment

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

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

   …

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

      …

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

7.1.1 EVENT

Identification

Name	EVENT
Metadata Type	Section
Identifier	S-16006

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	ENCOUNTER	Essential	1..1
	PROBLEMS/DIAGNOSES THIS VISIT	Essential	1..1
	CLINICAL INTERVENTIONS PERFORMED THIS VISIT	Optional	0..1
	CLINICAL SYNOPSIS	Essential	1..1
	DIAGNOSTIC INVESTIGATIONS	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.2, “Event” 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.

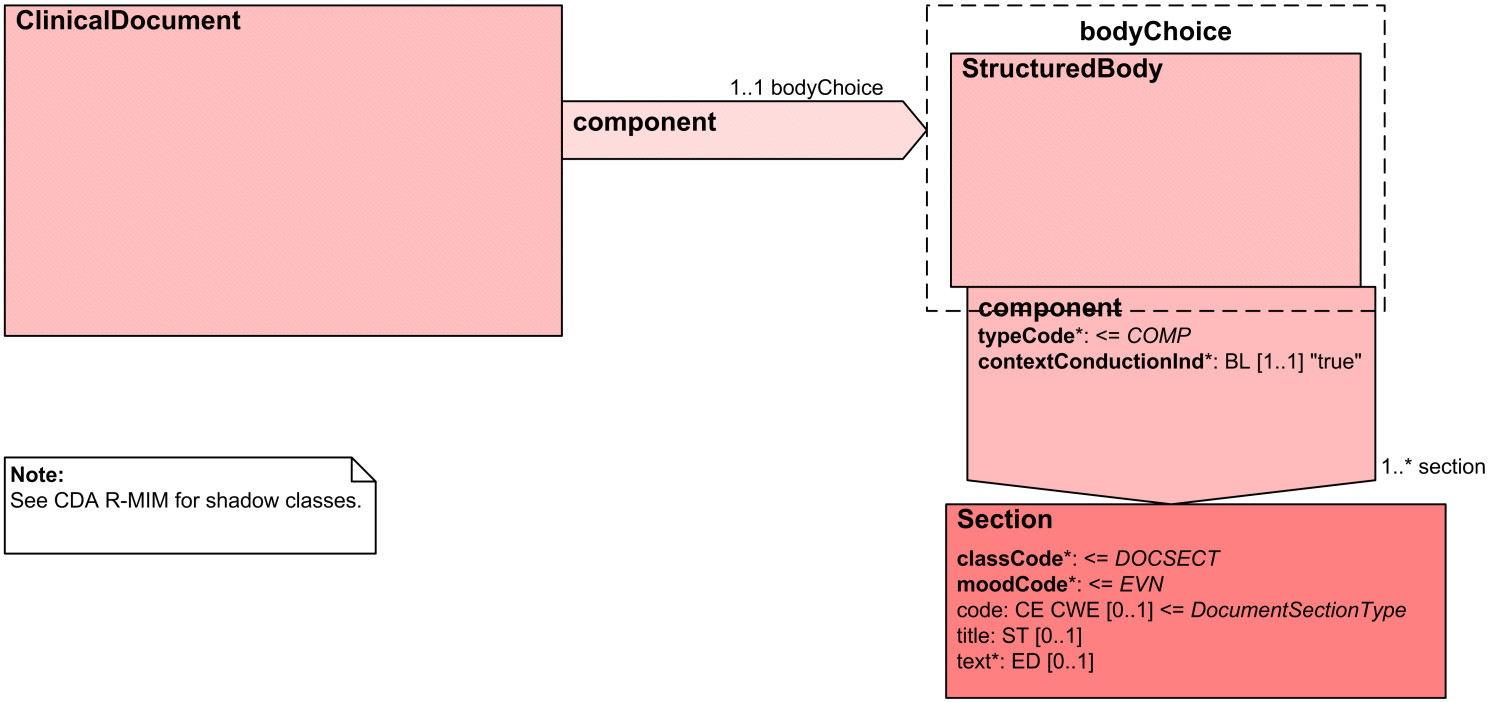

Figure 7.2. Event

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Event	Details of the subject of care's stay in a healthcare facility which instigated the creation of the discharge summary.	1..1	**component[event]/section/code**		
			component[event]/section/code/**@code="101.16006"**		
			component[event]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[event]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[event]/section/code/**@displayName="Event"**		
			component[event]/section/**title="Event"**		
			component[event]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.2. Event XML Fragment

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

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

 <!-- Begin CDA Header -->

 …

 <!-- End CDA Header -->

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

   …

   <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>
     <code code="101.16006"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Event"/>
     <title>Event</title>
     <text>Event narrative goes here.</text>

     ...

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

   …

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

</ClinicalDocument>
```

7.1.1.1 ENCOUNTER

Identification

Name	ENCOUNTER
Metadata Type	Data Group
Identifier	DG-16057

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE	Essential	1..1
	OTHER PARTICIPANT	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	EVENT	Essential	1..1

CDA R-MIM Representation

Figure 7.3, “Encounter - Header” and Figure 7.4, “Encounter - Body” 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 CDA Header part of the ENCOUNTER data group comprises the EncompassingEncounter class, which represents the setting of the clinical encounter during which the documented act(s) occurred, which is related to the ClinicalDocument by the component relationship and a Participant representing the Location of Discharge.

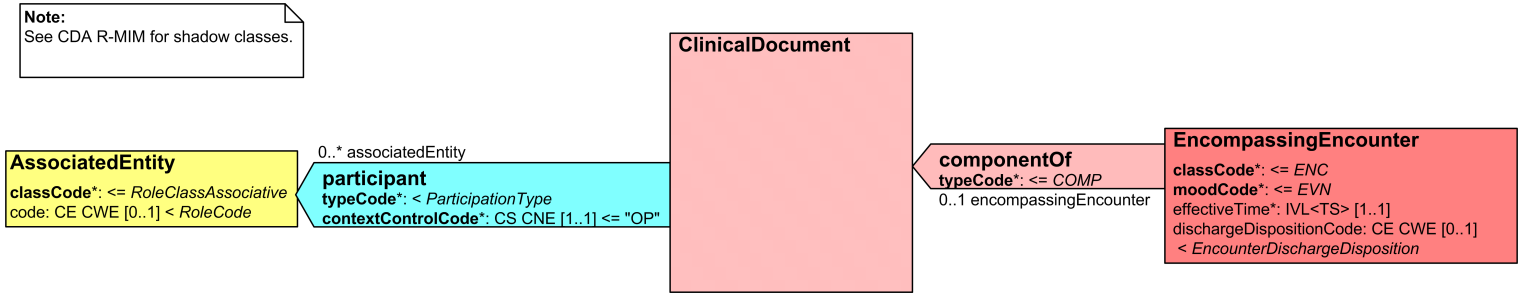

Figure 7.3. Encounter - Header

The CDA Body part of the ENCOUNTER data group comprises an instance of the Observation class containing a list of Specialties. The Observation class is related to the Administrative Observations Section by an entry relationship.

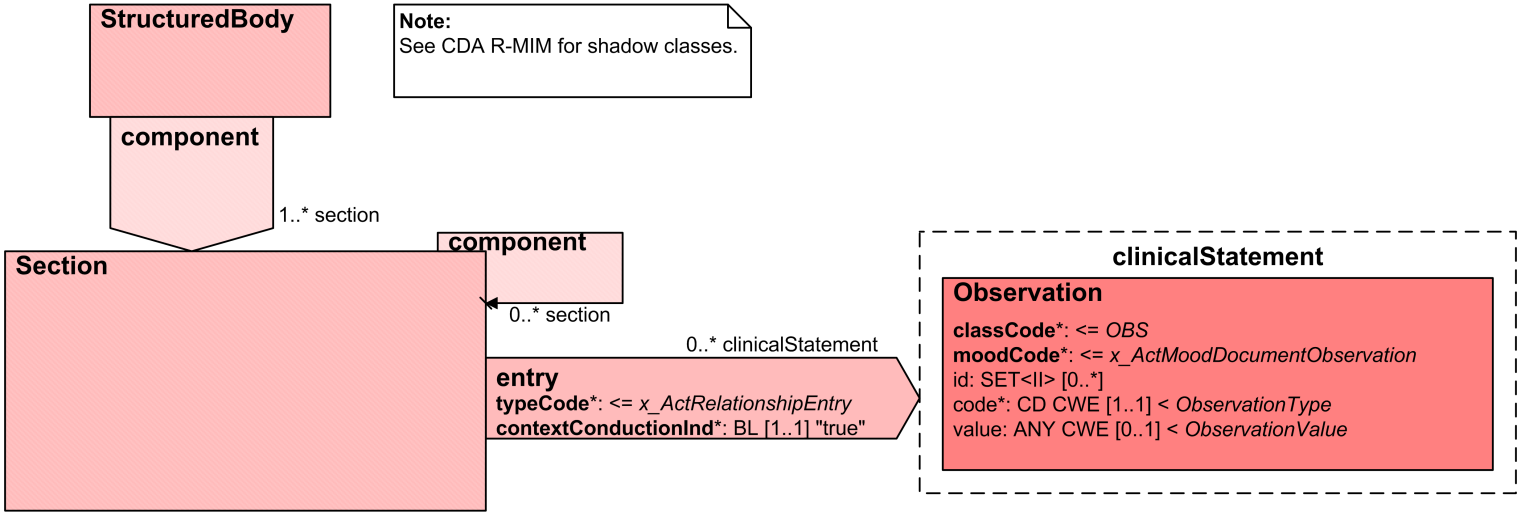

Figure 7.4. Encounter - Body

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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Encounter	Administrative details of the subject of care's stay in a healthcare facility.	1..1	componentOf[enc]/**encompassingEncounter**		
Encounter > **Encounter Period**	The date (and optionally time) of the start and end of the encounter that this discharge summary refers to.	1..1	componentOf[enc]/encompassingEncounter/**effectiveTime**		See <time> for available attributes.
Encounter > **Separation Mode**	Status at separation of the subject of care and place to which the person is released.	1..1	componentOf[enc]/encompassingEncounter/**dischargeDispositionCode**	AIHW Mode of Separation [AIHW2005]	
Encounter > **Location of Discharge**	The physical location from which the patient was discharged. In the case of admitted patients, this should be the ward in which they were located at the time of discharge. For non-admitted patients, this may be the department in which the encounter occurred.	0..1	**participant**		
			participant/**@typeCode="ORG"**		
			participant/**associatedEntity**		
			participant/associatedEntity/**@classCode="SDLOC"**		
		0..*	participant/associatedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
		1..1	participant/associatedEntity/**code/originalText**		
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component/section[admin_obs]		

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Encounter > **Specialty**	The clinical specialty under which the patient was treated during the encounter.	1..*	**entry[specialty]**		
			entry[specialty]/**@typeCode="DRIV"**		
			entry[specialty]/**observation**		
			entry[specialty]/observation/**@classCode="OBS"**		
			entry[specialty]/observation/**@moodCode="EVN"**		
			entry[specialty]/observation/**code**	Medical Board of Australia: Medical Specialties and Specialty Fields [MBA2010a]	See <code> for available attributes.
			entry[specialty]/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[specialty]/observation/**value:LIST<CD>**	NS	

Example 7.3. Encounter XML Fragment

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

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

   <!-- Begin CDA Header -->

   ...

   <!-- Begin Location of Discharge -->
 <participant typeCode="ORG">
  <associatedEntity classCode="SDLOC">

   <!-- ID is used for system purposes such as matching -->
   <id root="88373F16-0CE8-11E0-81E5-6969DFD72085"/>

   <code>
    <originalText>Ward B</originalText>
   </code>
  </associatedEntity>
 </participant>
 <!-- End Location of Discharge -->

 ...

   <!-- Begin Encounter (header part) -->
 <componentOf>
  <encompassingEncounter>

   <!-- Encounter Period -->
   <effectiveTime>
    <low value="20090101"/>
    <high value="20090125"/>
   </effectiveTime>

   <!-- Separation Mode -->
   <dischargeDispositionCode code="8"
             codeSystem="2.16.840.1.113883.13.65"
             codeSystemName="Episode of admitted patient care-separation mode"
             displayName="Other (includes discharge to usual residence, own accommodation/welfare institution
                   (includes prisons, hostels and group homes providing primarily welfare services))"/>

   ...

  </encompassingEncounter>
 </componentOf>
 <!-- End Encounter (header part) -->
   <!-- End CDA Header -->

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

         <!-- Begin Section Administrative Observations -->
         <component>
            <section>
```

```
            <code code="102.16080" codeSystem="1.2.36.1.2001.1001.101"
               codeSystemName="NCTIS Data Components" displayName="Administrative Observations" />
            <title>Administrative Observations</title>
            <text>
               <table>
                  <tbody>

                     ...

                     <tr>
                        <th>Specialties</th>
                        <td>Dermatology, Paediatric cardiology, Rheumatology</td>
                     </tr>
                  </tbody>
               </table>
            </text>

            ...

            <!-- Begin Encounter - Specialty (Administrative Observations) -->
      <entry typeCode="DRIV"><!-- [specialty] -->
       <observation classCode="OBS" moodCode="EVN">

        <!-- ID is used for system purposes such as matching -->
        <id root="A27F2F28-C379-11DE-9550-A59055D89593"/>
        <code code="103.16028"
          codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Specialty"/>

        <value code="394582007"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Dermatology"
           xsi:type="CD"/>
        <value code="408459003"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Paediatric cardiology"
           xsi:type="CD"/>
        <value code="394810000"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Rheumatology"
           xsi:type="CD"/>
       </observation>
      </entry>
      <!-- End Encounter - Specialty (Administrative Observations) -->
     </section>
    </component>
    <!-- End Section Administrative Observations -->

          ...

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

7.1.1.1.1 RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE

Identification

Name	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	ENCOUNTER	Essential	1..1

CDA R-MIM Representation

Figure 7.5, “Responsible Health Professional at Time of Discharge” 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 Responsible Health Professional at Time of Discharge is represented by the EncounterParticipant class.

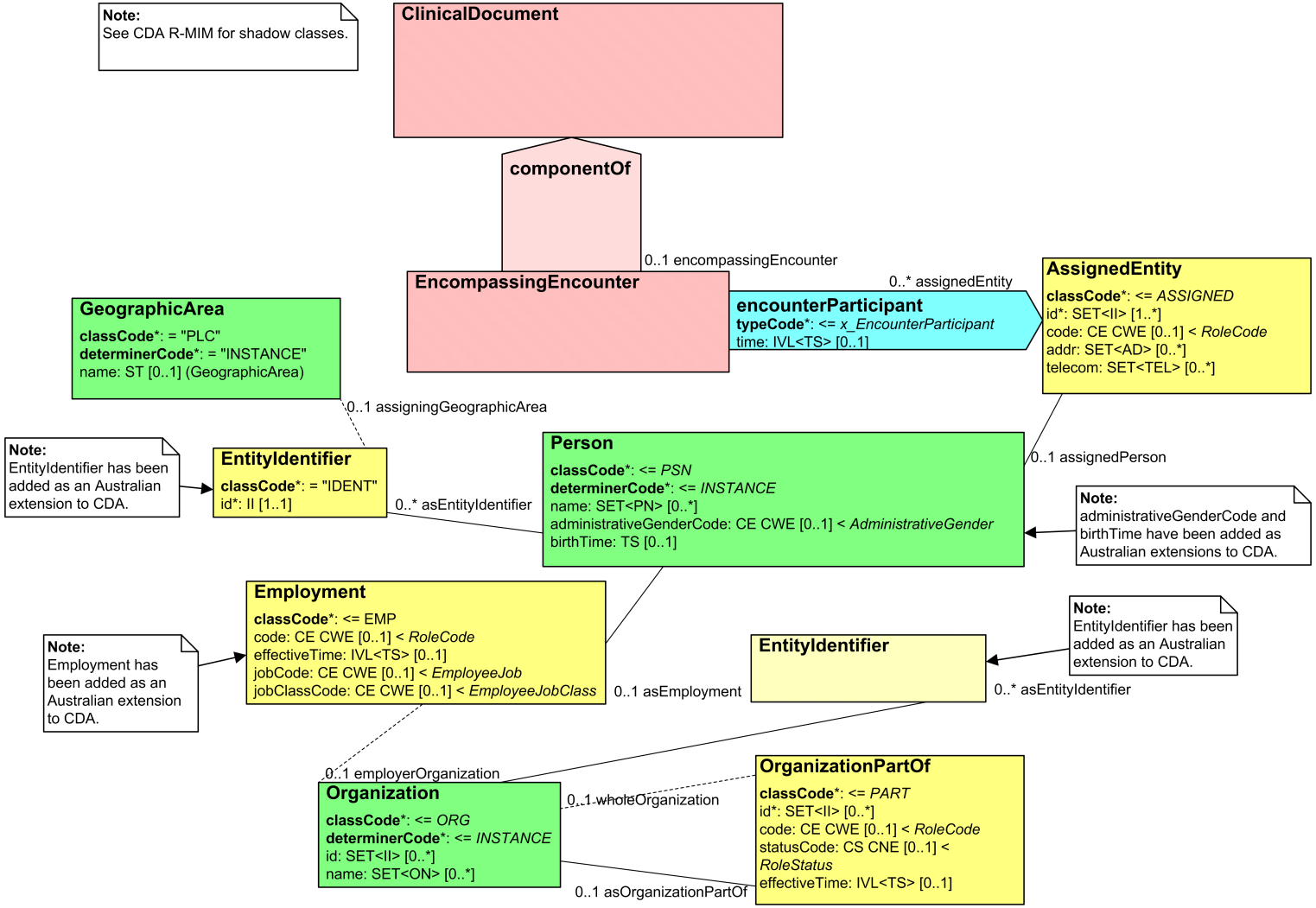

Figure 7.5. Responsible Health Professional at Time of Discharge

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument/componentOf/encompassingEncounter		
Responsible Health Professional at Time of Discharge	The healthcare provider who has the overall responsibility for the care given to the subject of care at the time of discharge.	1..1	**encounterParticipant**		
Responsible Health Professional at Time of Discharge > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	encounterParticipant/**@typeCode="DIS"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Responsible Health Professional at Time of Discharge".	
Responsible Health Professional at Time of Discharge > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	encounterParticipant/**assignedEntity/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
Responsible Health Professional at Time of Discharge > **Participation Period**	The time interval during which the participation in the health care event occurred.	0..1	encounterParticipant/**time**		See <time> for available attributes.
n/a	n/a	1..1	encounterParticipant/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.
Responsible Health Professional at Time of Discharge > **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	encounterParticipant/assignedEntity/**assignedPerson**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Responsible Health Professional at Time of Discharge > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	encounterParticipant/assignedEntity/assignedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Responsible Health Professional at Time of Discharge > 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..*	encounterParticipant/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Responsible Health Professional at Time of Discharge > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	encounterParticipant/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Responsible Health Professional at Time of Discharge > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Responsible Health Professional at Time of Discharge > 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 encounterParticipant/assignedEntity/assignedPerson.
Responsible Health Professional at Time of Discharge > 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..*	encounterParticipant/assignedEntity/assignedPerson/<Person Name>		See common pattern: Person Name.
Responsible Health Professional at Time of Discharge > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	>encounterParticipant/assignedEntity/assignedPerson/**<Employment>**		See common pattern: Employment.

Example 7.4. Responsible Health Professional at Time of Discharge XML Fragment

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

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

   …

   <!-- Begin Encounter (header part) -->
 <componentOf>
  <encompassingEncounter>

   ...

   <!-- Begin Responsible Health Professional at Time of Discharge -->
   <encounterParticipant typeCode="DIS">
    <!-- Participation period -->
    <time>
     <low value="20090101" />
     <high value="20090125" />
    </time>
    <assignedEntity>

     <!-- ID is used for system purposes such as matching -->
     <id root="A19A7C1A-0CD0-11E0-AE84-C750DFD72085" />

     <!-- Role -->
     <code code="253314 " codeSystem="2.16.840.1.113883.13.62"
      codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition"
      displayName="Medical Oncologist" />

     <!-- 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 value="mailto:doctor@hospital.com.au" />
     <assignedPerson>

      <!-- Person Name -->
      <name use="L">
       <prefix>Miss</prefix>
       <given>Good</given>
       <family>Oncologist</family>
      </name>


      <!-- Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
       <ext:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003615234567890" />
```

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

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

        <!-- Occupation -->
        <ext:jobCode code="253314 " codeSystem="2.16.840.1.113883.13.62"
         codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition"
         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>Acme Hospital One</name>

         <asOrganizationPartOf>
          <wholeOrganization>

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

           <!-- Entity Identifier -->
           <ext:asEntityIdentifier classCode="IDENT">
            <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621231167899" />
            <ext:assigningGeographicArea classCode="PLC">
             <ext:name>National Identifier</ext:name>
            </ext:assigningGeographicArea>
           </ext:asEntityIdentifier>
          </wholeOrganization>
         </asOrganizationPartOf>
        </ext:employerOrganization>
       </ext:asEmployment>
      </assignedPerson>
     </assignedEntity>
    </encounterParticipant>
    <!-- End Responsible health professional at time of discharge -->

    ...

   </encompassingEncounter>
  </componentOf>
  <!-- End Encounter (header part) -->
    <!-- End CDA Header -->


</ClinicalDocument>
```

7.1.1.1.2 OTHER PARTICIPANT

Identification

Name	OTHER PARTICIPANT
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	ENCOUNTER	Optional	0..*

CDA R-MIM Representation

Figure 7.6, “Other Participant” 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 OTHER PARTICIPANT data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (NEHTA CDA Extension) which is associated to the associatedEntity.

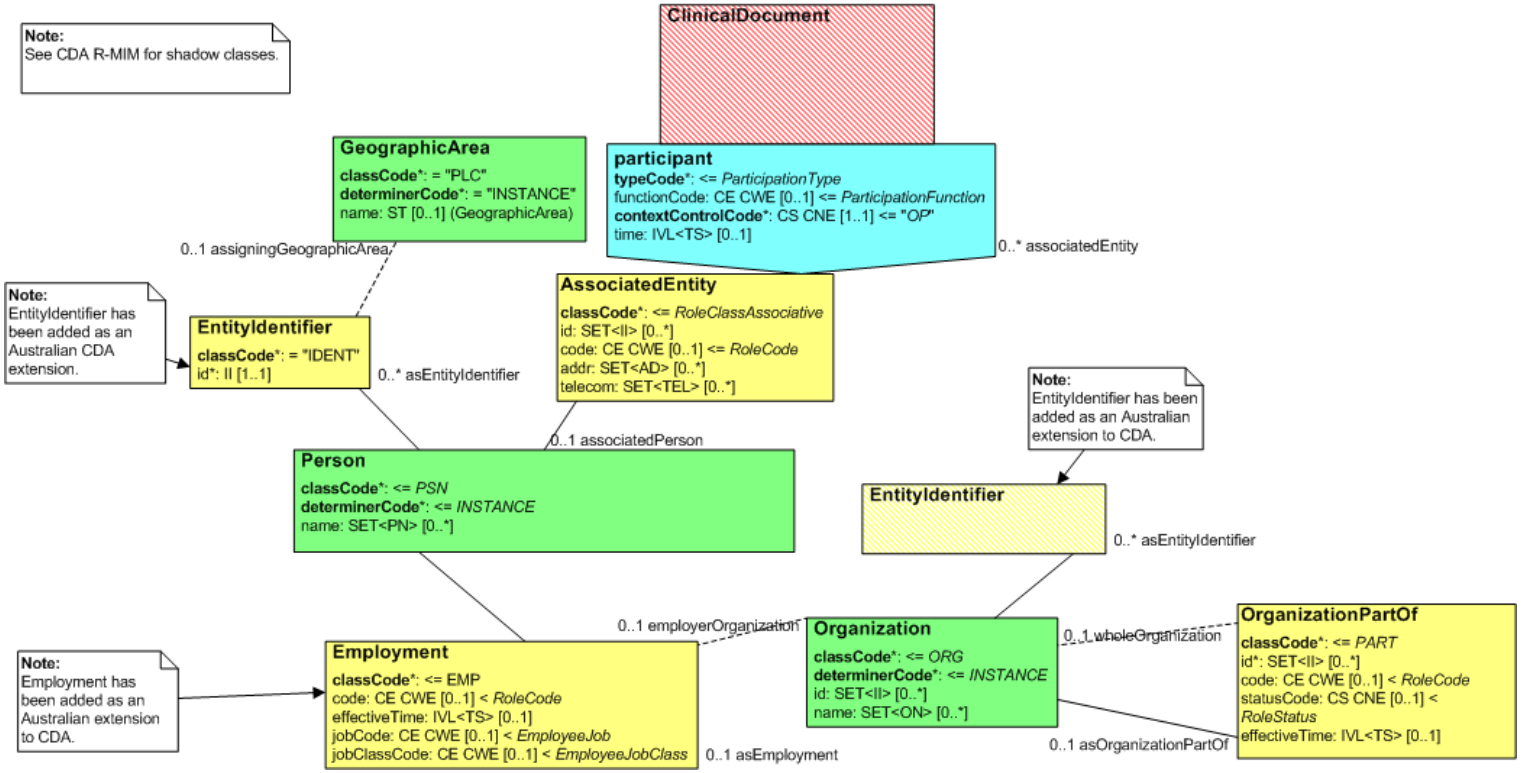

Figure 7.6. Other Participant

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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Other Participant	Other healthcare providers who were involved in the encounter, or individuals associated with the patient at the time of the encounter, and the role that they played – e.g. registrar, referred specialist, referring clinician, emergency contact.	0..*	**participant**		
Other Participant > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="PART"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Other Participant".	
Other Participant > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative	
			participant/**associatedEntity/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
Other Participant > **Participation Period**	The time interval during which the participation in the health care event occurred.	0..1	participant/**time**		See <time> for available attributes.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
n/a	n/a	0..*	participant/associatedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	
Other Participant > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	participant/associatedEntity/**associatedPerson**		
Other Participant > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..* / 0..*	participant/associatedEntity/associatedPerson/**<Entity Identifier>**	If the Other Participant has an Australian HPI-I, then Entity Identifier is **ESSENTIAL**, otherwise it is **OPTIONAL**. If the Other Participant has an Australian HPI-I, then one value of Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.
Other Participant > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	0..*	participant/associatedEntity/**<Address>**		See common pattern: Address.
Other Participant > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Other Participant > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		Person OR Organisation OR Device **SHALL** be instantiated as a Person. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Other Participant > Participant > Person or Organisation or Device > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in participant/associatedEntity/associatedPerson.
Other Participant > Participant > Person or Organisation or Device > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	participant/associatedEntity/associatedPerson/<Person Name>		See common pattern: Person Name.
Other Participant > Participant > Person or Organisation or Device > Person > **Relationship to Subject of Care**	The relationship of a participant to a subject of care (patient).	0..1	See: Known Issues		
Other Participant > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	participant/associatedEntity/associatedPerson/**<Employment>**		See common pattern: Employment.

Example 7.5. Other Participant XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

 <!-- Begin Other Participant (No HPI-O) -->
 <participant typeCode="PART">

  <!-- Participation Period -->
  <time>
   <low value="20090101" />
   <high value="20090125" />
  </time>

  <associatedEntity classCode="CAREGIVER">

   <!-- ID is used for system purposes such as matching -->
   <id root="5D2CFA72-0CE8-11E0-8796-2A69DFD72085" />

   <!-- Role -->
   <code>
    <originalText>Primary Carer</originalText>
   </code>

   <!-- Address -->
   <addr use="H">
    <streetAddressLine>55 Carer 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:0711111111" />
   <associatedPerson>

    <!-- Name -->
    <name>
     <prefix>Mr.</prefix>
     <family>Carer</family>
    </name>

   </associatedPerson>
  </associatedEntity>
 </participant>
 <!-- End Other Participant (No HPI-O) -->

 <!-- Begin Other Participant (With HPI-0) -->
 <participant typeCode="PART">
```

```
<!-- Participation Period -->
<time>
 <low value="20090101" />
 <high value="20090125" />
</time>

<associatedEntity classCode="PROV">

 <!-- ID is used for system purposes such as matching -->
 <id root="5D2CFA72-0CE8-11E0-8796-2A69DFD72085" />

 <!-- Role -->
 <code code="253318 " codeSystem="2.16.840.1.113883.13.62"
  codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
  displayName="Neurologist" />

 <!-- Address -->
 <addr use="WP">
  <streetAddressLine>55 Specialist Road</streetAddressLine>
  <city>Nehtaville</city>
  <state>QLD</state>
  <postalCode>5555</postalCode>
  <additionalLocator>32568931</additionalLocator>
  <country>Australia</country>
 </addr>

 <!-- Electronic Communication Detail -->
 <telecom use="WP" value="tel:0722222222" />

 <associatedPerson>

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

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

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

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

   <!-- Occupation -->
   <ext:jobCode code="253318 " codeSystem="2.16.840.1.113883.13.62"
    codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
    displayName="Neurologist" />

   <!-- 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>Neurology Specialists</name>

      <asOrganizationPartOf>
       <wholeOrganization>

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

        <!-- Entity Identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
         <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621231164512" />
         <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
         </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
       </wholeOrganization>
      </asOrganizationPartOf>
     </ext:employerOrganization>
    </ext:asEmployment>
   </associatedPerson>
  </associatedEntity>
 </participant>
 <!-- End Other Participant  (With HPI-0)-->

 ...

 <!-- End CDA Header -->

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

        …

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

</ClinicalDocument>
```

7.1.1.2 PROBLEMS/DIAGNOSES THIS VISIT

Identification

Name	PROBLEMS DIAGNOSES THIS VISIT
Metadata Type	Section
Identifier	S-16142

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Optional	0..1
	PROBLEM/DIAGNOSIS	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	EVENT	Essential	1..1

CDA R-MIM Representation

Figure 7.7, “Problems Diagnoses This Visit” 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.

Problems/Diagnoses This Visit comprise of a Section class nested using the component relationship under the Event Section class.

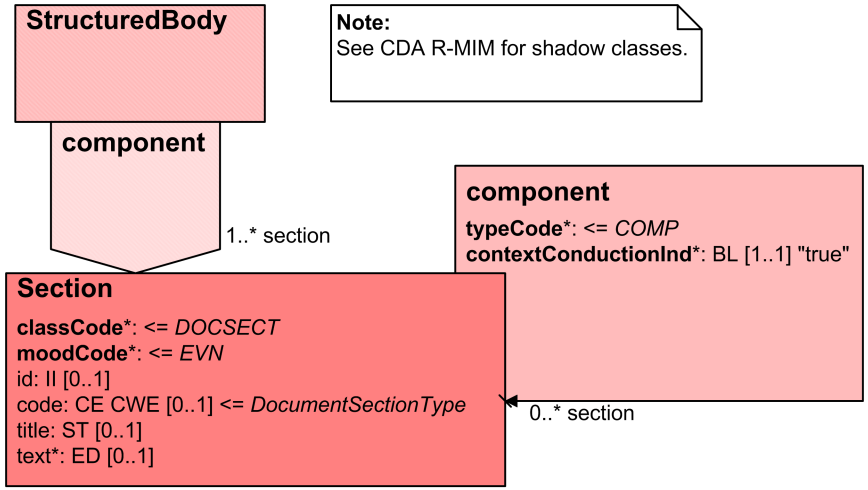

Figure 7.7. Problems Diagnoses This Visit

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component/section[event]		
Problems/Diagnoses This Visit	Describes the diagnostic labels or problem statements assigned by the healthcare provider to describe the diagnoses or health/medical problems relevant to the subject of care during the encounter.	1..1	**component[prob_visit]/section/code**		
			component[prob_visit]/section/code/**@code="101.16142"**		
			component[prob_visit]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[prob_visit]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[prob_visit]/section/code/**@displayName="Problems/Diagnoses This Visit"**		
			component[prob_visit]/section/**title="Problems/Diagnoses This Visit"**		
			component[prob_visit]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.6. Problems Diagnoses This Visit XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>

     ...

     <!-- Begin Problems/Diagnoses this Visit section -->
     <component><!-- [prob_visit] -->
      <section>
       <code code="101.16142"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Problems/Diagnoses This Visit"/>

       <title>Problems/Diagnoses This Visit</title>
       <text/>

       ...

      </section>
     </component>
     <!-- End Problems/Diagnoses this Visit section -->

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

   ...


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

</ClinicalDocument>
```

7.1.1.2.1 EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	PROBLEMS/DIAGNOSES THIS VISIT	Optional	0..1

CDA R-MIM Representation

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

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

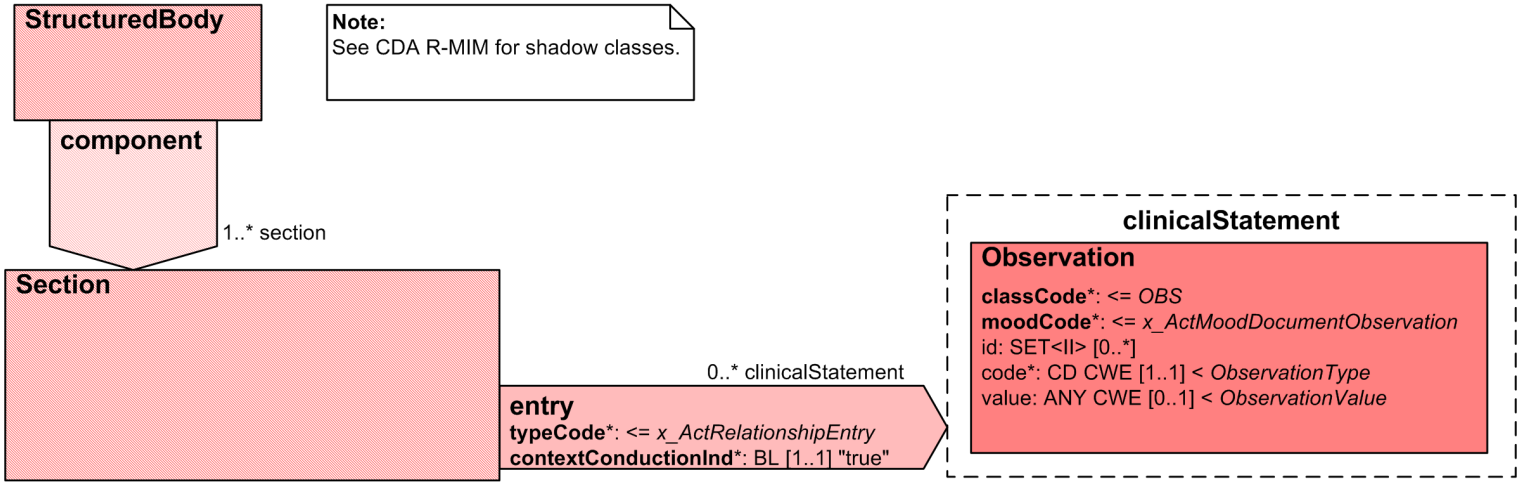

Figure 7.8. Exclusion Statement - Problems and Diagnoses

CDA Mapping

Note

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[prob_visit]/section		
Exclusion Statement - Problems and Diagnoses > **Global Statement**	Global statements about the exclusion.	1..1	**entry[gbl_prob]**		
			entry[gbl_prob]/**observation**		
			entry[gbl_prob]/observation/**@classCode="OBS"**		
			entry[gbl_prob]/observation/**@moodCode="EVN"**		
			entry[gbl_prob]/observation/**code**		
			entry[gbl_prob]/observation/code/**@code="103.16302.4.3.1"**		
			entry[gbl_prob]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_prob]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_prob]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_prob]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

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

Example 7.7. Exclusion Statement - Problems and Diagnoses XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>

     <!-- Begin Problems/Diagnoses this Visit section -->
     <component><!-- [prob_visit] -->
      <section>

       <!-- Begin Exclusion Statement - Problems and Diagnoses -->
       <!-- Global Statement -->
       <entry>
        <!-- [gbl_prob] -->

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

        <code code="103.16302.4.3.1" codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components" displayName="Global Statement" />

        <value code="01" codeSystem="1.2.36.1.2001.1001.101.104.16299"
         codeSystemName="Global Statement Values"
         displayName="None known" xsi:type="CD" />

       </observation>
      </entry>
      <!-- End Exclusion Statement - Problems and Diagnoses -->

      ...

     </section>
    </component>
    <!-- End Problems/Diagnoses this Visit section -->

    ...

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

 ...
```

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

</ClinicalDocument>
```

7.1.1.2.2 PROBLEM/DIAGNOSIS

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	PROBLEMS/DIAGNOSES THIS VISIT	Optional	0..*

CDA R-MIM Representation

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

Each PROBLEM/DIAGNOSIS data group is represented by an Observation related to the Problems/Diagnoses This Visit Section class by an entry relationship.

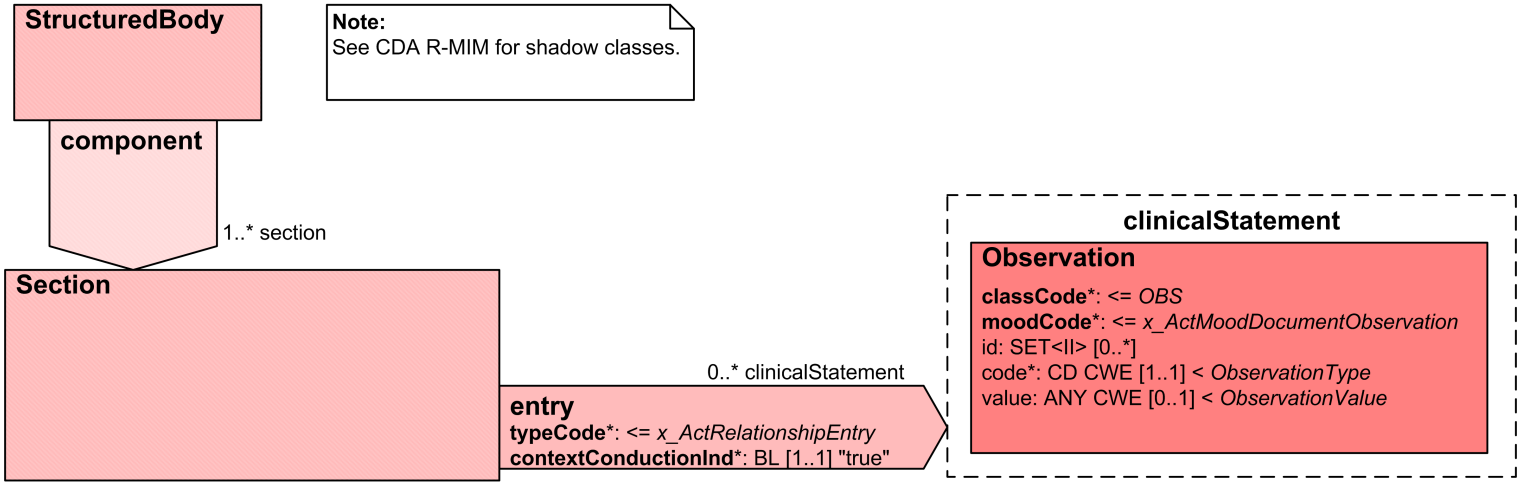

Figure 7.9. Problem/Diagnosis This Visit

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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[prob_visit]/section		
Problems/Diagnosis	Describes a diagnostic label or problem statement assigned by the healthcare provider to describe the diagnoses or health/medical problems affecting the subject of care.	0..*	**entry[prob]**		
			entry[prob]/**observation**		
			entry[prob]/observation/**@classCode="OBS"**		
			entry[prob]/observation/**@moodCode="EVN"**		
			entry[prob]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Problems/Diagnosis > **Problem/Diagnosis Type**	The type used to categorise the problem/diagnosis.	1..1	entry[prob]/observation/**code**	NS	See <code> for available attributes.
Problems/Diagnosis > **Problem/Diagnosis Description**	An identifying description of the problem/diagnosis.	1..1	entry[prob]/observation/**value:CD**	SNOMED CT-AU Problem/Diagnosis Reference Set	

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

Example 7.8. Problem/Diagnosis XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>

     <!-- Begin Problems/Diagnoses this Visit section -->
     <component><!-- [prob_visit] -->
      <section>

       ...

       <!-- Begin Problem/Diagnosis -->
       <entry><!-- [prob] -->
        <observation classCode="OBS" moodCode="EVN">

         <!-- ID is used for system purposes such as matching -->
         <id root="81FEB786-C465-11DE-B347-E8CA56D89593"/>

         <!-- Problem/Diagnosis Type -->
         <code code="116223007"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Comorbidity"/>

         <!-- Problem/Diagnosis Description -->
         <value xsi:type="CD"
            code="236629009"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED-CT"
            codeSystemVersion="20090731"
            displayName="Chronic radiation cystitis"/>
        </observation>
       </entry>
       <!-- End Problem/Diagnosis -->


       ...

      </section>
     </component>
```

```
      <!-- End Problems/Diagnoses this Visit section -->

      ...

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

</ClinicalDocument>
```

7.1.1.3 CLINICAL INTERVENTIONS PERFORMED THIS VISIT

Identification

Name	CLINICAL INTERVENTIONS PERFORMED THIS VISIT
Metadata Type	Section
Identifier	S-20109

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	EVENT	Optional	0..1

CDA R-MIM Representation

Figure 7.10, “Clinical Interventions Performed This Visit” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

Clinical Interventions Performed This Visit is comprised of a Section class nested using the component relationship under the Event Section class. Each CLINICAL INTERVENTION data group is represented by a Procedure related to the Clinical Interventions Performed This Visit Section class by an entry relationship.

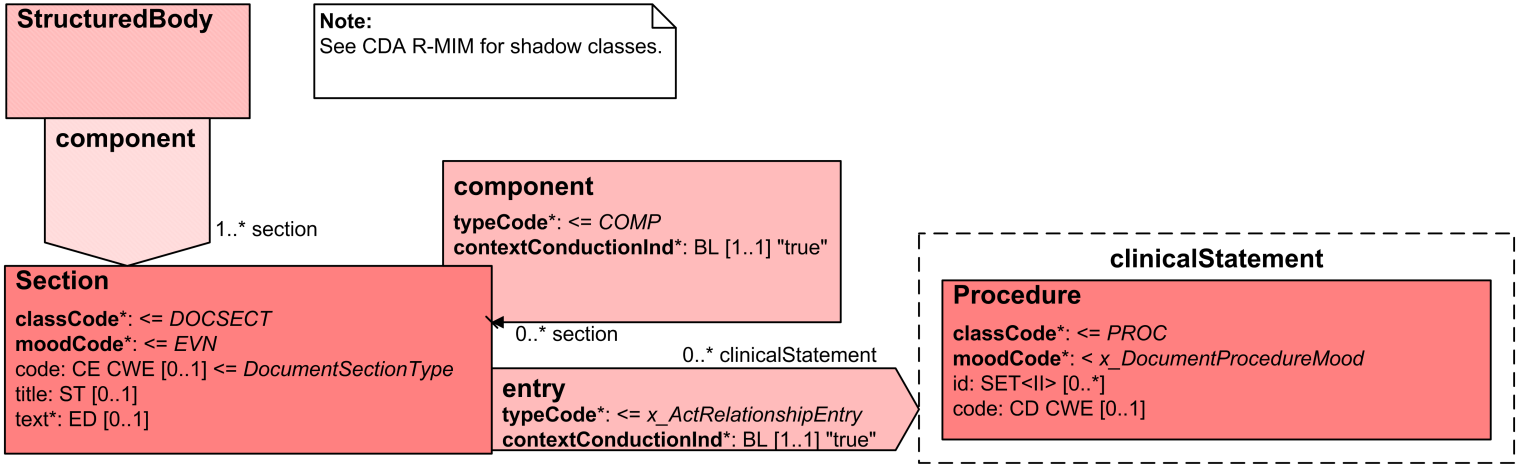

Figure 7.10. Clinical Interventions Performed This Visit

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section		
Clinical Interventions Performed This Visit	Describes the clinical interventions (including operations, procedures and relevant nursing and allied health interventions) performed on the subject of care during the healthcare encounter.	0..1	**component[inter_visit]/section/code**		
			component[inter_visit]/section/code/**@code="101.20109"**		
			component[inter_visit]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[inter_visit]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[inter_visit]/section/code/**@displayName="Clinical Interventions Performed This Visit"**		
			component[inter_visit]/section/**title="Clinical Interventions Performed This Visit"**		
			component[inter_visit]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section		
Clinical Interventions Performed This Visit > **Clinical Intervention**	Describes an intervention carried out by a healthcare provider to improve, maintain or assess the health of a subject of care, in a clinical situation that may require clinical judgement to produce a subjective finding (i.e. an 'action' that may include an 'evaluation').	1..*	component[inter_visit]/section/**entry[inter]**		See <code> for available attributes.
			component[inter_visit]/section/entry[inter]/**@typeCode="DRIV"**		
			component[inter_visit]/section/entry[inter]/**procedure**		
			component[inter_visit]/section/entry[inter]/procedure/**@classCode="PROC"**		
			component[inter_visit]/section/entry[inter]/procedure/**@moodCode="EVN"**		
			component[inter_visit]/section/entry[inter]/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.
Clinical Interventions Performed This Visit > Clinical Intevention > **Clinical Intervention Description**	Describes the clinical intervention undertaken on or provided to the subject of care.	1..1	component[inter]/section/entry/procedure/**code**	SNOMED CT-AU Procedure foundation reference set	See <code> for available attributes.

Example 7.9. Clinical Interventions Performed This Visit XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

    …

  <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>
     ...

     <!-- Begin Clinical Interventions Performed This Visit section -->
     <component><!-- [inter_visit] -->
      <section>
       <code code="101.20109"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Clinical Interventions Performed This Visit"/>


       <title>Clinical Interventions Performed This Visit</title>
       <text/>


       <!-- Clinical Intervention -->
       <entry typeCode="DRIV"><!-- [inter] -->
        <procedure classCode="PROC" moodCode="EVN">

         <!-- ID is used for system purposes such as matching -->
         <id root="81FEB786-C465-11DE-B347-E8CA56D89593"/>

         <!-- Clinical Intervention Description -->
         <code code="430698003"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Replacement of total knee joint"/>
        </procedure>
       </entry>
      </section>
     </component>
     <!-- End Clinical Interventions Performed This Visit section -->

     ...
```

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


</ClinicalDocument>
```

7.1.1.4 CLINICAL SYNOPSIS

Identification

Name	CLINICAL SYNOPSIS
Metadata Type	Data Group
Identifier	DG-15513

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	EVENT	Essential	1..1

CDA R-MIM Representation

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

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

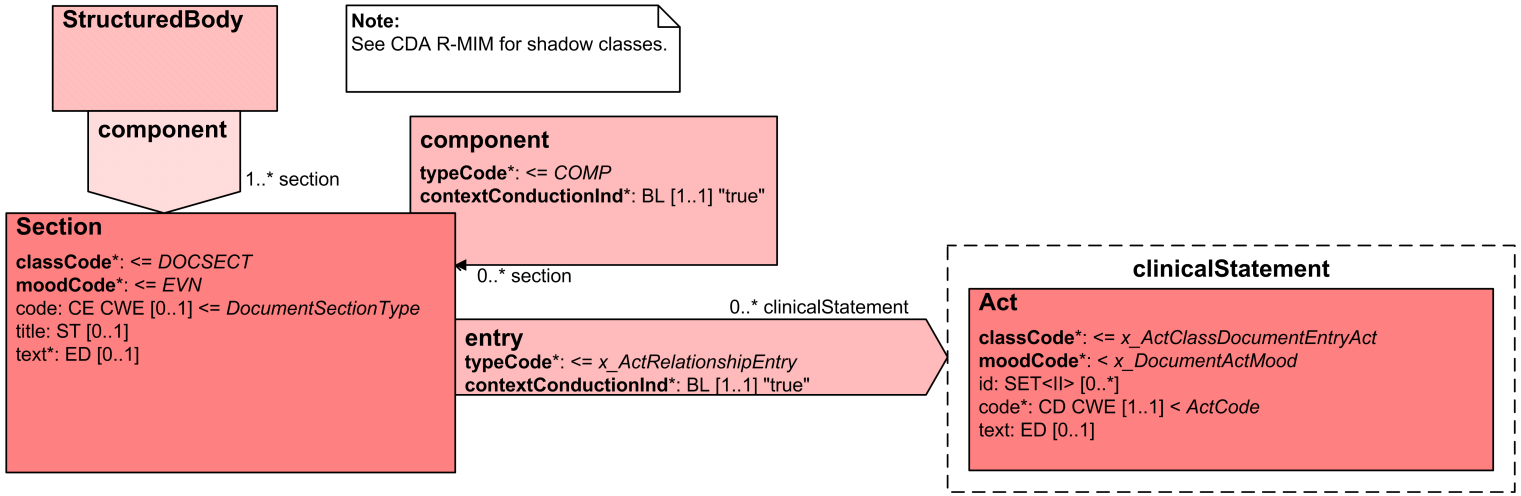

Figure 7.11. Clinical Synopsis

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section		
Clinical Synopsis	Summary information or comments about the clinical management of the subject of care, and the prognosis of diagnoses/problems identified during the healthcare encounter. It may also include health-related information pertinent to the subject of care, and a clinical interpretation of relevant investigations and observations performed on the subject of care (including pathology and diagnostic imaging).	1..1	**component[synop]/section/code**		
			component[synop]/section/code/**@code="102.15513.4.1.1"**		
			component[synop]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[synop]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[synop]/section/code/**@displayName="Clinical Synopsis"**		
			component[synop]/section/**title="Clinical Synopsis"**		
			component[synop]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section		
			component[synop]/section/**entry**		See <code> for available attributes.
			component[synop]/section/entry/**@typeCode="DRIV"**		
			component[synop]/section/entry/**act**		
			component[synop]/section/entry/act/**@classCode="ACT"**		
			component[synop]/section/entry/act/**@moodCode="EVN"**		
			component[synop]/section/entry/act/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			component[synop]/section/entry/act/**code**		
			component[synop]/section/entry/act/**@code="103.15582"**		
			component[synop]/section/entry/act/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[synop]/section/entry/act/**@codeSystemName="NCTIS Data Components"**		
			component[synop]/section/entry/act/**@displayName="Clinical Synopsis Description"**		
Clinical Synopsis > **Clinical Synopsis Description**	The clinical synopsis, written in free text. The description may include a summary of the issues/problems, management strategies, outcomes/progress and possible prognosis.	1..1	component[synop]/section/entry/act/**text:ST**		

Example 7.10. Clinical Synopsis XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

     <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>
     ...

     <!-- Begin Clinical Synopsis section -->
     <component><!-- [synop] -->
      <section>
       <code code="102.15513.4.1.1"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Clinical Synopsis"/>


       <title>Clinical Synopsis</title>
       <text/>

       <entry typeCode="DRIV">
        <act classCode="ACT" moodCode="EVN">

         <!-- ID is used for system purposes such as matching -->
         <id root="39655E76-C465-11DE-8B04-0BC756D89593"/>

         <!--  -->
         <code code="103.15582"
           codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components"
           displayName="Clinical Synopsis Description"/>

         <!-- Clinical Synopsis Description -->
         <text xsi:type="ST">This 61yo female was admitted for elective, right, total knee replacement. Past history of mild
          COPD, mild anaemia, and radiation cystitis. A cemented prosthesis was inserted without difficulty
          under combined lumbar epidural and general anaesthetic. On day 2, she developed bilateral basal
          atelectasis. Ongoing problems with inadequate pain management because of persistent hypotension
          secondary to the epidural. The epidural was ceased and the patient was switched to a morphine PCA
          regime. Due to concern about the potential for pneumonia in the presence of COPD she was commenced on
          oral antibiotics and given regular chest physiotherapy. Due to mild anaemia prior to surgery and
          subsequent operative blood loss she required a blood transfusion of three units. She was given regular
          enoxaparin (Clexane) to reduce the risk of DVT. The patient subsequently makes steady progress,
          regaining good mobility in her knee and is able to mobilise with the aid of a stick. She is on
          regular paracetamol and codeine for pain relief, as well as her usual medications for COPD. The
```

```
            Celecoxib was ceased. Aspirin is to be recommenced at the discretion of the GP. Discharged with
            post-op analgesics and oral antibiotics.</text>
          </act>
        </entry>
      </section>
    </component>
    <!-- End Clinical Synopsis section -->

    ...

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

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

7.1.1.5 DIAGNOSTIC INVESTIGATIONS

Identification

Name	DIAGNOSTIC INVESTIGATIONS
Metadata Type	Section
Identifier	S-20117

Relationships

Children Not Included in Mapping for This Section

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

Parent

Data Type	Name	Obligation	Occurrence
	EVENT	Optional	0..1

CDA R-MIM Representation

Figure 7.12, “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.

Diagnostic Investigations comprises of a Section class related to its parent section by a component relationship.

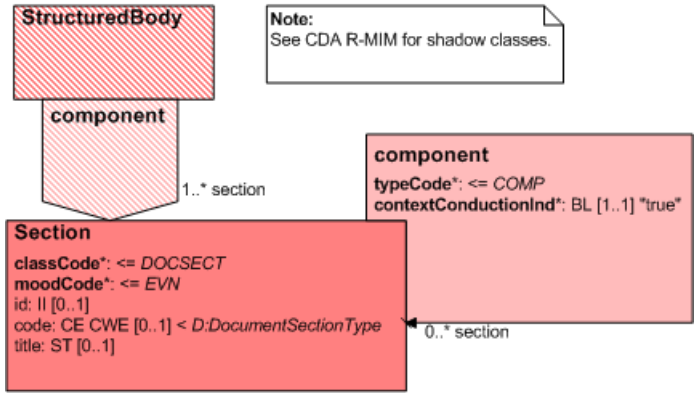

Figure 7.12. Diagnostic Investigations

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section		
Diagnostic Investigations	Describes the diagnostic tests or procedures performed on the subject of care during the healthcare event, that are considered to be relevant to the subject of care's ongoing care.	0..1	component[diag_inv]/**section**		
			component[diag_inv]/section/**code**		
			component[diag_inv]/section/code/**@code="101.20117"**		
			component[diag_inv]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[diag_inv]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[diag_inv]/section/code/**@displayName="Diagnostic Investigations"**		
			component[diag_inv]/section/**title="Diagnostic Investigations"**		
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/		
Diagnostic Investigations > **Pathology Test Result**	The result of a laboratory test which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	See: PATHOLOGY TEST RESULT		
Diagnostic Investigations > **Imaging Examination Result**	The result of an imaging examination which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	See: IMAGING EXAMINATION RESULT		

Example 7.11. Diagnostic Investigations XML Fragment

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

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

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

    <!-- Begin Event section -->
   <component><!-- [event] -->
    <section>
     ...

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

       <title>Diagnostic Investigations</title>

       ...

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

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

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

7.1.1.5.1 PATHOLOGY TEST RESULT

Identification

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

Relationships

Children Not Included in Mapping for This Section

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

Parent

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

CDA R-MIM Representation

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

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

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

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

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

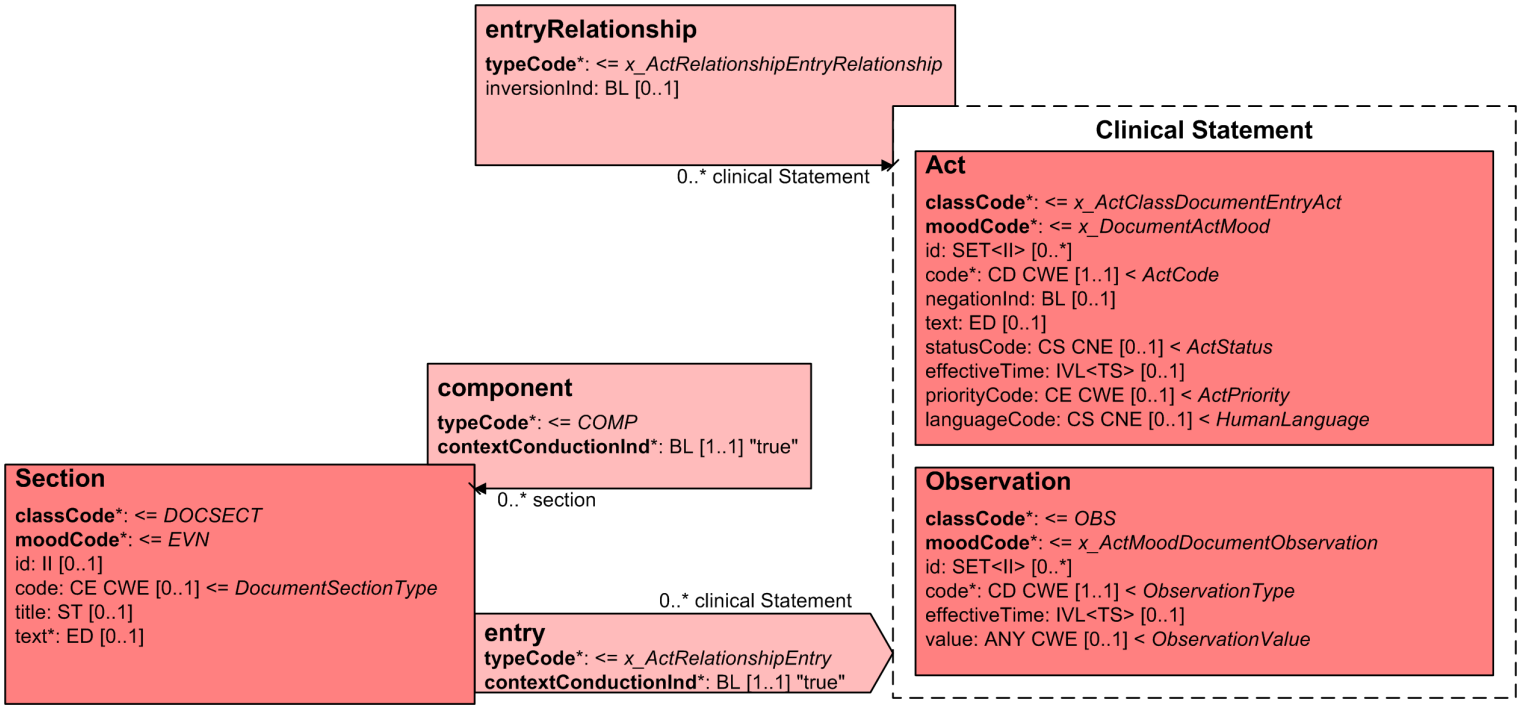

Figure 7.13. Pathology Test Result

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/		
Pathology Test Result	The result of a laboratory test which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	**component[path_test]/section**		
			component[path_test]/section/**code**		
			component[path_test]/section/**@code="102.16144"**		
			component[path_test]/section/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[path_test]/section/**@codeSystemName="NCTIS Data Components"**		
			component[path_test]/section/**@displayName="Pathology Test Result"**		
			component[path_test]/section/**title="Pathology Test Result"**		
			component[path_test]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section/		
Pathology Test Result > **Pathology Test Result Name**	Identification of the pathology test performed, sometimes including specimen type.	1..1	**entry[path_test_res]/observation**		
			entry[path_test_res]/observation**@classCode="OBS"**		
			entry[path_test_res]/observation**@moodCode="EVN"**		
			entry[path_test_res]/observation/**code**	NS	See <code> for available attributes.
Pathology Test Result > **Diagnostic Service**	The diagnostic service that performs the examination.	0..1	entry[path_test_res]/observation/**entryRelationship[diag_serv]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/**observation**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@code="310074003"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystemVersion="20110531"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/code/**@displayName="pathology service"**		
			entry[path_test_res]/observation/entryRelationship[diag_serv]/observation/**value:CD**	HL7 Diagnositc Service Values (table 0074)	See <code> for available attributes.

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Pathology Test Conclusion**	Concise and clinically contextualised narrative interpretation of the pathology test results.	0..1	entry[path_test_res]/observation/**entryRelationship[path_conc]/@typeCode="REFR"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/**observation**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@code="386344002"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystem="2.16.840.1.113883.6.96"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystemVersion="20110531"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@codeSystemName="SNOMED CT-AU"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/code/**@displayName="laboratory findings data interpretation"**		
			entry[path_test_res]/observation/entryRelationship[path_conc]/observation/**value:ST**		
Pathology Test Result > **Test Result Representation**	Rich text representation of the entire result as issued by the diagnostic service.	0..1	entry[path_test_res]/observation/**value:ED**		
Pathology Test Result > **Test Comment**	Additional narrative about the test not captured in other fields.	0..1	entry[path_test_res]/observation/**entryRelationship[tst_cmt]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@classCode="INFRM"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**code**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**@code="103.16468"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/code/**@displayName="Test Comment"**		
			entry[path_test_res]/observation/entryRelationship[tst_cmt]/act/**text:ST**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Test Request Details**	Details concerning a single pathology test requested.	0..*	entry[path_test_res]/observation/**entryRelationship[req_dets]/@typeCode="SUBJ"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/**@inversionInd="true"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/**act**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**@classCode="ACT"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/**code**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@code="102.16160"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/code/**@displayName="Test Request Details"**		
Pathology Test Result > Test Request Details > **Test Requested Name**	Identification of pathology test requested, where the test requested differs from the test actually performed.	0..*	entry[path_test_res]/observation/entryRelationship[req_dets]/act/**entryRelationship[req_name]/ @typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/**observation**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/ observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/ observation/**@moodCode="RQO"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/ observation/**code**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/ code/**@code="103.11017"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/ code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/ code/**@codeSystemName="NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/ code/**@displayName="Test Requested Name"**		
			entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/ observation/**value:CD**	NS	
Pathology Test Result > Test Request Details > **Laboratory Test Result Identifier**	The identifier given to the laboratory test result of a pathology investigation.	0..1	entry[path_test_res]/observation/**id**		See <id> for available attributes.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Pathology Test Result > **Pathology Test Result DateTime**	The date and, optionally, time of the Pathology Test Result observation. If the Pathology Test Result Duration is non-zero, it is the time at which the Pathology Test Result observation was completed, i.e. the date (and time) of the trailing edge of the Pathology Test Result Duration.	1..1	entry[path_test_res]/observation/**entryRelationship[tst_date]/@typeCode="COMP"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/**observation**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**@classCode="OBS"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**@moodCode="EVN"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**code**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@code="103.16605"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@codeSystemName= "NCTIS Data Components"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/code/**@displayName="Pathology Test Result DateTime"**		
			entry[path_test_res]/observation/entryRelationship[tst_date]/observation/**effectiveTime**		See <time> for available attributes.

Example 7.12. Pathology Test Result XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

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

       ...

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

       ...

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

```
      <td>mmol/L</td>
      <td>0.14-0.35</td>
      <td>HH</td>
     </tr>
    </tbody>
   </table>
  </text>
  <entry>
   <observation classCode="OBS" moodCode="EVN">

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

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

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

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

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

      ...

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

    <!-- Begin Overall Pathology Test Result Status -->
    <entryRelationship typeCode="COMP">
     <observation classCode="OBS" moodCode="EVN">
      <code code="308552006" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
       codeSystemVersion="20110531" displayName="Report Status" />
      <value code="3" codeSystem="1.2.36.2001.1001.101.104.16501"
       codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
     </observation>
    </entryRelationship>
    <!-- End Overall Pathology Test Result Status -->

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

```
<!-- End Clinical Information Provided -->

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

 ...

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

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

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

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

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

  <!-- Begin Test Requested Name -->
  <entryRelationship typeCode="COMP">
   <observation classCode="OBS" moodCode="RQO">
    <code code="103.11017" codeSystem="1.2.36.1.2001.1001.101"
     codeSystemName="NCTIS Data Components" displayName="Test Requested Name" />
    <value xsi:type="CD" code="883080000" codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
           displayName="Blood Cell Count">
   </observation>
  </entryRelationship>
  <!-- End Test Requested Name -->

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

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

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

        ...

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

     ...

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

   ...

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

7.1.1.5.1.1 TEST SPECIMEN DETAIL

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

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

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

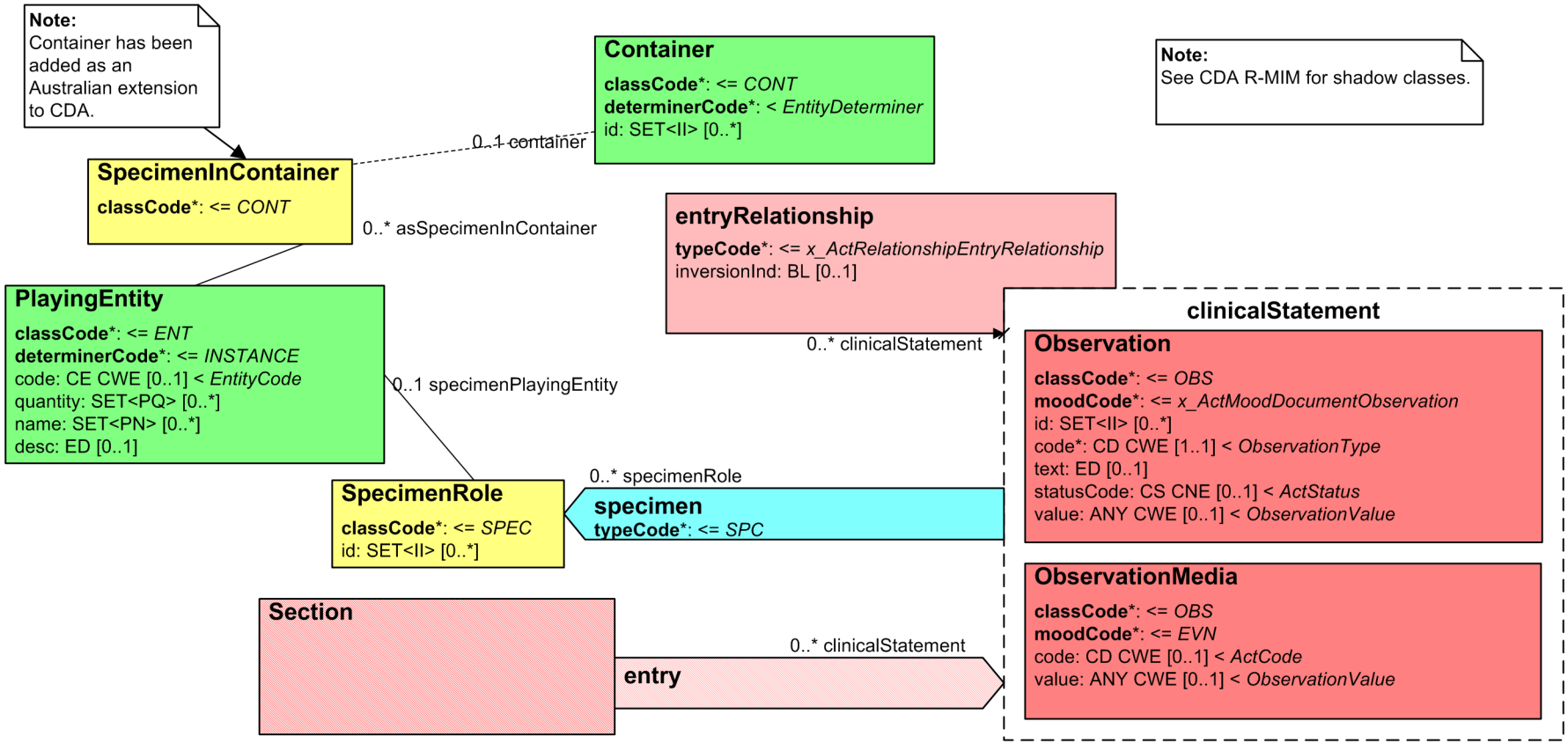

Figure 7.14. Test Specimen Detail

CDA Mapping

Note

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/		
Test Specimen Detail	Details about the individual specimen to which these 'Result group' test results refer, where testing of multiple specimens is required.	1..*	**entryRelationship[spec]/@typeCode="SUBJ"**		
			entryRelationship[spec]/**observation**		
			entryRelationship[spec]/observation/**@classCode="OBS"**		
			entryRelationship[spec]/observation/**@moodCode="EVN"**		
			entryRelationship[spec]/observation/**code**		
			entryRelationship[spec]/observation/code/**@code="102.16156.2.2.1"**		
			entryRelationship[spec]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[spec]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[spec]/observation/code/**@displayName="Test Specimen Detail"**		
Test Specimen Detail > **Specimen Tissue Type**	The type of specimen to be collected.	0..1	entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/**code**	NS	See <code> for available attributes.
Test Specimen Detail > **Collection Procedure**	The method of collection to be used.	0..1	entryRelationship[spec]/observation/**methodCode**	NS	See <code> for available attributes.
Test Specimen Detail > **Anatomical Site (Anatomical Location)**	The anatomical site(s) from where the specimen was taken.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

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

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

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

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

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

Example 7.13. Test Specimen Detail XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

   <!-- Event -->
   <component>
    <section>

    ...

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

      ...

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

        ...
         <entry>
          <observation  classCode="OBS" moodCode="EVN">

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

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

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

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

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

```
 displayName="cubital fossa">

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

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

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

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

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

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

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

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

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

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

<!-- Begin Image -->
<entryRelationship typeCode="SPRT">
 <observationMedia classCode="OBS" moodCode="EVN">
  <id root="62C6AEDE-F08A-11E0-AA3F-10824824019B" />
  <value  mediaType="image/jpeg">
   <reference value="image.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="182923009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT-AU"
      displayName="fasting patient" xsi:type="CD" />
    </observation>
   </entryRelationship>
   <!-- End Sampling Preconditions -->

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

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

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

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

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

  </observation>
 </entryRelationship>
```

```
            <!-- End Test Specimen Detail -->

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

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

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

  ...

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

7.1.1.5.1.2 PATHOLOGY TEST RESULT GROUP

Identification

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

Relationships

Children Not Included in Mapping for This Section

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

Parent

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

CDA R-MIM Representation

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

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

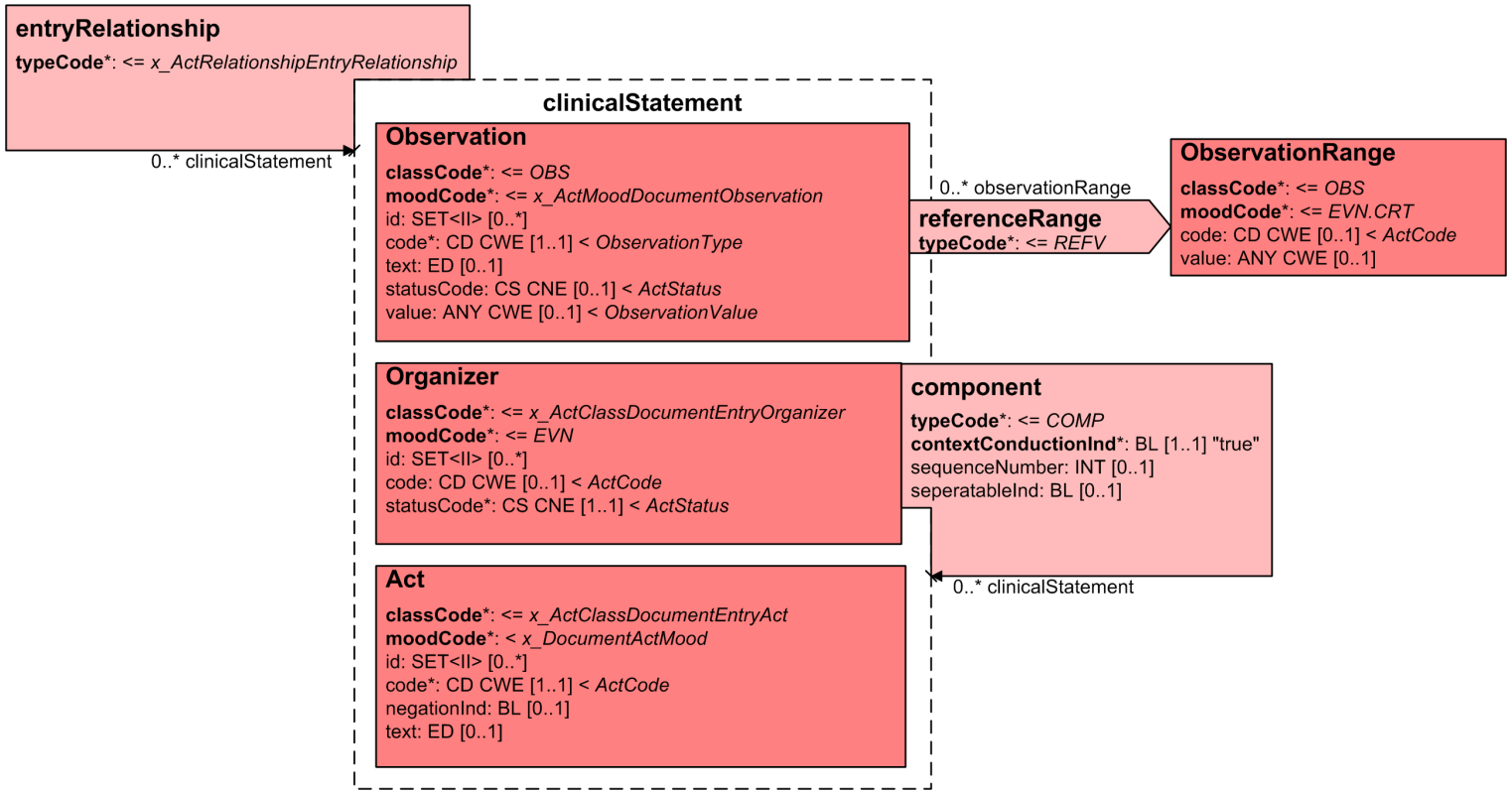

Figure 7.15. Pathology Test Result Group

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/		
Pathology Test Result Group	A group of results.	0..*	**entryRelationship[res_gp]/@typeCode="COMP"**		
			entryRelationship[res_gp]/**organizer**		
			entryRelationship[res_gp]/organizer/**@classCode="BATTERY"**		
			entryRelationship[res_gp]/organizer/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entryRelationship[res_gp]/organizer/**statusCode/@code="completed"**		Required CDA element.
Pathology Test Result Group > **Pathology Test Result Group Name**	The name of a group of pathology test results.	1..1	entryRelationship[res_gp]/organizer/**code**	NS	See <code> for available attributes.
Pathology Test Result Group > **Individual Pathology Test Result**	Specific detailed result, including both the value of the result item, and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[res_gp]/organizer/**component[ind_res]/**		
			entryRelationship[res_gp]/organizer/component[ind_res]/**observation**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/**@classCode="OBS"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/**@moodCode="EVN"**		
			entryRelationship[res_gp]/organizer/component[ind_res]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Name**	The name of an individual pathology test result.	1..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**code**	NS	See <code> for available attributes.
Pathology Test Result Group > Individual Pathology Test Result > **Individual Pathology Test Result Value**	Actual value of the result.	0..1	entryRelationship[res_gp]/organizer/component[ind_res]/observation/**value**		Although **value** is of datatype 'ANY', use only CD, PQ, BL, ST, INT, RTO, IVL_PQ or PPD.

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

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

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

Example 7.14. Pathology Test Result Group XML Fragment

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

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

   ...

   <!-- End CDA Header -->

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

    ...

   <!-- Event section -->
   <component>
    <section>

    ...

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

       ...

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

         ...

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

           ...

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

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

             <statusCode code="completed" />

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

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

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

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

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

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

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

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

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

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

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

    </observation>
   </component>
   <!-- Begin Individual Pathology Test Result -->

   <component>
    <observation classCode="OBS" moodCode="EVN">
     <id root="888FBD14-F089-11E0-8B47-D1804824019B" />
     <code code="14933-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
      displayName="Serum Uric Acid" />
     <value unit="mmol/L" value="0.41" xsi:type="PQ" />
     <interpretationCode code="HH" codeSystemName="HL7ObservationInterpretationNormality"
       codeSystem="2.16.840.1.113883.5.83" displayName="High alert" />
     <entryRelationship typeCode="COMP">
      <act classCode="INFRM" moodCode="EVN">
       <code code="281296001" codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
        displayName="result comments" />
       <text>High alert.</text>
      </act>
     </entryRelationship>
     <entryRelationship typeCode="COMP">
      <act classCode="INFRM" moodCode="EVN">
       <code code="281298000" codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
        displayName="reference range comments" />
       <text>High alert.</text>
      </act>
     </entryRelationship>
     <entryRelationship typeCode="COMP">
      <observation classCode="OBS" moodCode="EVN">
       <code code="308552006" codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT-AU" codeSystemVersion="20110531"
        displayName="report status" />
       <value code="3" codeSystem="1.2.36.1.2001.1001.101.104.16501"
        codeSystemName="NCTIS Result Status Values" displayName="Final" xsi:type="CD" />
      </observation>
     </entryRelationship>
     <referenceRange typeCode="REFV">
      <observationRange classCode="OBS" moodCode="EVN.CRT">
       <code code="260395002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
        displayName="normal range" />
       <value xsi:type="IVL_PQ">
        <low value="0.14" />
        <high value="0.35" />
       </value>
      </observationRange>
     </referenceRange>
    </observation>
   </component>

   ...

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

 ...

</observation>
</entry>
<!-- End Pathology Test Result entry -->
```

```
        </section>
       </component>
       <!-- End Pathology Test Result section -->
      </section>
     </component>
     <!-- End Diagnositic Investigations section -->
    </section>
   </component>
   <!-- End Event Section -->

   ...

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

7.1.1.5.1.2.1 RESULT GROUP SPECIMEN DETAIL

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.16, “Result Group Specimen Detail” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

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

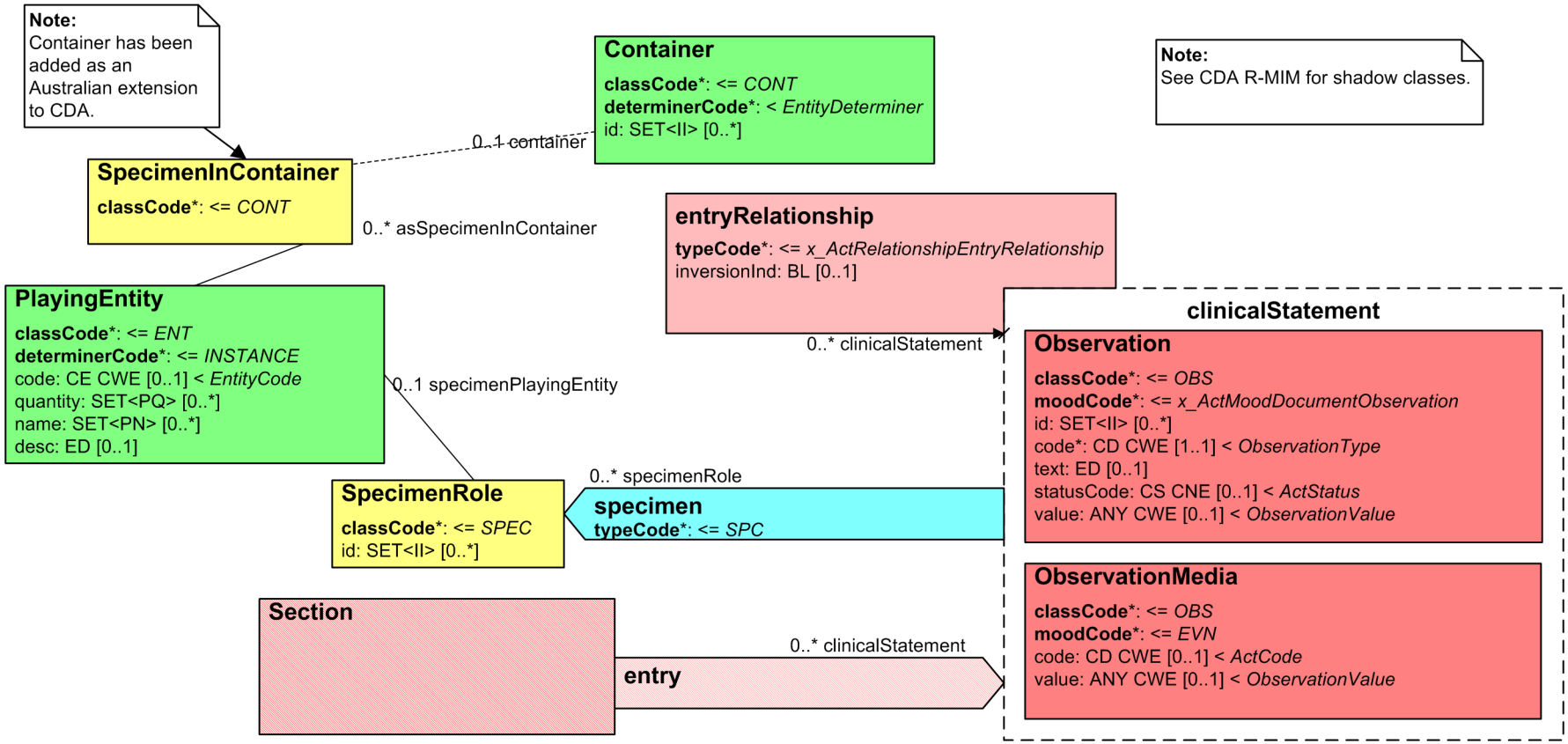

Figure 7.16. Result Group Specimen Detail

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[6] with an appropriate object identifier (OID), and **SHALL** be publicly available.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section /component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/		
Result Group Specimen Detail	Details about the individual specimen to which these 'Result group' test results refer, where testing of multiple specimens is required.	0..1	**component**		
			component/**observation**		
			component/observation/**@classCode="OBS"**		
			component/observation/**@moodCode="EVN"**		
			component/observation/**code**		
			component/observation/code/**@code="102.16156.2.2.2"**		
			component/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component/observation/code/**@codeSystemName="NCTIS Data Components"**		
			component/observation/code/**@displayName="Result Group Specimen Detail"**		
Result Group Specimen Detail > **Specimen Tissue Type**	The type of specimen to be collected.	0..1	component/observation/specimen/specimenRole/specimenPlayingEntity/**code**	NS	See <code> for available attributes.
Result Group Specimen Detail > **Collection Procedure**	The method of collection to be used.	0..1	component/observation/**methodCode**	NS	See <code> for available attributes.
Result Group Specimen Detail > **Anatomical Site (Anatomical Location)**	The anatomical site(s) from where the specimen was taken.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

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

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

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

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

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

Example 7.15. Result Group Specimen Detail XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    ...

     <!-- Event -->
   <component>
    <section>

     ...

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

        ...

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

        ...

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

          ...

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

           ...

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

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

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

```
<!-- End Collection DateTime -->

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

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

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

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

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

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

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

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

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

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

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

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

<!-- Begin Sampling Preconditions -->
<entryRelationship typeCode="COMP">
 <observation classCode="OBS" moodCode="EVN">
  <code code="103.16171" codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components" displayName="Sampling Preconditions" />
```

```
    <value code="182923009" codeSystem="2.16.840.1.113883.6.96"
     codeSystemName="SNOMED CT-AU" displayName="fasting patient" xsi:type="CD" />
   </observation>
  </entryRelationship>
  <!-- End Sampling Preconditions -->

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

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

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

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

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

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

```
            </organizer>
           </entryRelationship>
           <!-- End Pathology Test Result Group -->
          </observation>
         </component>
        </section>
       </component>
       <!-- End Pathology Test Result -->
      </section>
     </component>
     <!-- End Diagnostic Investigations -->
    </section>
   </component>
   <!-- End Event -->

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

7.1.1.5.2 IMAGING EXAMINATION RESULT

Identification

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

Relationships

Children Not Included in Mapping for This Section

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

Parent

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

CDA R-MIM Representation

Figure 7.17, “Imaging Examination Result” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

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

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

The Anatomical Location details are contained in the targetSiteCode.

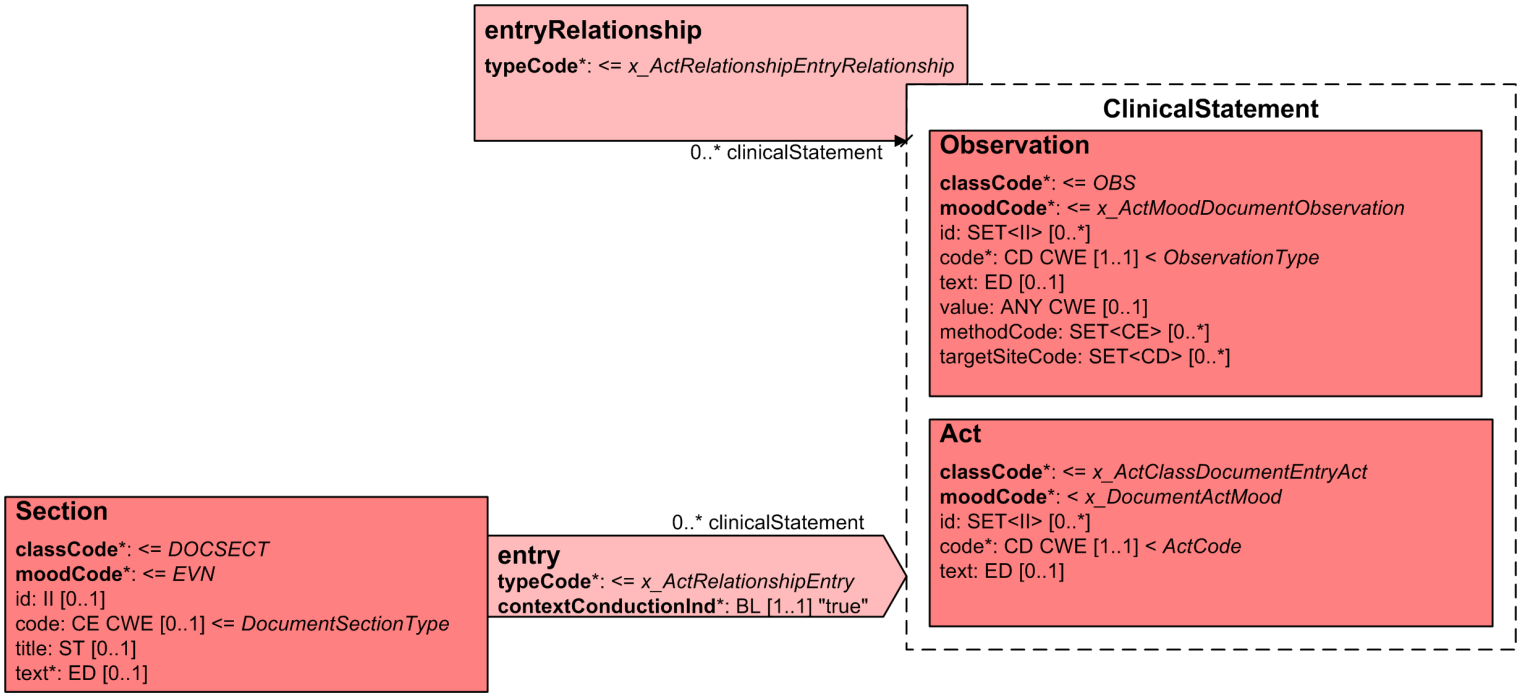

Figure 7.17. Imaging Examination Result

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*[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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/		
Imaging Examination Result	The result of an imaging examination which may be used to record a single valued test but will often be specialised or templated to represent multiple value or 'panel' tests.	0..*	**component[img_exam]/section**		
			component[img_exam]/section/**code**		
			component[img_exam]/section/**@code="102.16145"**		
			component[img_exam]/section/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[img_exam]/section/**@codeSystemName="NCTIS Data Components"**		
			component[img_exam]/section/**@displayName="Imaging Examination Result"**		
			component[img_exam]/section/**title="Imaging Examination Result"**		
			component[img_exam]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[img_exam]/section/		
Imaging Examination Result > **Imaging Examination Result Name**	Identification of the imaging examination or procedure performed, typically including modality and anatomical location (including laterality).	1..1	entry[img_exam_res]/**observation**		
			entry[img_exam_res]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/**id**		
			entry[img_exam_res]/observation/**code**	NS	See <code> for available attributes.
Imaging Examination Result > **Imaging Modality**	The imaging method used to perform the examination.	0..1	entry[img_exam_res]/observation/**methodCode**	NS	See <code> for available attributes.
Imaging Examination Result > **Anatomical Site (Anatomical Location)**	Details about the anatomical locations to which this examination result refers.	0..*	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result > **Clinical Information Provided**	Description of clinical information available at the time of interpretation of results, or a link to the original clinical information provided in the examination request.	0..1	entry[img_exam_res]/observation/**entryRelationship[clin_inf]/@typeCode="COMP"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/**act**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**@classCode="INFRM"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**code**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@code="55752-0"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@codeSystem= "2.16.840.1.113883.6.1"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@codeSystemName="LOINC"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/code/**@displayName="Clinical information"**		
			entry[img_exam_res]/observation/entryRelationship[clin_inf]/act/**text:ST**		
Imaging Examination Result > **Findings**	Narrative description of findings, including comparative findings.	0..1	entry[img_exam_res]/observation/**entryRelationship[find]/@typeCode="REFR"**		
			entry[img_exam_res]/observation/entryRelationship[find]/**observation**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**@classCode="OBS"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**@moodCode="EVN"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**code**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@code="103.16503"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@codeSystem= "1.2.36.1.2001.1001.101"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/code/**@displayName="Findings"**		
			entry[img_exam_res]/observation/entryRelationship[find]/observation/**text:ST**		
Imaging Examination Result > **Imaging Examination Result Group**	A group of structured results.	0..*	See: IMAGING EXAMINATION RESULT GROUP.		
Imaging Examination Result > **Examination Result Representation**	Rich text representation of the entire result as issued by the diagnostic service.	0..1	entry[img_exam_res]/observation/**text**		

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

Example 7.16. Imaging Examination Result XML Fragment

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

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

 <!-- Begin CDA Header -->

 ...

 <!-- End CDA Header -->

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

   ...

  <!-- Event -->
  <component>
   <section>

   ...

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

    ...

     <!-- Begin Imaging Examination Result -->
     <component>
      <section>
       <code code="102.16145" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
        displayName="Imaging Examination Result" />
       <title>Imaging Examination Result</title>
       <text>
        <table>
         <thead>
          <tr>
           <th>Imaging Examination</th>
           <th>Result</th>
           <th>Result Status</th>
          </tr>
         </thead>
         <tbody>
          <tr>
           <td>Chest X-ray</td>
           <td>
            <paragraph>The lungs and pleura appear clear.</paragraph>
            <paragraph>Cardiac and mediastinal contours are within normal limits.</paragraph>
           </td>
           <td>Normal</td>
          </tr>
         </tbody>
        </table>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
```

```
<id root="D3C0BC62-F08D-11E0-A994-06864824019B" />

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

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

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

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

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

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

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

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

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

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

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

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

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

         ...

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

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

         ...

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

       <!-- Begin Imaging Examination Result DateTime -->
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <code code="103.16589" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
          displayName="Imaging Examination Result DateTime" />
         <effectiveTime value="201112141120+1000" />
        </observation>
       </entryRelationship>
       <!-- End Imaging Examination Result DateTime -->

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

  ...

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

...

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

```
    ...

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

7.1.1.5.2.1 IMAGING EXAMINATION RESULT GROUP

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.18, “Imaging Examination Result Group” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

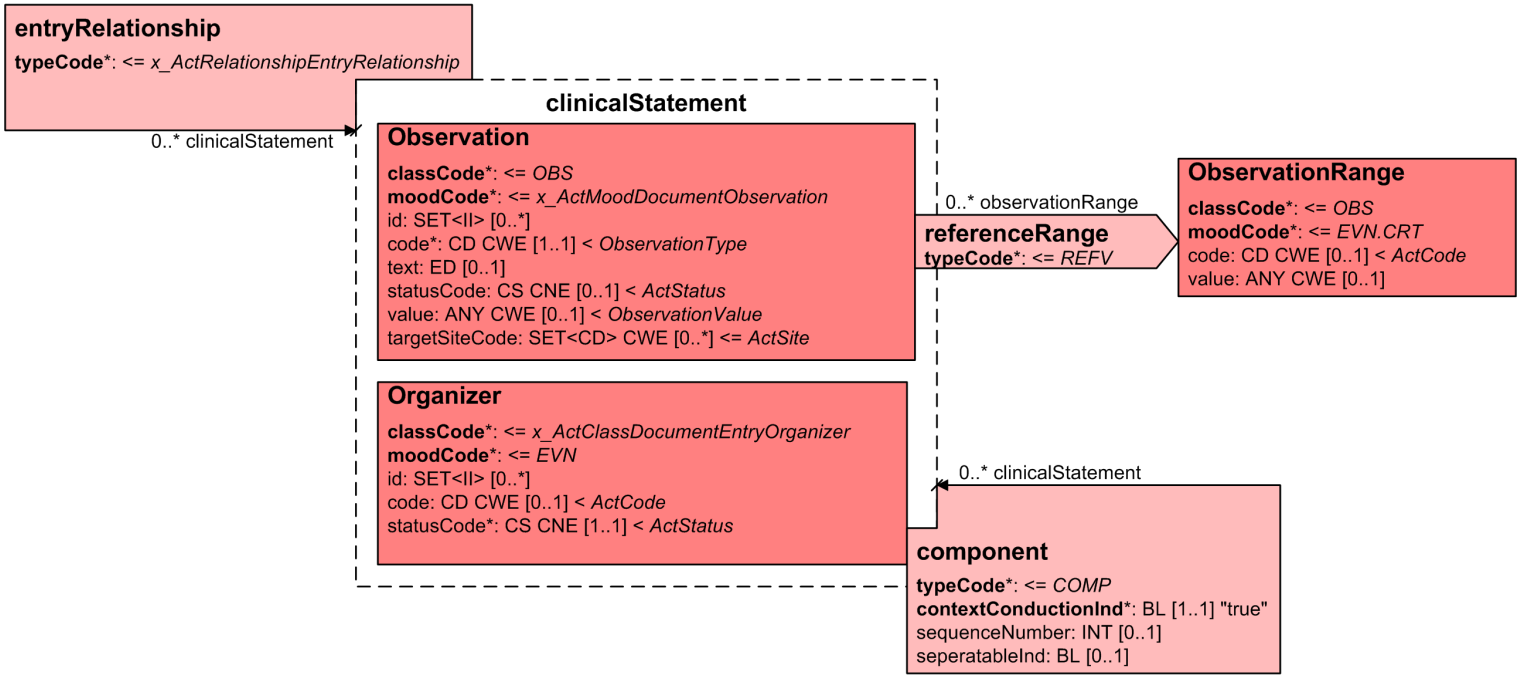

Figure 7.18. Imaging Examination Result Group

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*[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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[im_exam]/section/entry[img_exam_res]/observation/		
Imaging Examination Result Group	A group of structured results.	0..*	**entryRelationship[im_res_gp]/@typeCode="COMP"**		
			entryRelationship[im_res_gp]/**organizer**		
			entryRelationship[im_res_gp]/organizer/**@classCode="BATTERY"**		
			entryRelationship[im_res_gp]/organizer/**@moodCode="EVN"**		
			entryRelationship/[im_res_gp]/organizer/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entryRelationship/[im_res_gp]/organizer/**statusCode="completed"**		Required CDA element.
Imaging Examination Result Group > **Imaging Examination Result Group Name**	The name of a group of structured results.	1..1	entryRelationship[im_res_gp]/organizer/**code**	NS	See <code> for available attributes.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result Group > **Individual Imaging Examination Result**	Specific detailed result, including both the value of the result item and additional information that may be useful for clinical interpretation.	1..*	entryRelationship[im_res_gp]/organizer/**component[ind_im_res]**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**@classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**@moodCode="EVN"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > **Individual Imaging Examination Result Name**	The name of a specific detailed result.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**code**	NS	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value**	Actual value of the result.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**value**		Although **value** is datatype 'ANY', use only CD, PQ.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value Normal Status**	An interpretation of an observation to indicate whether the result is considered normal or abnormal.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**interpretationCode**	HL7 V3: ObservationInterpretationNormality	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > **Imaging Examination Result Value Reference Range Details**	Tagged reference ranges for this value in its particular measurement context.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/**referenceRange/@typeCode= "REFV"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/**observationRange**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**moodCode="EVN.CRT"**		
Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details > **Imaging Examination Result Value Reference Range Meaning**	Term whose value indicates the meaning of this range.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**code**	NS	See <code> for available attributes.
Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Reference Range Details > **Imaging Examination Result Value Reference Range**	The data range for the associated meaning.	1..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/referenceRange/observationRange/**value:IVL_PQ**		

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Imaging Examination Result Group > Anatomical Location > Specific Location > **Side**	The lateraility of an anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/**qualifier**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/**name**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@code="78615007"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystem="2.16.840.1.113883.6.96"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystemName="SNOMED CT-AU"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@codeSystemVersion="20110531"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/name/**@displayName="with laterality"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/qualifier/**value**	SNOMED CT-AU Laterality Reference Set	See <code> for available attributes.
Imaging Examination Result Group > Anatomical Location > **Anatomical Location Description**	Description of anatomical location.	0..1	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode/**originalText**		
Imaging Examination Result Group > Anatomical Location > **Anatomical Location Image**	Image or images used to identify a location.	0..*	entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/**@typeCode="REFR"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/**observationMedia**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**@classCode="OBS"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**@moodCode="EVN"**		
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/entryRelationship[img]/observationMedia/**value**		

Example 7.17. Imaging Examination Result Group XML Fragment

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

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

 <!-- Begin CDA Header -->

 ...

 <!-- End CDA Header -->

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

   ...

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

     ...

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

       ...

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

            <entry>
          <observation classCode="OBS" moodCode="EVN">
          ...

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

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

             <statusCode code="completed" />

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

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

```
<!-- End Individual Imaging Examination Result Name -->

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

<!-- Begin Result Value Normal Status -->
<interpretationCode code="N" codeSystemName="HL7ObservationInterpretationNormality"
     codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />
<!-- End Result Value Normal Status -->

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

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

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

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

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

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

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

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

  <!-- Begin Result Value Reference Range -->
  <value xsi:type="IVL_PQ">
   <low value="0.25" />
```

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

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

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

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

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

     ...

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

  ...

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

 ...

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

7.1.1.5.2.2 EXAMINATION REQUEST DETAILS

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.19, “Examination Request Details” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

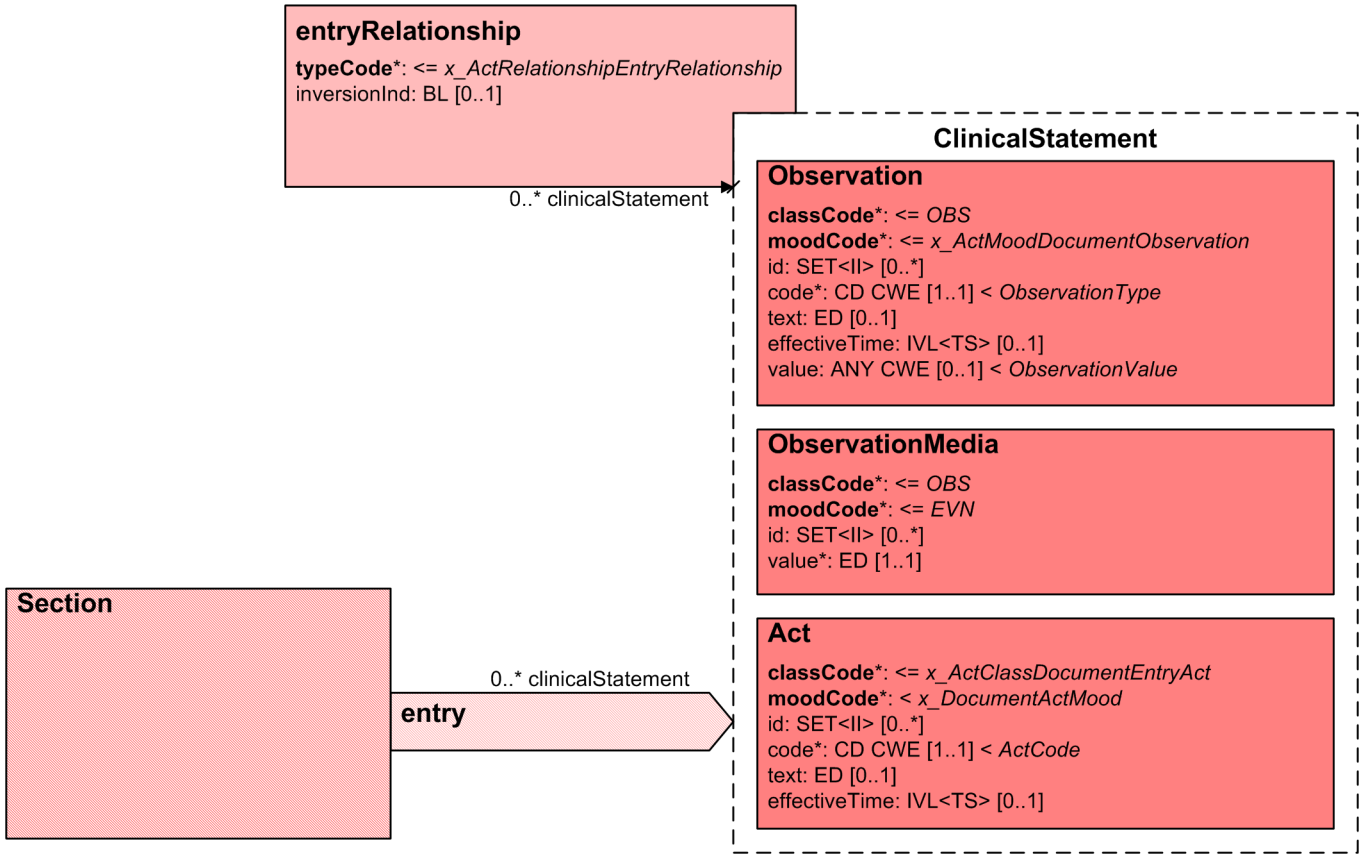

Figure 7.19. Examination Request Details

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*[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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[im_exam]/section/entry[img_exam_res]/observation		
Examination Request Details	Details concerning a single examination requested.	0..*	**entryRelationship[exam_req]/@typeCode="SUBJ"**		
			entryRelationship[exam_req]/**@inversionInd="true"**		
			entryRelationship[exam_req]/**act**		
			entryRelationship[exam_req]/act/**@classCode="ACT"**		
			entryRelationship[exam_req]/act/**@moodCode="EVN"**		
			entryRelationship[exam_req]/act/**code**		
			entryRelationship[exam_req]/act/code/**@code="102.16511"**		
			entryRelationship[exam_req]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entryRelationship[exam_req]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entryRelationship[exam_req]/act/code/**@displayName="Examination Request Details"**		

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

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

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

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Examination Request Details > Image Details > **Image**	An attached or referenced image of a current view.	0..1	entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**@typeCode="SPRT"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia**		The image may or may not be attested to and is therefore mapped to observationMedia.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/@classCode="OBS"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/@moodCode="EVN"**		
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship/**observationMedia/value:ED**		

Example 7.18. Imaging Examination Result XML Fragment

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

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

 <!-- Begin CDA Header -->

 ...

 <!-- End CDA Header -->

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

   ...
   <!-- Begin Event section -->
   <component>
    <section>

     ...

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

       ...

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

         ...

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

           ...

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

             <!-- Begin Examination Requested Name -->
             <entryRelationship typeCode="REFR">
              <observation classCode="OBS" moodCode="EVN">
               <code code="103.16512" codeSystem="1.2.36.1.2001.1001.101"
                codeSystemName="NCTIS Data Components" displayName="Examination Requested Name" />
               <text>Chest X-ray</text>
              </observation>
             </entryRelationship>
             <!-- End Examination Requested Name -->

             <!-- Begin DICOM Study Identifier -->
             <entryRelationship typeCode="SUBJ">
```

```
<act classCode="ACT" moodCode="EVN">
 <id root="1.2.312.1264.124654654.12456456301" />
 <code code="103.16513" codeSystem="1.2.36.1.2001.1001.101"
  codeSystemName="NCTIS Data Components" displayName="DICOM Study Identifier" />

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

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

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

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

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

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

   <!-- Begin DICOM Series Identifier -->
   <entryRelationship typeCode="REFR">
    <act classCode="ACT" moodCode="EVN">
     <id root="1.2.3.1.2.2654654654654564" />
     <code code="103.16517" codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components" displayName="DICOM Series Identifier"/>
    </act>
   </entryRelationship>
   <!-- End DICOM Series Identifier -->

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

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

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

</act>
```

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

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

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

         ...

          <observation>
         <entry>
         <!-- End Imaging Examination Result observation -->

         ...

        <observation>
       <entry>
       <!-- End Imaging Examination Result section -->

      ...

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

     ...

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

   ...

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

7.1.2 MEDICATIONS

Identification

Name	MEDICATIONS
Metadata Type	Section
Identifier	S-16022

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	CURRENT MEDICATIONS ON DISCHARGE	Essential	1..1
	CEASED MEDICATIONS	Essential	1..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.20, “Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

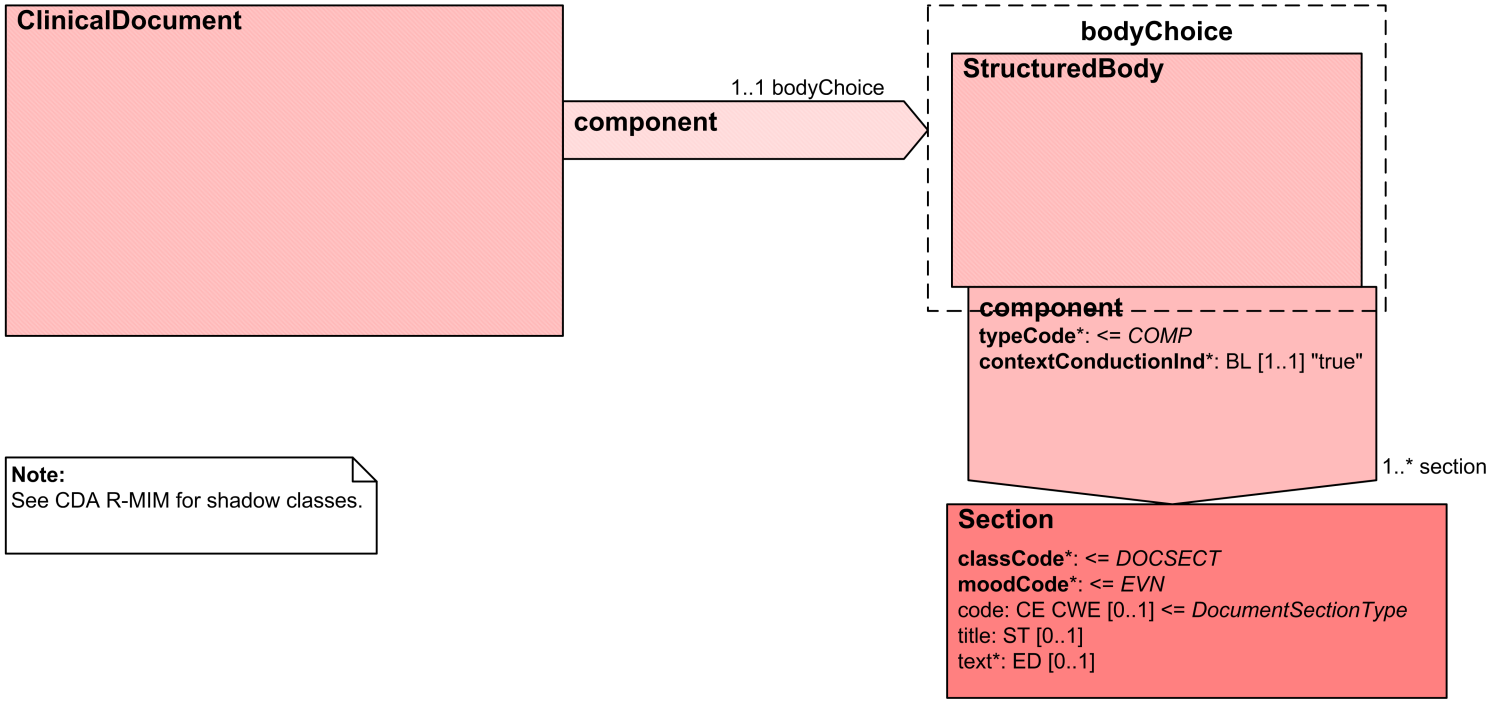

Figure 7.20. Medications

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Medications	Therapeutic Goods which are/were prescribed for the patient or the patient has/had been taking.	1..1	component[meds]/**section**		
			component[meds]/section/**code**		
			component[meds]/section/code/**@code="101.16022"**		
			component[meds]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[meds]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[meds]/section/code/**@displayName="Medications"**		
			component[meds]/section/**title="Medications"**		
			component[meds]/section/**text**		See Appendix A, *CDA Narratives*
Medications > **Current Medications on Discharge**	Medications that the subject of care will continue or commence on discharge.	1..1	See: CURRENT MEDICATIONS ON DISCHARGE		
Medications > **Ceased Medications**	Medications that the subject of care was taking at the start of the healthcare encounter (e.g. on admission), that have been stopped during the encounter or on discharge, and that are not expected to be recommenced.	1..1	See: CEASED MEDICATIONS		

Example 7.19. Medications XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>
     <code code="101.16022"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Medications"/>
     <title>Medications</title>

     <text>...</text>

     ...

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

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

7.1.2.1 CURRENT MEDICATIONS ON DISCHARGE

Identification

Name	CURRENT MEDICATIONS ON DISCHARGE
Metadata Type	Section
Identifier	S-16146

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	EXCLUSION STATEMENT - MEDICATIONS	Optional	0..1
	THERAPEUTIC GOOD	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	MEDICATIONS	Essential	1..1

CDA R-MIM Representation

Figure 7.21, “Current Medications on Discharge” 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 CURRENT MEDICATIONS ON DISCHARGE data group is related to its context by a component relationship into a new section.

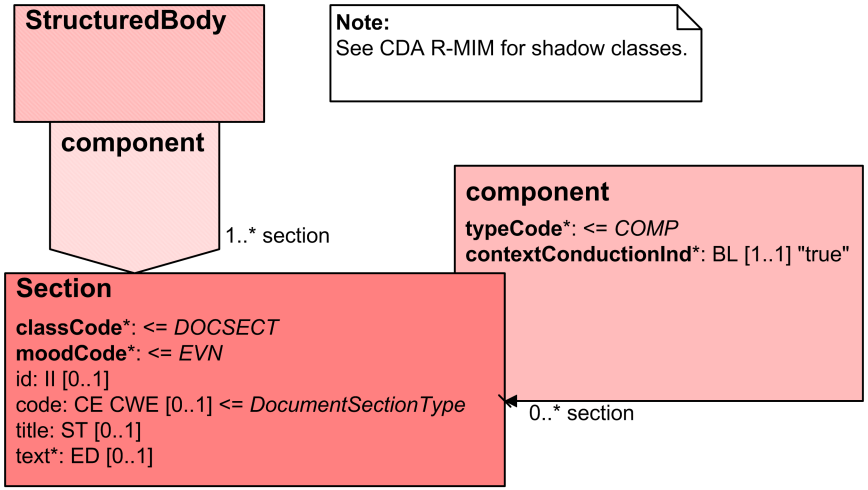

Figure 7.21. Current Medications on Discharge

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[meds]/section		
Current Medications on Discharge	Medications that the subject of care will continue or commence on discharge.	1..1	**component[current]/section/code**		
			component[current]/section/code/**@code="101.16146.4.1.1"**		
			component[current]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[current]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[current]/section/code/**@displayName="Current Medications on Discharge"**		
			component[current]/section/**title="Current Medications on Discharge"**		
			component[current]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.20. Current Medications on Discharge XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     ...

     <!-- Begin Current medications on discharge -->
     <component><!-- [current] -->
      <section>
       <code code="101.16146.4.1.1"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Current Medications On Discharge"/>

       <title>Current Medications On Discharge</title>

       <text>...</text>

        ...

      </section>
     </component>
     <!-- End Current medications on discharge -->

     ...

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

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

7.1.2.1.1 EXCLUSION STATEMENT - MEDICATIONS

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	CURRENT MEDICATIONS ON DISCHARGE	Optional	0..1

CDA R-MIM Representation

Figure 7.22, “Exclusion Statement - Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

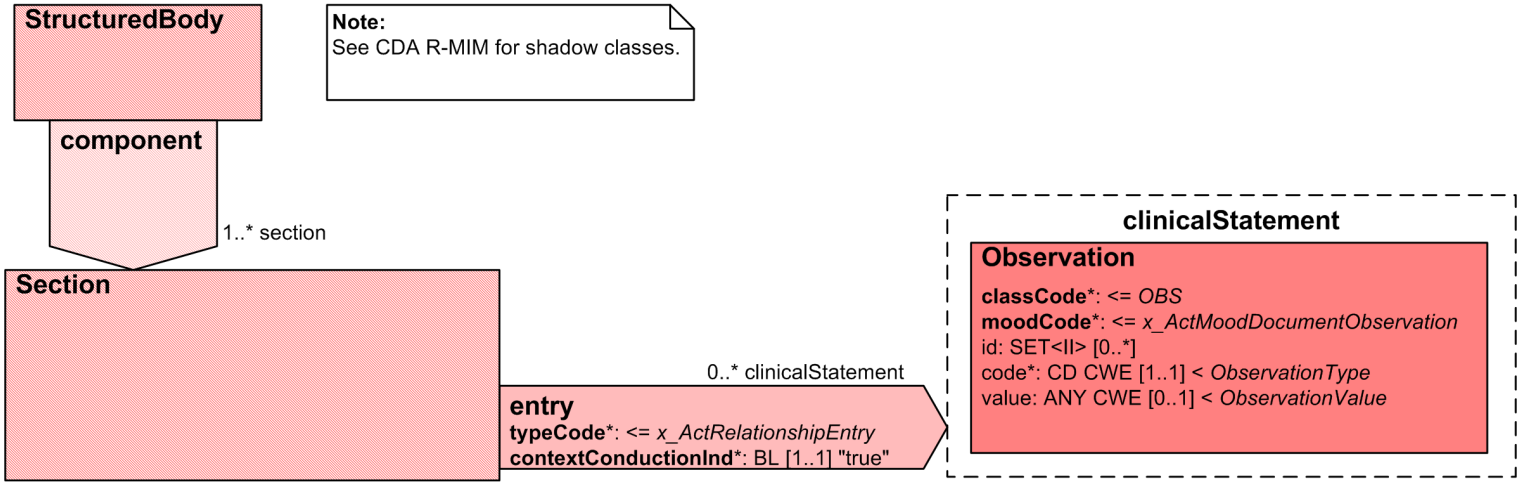

Figure 7.22. Exclusion Statement - Medications

CDA Mapping

NEHTA SDT 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/component[current]/section		
Exclusion Statement - Medications	Assertion that no medication information is included in this section of the document.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Medications > **Global Statement**	The statement about the absence or exclusion of certain medication.	1..1	**entry[gbl_meds]**		
			entry[gbl_meds]/**observation**		
			entry[gbl_meds]/observation/**@classCode="OBS"**		
			entry[gbl_meds]/observation/**@moodCode="EVN"**		
			entry[gbl_meds]/observation/**code**		
			entry[gbl_meds]/observation/code/**@code="103.16302.4.3.2"**		
			entry[gbl_meds]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_meds]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_meds]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_meds]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.21. Exclusion Statement - Medications XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     ...

     <!-- Begin Current Medications on discharge-->
     <component><!-- [current] -->
      <section>

       ...

       <!-- Begin Exclusion Statement - Medications-->
       <!-- Global Statement -->
       <entry>
        <!-- [gbl_meds] -->
        <observation classCode="OBS" moodCode="EVN">
         <code code="103.16302.4.3.2" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Global Statement" />

         <value code="02" codeSystem="1.2.36.1.2001.1001.101.104.16299"
          codeSystemName="Global Statement Values" displayName="Not asked"
          xsi:type="CD" />

        </observation>
       </entry>
       <!-- End Exclusion Statement - Medications-->

       ...

      </section>
     </component>
    <!-- End Current Medications on discharge -->

     ...

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

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

7.1.2.1.2 THERAPEUTIC GOOD

Identification

Name	THERAPEUTIC GOOD
Metadata Type	Data Group
Identifier	DG-16211

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	CURRENT MEDICATIONS ON DISCHARGE	Optional	0..*

CDA R-MIM Representation

Figure 7.23, “Therapeutic Good” 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 Therapeutic Good data group is described by a SubstanceAdministration which is related to the containing section by an entry. SubstanceAdministration has five related clinicalStatements: a subject Observation to represent Item Status, a reason Act to represent Reason for Medication, a reason Observation to represent Reason for Change, a reference Supply to represent Unit of Use, a supporting Observation to represent the CHANGE DETAIL data group and a component Observation to represent Additional Comments. Therapeutic Good Description maps to consumable.manufacturedProduct.manufacturedMaterial.

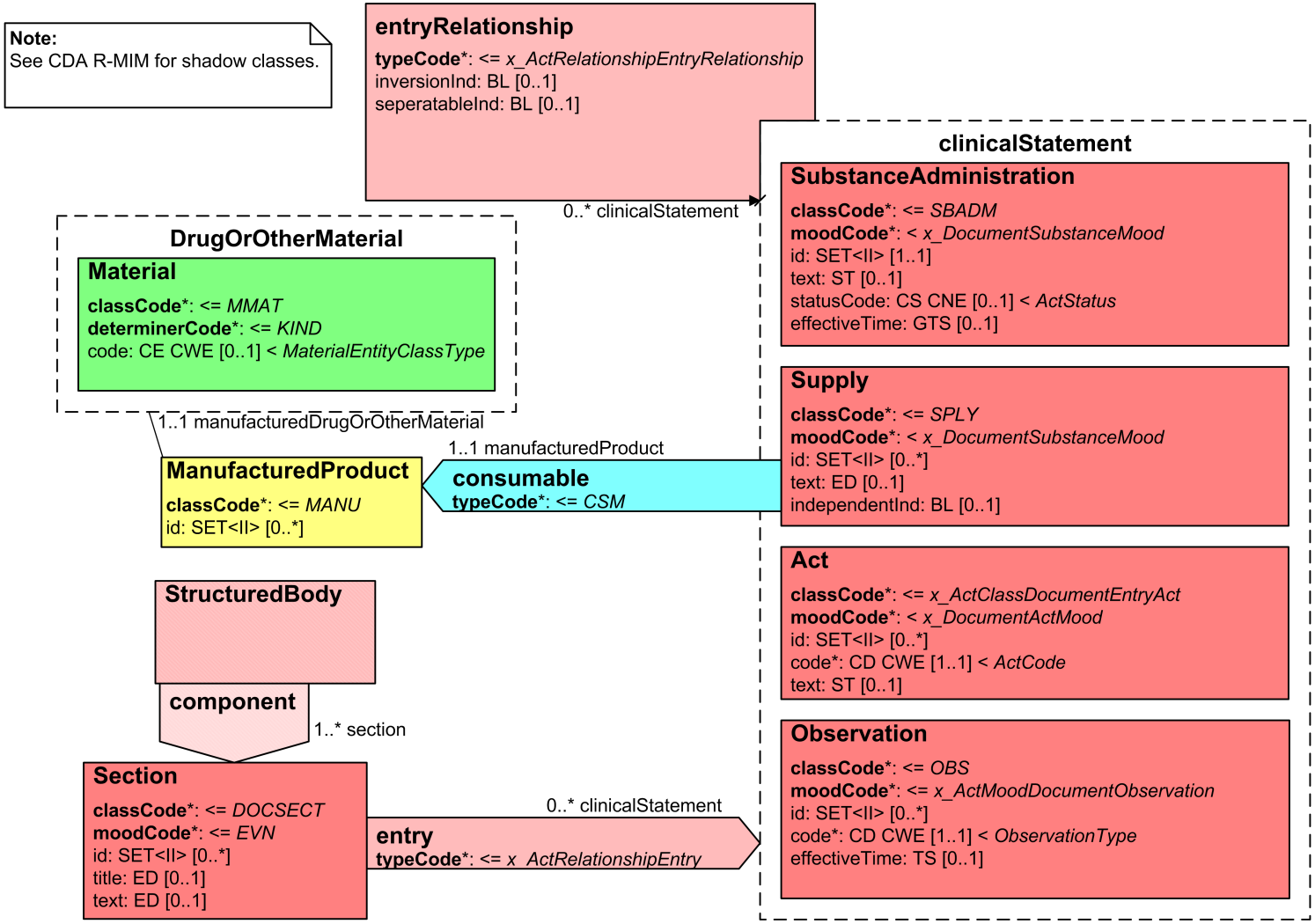

Figure 7.23. Therapeutic Good

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			**Context for > Current Medications >:** ClinicalDocument/component/structuredBody/component[meds]/section/component[current]/section		
Therapeutic Good	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	0..*	**entry[sbadm]**		
			entry[sbadm]/**substanceAdministration**		
			entry[sbadm]/substanceAdministration/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/**@classCode="SBADM"**		
			entry[sbadm]/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.
			entry[sbadm]/substanceAdministration/**statusCode="active"**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > **Therapeutic Good Identification**	Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989). Therapeutic use means use in or in connection with: • preventing, diagnosing, curing or alleviating a disease, ailment, defector injury; • influencing, inhibiting or modifying a physiological process; • testing the susceptibility of persons to a disease or ailment; • influencing, controlling or preventing conception; • testing for pregnancy; • replacement or modification of parts of the anatomy.	1..1	entry[sbadm]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code**	The set of values is ConceptIDs and Preferred Terms from AMT (Australian Medicines Terminology) concepts which have one of the following modelled relationships: • IS A Medicinal Product Unit of Use (MPUU); • IS A Medicinal Product Pack (MPP); • IS A Trade Product Unit of Use (TPUU); • IS A Trade Product Pack (TPP); • IS A Containered Trade Product Pack (CTPP). Specifically for MPUU: only MPUU concepts that have no child MPUUs are to be included. Where an MPUU concept is a parent of another MPUU, the parent MPUU is to be omitted.	See <code> for available attributes.
Therapeutic Good > **Dosage**	The regimen governing the amount (in a single administration, i.e. dose quantity), [the] frequency and the number of doses of a therapeutic agent to be administered to a subject of care.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > Dosage > **Dose Instruction**	A description of the dose quantity, frequency and route instruction that determines how the prescribed therapeutic substance is administered to, or taken by, the subject of care.	1..1	entry[sbadm]/substanceAdministration/**text:ST**		Dose Instruction and Instructions for Use are mutually exclusive - Dose Instruction is to be used for a medication and Instructions for Use is to be used for a therapeutic good other than a medication.
Therapeutic Good > **Unit of Use Quantity Dispensed**	A statement of the total number of units or physical amount of the therapeutic good that is dispensed or supplied to the subject of care.	0..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**text:ST**		
Therapeutic Good > **Reason for Therapeutic Good**	The clinical justification (e.g. specific therapeutic effect intended) for this subject of care's use of the therapeutic good.	0..1	entry[sbadm]/substanceAdministration/**entryRelationship[reason]/@typeCode="RSON"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/**@moodCode="RQO"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/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.	
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/**code**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/code/**@code="103.10141"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/code/**@displayName="Reason for Therapeutic Good"**		
			entry[sbadm]/substanceAdministration/entryRelationship[reason]/act/**text:ST**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > **Additional Comments**	Any additional information that may be needed to ensure the continuity of supply, proper use, or appropriate medication management.	0..1	entry[sbadm]/substanceAdministration/**entryRelationship[cmts]/@typeCode="COMP"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/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[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**code**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/code/**@code="103.16044"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/code/**@displayName="Additional Comments"**		
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**text:ST**		
Therapeutic Good > **Medication History**	Details of the history of the use of this therapeutic good by the subject of care.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > Medication History > **Item Status**	The status of the medication item at a specific point in time, e.g. at discharge.	1..1	entry[sbadm]/substanceAdministration/**entryRelationship[item_status]**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**@typeCode="SUBJ"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**@inversionInd="true"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**observation**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**@classCode="OBS"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**code**	NS	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/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.	
Therapeutic Good > Medication History > **Change Detail**	Describes information about any relevant changes made to the medication item during the patient's healthcare encounter, and the reason for that change.	0..1	entry[sbadm]/substanceAdministration/**entryRelationship[change_detail]**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/**@typeCode="SPRT"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/**observation**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**@typeCode="OBS"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/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.
Therapeutic Good > Medication History > Change Detail > **Changes Made**	Description of any change made during the healthcare encounter where the change is intended to continue after the end of the healthcare encounter.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**code**	NS	

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > Medication History > Change Detail > **Reason for Change**	The justification for the stated change in medication.	0..1	entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/**@typeCode="RSON"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/**code**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/code/**@code="103.10177"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/code/**@displayName="Reason for Change"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/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[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/entryRelationship[rsn_for_change]/act/**text:ST**		
Therapeutic Good > Medication History > **Medication Duration**	The time period that the patient has taken or will take the prescribed medication.	0..1	entry[sbadm]/substanceAdministration/**effectiveTime:IVL_TS**		See <time> for available attributes.

Example 7.22. Therapeutic Good XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     <!-- Begin Current Medications on Discharge section -->
     <component><!-- [current] -->
      <section>

       ...

       <!-- Therapeutic Good -->
       <entry><!-- [med_instr] -->
        <substanceAdministration classCode="SBADM" moodCode="EVN">

         <!-- ID is used for system purposes such as matching -->
         <id root="080C5AC2-C835-11DE-81C9-B16456D89593" />

         <!--  Dose Instruction -->
         <text xsi:type="ST">2 tablets daily after breakfast</text>

         <statusCode code="active" />

         <!-- Medication duration -->
         <effectiveTime xsi:type="IVL_TS">
          <low value="20091001" />
          <high value="20101001" />
         </effectiveTime>

         <!-- Therapeutic Good Identification -->
         <consumable>
          <manufacturedProduct>
           <manufacturedMaterial>
            <code code="23641011000036102" codeSystem="1.2.36.1.2001.1004.100"
             codeSystemName="Australian Medicinces Terminology (AMT)"
             displayName="paracetamol 500 mg + codeine phosphate 30 mg tablet" />
           </manufacturedMaterial>
          </manufacturedProduct>
         </consumable>

         <!-- Item status -->
```

```
<entryRelationship inversionInd="true" typeCode="SUBJ">
 <observation classCode="OBS" moodCode="EVN">
  <id root="25A6FDCE-C837-11DE-AE8D-9A8656D89593" />
  <code code="309633003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
   codeSystemVersion="20090731" displayName="Prescription dose change" />
 </observation>
</entryRelationship>

<!-- Reason for Therapeutic Good -->
<entryRelationship typeCode="RSON">
 <!-- [reason] -->
 <act classCode="INFRM" moodCode="RQO">

  <!-- ID is used for system purposes such as matching -->
  <id root="3F399418-C83C-11DE-99FA-D5C756D89593" />

  <code code="103.10141" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
   displayName="Reason for Therapeutic Good" />

  <text xsi:type="ST">Pain control.</text>
 </act>
</entryRelationship>

<entryRelationship inversionInd="true" typeCode="REFR">
 <supply classCode="SPLY" moodCode="EVN">


  <!-- Unit of Use Quantity Dispensed -->
  <text xsi:type="ST">25 tablets</text>

 </supply>
</entryRelationship>

<!-- Change detail -->
<entryRelationship typeCode="SPRT">
 <observation classCode="OBS" moodCode="EVN">
  <id root="986C93E4-C843-11DE-B62C-609C55D89593" />

  <!-- Changes made -->
  <code code="182877009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
   codeSystemVersion="20090731" displayName="Drug dosage altered" />

  <!-- Reason for change -->
  <entryRelationship typeCode="RSON">
   <act classCode="INFRM" moodCode="EVN">
    <id root="93CCA164-C850-11DE-A4CA-EE4756D89593" />
    <code code="103.10177" codeSystem="1.2.36.1.2001.1001.101"
     codeSystemName="NCTIS Data Components" displayName="Reason for Change" />
    <text xsi:type="ST">Optimise drug therapy.</text>
   </act>
  </entryRelationship>
 </observation>
</entryRelationship>

<!-- Additional comments -->
<entryRelationship typeCode="COMP">
 <act classCode="INFRM" moodCode="EVN">
  <!-- ID is used for system purposes such as matching -->
  <id root="13DC242A-C855-11DE-BFE5-3F7A56D89593" />

  <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components"
   displayName="Additional Comments" />

  <text>Dosage to be reviewed in 10 days.</text>
 </act>
```

```
          </entryRelationship>
         </substanceAdministration>

        </entry>


       </section>
      </component>
      <!-- End Current Medications on Discharge section -->

      ...

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

    ...

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

7.1.2.2 CEASED MEDICATIONS

Identification

Name	CEASED MEDICATIONS
Metadata Type	Section
Identifier	S-16146

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	EXCLUSION STATEMENT - MEDICATIONS	Optional	0..1
	THERAPEUTIC GOOD	Optional	0..*

Parent

Data Type	Name	Obligation	Occurrence
	MEDICATIONS	Essential	1..1

CDA R-MIM Representation

Figure 7.24, “Ceased Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The CEASED MEDICATIONS data group is related to its context by a component relationship into a new section.

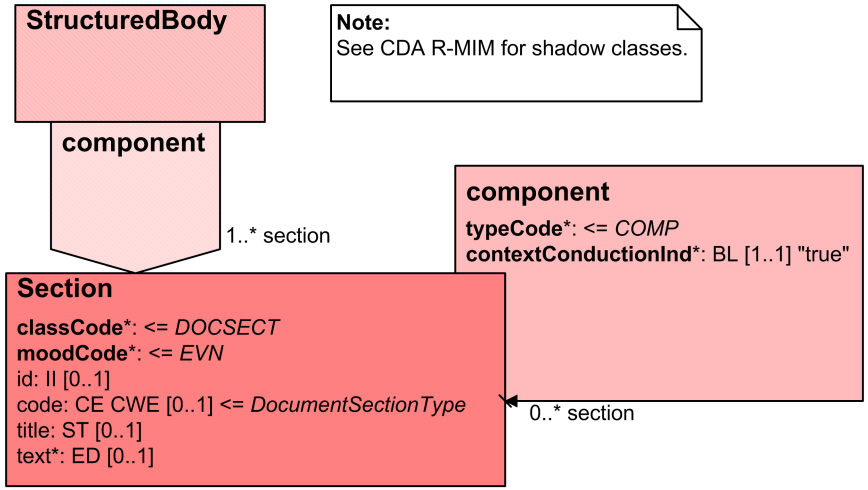

Figure 7.24. Ceased Medications

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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[meds]/section		
Ceased Medications	Medications that the subject of care was taking at the start of the healthcare encounter (e.g. on admission), that have been stopped during the encounter or on discharge, and that are not expected to be recommenced.	1..1	**component[ceased]/section/code**		
			component[ceased]/section/code/**@code="101.16146.4.1.2"**		
			component[ceased]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[ceased]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[ceased]/section/code/**@displayName="Ceased Medications"**		
			component[ceased]/section/**title="Ceased Medications"**		
			component[ceased]/section/**text**		See Appendix A, *CDA Narratives*

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

Example 7.23. Ceased Medications XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     ...

     <!-- Begin Ceased medications -->
     <component>
      <section>
       <code code="101.16146.4.1.2"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Ceased Medications"/>

       <title>Ceased Medications</title>

       <text>...</text>

       ...

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


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

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

7.1.2.2.1 EXCLUSION STATEMENT - MEDICATIONS

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	CEASED MEDICATIONS	Optional	0..1

CDA R-MIM Representation

Figure 7.22, “Exclusion Statement - Medications” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

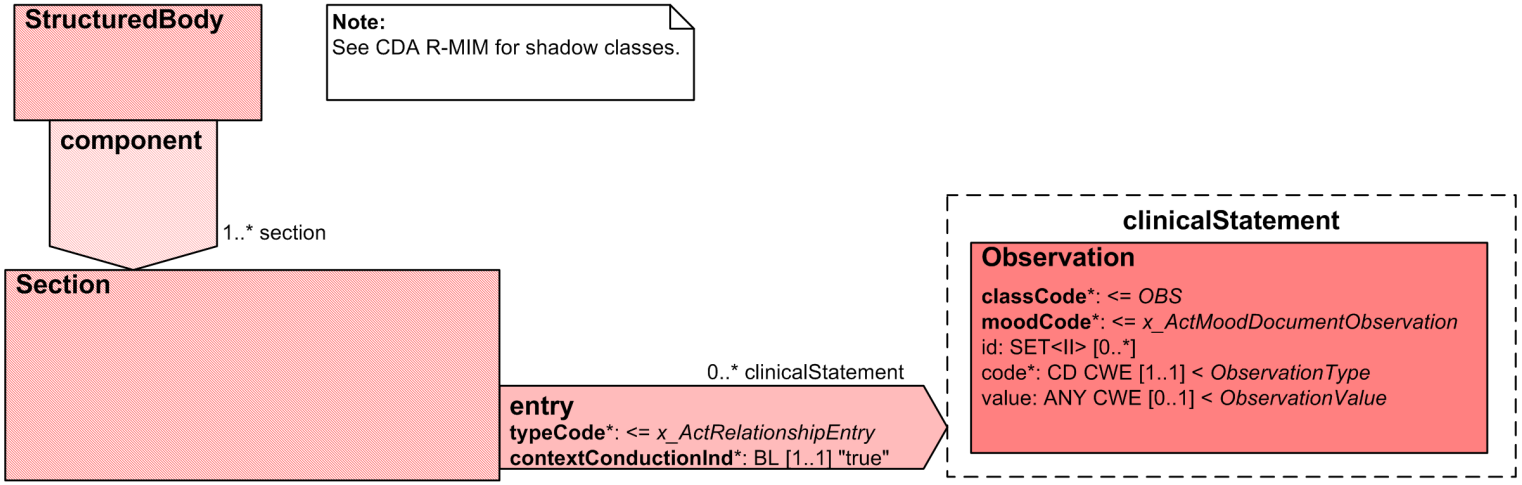

Figure 7.25. Exclusion Statement - Medications

CDA Mapping

NEHTA SDT 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/component[current]/section		
Exclusion Statement - Medications	Assertion that no medication information is included in this section of the document.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Exclusion Statement - Medications > **Global Statement**	The statement about the absence or exclusion of certain medication.	1..1	**entry[gbl_meds]**		
			entry[gbl_meds]/**observation**		
			entry[gbl_meds]/observation/**@classCode="OBS"**		
			entry[gbl_meds]/observation/**@moodCode="EVN"**		
			entry[gbl_meds]/observation/**code**		
			entry[gbl_meds]/observation/code/**@code="103.16302.4.3.3"**		
			entry[gbl_meds]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_meds]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_meds]/observation/code/**@displayName="Global Statement"**		
			entry[gbl_meds]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.24. Exclusion Statement - Medications XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     ...

     <!-- Begin Ceased Medications-->
     <component><!-- [ceased] -->
      <section>

       ...

       <!-- Begin Exclusion Statement - Medications-->
       <!-- Global Statement -->
       <entry>
        <!-- [gbl_meds] -->
        <observation classCode="OBS" moodCode="EVN">
         <id root="711DB4F4-3894-11E0-8F9D-B8DDDKD72085" />
         <code code="103.16302.4.3.3" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Global Statement" />

         <value code="02" codeSystem="1.2.36.1.2001.1001.101.104.16299"
          codeSystemName="Global Statement Values" displayName="Not asked" xsi:type="CD" />

        </observation>
       </entry>
       <!-- End Exclusion Statement - Medications-->
      </section>
     </component>
     <!-- End Ceased Medications-->

     ...

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

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

```
</ClinicalDocument>
```

7.1.2.2.2 THERAPEUTIC GOOD

Identification

Name	THERAPEUTIC GOOD
Metadata Type	Data Group
Identifier	DG-16211

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	CEASED MEDICATIONS	Optional	0..*

CDA R-MIM Representation

Figure 7.23, “Therapeutic Good” 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 Therapeutic Good data group is described by a SubstanceAdministration which is related to the containing section by an entry. SubstanceAdministration has five related clinicalStatements: a subject Observation to represent Item Status, a reason Act to represent Reason for Medication, a reason Observation to represent Reason for Change, a reference Supply to represent Unit of Use, a supporting Observation to represent the CHANGE DETAIL data group and a component Observation to represent Additional Comments. Therapeutic Good Description maps to consumable.manufacturedProduct.manufacturedMaterial.

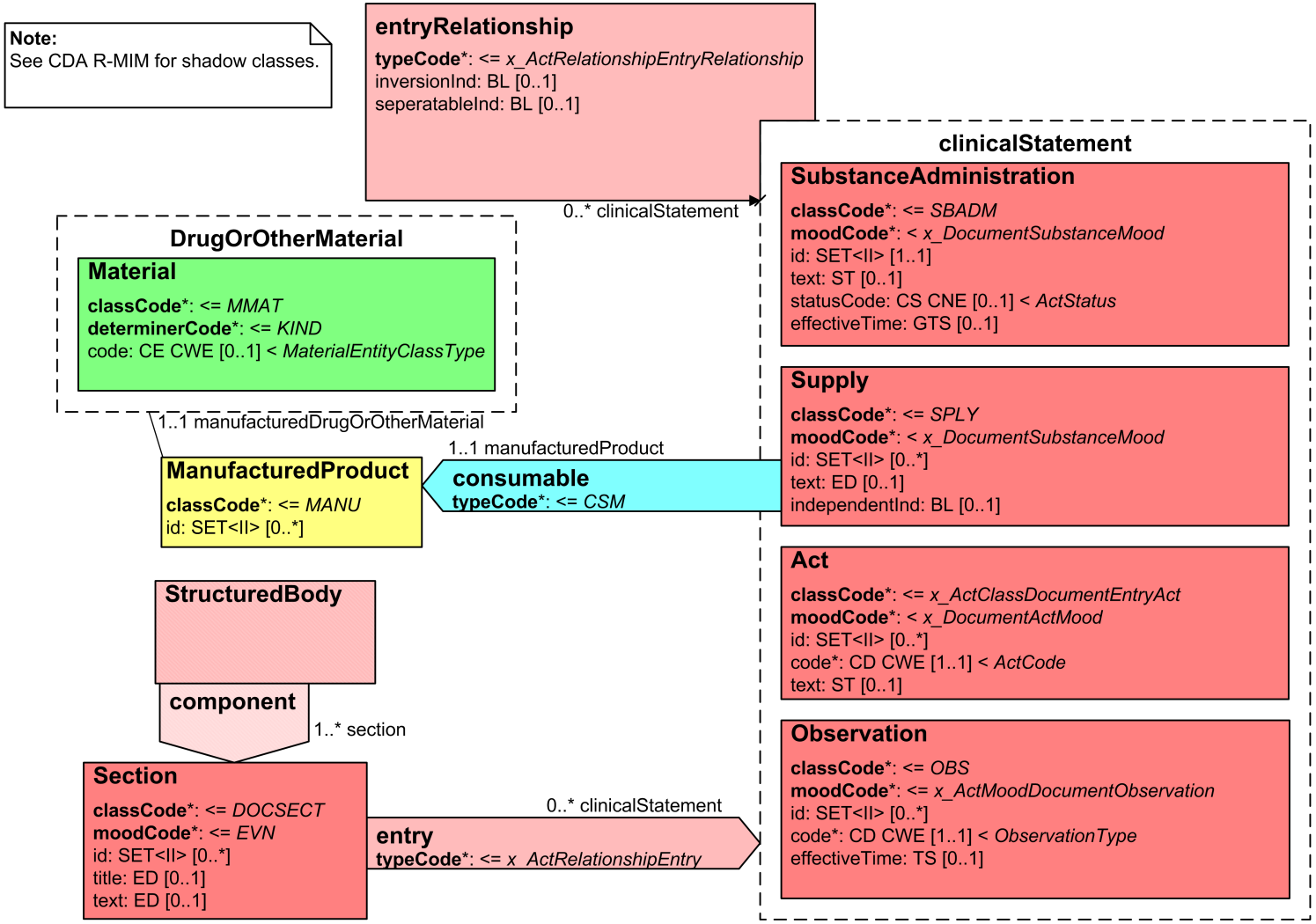

Figure 7.26. Therapeutic Good

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
			Context for > Ceased Medications >: ClinicalDocument/component/structuredBody/component[meds]/section/component[ceased]/section		
Therapeutic Good	Information pertaining to one or more therapeutic goods that is represented to achieve, or is likely to achieve, its principal intended action by pharmacological, chemical, immunological or metabolic means in or on the body of a human.	0..*	**entry[sbadm]**		
			entry[sbadm]/**substanceAdministration**		
			entry[sbadm]/substanceAdministration/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/**@classCode="SBADM"**		
			entry[sbadm]/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.
			entry[sbadm]/substanceAdministration/**statusCode="cancelled"**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > **Therapeutic Good Identification**	Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989). Therapeutic use means use in or in connection with: • preventing, diagnosing, curing or alleviating a disease, ailment, defector injury; • influencing, inhibiting or modifying a physiological process; • testing the susceptibility of persons to a disease or ailment; • influencing, controlling or preventing conception; • testing for pregnancy; • replacement or modification of parts of the anatomy.	1..1	entry[sbadm]/substanceAdministration/**consumable/manufacturedProduct/manufacturedMaterial/code**	The set of values is ConceptIDs and Preferred Terms from AMT (Australian Medicines Terminology) concepts which have one of the following modelled relationships: • IS A Medicinal Product Unit of Use (MPUU); • IS A Medicinal Product Pack (MPP); • IS A Trade Product Unit of Use (TPUU); • IS A Trade Product Pack (TPP); • IS A Containered Trade Product Pack (CTPP). Specifically for MPUU: only MPUU concepts that have no child MPUUs are to be included. Where an MPUU concept is a parent of another MPUU, the parent MPUU is to be omitted.	See <code> for available attributes.
Therapeutic Good > **Medication History**	Details of the history of the use of this therapeutic good by the subject of care.	1..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > Medication History > **Item Status**	The status of the medication item at a specific point in time, e.g. at discharge.	1..1	entry[sbadm]/substanceAdministration/**entryRelationship[item_status]**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**@typeCode="SUBJ"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**@inversionInd="true"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/**observation**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**@classCode="OBS"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/observation/**code**	NS	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[item_status]/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.	
Therapeutic Good > Medication History > **Change Detail**	Describes information about any relevant changes made to the medication item during the patient's healthcare encounter, and the reason for that change.	1..1	entry[sbadm]/substanceAdministration/**entryRelationship[change_detail]**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/**@typeCode="SPRT"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/**observation**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**@typeCode="OBS"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/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.
Therapeutic Good > Medication History > Change Detail > **Changes Made**	Description of any change made during the healthcare encounter where the change is intended to continue after the end of the healthcare encounter.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/**code**	NS	

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Therapeutic Good > Medication History > Change Detail > **Reason for Change**	The reason why the medication was ceased.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/a/ entryRelationship[rsn_for_change]/**@typeCode="RSON"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/**code**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/code/**@code="103.10177"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/code/**@displayName="Reason for Change"**		
			entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/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[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act/**text:ST**		

Example 7.25. Therapeutic Good XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Medications section -->
   <component><!-- [meds] -->
    <section>

     ...

      <!-- Begin Ceased Medications section -->
      <component><!-- [ceased] -->
       <section>

        ...

        <!-- Therapeutic Good -->
        <entry>
         <!-- Item detail -->
         <substanceAdministration classCode="SBADM" moodCode="EVN">

          <!-- ID is used for system purposes such as matching -->
          <id root="A8921C16-CDB7-11DE-B34C-267655D89593" />

          <statusCode code="cancelled"/>

          <!-- Therapeutic Good Identification -->
          <consumable>
           <manufacturedProduct>
            <manufacturedMaterial>
             <code code="23641011000036102" codeSystem="1.2.36.1.2001.1004.100"
              codeSystemName="Australian Medicinces Terminology (AMT)"
              displayName="paracetamol 500 mg + codeine phosphate 30 mg tablet" />
            </manufacturedMaterial>
           </manufacturedProduct>
          </consumable>

          <!-- Item status -->
          <entryRelationship inversionInd="true" typeCode="SUBJ">
           <observation classCode="OBS" moodCode="EVN">

            <!-- ID is used for system purposes such as matching -->
            <id root="9C9E3458-CDB7-11DE-8ED0-C37555D89593" />
```

```
            <code>
             <originalText>Ceased</originalText>
            </code>
           </observation>
          </entryRelationship>

          <!-- Change detail -->
          <entryRelationship typeCode="SPRT">
           <observation classCode="OBS" moodCode="EVN">

            <!-- ID is used for system purposes such as matching -->
            <id root="90F4E89A-CDB7-11DE-A0BC-5E7555D89593" />

            <!-- Changes made -->
            <code code="274512008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT"
             codeSystemVersion="20090731" displayName="Drug therapy discontinued" />

            <!-- Reason for change -->
           <entryRelationship typeCode="RSON">
            <act classCode="INFRM" moodCode="EVN">

             <!-- ID is used for system purposes such as matching -->
             <id root="BB6799BA-CDB7-11DE-86D5-957655D89593" />

             <code code="103.10177" codeSystem="1.2.36.1.2001.1001.101"
              codeSystemName="NCTIS Data Components" displayName="Reason for Change" />

             <text xsi:type="ST">Side effect.</text>
            </act>
           </entryRelationship>
           </observation>
          </entryRelationship>
         </substanceAdministration>
        </entry>

        ...

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

     ...

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

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

7.1.3 HEALTH PROFILE

Identification

Name	HEALTH PROFILE
Metadata Type	Section
Identifier	S-16011

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	HEALTHCARE PROVIDERS	Optional	0..1
	ADVERSE REACTIONS	Essential	1..1
	ALERTS	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.27, “Health Profile” 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 Health Profile section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

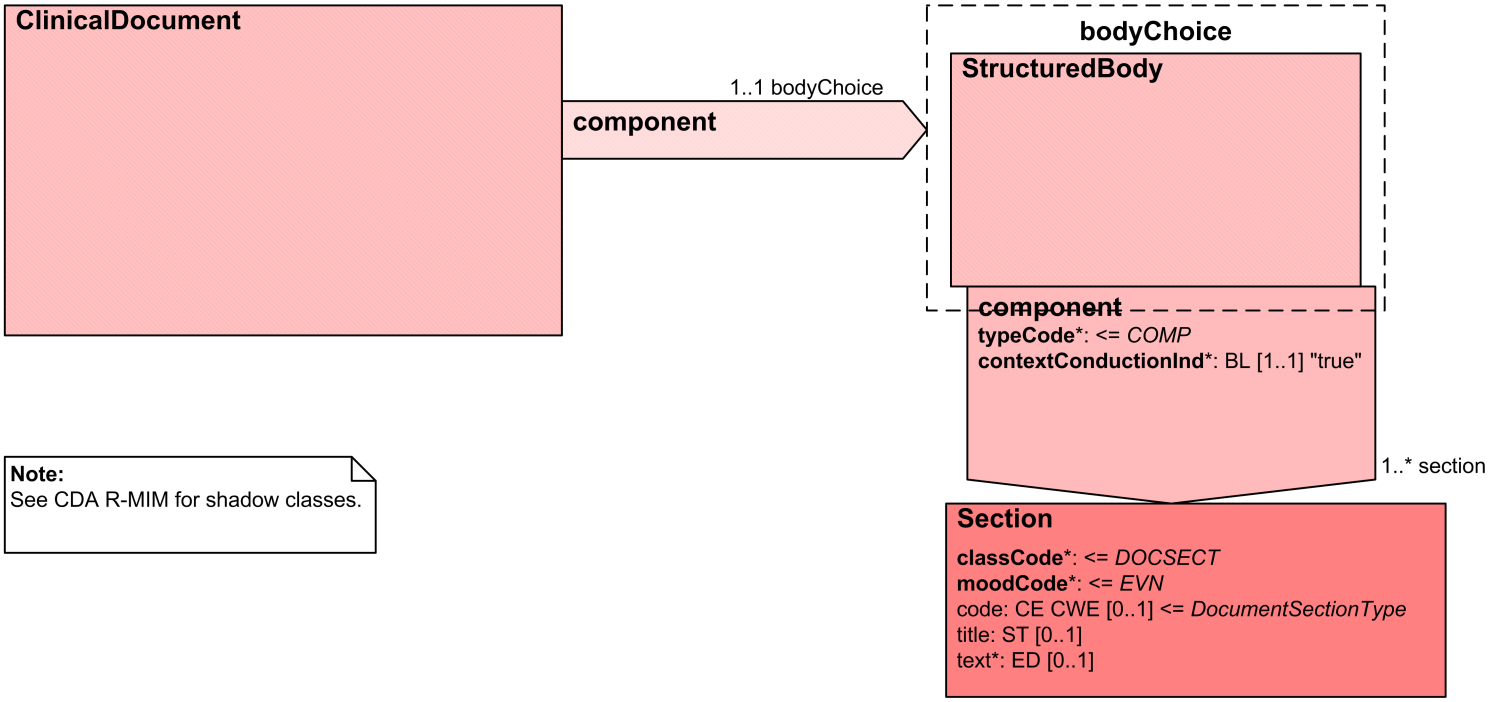

Figure 7.27. Health Profile

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Health Profile	Information pertaining to the health status or general health of the subject of care. Contains information related to the subject of care that is not specific to the healthcare encounter described by the discharge summary.	1..1	**component[health]/section/code**		
			component[health]/section/code/**@code="101.16011"**		
			component[health]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[health]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[health]/section/code/**@displayName="Health Profile"**		
			component[health]/section/**title="Health Profile"**		
			component[health]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.26. Health Profile XML Fragment

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

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

  <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

    <!-- Begin Health Profile section -->
   <component>
    <section>
     <code code="101.16011"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Health Profile"/>

     <title>Health Profile</title>

     ...

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

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

7.1.3.1 HEALTHCARE PROVIDERS

Identification

Name	HEALTHCARE PROVIDERS
Metadata Type	Data Group
Identifier	DG-20002

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	NOMINATED PRIMARY HEALTHCARE PROVIDER	Essential	1..*

Parent

Data Type	Name	Obligation	Occurrence
	HEALTH PROFILE	Optional	0..1

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements					
Healthcare Providers	The subject of care's healthcare providers.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

7.1.3.1.1 NOMINATED PRIMARY HEALTHCARE PROVIDER

Identification

Name	NOMINATED PRIMARY HEALTHCARE PROVIDER
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	HEALTHCARE PROVIDERS	Essential	1..*

7.1.3.1.1.1 NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON

CDA R-MIM Representation

Figure 7.28, “Nominated Primary Healthcare Provider (Person)” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

The Nominated Primary Healthcare Provider (Person) data group is related to its context of ClinicalDocument by the participant participation class. A participant is a person in the role of associatedEntity (AssociatedEntity class). The entity playing the role is associatedPerson (Person class). The entity identifier of the participant is mapped to the EntityIdentifier class (Australian CDA extension) which is associated to the associatedEntity.

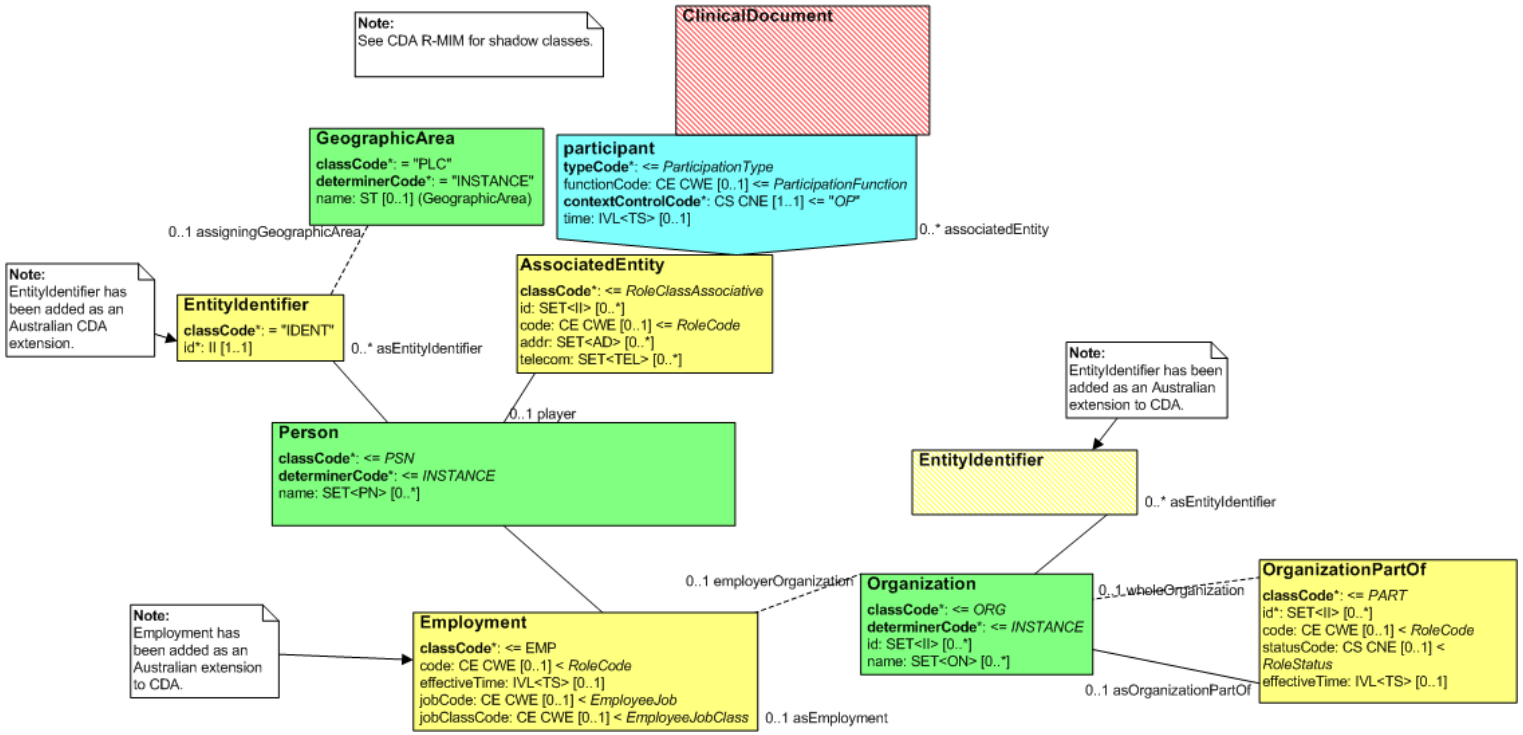

Figure 7.28. Nominated Primary Healthcare Provider (Person)

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Nominated Primary Healthcare Provider (Person)	The healthcare providers (person) nominated by the subject of care as being primarily responsible for their ongoing healthcare.	1..*	**participant**		
Nominated Primary Healthcare Provider > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="PART"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Nominated Primary Healthcare Provider".	
			participant/**functionCode/@code="PCP"**		
Nominated Primary Healthcare 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	participant/**associatedEntity/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
			participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
Nominated Primary Healthcare 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	participant/associatedEntity/**associatedPerson**		
Nominated Primary Healthcare Provider > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/associatedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Nominated Primary Healthcare 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..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Nominated Primary Healthcare Provider > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Nominated Primary Healthcare Provider > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Nominated Primary Healthcare 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 participant/associatedEntity/associatedPerson.
Nominated Primary Healthcare 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..*	participant/associatedEntity/associatedPerson/**<Person Name>**		See common pattern: Person Name.
Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	participant/associatedEntity/associatedPerson/**<Employment>**		See common pattern: Employment.

Example 7.27. Nominated Primary Healthcare Provider - Person XML Fragment

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

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

    <!-- Begin Nominated Primary Healthcare Provider (person) -->
  <participant typeCode="PART">
   <functionCode code="PCP" />
   <associatedEntity classCode="PROV">

    <!-- ID is used for system purposes such as matching -->
    <id root="8FF6156A-0CE8-11E0-BE3B-6C69DFD72085" />

    <code code="253111" codeSystem="2.16.840.1.113883.13.62"
     codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
     displayName="General Medical Practitioner" />

    <!-- Address -->
    <addr use="WP">
     <streetAddressLine>55 GP Street</streetAddressLine>
     <city>Nehtaville</city>
     <state>QLD</state>
     <postalCode>5555</postalCode>
     <additionalLocator>32568931</additionalLocator>
     <country>Australia</country>
    </addr>

    <!-- Electronic Communication Detail -->
    <telecom use="WP" value="tel:0777777777" />

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

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

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

      <!-- Position In Organisation -->
      <ext:code>
       <originalText>Senior General Practitioner</originalText>
      </ext:code>

      <!-- Occupation -->
      <ext:jobCode code="253111" codeSystem="2.16.840.1.113883.13.62"
```

```
        codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
        displayName="General Medical Practitioner" />

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

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

        <!-- Department/Unit -->
        <name>GP Clinic</name>

        <asOrganizationPartOf>
         <wholeOrganization>

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

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

         </wholeOrganization>
        </asOrganizationPartOf>
       </ext:employerOrganization>
      </ext:asEmployment>
     </associatedPerson>
    </associatedEntity>
   </participant>
   <!-- End Nominated Primary Healthcare Provider (person) -->

   ...

    <!-- End CDA Header -->

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

    …

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

7.1.3.1.1.2 NOMINATED PRIMARY HEALTHCARE PROVIDER - ORGANISATION

CDA R-MIM Representation

Figure 7.29, " Nominated Primary Healthcare 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 Header elements.

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

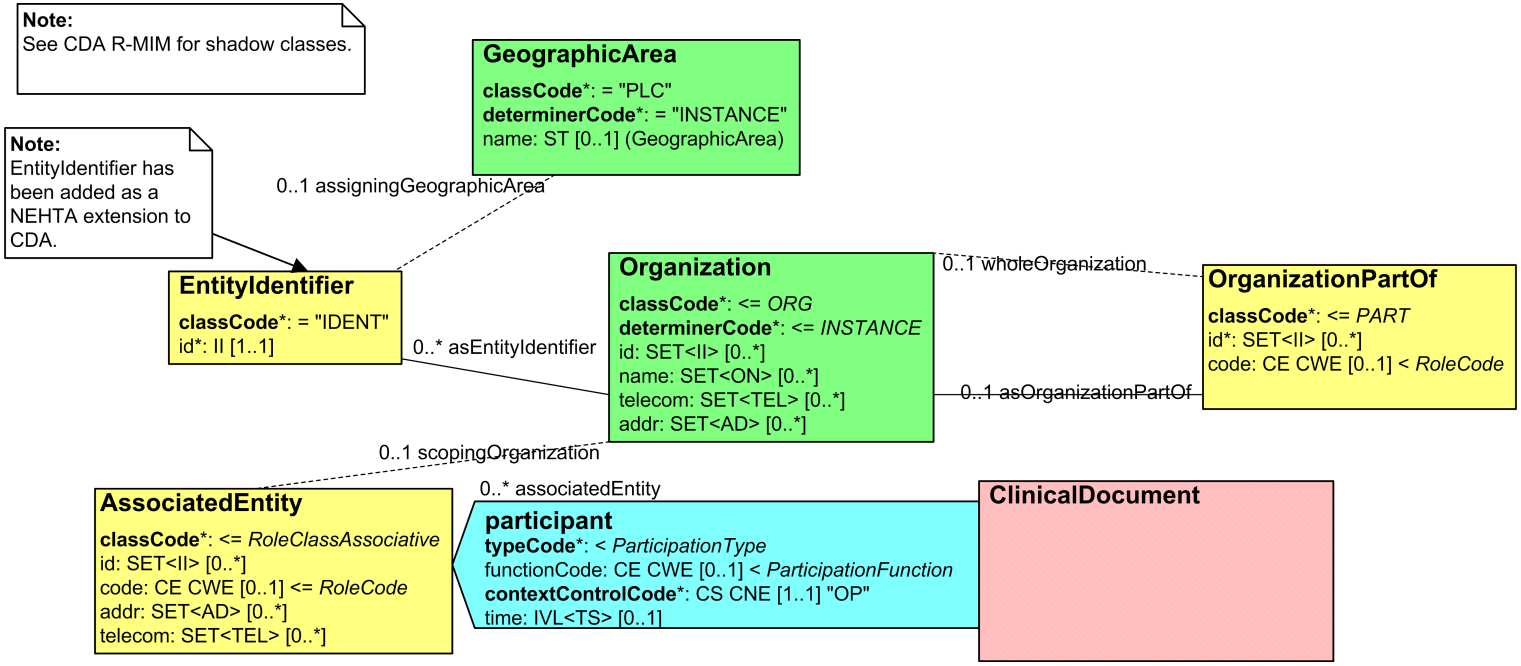

Figure 7.29. Nominated Primary Healthcare Provider (Organisation)

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument		
Nominated Primary Healthcare Provider (Organisation) (Organisation)	The healthcare providers (Organisation) nominated by the patient as being primarily responsible for their ongoing healthcare.	0..1	**participant**		
Nominated Primary Healthcare Provider (Organisation) > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	participant/**@typeCode="PART"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Nominated Primary Healthcare Provider (Organisation)".	
			participant/**functionCode/@code="PCP"**		
Nominated Primary Healthcare Provider (Organisation) > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	participant/**associatedEntity/code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	See <code> for available attributes.
			participant/**associatedEntity/@classCode**	HL7:RoleClassAssociative (usually ="PROV")	
n/a	n/a	1..1	participant/associatedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Nominated Primary Healthcare Provider (Organisation) > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	participant/associatedEntity/**scopingOrganization**		
Nominated Primary Healthcare Provider (Organisation) > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Nominated Primary Healthcare Provider (Organisation) > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	participant/associatedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Nominated Primary Healthcare Provider (Organisation) > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	participant/associatedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Nominated Primary Healthcare Provider (Organisation) > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Nominated Primary Healthcare Provider (Organisation) > Participant > Person or Organisation or Device > **Organisation**	Any organisation of interest to, or involved in, the business of healthcare service provision.	1..1	n/a		Not mapped directly, encompassed implicitly in participant/associatedEntity/associatedPerson.
Nominated Primary Healthcare Provider (Organisation) > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	participant/associatedEntity/scopingOrganization/**asOrganizationPartof/wholeOrganization/name**		
Nominated Primary Healthcare Provider (Organisation) > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	participant/associatedEntity/scopingOrganization/**name**		
Nominated Primary Healthcare Provider (Organisation) > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	participant/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.28. Nominated Primary Healthcare Provider - Organisation XML Fragment

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

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

   ...

   <!-- Begin Nominated primary healthcare provider (organisation) -->
 <participant typeCode="PART">
  <functionCode code="PCP" />
  <associatedEntity classCode="PROV">

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

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

   <!-- Address -->
   <addr use="WP">
    <streetAddressLine>55 GP Street</streetAddressLine>
    <city>Nehtaville</city>
    <state>QLD</state>
    <postalCode>5555</postalCode>
    <additionalLocator>32568931</additionalLocator>
    <country>Australia</country>
   </addr>

   <!-- Electronic Communication Detail -->
   <telecom use="WP" value="tel:0788888888" />

   <scopingOrganization>
    <!-- Department/Unit -->
    <name use="ORGB">GP Practice</name>

    <asOrganizationPartOf>
     <wholeOrganization>

      <!-- Organisation Name -->
      <name use="ORGB">GP Practice Group</name>

      <!-- Entity Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
       <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621771137888" />
       <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
       </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
     </wholeOrganization>
    </asOrganizationPartOf>
   </scopingOrganization>
  </associatedEntity>
 </participant>
 <!-- End Nominated primary healthcare provider (organisation) -->
```

```
    ...

    <!-- End CDA Header -->

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

     …

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

7.1.3.2 ADVERSE REACTIONS

Identification

Name	ADVERSE REACTIONS
Metadata Type	Section
Identifier	S-20113

Relationships

Children Not Included in Mapping for This Section

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

Parent

Data Type	Name	Obligation	Occurrence
	HEALTH PROFILE	Essential	1..1

CDA R-MIM Representation

Figure 7.30, “Adverse Reactions” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The ADVERSE REACTIONS data group is related to its context (Health Profile section) by a component relationship to a new section.

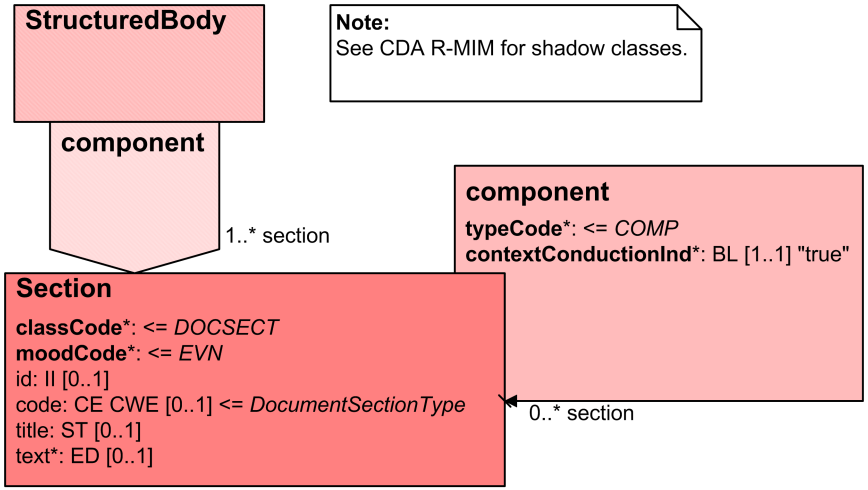

Figure 7.30. Adverse Reactions

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component/section[health]		
Adverse Reactions	A section that groups together adverse reaction information about the subject of care that is known to the provider/provider facility during a healthcare visit/encounter.	1..1	**component[adverse]/section/code**		
			component[adverse]/section/code/**@code="101.20113"**		
			component[adverse]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[adverse]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[adverse]/section/code/**@displayName="Adverse Reactions"**		
			component[adverse]/section/**title="Adverse Reactions"**		
			component[adverse]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.29. Adverse Reactions XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Health Profile section -->
   <component>
    <section>

     ...

     <!-- Begin Adverse Reactions section -->
     <component>
      <section>
       <code code="101.20113"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Adverse Reactions"/>

       <title>Adverse reactions</title>
       <text>...</text>

       ...

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

     ...

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

     ...

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

7.1.3.2.1 EXCLUSION STATEMENT - ADVERSE REACTION

Identification

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

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.31, “Exclusion Statement - Adverse Reaction” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

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

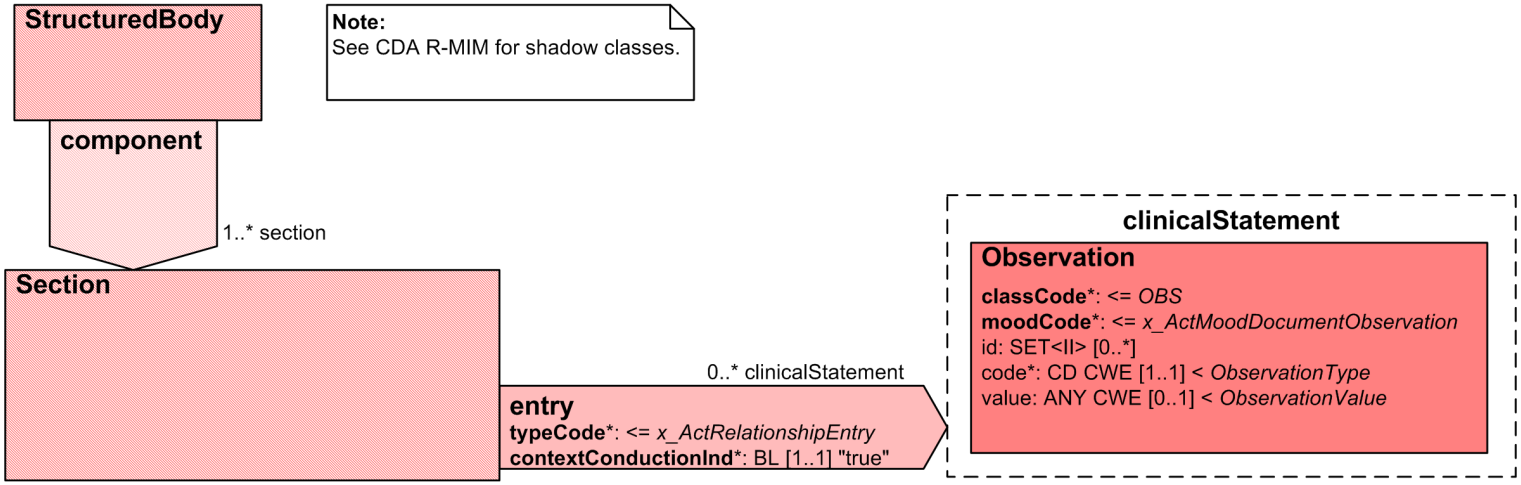

Figure 7.31. Exclusion Statement - Adverse Reaction

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[health]/section/component[adverse]/section		
Exclusion Statement - Adverse Reactions	Assertion that no adverse reaction information is included in this section of the document.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Exclusion Statement - Adverse Reactions > **Global Statement**	Global statements about the exclusion.	1..1	**entry[gbl_adv]**		
			entry[gbl_adv]/**observation**		
			entry[gbl_adv]/observation/**@classCode="OBS"**		
			entry[gbl_adv]/observation/**@moodCode="EVN"**		
			entry[gbl_adv]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	See <id> for available attributes.
			entry[gbl_adv]/observation/**code**		
			entry[gbl_adv]/observation/code/**@code="103.16302.4.3.4"**		
			entry[gbl_adv]/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[gbl_adv]/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry[gbl_adv]/observation/code/**@displayName="Global Statement "**		
			entry[gbl_adv]/observation/**value:CD**	NCTIS: Admin Codes - Global Statement Values	See <code> for available attributes.

Example 7.30. Exclusion Statement - Adverse Reaction XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Health Profile section -->
   <component><!-- [health] -->
    <section>

     ...

     <!-- Begin Adverse Reactions section -->
     <component><!-- [adverse] -->
      <section>

       ...

       <!-- Begin Exclusion Statement - Adverse Reaction -->
       <!-- Global Statement -->
       <entry>
        <!-- [gbl_adv] -->
        <observation classCode="OBS" moodCode="EVN">
         <id root="95BB617A-38CC-11E0-95D5-6815E0D72085" />
         <code code="103.16302.4.3.4" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Global Statement" />

         <value code="03" codeSystem="1.2.36.1.2001.1001.101.104.16299"
          codeSystemName="Global Statement Values" displayName="None supplied" xsi:type="CD" />
        </observation>
       </entry>
       <!-- Begin Exclusion Statement - Adverse Reaction -->
      </section>
     </component>
     <!-- End Adverse Reactions section -->

    ...

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

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

```
</ClinicalDocument>
```

7.1.3.2.2 ADVERSE REACTION

Identification

Name	Adverse Reaction
Metadata Type	Data Group
Identifier	DG-15517

Relationships

Parent

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

CDA R-MIM Representation

Figure 7.32, “Adverse Reaction” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

Each ADVERSE REACTION data group modelled as an Observation which is related to the Adverse Reaction section by an entry relationship. This Observation has a related participant which represents the Agent Description. It also has a related inverted manifestation Observation to describe the Reaction Detail.

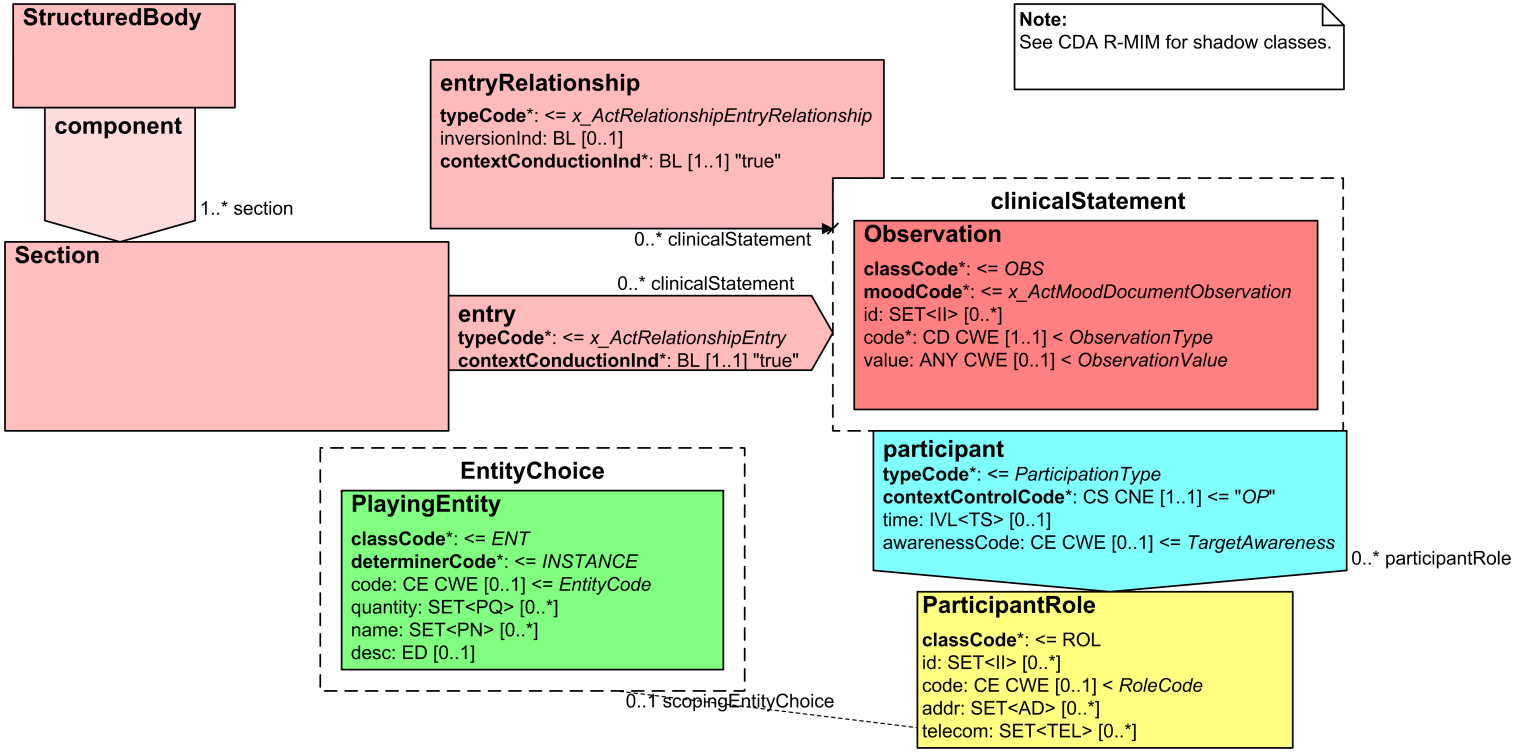

Figure 7.32. Adverse Reaction

CDA Mapping

Note

NS = In the absence of national standard code sets, the code sets used **SHALL** be registered code sets, i.e. registered through the *HL7 code set registration procedure*[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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[health]/section/component[adverse]/section		
Adverse Reaction	A known adverse reaction for the subject of care (including allergies and intolerances), and any relevant reaction details.	0..*	**entry**		
			entry/**observation**		
			entry/observation/**@classCode="OBS"**		
			entry/observation/**@moodCode="EVN"**		
			entry/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/observation/**code**		
			entry/observation/code/**@code="102.15517"**		
			entry/observation/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry/observation/code/**@codeSystemName="NCTIS Data Components"**		
			entry/observation/code/**@displayName="Adverse Reaction"**		
Adverse Reaction > **Agent Description**	The agent causing the adverse reaction experienced by the subject of care.	1..1	entry/observation/**participant**		
			entry/observation/participant/**@typeCode="CAGNT"**		
			entry/observation/participant/**participantRole/playingEntity/code**	NS	See <code> for available attributes.
Adverse Reaction > **Adverse Reaction Type**	The type of reaction experienced by the subject of care to an agent.	1..1	entry/observation/**value:CD**	NS	See <code> for available attributes.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Adverse Reaction > **Reaction Detail**	Undesirable responses to an agent.	0..*	entry/observation/**entryRelationship/@typeCode="MFST"**		
			entry/observation/entryRelationship/**@inversionInd="true"**		
			entry/observation/entryRelationship/**observation**		
			entry/observation/entryRelationship/observation/**@classCode="OBS"**		
			entry/observation/entryRelationship/observation/**@moodCode="EVN"**		
Adverse Reaction > Reaction Detail > **Reaction Description**	The signs and/or symptoms experienced or exhibited by the subject of care as a consequence of the adverse reaction to the specific agent.	1..1	entry[adv_reac]/observation/entryRelationship/observation/**code**	NS	

Example 7.31. Adverse Reaction XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Health Profile section -->
   <component><!-- [health] -->
    <section>

     ...

     <!-- Begin Adverse Reactions section -->
     <component><!-- [adverse] -->
      <section>

       ...

       <!-- Adverse Reaction -->
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <id root="AC8896B8-3D57-11E0-A777-F259DFD72085" />
         <code code="102.15517"
           codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components"
           displayName="Adverse Reaction"/>

         <!-- Adverse Reaction Type -->
         <value xsi:type="CD"
            code="419199007"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED-CT"
            codeSystemVersion="20090731"
            displayName="Allergy to substance"/>

         <!-- Agent Description -->
         <participant typeCode="CAGNT">
          <participantRole>
           <playingEntity>
            <code code="90580008"
              codeSystem="2.16.840.1.113883.6.96"
              codeSystemName="SNOMED-CT"
              codeSystemVersion="20090731"
              displayName="fish" />
           </playingEntity>
          </participantRole>
```

```
  </participant>

  <!-- Reaction Detail -->
  <entryRelationship inversionInd="true" typeCode="MFST">
   <observation classCode="OBS" moodCode="EVN">

    <!-- Reaction Description -->
    <code code="271807003"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED-CT"
      codeSystemVersion="20090731"
      displayName="skin rash"/>
   </observation>
  </entryRelationship>

  <!-- Reaction Detail -->
  <entryRelationship inversionInd="true" typeCode="MFST">
   <observation classCode="OBS" moodCode="EVN">

    <!-- Reaction Description -->
    <code code="418290006"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED-CT"
      codeSystemVersion="20090731"
      displayName="itchy"/>
   </observation>
  </entryRelationship>
 </observation>
</entry>

<!-- Adverse Reaction -->
<entry>
 <observation classCode="OBS" moodCode="EVN">
  <code code="102.15517"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Adverse Reaction"/>

  <!-- Adverse Reaction Type -->
  <value xsi:type="CD"
     code="416098002"
     codeSystem="2.16.840.1.113883.6.96"
     codeSystemName="SNOMED-CT"
     codeSystemVersion="20090731"
     displayName="Drug allergy"/>

  <!-- Agent Description -->
  <participant typeCode="CAGNT">
   <participantRole>
    <playingEntity>
     <code code="6369005"
       codeSystem="2.16.840.1.113883.6.96"
       codeSystemName="SNOMED-CT"
       codeSystemVersion="20090731"
       displayName="penicillin"/>
    </playingEntity>
   </participantRole>
  </participant>

  <!-- Reaction Detail -->
  <entryRelationship inversionInd="true" typeCode="MFST">
   <observation classCode="OBS" moodCode="EVN">

    <!-- Reaction Description -->
    <code code="64305001"
```

```
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED-CT"
            codeSystemVersion="20090731"
            displayName="urticaria"/>
         </observation>
        </entryRelationship>

        <!-- Reaction Detail -->
        <entryRelationship inversionInd="true" typeCode="MFST">
         <observation classCode="OBS" moodCode="EVN">

          <!-- Reaction Description -->
          <code>
           <originalText>Nausea and vomiting</originalText>
          </code>
         </observation>
        </entryRelationship>
       </observation>
      </entry>
      <!-- CDA Entries for Adverse Reactions -->
     </section>
    </component>
    <!-- End Adverse Reactions section -->

    ...

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

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

7.1.3.3 ALERTS

Identification

Name	ALERTS
Metadata Type	Section
Identifier	S-20112

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	HEALTH PROFILE	Optional	0..1

CDA R-MIM Representation

Figure 7.33, “Alerts” 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 Alerts section is related to its context (Health Profile section) by a component relationship to a new section. This section has a related entry observation for each ALERT data group.

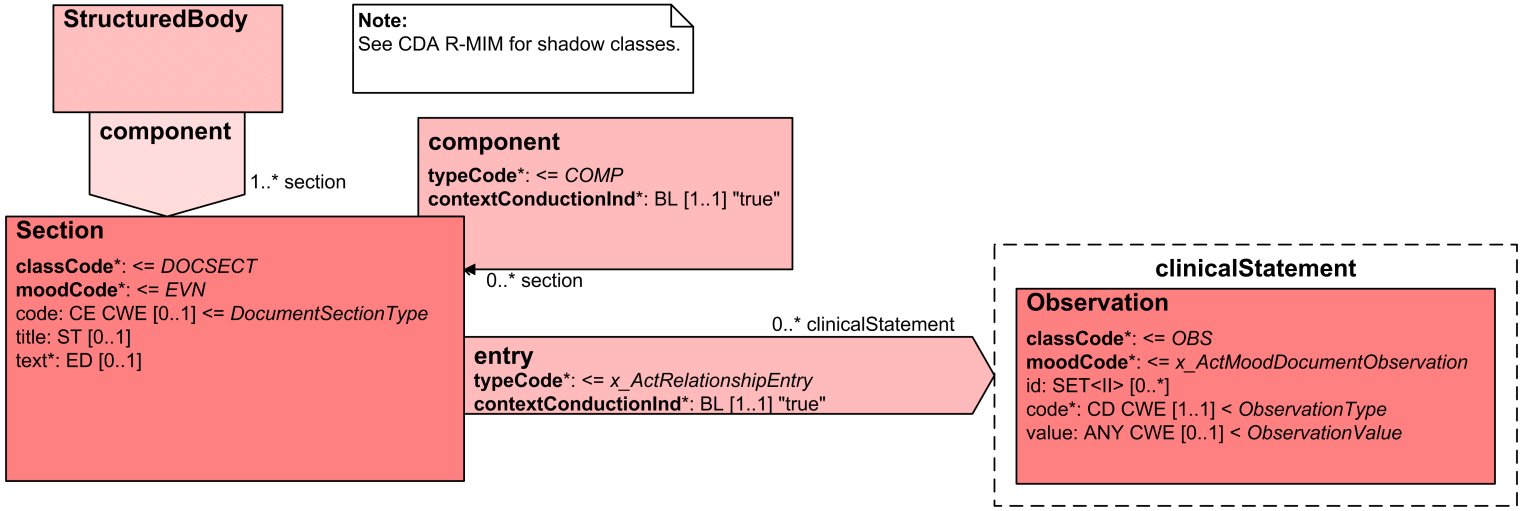

Figure 7.33. Alerts

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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[health]/section		
Alerts	Describes alerts pertaining to the patient that may require special consideration or action by the recipients.	0..1	**component[alerts]/section/code**		
			component[alerts]/section/code//**@code="101.20021"**		
			component[alerts]/section/code//**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[alerts]/section/code//**@codeSystemName="NCTIS Data Components"**		
			component[alerts]/section/code//**@displayName="Alerts"**		
			component[alerts]/section/**title="Alerts"**		
			component[alerts]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[health]/section		
Alerts > **Alert**	Describes information pertaining to a patient that may: • need special consideration by a healthcare provider before making a decision about his/her actions to avert an unfavourable healthcare event; • need consideration and/or action by a healthcare provider or facility in relation to the care and safety of the patient, staff and/or other individuals; or • notify the healthcare provider of special circumstances that may be relevant in delivering care and/or interacting with the patient.	1..*	component[alerts]/section/**entry**		
			component[alerts]/section/entry/**observation**		
			component[alerts]/section/entry/observation/**@classCode="OBS"**		
			component[alerts]/section/entry/observation/**@moodCode="EVN"**		

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
n/a	n/a	0..1	component[alerts]/section/entry/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.
Alerts > Alert > **Alert Type**	The type of alert (e.g. infection risk, special needs, clinical, discharge circumstances, vulnerable families, psychosocial alerts etc).	1..1	component[alerts]/section/entry/observation/**code**	NS	See <code> for available attributes.
Alerts > Alert > **Alert Description**	The nature of the alert.	1..1	component[alerts]/section/entry/observation/**value:CD**	NS	

Example 7.32. Alerts XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Health Profile section -->
   <component><!-- [health] -->
    <section>
     ...

     <!-- Begin Alerts section -->
     <component><!-- [alerts] -->
      <section>
       <code code="101.20021"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Alerts"/>

       <title>Alerts</title>
       <text>...</text>

       <!-- Begin Alert -->
       <entry>
        <observation classCode="OBS" moodCode="EVN">

         <!-- ID is used for system purposes such as matching -->
         <id root="98214104-D1D6-11DE-8E14-FE6B56D89593"/>

         <!-- Alert Type -->
         <code code="74188005"
           codeSystem="2.16.840.1.113883.6.96"
           codeSystemName="SNOMED-CT"
           codeSystemVersion="20090731"
           displayName="Medical"/>

         <!-- Alert Description -->
         <value code="78648007"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED-CT"
            codeSystemVersion="20090731"
            displayName="At risk for infection"
            xsi:type="CD"/>
        </observation>
       </entry>
       <!-- End Alert -->
```

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

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

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

7.1.4 PLAN

Identification

Name	PLAN
Metadata Type	Section
Identifier	S-16020

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	ARRANGED SERVICES	Optional	0..1
	RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED	Essential	1..1

Parent

Data Type	Name	Obligation	Occurrence
	e-Discharge Summary	Essential	1..1

CDA R-MIM Representation

Figure 7.34, “Plan” 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 Plan section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

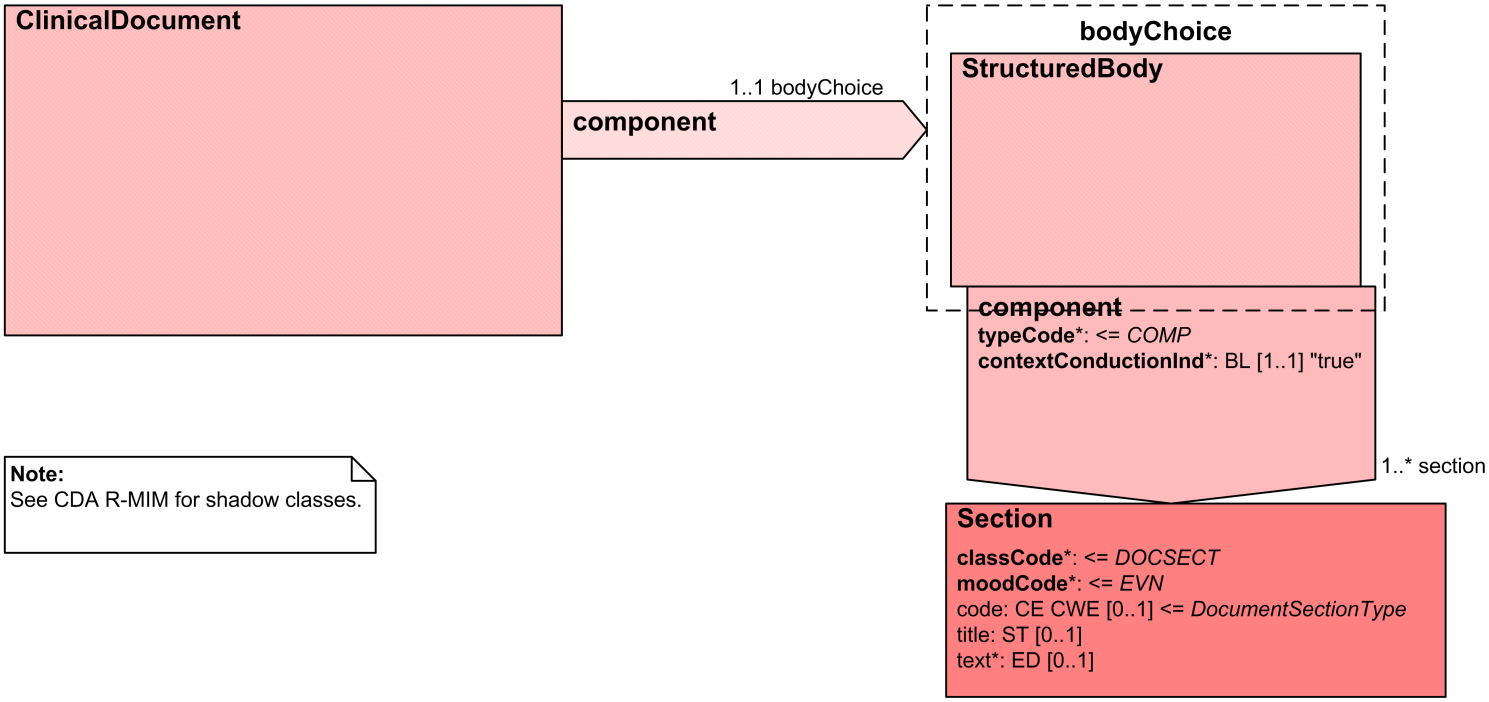

Figure 7.34. Plan

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Plan	Describes the services requested for the subject of care and the recommendations to the recipient healthcare providers and/or the subject of care.	1..1	**component[rec]/section/code**		
			component[rec]/section/code/**@code="101.16020"**		
			component[rec]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[rec]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[rec]/section/code/**@displayName="Plan"**		
			component[rec]/section/**title="Plan"**		
			component[rec]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.33. Plan XML Fragment

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

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

   …

 <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>
     <code code="101.16020"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Plan"/>
     <title>Plan</title>

     <text>...</text>

     ...

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

   ...

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

</ClinicalDocument>
```

7.1.4.1 ARRANGED SERVICES

Identification

Name	ARRANGED SERVICES
Metadata Type	Section
Identifier	S-16021

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	PROTOCOL	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	PLAN	Optional	0..1

CDA R-MIM Representation

Figure 7.35, “Arranged Services” 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 Arranged Services section is related to its context (Plan section) by a component relationship to a new section. This section has a related entry Act for each ARRANGED SERVICE data group.

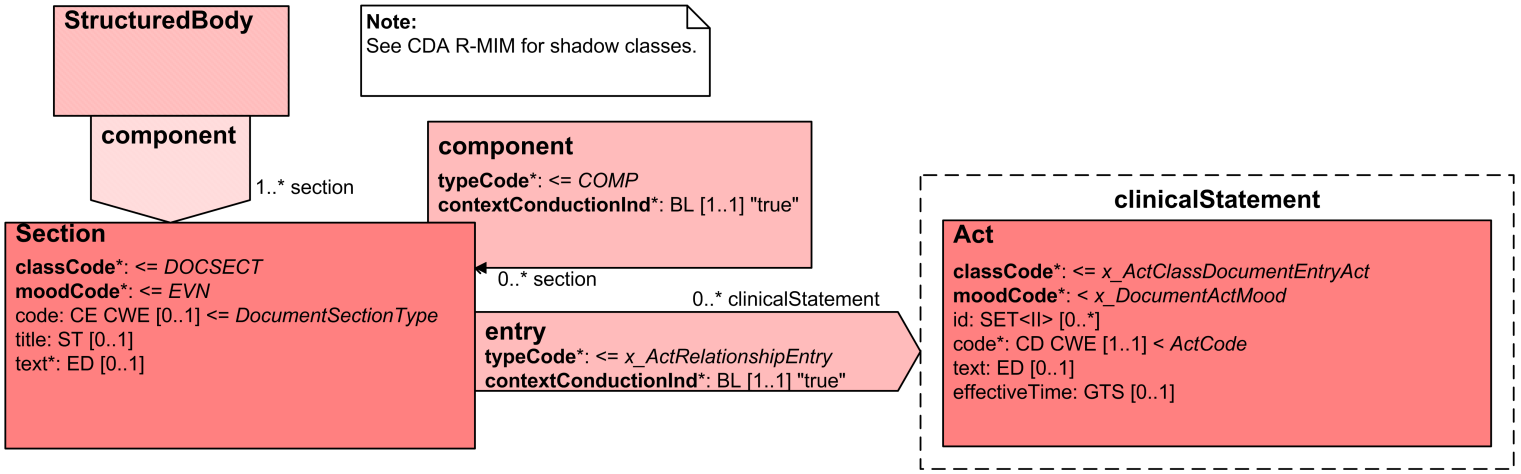

Figure 7.35. Arranged Services

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*[14] 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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section		
Arranged Services	Describes services that have been provided for or arranged for the subject of care.	0..1	**component[arranged]/section/code**		
			component[arranged]/section/code/**@code="101.16021"**		
			component[arranged]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[arranged]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[arranged]/section/code/**@displayName="Arranged Services"**		
			component[arranged]/section/**title="Arranged Services"**		
			component[arranged]/section/**text**		See Appendix A, *CDA Narratives*
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[health]/section		
Arranged Services > **Arranged Service**	Describes the types of service requested for, or provided to, the subject of care.	1..*	component[arranged]/section/**entry[service]**		
			component[arranged]/section/entry[service]/**act**		
			component[arranged]/section/entry[service]/act/**@classCode="ACT"**		
			component[arranged]/section/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.
Arranged Services > Arranged Service > **Arranged Service Description**	Describes the service arranged for, or provided to the subject of care.	1..1	component[arranged]/section/entry[service]/act/**code**	NS	See <code> for available attributes.
Arranged Services > Arranged Service > **Service Commencement Window**	The datetime or date range at/during which the arranged service is scheduled to be provided to the subject of care.	0..1	component[arranged]/section/entry[service]/act/**effectiveTime**		See <time> for available attributes.

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Arranged Services > Arranged Service > **Service Booking Status**	An indication of the booking status of the arranged service.	1..1	component[arranged]/section/entry[service]/act/**@moodCode**		HL7 v3 CDA: Act.moodCode

Example 7.34. Arranged Services XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>

     ...

    <!-- Begin Arranged Services Section -->
    <component><!-- [arranged] -->
     <section>
      <code code="101.16021"
        codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components"
        displayName="Arranged Services"/>

      <title>Arranged Services</title>
      <text>...</text>

      <!-- Arranged Service -->
      <entry><!-- [service] -->
       <act classCode="ACT" moodCode="APT"><!-- Service Booking Status -->

        <!-- ID is used for system purposes such as matching -->
        <id root="3F5BAA62-D1DD-11DE-9F84-81A056D89593"/>

        <!-- Arranged Service Description -->
        <code>
         <originalText>Orthopaedic outpatient clinic appointment</originalText>
        </code>

        <!-- Service Commencement Window -->
        <effectiveTime>
         <low value="200912011315"/>
        </effectiveTime>

        ...

       </act>

      </entry>
     </section>
```

```
      </component>
      <!-- End Arranged Services Section -->

      ...

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

    ...

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

7.1.4.1.1 PROTOCOL

Identification

Name	PROTOCOL
Metadata Type	Data Group
Identifier	DG-16131

Relationships

Children Not Included in Mapping for This Section

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

Parent

Data Type	Name	Obligation	Occurrence
	ARRANGED SERVICES	Optional	0..1

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements					
Arranged Services > Arranged Service > **Protocol**	Relevant non-clinical information.	0..1	n/a		This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.

7.1.4.1.1.1 SERVICE PROVIDER

Identification

Name	Service Provider
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	PROTOCOL	Optional	0..1

7.1.4.1.1.1.1 SERVICE PROVIDER - PERSON

CDA R-MIM Representation

Figure 7.36, “Service Provider - Person” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Service Provider data group is represented by the performer participation of the ClinicalStatement.

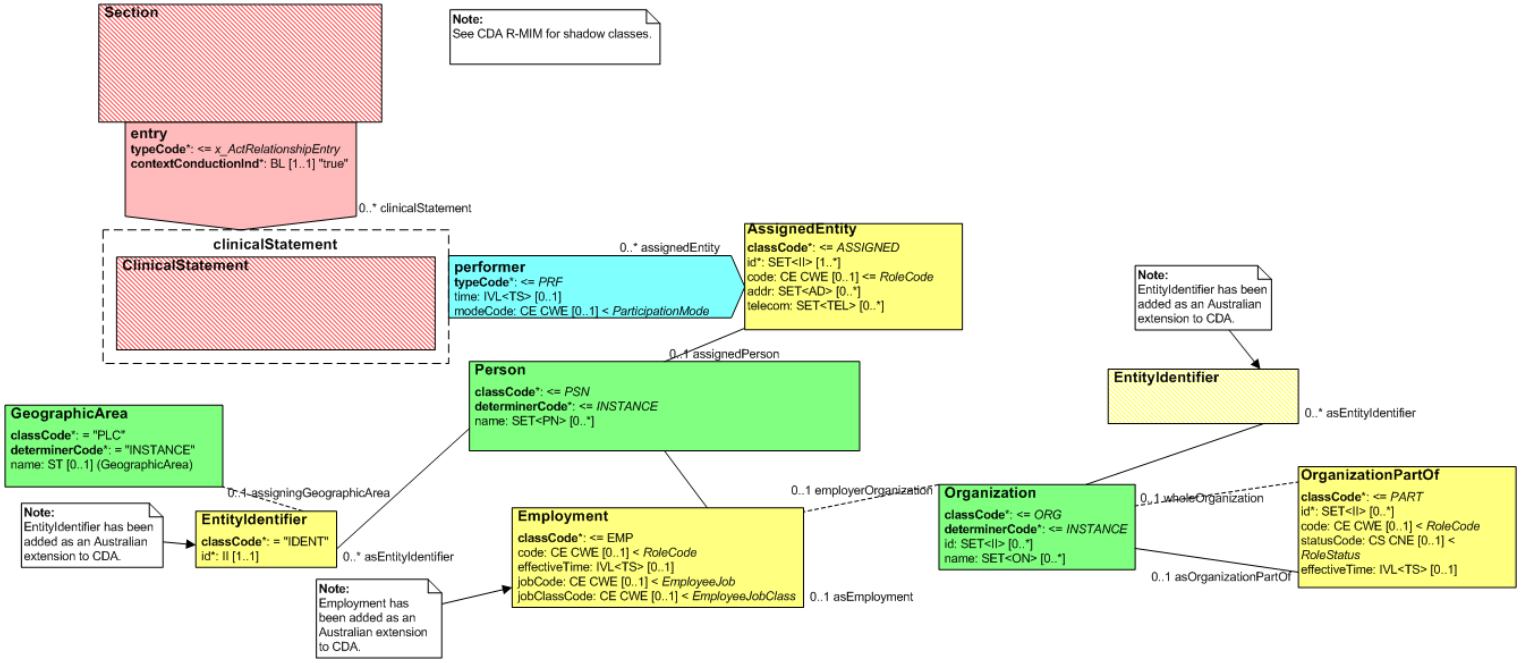

Figure 7.36. Service Provider - Person

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[arranged]/entry[service]/act		
Service Provider (Person)	The provider (individual) who has been arranged to provide the service.	0..1	**performer**		
Service Provider > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	performer/**@typeCode="PRF"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Service Provider".	
Service Provider > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	performer/**assignedEntity/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
n/a	n/a	1..1	performer/assignedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Service Provider > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	performer/assignedEntity/**assignedPerson**		
Service Provider > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/assignedPerson/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-I.	See common pattern: Entity Identifier.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Service Provider > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	performer/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Service Provider > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Service Provider > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Service Provider > Participant > Person or Organisation or Device > **Person**	An individual who is in the role of healthcare provider, who uses or is a potential user of a healthcare service, or is in some way related to, or a representative of, a subject of care (patient).	1..1	n/a		Not mapped directly, encompassed implicitly in performer/assignedEntity/assignedPerson.
Service Provider > Participant > Person or Organisation or Device > Person > **Person Name**	The appellation by which an individual may be identified separately from any other within a social context.	1..*	performer/assignedEntity/assignedPerson/**<Person Name>**		See common pattern: Person Name.
Service Provider > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	performer/assignedEntity/assignedPerson/**<Employment>**		See common pattern: Employment.

Example 7.35. Service Provider - Person XML Fragment

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

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

   …

  <!-- End CDA Header -->

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

    …

     <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>

     ...

    <!-- Begin Arranged Services Section -->
    <component><!-- [arranged] -->
     <section>

      ...

      <!-- Arranged Service -->
      <entry><!-- [service] -->
       <act classCode="ACT" moodCode="APT"><!-- Service Booking Status -->

        ...

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

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

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

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

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

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


   <!-- Entity Identifier -->
   <ext:asEntityIdentifier classCode="IDENT">
    <ext:id assigningAuthorityName="HPI-I"
     root="1.2.36.1.2001.1003.0.8003611754567890" />
    <ext:assigningGeographicArea classCode="PLC">
     <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
   </ext:asEntityIdentifier>

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

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

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

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

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

     <asOrganizationPartOf>
      <wholeOrganization>

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

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

```
        ...

        </act>
       </entry>
      </section>
     </component>
     <!-- End Arranged Services Section -->

     ...

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

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

7.1.4.1.1.1.2 SERVICE PROVIDER - ORGANISATION

CDA R-MIM Representation

Figure 7.37, “Service Provider - Organisation” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Service Provider data group is represented by the performer participation of the ClinicalStatement.

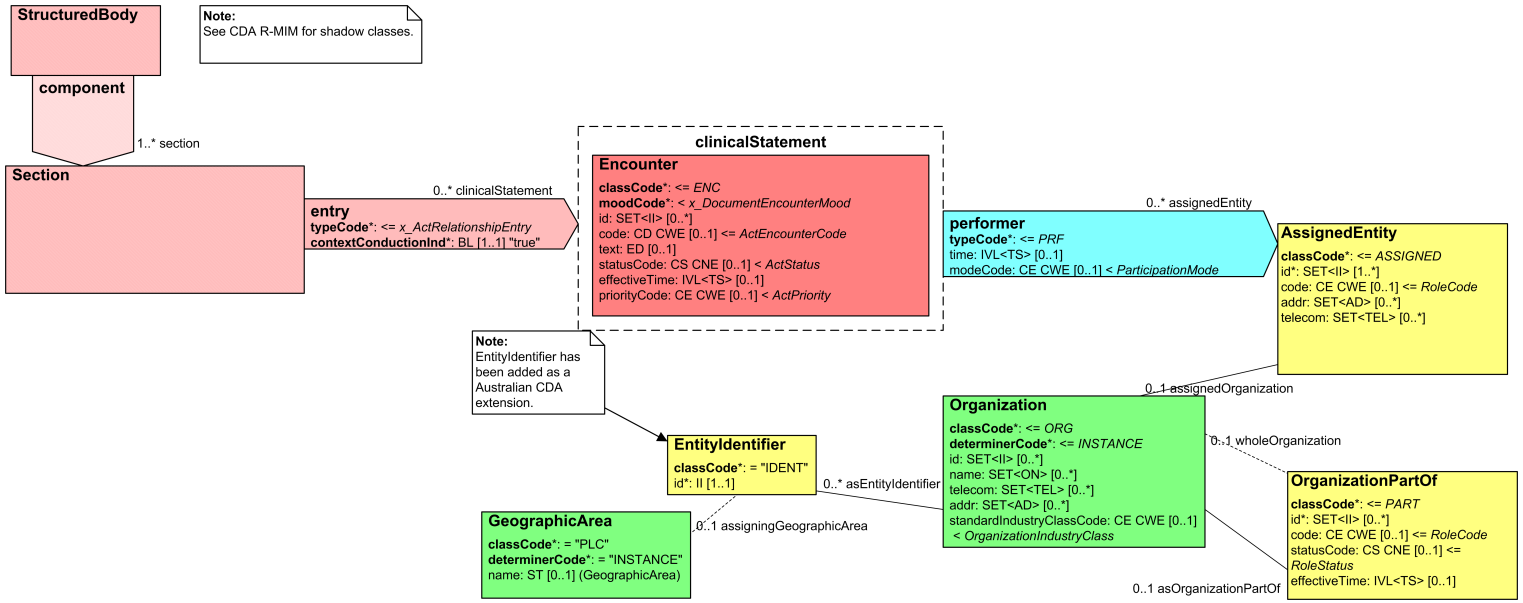

Figure 7.37. Service Provider - Organisation

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[arranged]/section/entry[service]/act/		
Service Provider (Organisation)	The provider (organisation) who has been arranged to provide the service.	0..1	**performer**		
Service Provider > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	performer/**@typeCode="PRF"**	Participation Type **SHALL** have an implementation-specific fixed value equivalent to "Service Provider".	
Service Provider > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	performer/**assignedEntity/code**	Role **SHALL** have a value representing the type of Facility e.g. Hospital, Clinic.	See <code> for available attributes.
n/a	n/a	1..1	performer/assignedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Service Provider > **Participant**	Details pertinent to the identification of an individual or organisation or device that has participated in a healthcare event/encounter/clinical interaction.	1..1	performer/assignedEntity/**representedOrganization**		
Service Provider > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..*	performer/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of one Entity Identifier **SHALL** be an Australian HPI-O.	See common pattern: Entity Identifier.
Service Provider > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	0..*	performer/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Service Provider > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Service Provider > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Service Provider > Participant > Person or Organisation or Device > **Organisation**	Any organisation of interest to, or involved in, the business of healthcare service provision.	1..1	n/a		Not mapped directly, encompassed implicitly in performer/assignedEntity/associatedPerson.
Service Provider > Participant > Person or Organisation or Device > Organisation > **Organisation Name**	The name by which an organisation is known or called.	1..1	performer/assignedEntity/representedOrganization/**asOrganizationPartof/wholeOrganization/name**		
Service Provider > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	performer/assignedEntity/representedOrganization/**name**		
Service Provider > Participant > Person or Organisation or Device > Organisation > Organisation Name Detail > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	performer/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.36. Service Provider - Organisation XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>

     ...

    <!-- Begin Arranged Services Section -->
    <component><!-- [arranged] -->
     <section>

      ...

      <!-- Arranged Service -->
      <entry><!-- [service] -->
       <act classCode="ACT" moodCode="APT"><!-- Service Booking Status -->

        ...

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

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

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

          <!-- Address -->
          <addr use="WP">
           <streetAddressLine>55 GP Street</streetAddressLine>
           <city>Nehtaville</city>
           <state>QLD</state>
           <postalCode>5555</postalCode>
           <additionalLocator>32568931</additionalLocator>
           <country>Australia</country>
          </addr>

          <!-- Electronic Communication Detail -->
```

```
          <telecom use="WP" value="tel:0788888888" />

          <representedOrganization>

           <asOrganizationPartOf>
            <wholeOrganization>

              <!-- Organisation Name -->
              <name use="ORGS">GP Practice</name>

              <!-- Entity Identifier -->
              <ext:asEntityIdentifier classCode="IDENT">
               <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621771167888" />
               <ext:assigningGeographicArea classCode="PLC">
                <ext:name>National Identifier</ext:name>
               </ext:assigningGeographicArea>
              </ext:asEntityIdentifier>
            </wholeOrganization>
           </asOrganizationPartOf>
          </representedOrganization>

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

        ...

       </act>
      </entry>
      <!-- End Arranged Services act -->
     </section>
    </component>
    <!-- End Arranged Services Section -->

    ...

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

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

7.1.4.2 RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED

Identification

Name	RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED
Metadata Type	Section
Identifier	S-20116

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	RECOMMENDATIONS PROVIDED	Essential	1..*
	INFORMATION PROVIDED	Optional	0..1

Parent

Data Type	Name	Obligation	Occurrence
	PLAN	Essential	1..1

CDA R-MIM Representation

Figure 7.38, “Record of Recommendations and Information Provided” 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 Record of Recommendations and Information Provided section is related to its context (Plan section) by a component relationship to a new section.

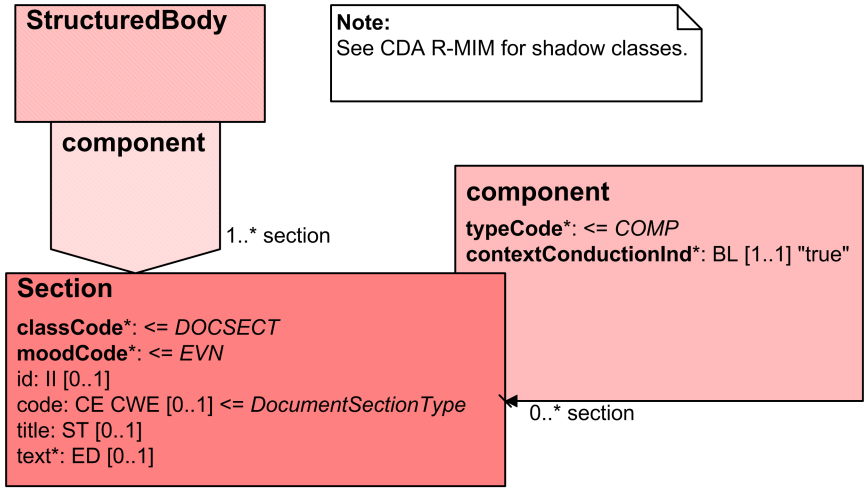

Figure 7.38. Record of Recommendations and Information Provided

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section		
Record Of Recommendations And Information Provided	Contains: • recommendations to a recipient healthcare provider and/or patient which are relevant to the continuity of care and management of the patient after discharge; and optionally • information that has been provided, including information provided to the subject of care and/or relevant parties.	1..1	**component[rec]/section/code**		
			component[rec]/section/code/**@code="101.20016"**		
			component[rec]/section/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			component[rec]/section/code/**@codeSystemName="NCTIS Data Components"**		
			component[rec]/section/code/**@displayName="Record of Recommendations and Information Provided"**		
			component[rec]/section/**title="Record of Recommendations and Information Provided"**		
			component[rec]/section/**text**		See Appendix A, *CDA Narratives*

Example 7.37. Record of Recommendations and Information Provided XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>

     ...

     <!-- Begin Record of Recommendations and Information Provided Section -->
     <component><!-- [rec] -->
      <section>
       <code code="101.20016"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Record of Recommendations and Information Provided"/>


       <title>Record of Recommendations and Information Provided</title>
       <text>...</text>

       ...

      </section>
     </component>
     <!-- End Record of Recommendations and Information Provided Section -->

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

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

7.1.4.2.1 RECOMMENDATIONS PROVIDED

Identification

Name	RECOMMENDATIONS PROVIDED
Metadata Type	Data Group
Identifier	DS-20116

Relationships

Children Not Included in Mapping for This Section

Data Type	Name	Obligation	Occurrence
	RECOMMENDATION RECIPIENT	Essential	1..1

Parent

Data Type	Name	Obligation	Occurrence
	RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED	Essential	1..1

CDA R-MIM Representation

Figure 7.39, “Recommendations Provided” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

Each instance of the RECOMMENDATIONS PROVIDED data group is an Act that related to its context (Record of Recommendations and Information Provided) by an entry relationship.

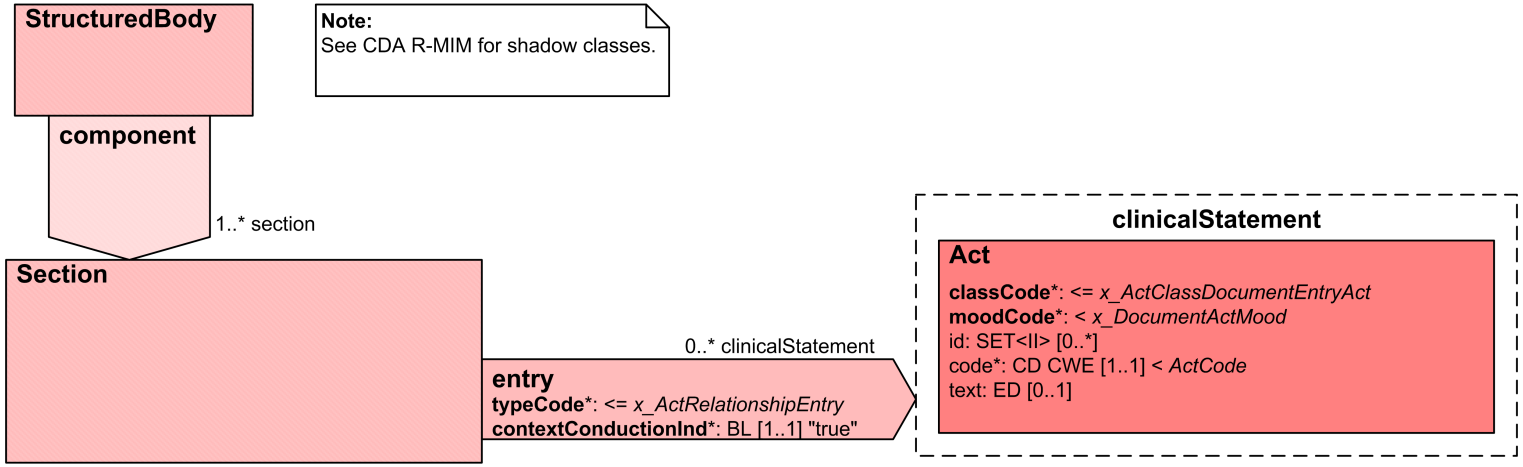

Figure 7.39. Recommendations Provided

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[rec]/section		
Recommendations Provided	Recommendations to a recipient healthcare provider and/or subject of care which are relevant to the continuity of care and management of the subject of care after discharge.	1..*	**entry[rec_prov]**		
			entry[rec_prov]/**act**		
			entry[rec_prov]/act/**@classCode="INFRM"**		
			entry[rec_prov]/act/**@moodCode="PRP"**		
			entry[rec_prov]/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[rec_prov]/act/**code**		
			entry[rec_prov]/act/code/**@code="102.20016.4.1.1"**		
			entry[rec_prov]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[rec_prov]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[rec_prov]/act/code/**@displayName="Recommendations Provided"**		
Recommendations Provided > **Recommendation Note**	Contains: • information and education that has been provided to and discussed with the subject of care, their family, carer and/or other relevant parties, including awareness or lack of awareness of diagnosed conditions, and relevant health management; • an indication of whether the subject of care or carer has understood the information or instructions provided may also be relevant; and/or • information and/or recommendations given by a healthcare provider during/at the end of a health event to another healthcare provider responsible for the ongoing care of the subject of care.	1..1	entry[rec_prov]/act/**text:ST**		

Example 7.38. Recommendations Provided XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>
     ...

     <!-- Begin Record of Recommendations and Information Provided Section -->
     <component><!-- [rec] -->
      <section>
       ...

       <!-- Begin Recommendations Provided -->
       <entry><!-- [rec_prov] -->
        <act classCode="INFRM" moodCode="PRP">

         <!-- ID is used for system purposes such as matching -->
         <id root="F90503FA-D1E2-11DE-8CC1-74CD56D89593"/>

         <code code="102.20016.4.1.1"
           codeSystem="1.2.36.1.2001.1001.101"
           codeSystemName="NCTIS Data Components"
           displayName="Recommendations Provided"/>

         <!-- Recommendation Note -->
         <text  xsi:type="ST">
          Please arrange a follow up appointment with a community physiotherapist in
          one week to ensure that post-surgical mobility outcomes are being met.
         </text>

         ...

        </act>
       </entry>
       <!-- End Recommendations Provided -->

       ...

      </section>
     </component>
     <!-- End Record of Recommendations and Information Provided Section -->
```

```
    </section>
   </component>
   <!-- End Plan Section -->

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

7.1.4.2.1.1 RECOMMENDATION RECIPIENT

Identification

Name	RECOMMENDATION RECIPIENT
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	RECOMMENDATIONS PROVIDED	Essential	1..1

7.1.4.2.1.1.1 RECOMMENDATION RECIPIENT - PERSON

CDA R-MIM Representation

Figure 7.40, “Recommendation Recipient - Person” shows a subset of the CDA R-MIM containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The RECOMMENDATION RECIPIENT data group is represented by the performer participation of the Recommendations Provided Act.

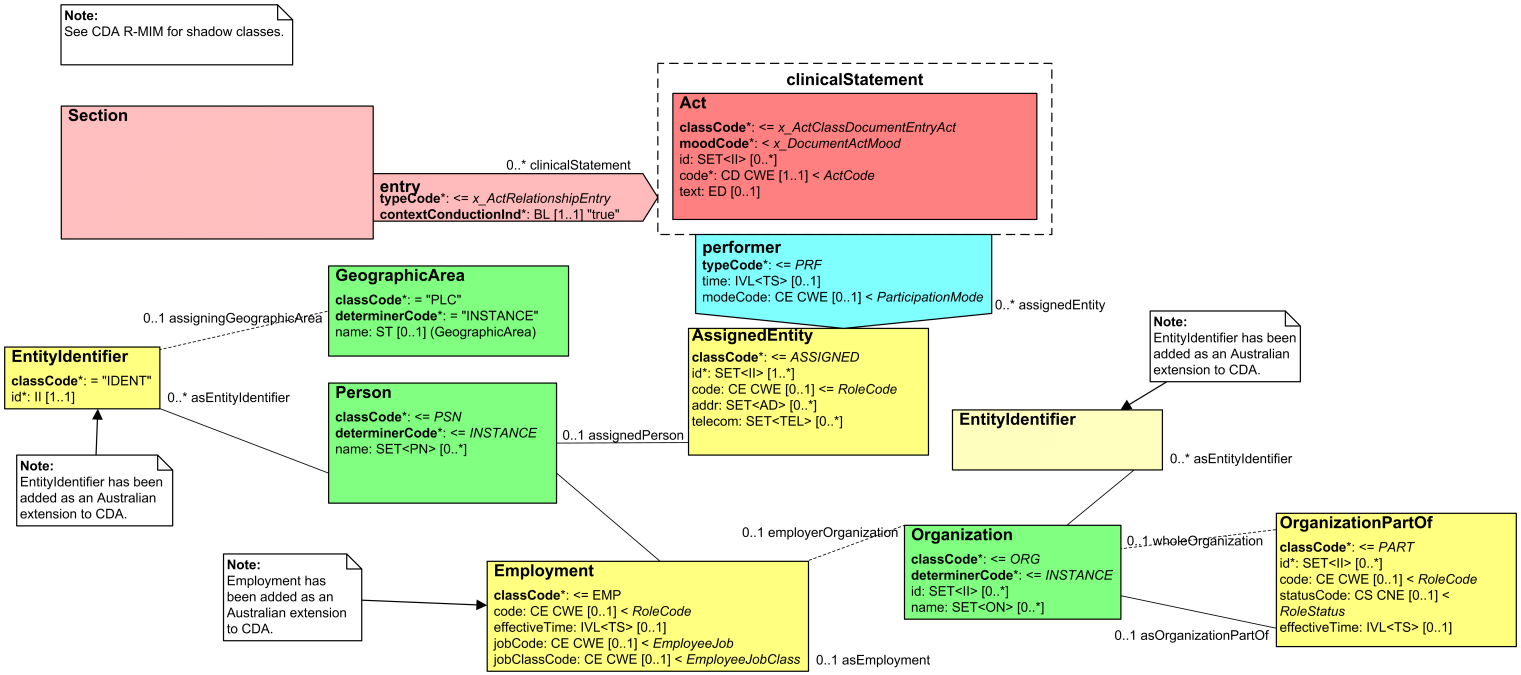

Figure 7.40. Recommendation Recipient - Person

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[rec]/section/entry[rec_prov]/act		
Recommendation Recipient (Person)	The individual to whom the information is directed.	1..1	**performer**		
Recommendation Recipient > **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 "Recommendation Recipient".	
Recommendation Recipient > **Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	performer/**assignedEntity/code**	Role **SHOULD** have a value chosen from 1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006 - METeOR 350899. [ABS2006]. However, if a suitable value in this set cannot be found, then any code set that is both registered with HL7 and publically available **MAY** be used.	See <code> for available attributes.
n/a	n/a	1..1	performer/assignedEntity/**id**	UUID This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used.	Required CDA element.
Recommendation Recipient > **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**		
Recommendation Recipient > 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 SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Recommendation Recipient > Participant > **Address**	The description of a location where an entity is located or can be otherwise reached or found and a description of the purpose for which that address is primarily used by that entity.	1..*	performer/assignedEntity/**<Address>**	AUSTRALIAN OR INTERNATIONAL ADDRESS SHALL be instantiated as an AUSTRALIAN ADDRESS.	See common pattern: Address.
Recommendation Recipient > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Recommendation Recipient > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as a PERSON. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Recommendation Recipient > 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.
Recommendation Recipient > 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.
Recommendation Recipient > Participant > Person or Organisation or Device > Person > **Employment Detail**	A person's occupation and employer.	0..1	performer/assignedEntity/assignedPerson/**<Employment>**		See common pattern: Employment.

Example 7.39. Recommendation Recipient - Person XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

     …

     <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>
     ...

     <!-- Begin Record of Recommendations and Information Provided Section -->
     <component><!-- [rec] -->
      <section>

       ...

       <!-- Begin Recommendations Provided -->
       <entry><!-- [rec_prov] -->
        <act classCode="INFRM" moodCode="PRP">

         ...

         <!-- Begin Recommendation Recipient (person) -->
         <performer typeCode="PRF">
          <assignedEntity>

           <!-- ID is used for system purposes such as matching -->
           <id root="B27D3CDE-0CD0-11E0-8956-CD50DFD72085" />

           <!-- Role -->
           <code code="252511" codeSystem="2.16.840.1.113883.13.62"
            codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
            displayName="Physiotherapist" />

           <!-- Address -->
           <addr use="WP">
            <streetAddressLine>67 Physiotherapy Crescent</streetAddressLine>
            <city>Nehtaville</city>
            <state>QLD</state>
            <postalCode>5555</postalCode>
            <additionalLocator>32568931</additionalLocator>
            <country>Australia</country>
           </addr>

           <!-- Electronic Communication Detail -->
```

```
  <telecom value="mailto:ps@hospital.com.au" />

  <assignedPerson>

   <!-- Person Name -->
   <name use="L">
    <given>Physical</given>
    <family>Therapist</family>
   </name>

   <!-- Entity Identifier -->
   <ext:asEntityIdentifier classCode="IDENT">
    <ext:id assigningAuthorityName="HPI-I"
     root="1.2.36.1.2001.1003.0.8003615534567890" />
    <ext:assigningGeographicArea classCode="PLC">
     <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
   </ext:asEntityIdentifier>

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

    <!-- Occupation -->
    <ext:jobCode code="252511" codeSystem="2.16.840.1.113883.13.62"
     codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"
     displayName="Physiotherapist" />

    <!-- 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>Physical Therapists</name>

     <asOrganizationPartOf>
      <wholeOrganization>

       <!-- Organisation Name -->
       <name use="ORGB">Physical Therapist Clinic</name>

       <!-- Entity Identifier -->
       <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O"
         root="1.2.36.1.2001.1003.0.8003621231167866" />
        <ext:assigningGeographicArea classCode="PLC">
         <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
       </ext:asEntityIdentifier>

      </wholeOrganization>
     </asOrganizationPartOf>
    </ext:employerOrganization>
   </ext:asEmployment>
  </assignedPerson>
 </assignedEntity>
</performer>
<!-- End Recommendation Recipient (person) -->
```

```
          ...

         </act>
        </entry>
        <!-- End Recommendations Provided -->

        ...

       </section>
      </component>
      <!-- End Record of Recommendations and Information Provided Section -->

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

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

7.1.4.2.1.1.2 RECOMMENDATION RECIPIENT - ORGANISATION

CDA R-MIM Representation

Figure 7.41, “Recommendation Recipient - 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 RECOMMENDATION RECIPIENT data group is represented by the performer participation of the Recommendations Provided Act.

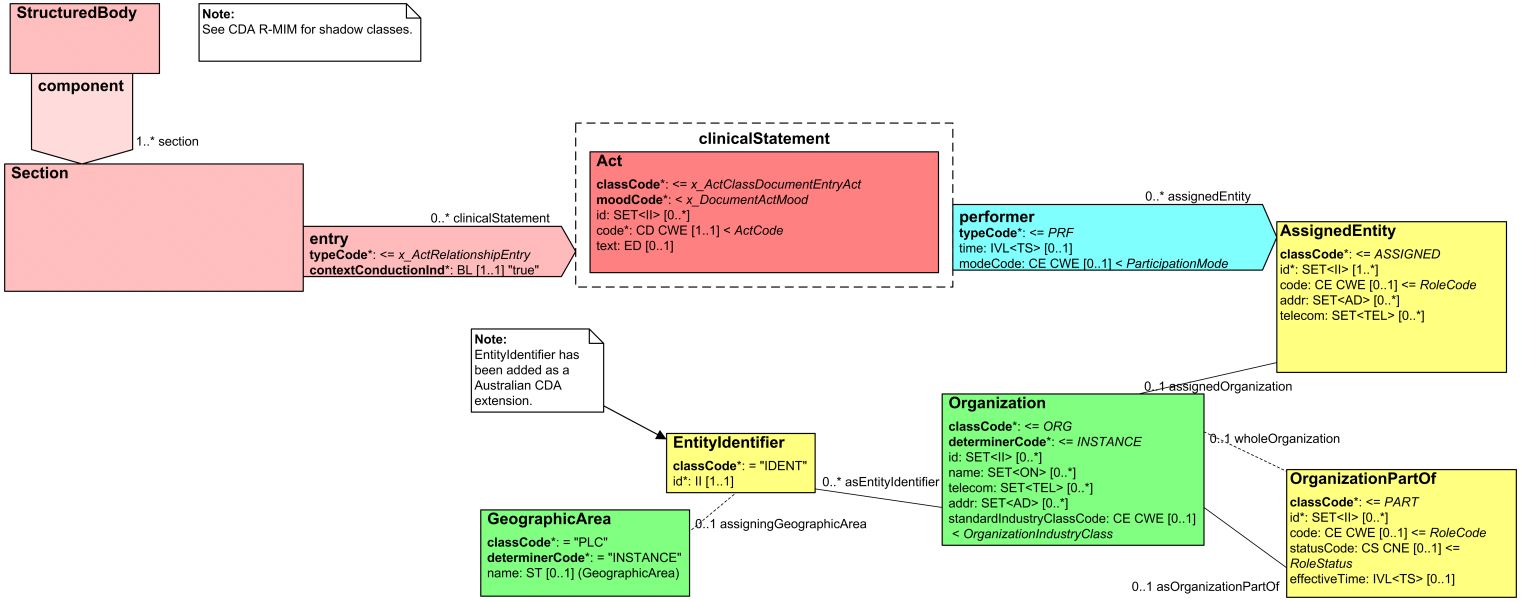

Figure 7.41. Recommendation Recipient - Organisation

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[rec]/section/entry[rec_prov]/act		
Recommendation Recipient (Organisation)	The organisation to whom the information is directed.	1..1	**performer**		
Recommendation Recipient > **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 "Recommendation Recipient".	
Recommendation Recipient > **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.
Recommendation Recipient > **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**		
Recommendation Recipient > 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.
Recommendation Recipient > 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.
Recommendation Recipient > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	performer/assignedEntity/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Recommendation Recipient > Participant > **Person or Organisation or Device**	Represents a choice to be made at run-time between PERSON, ORGANISATION and DEVICE.	1..1	n/a		PERSON OR ORGANISATION OR DEVICE **SHALL** be instantiated as an ORGANISATION. This logical NEHTA data component has no mapping to CDA. The cardinality of this component propagates to its children.
Recommendation Recipient > Participant > Person or Organisation or Device > **Organisation**	Any organisation of interest to, or involved in, the business of healthcare service provision.	1..1	n/a		Not mapped directly, encompassed implicitly in performer/assignedEntity/associatedPerson.
Recommendation Recipient > 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**		
Recommendation Recipient > Participant > Person or Organisation or Device > Organisation > **Department/Unit**	The name by which a department or unit within a larger organisation is known or called.	0..1	participant/assignedEntity/representedOrganization/**name**		
Recommendation Recipient > Participant > Person or Organisation or Device > Organisation > **Organisation Name Usage**	The classification that enables differentiation between recorded names for an organisation or service location.	0..1	participant/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	

Example 7.40. Recommendation Recipient - Organisation XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

    <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>
     ...

     <!-- Begin Record of Recommendations and Information Provided Section -->
     <component><!-- [rec] -->
      <section>

       ...

       <!-- Begin Recommendations Provided -->
       <entry><!-- [rec_prov] -->
        <act classCode="INFRM" moodCode="PRP">

         ...

         <!-- Begin Recommendation Recipient - Organisation -->
         <performer typeCode="PRF">
          <assignedEntity>

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

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

           <!-- Address -->
           <addr use="WP">
            <streetAddressLine>55 GP Street</streetAddressLine>
            <city>Nehtaville</city>
            <state>QLD</state>
            <postalCode>5555</postalCode>
            <additionalLocator>32568931</additionalLocator>
            <country>Australia</country>
           </addr>

           <!-- Electronic Communication Detail -->
           <telecom use="WP" value="tel:0788888888" />
```

```
          <representedOrganization>

           <!-- Department/Unit -->
           <name use="ORGB">GP Practice</name>

           <asOrganizationPartOf>
            <wholeOrganization>

             <name use="ORGB">GP Practice Group</name>

             <!-- Entity Identifier -->
             <ext:asEntityIdentifier classCode="IDENT">
              <ext:id assigningAuthorityName="HPI-O"
               root="1.2.36.1.2001.1003.0.8003624771167888" />
              <ext:assigningGeographicArea classCode="PLC">
               <ext:name>National Identifier</ext:name>
              </ext:assigningGeographicArea>
             </ext:asEntityIdentifier>
            </wholeOrganization>
           </asOrganizationPartOf>
          </representedOrganization>

         </assignedEntity>
        </performer>
        <!-- End Recommendation Recipient - Organisation -->

        ...

       </act>
      </entry>
      <!-- End Recommendations Provided -->

      ...

     </section>
    </component>
    <!-- End Record of Recommendations and Information Provided Section -->

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

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

7.1.4.2.2 INFORMATION PROVIDED

Identification

Name	INFORMATION PROVIDED
Metadata Type	Data Group
Identifier	DG-20116

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	RECORD OF RECOMMENDATIONS AND INFORMATION PROVIDED	Optional	0..1

CDA R-MIM Representation

Figure 7.42, “Information Provided” 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 INFORMATION PROVIDED data group is an Act that is related to its context (Record of Recommendations and Information Provided) by an entry relationship.

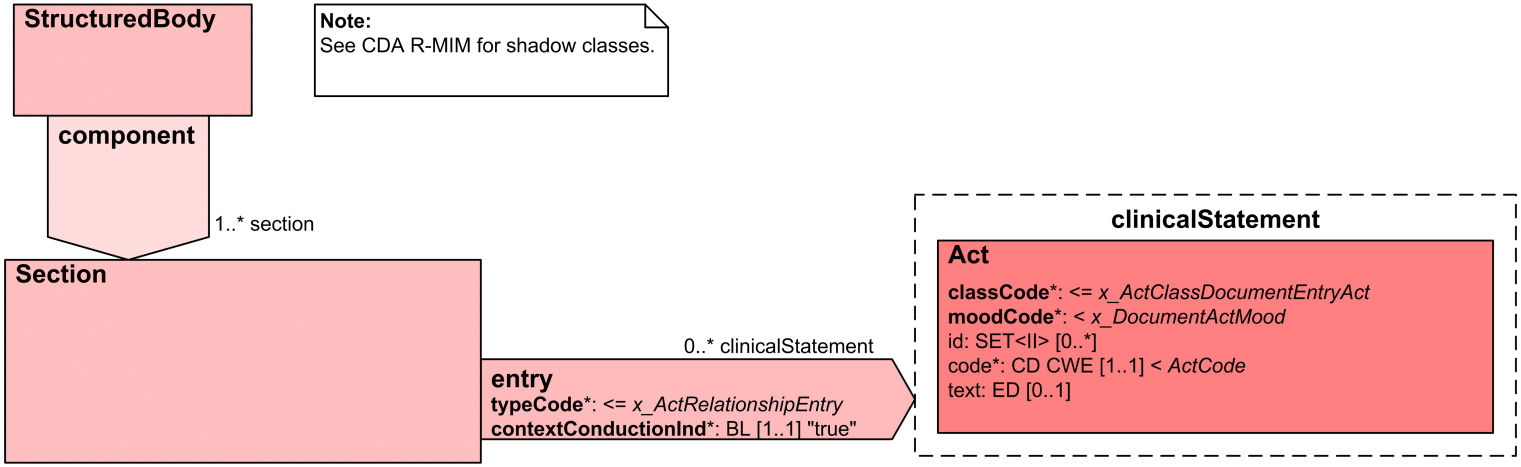

Figure 7.42. Information Provided

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[plan]/section/component[rec]/section		
Information Provided	Information that has been provided, including information provided to the subject of care and/or relevant parties.	0..1	**entry[inf_prov]**		
			entry[inf_prov]/**act**		
			entry[inf_prov]/act/**@classCode="INFRM"**		
			entry[inf_prov]/act/**@moodCode="EVN"**		
			entry[inf_prov]/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[inf_prov]/act/**code**		
			entry[inf_prov]/act/code/**@code="102.20016.4.1.2"**		
			entry[inf_prov]/act/code/**@codeSystem="1.2.36.1.2001.1001.101"**		
			entry[inf_prov]/act/code/**@codeSystemName="NCTIS Data Components"**		
			entry[inf_prov]/act/code/**@displayName="Information Provided"**		
Information Provided > **Information Provided to Subject of Care and/or Relevant Parties**	Contains: • information and education that has been provided to and discussed with the subject of care (patient), their family, carer and/or other relevant parties, including awareness or lack of awareness of diagnosed conditions, and relevant health management; • an indication of whether the subject of care (patient) or carer has understood the information or instructions provided may also be relevant; and/or • information and/or recommendations given by a healthcare provider during/at the end of a health event to another healthcare provider responsible for the ongoing care of the subject of care (patient).	1..1	entry[inf_prov]/act/**text:ST**		

Example 7.41. Information Provided XML Fragment

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

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

   …

   <!-- End CDA Header -->

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

    …

     <!-- Begin Plan Section -->
   <component><!-- [plan] -->
    <section>

     ...

    <!-- Begin Record of Recommendations and Information Provided Section -->
    <component><!-- [rec] -->
     <section>

      ...

      <!-- Begin Information Provided -->
      <entry><!-- [inf_prov] -->
       <act classCode="INFRM" moodCode="EVN">

        <!-- ID is used for system purposes such as matching -->
        <id root="12AC380C-D1E1-11DE-B505-09BE56D89593"/>

        <code code="102.20016.4.1.2"
         codeSystem="1.2.36.1.2001.1001.101"
         codeSystemName="NCTIS Data Components"
         displayName="Information Provided"/>

        <!-- Information Provided to Patient and/or Relevant Parties -->
        <text xsi:type="ST">
         The patient was advised to keep up a regular mobility routine as guided by the community
         physiotherapist. Return to GP day 10–14 post-op to have the staples removed.
        </text>
       </act>
      </entry>
      <!-- End Information Provided -->

     </section>
    </component>
    <!-- End Record of Recommendations and Information Provided Section -->

   </section>
  </component>
  <!-- End Plan Section -->
```

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

8 Common Patterns

8.1 code

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

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

A *displayName* is highly recommended.

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

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

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

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

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

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

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

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

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

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

Example 8.1. code

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


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


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



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

8.2 id

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

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

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

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

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

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

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

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

Example 8.2. id

```
<id root="2.16.840.1.113883.19" extension="123A45" />

<ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621234567890" />
```

8.3 time

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

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

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

Example 8.3. Simple timestamp

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

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

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

Example 8.4. Low time

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

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

Example 8.5. Interval timestamp 1

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

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

Example 8.6. Interval timestamp 2

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

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

Example 8.7. Width time

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

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

8.4 Entity Identifier

CDA Mapping

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

Example 8.8. Entity Identifier

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

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

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



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

8.5 Person Name

CDA Mapping

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

Example 8.9. Person Name

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

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

8.6 Address

CDA Mapping

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

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

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

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

Example 8.10. Address

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

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


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

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

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

8.7 Electronic Communication Detail

CDA Mapping

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

Example 8.11. Electronic Communication Detail

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

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


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


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

8.8 Employment

CDA Mapping

Note

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

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

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

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

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

Example 8.12. Employment

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

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

9 Australian CDA Extensions

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

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

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

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

9.1 ClinicalDocument.completionCode

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

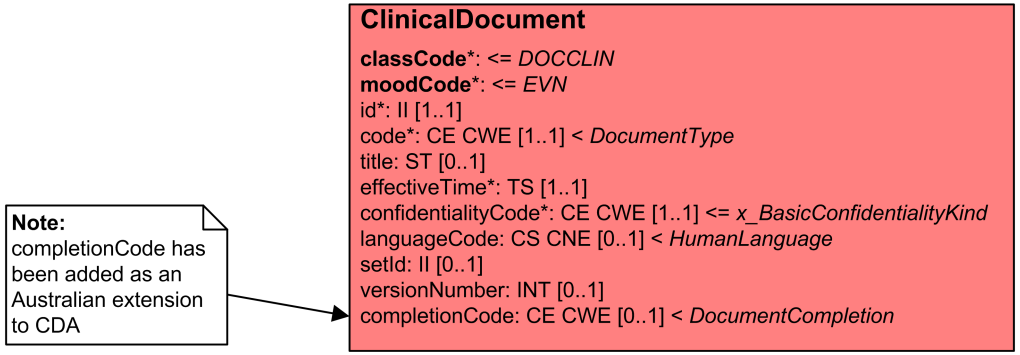

Figure 9.1. CDA R-MIM Representation

9.2 EntityIdentifier

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

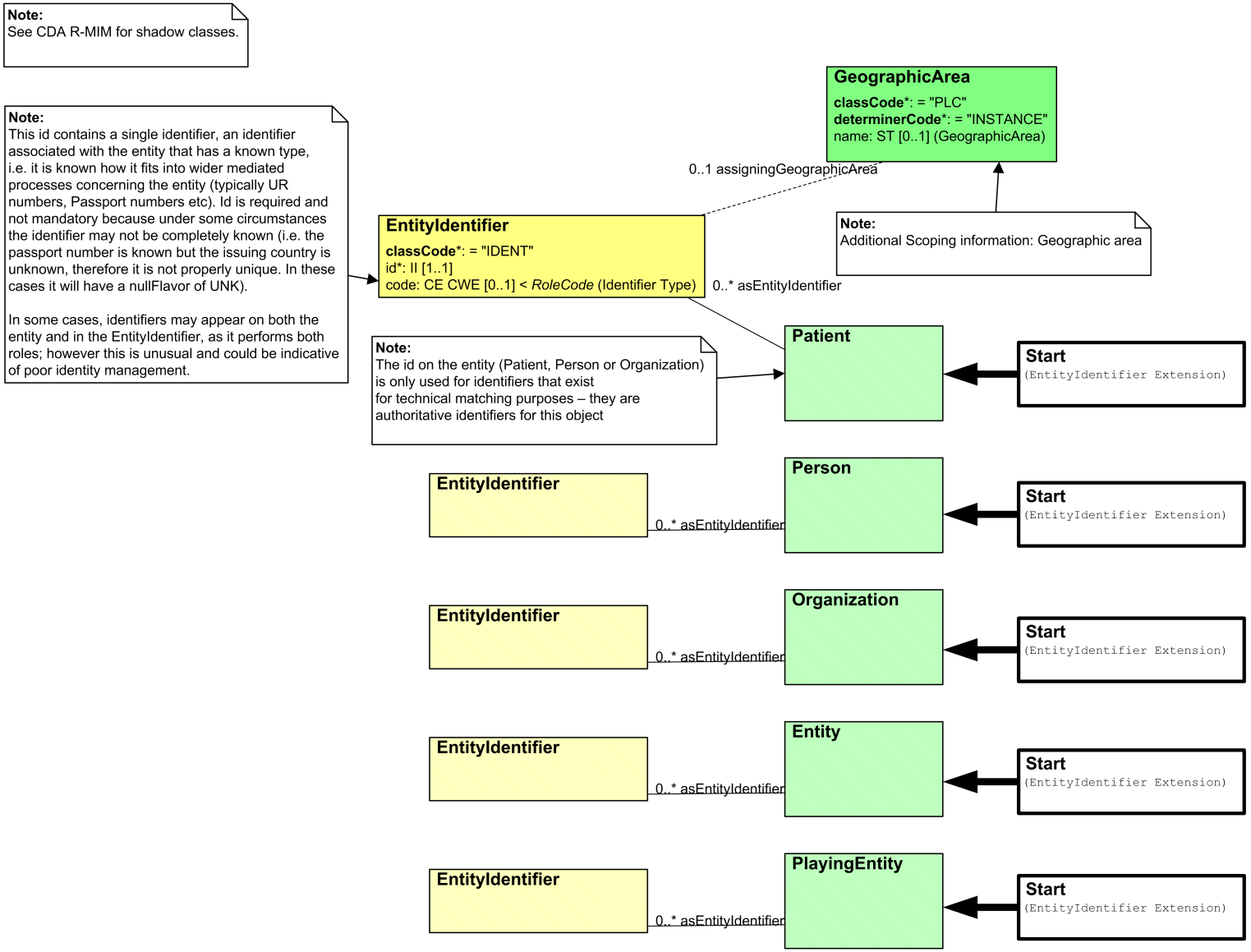

Figure 9.2. CDA R-MIM Representation

9.3 Entitlement

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

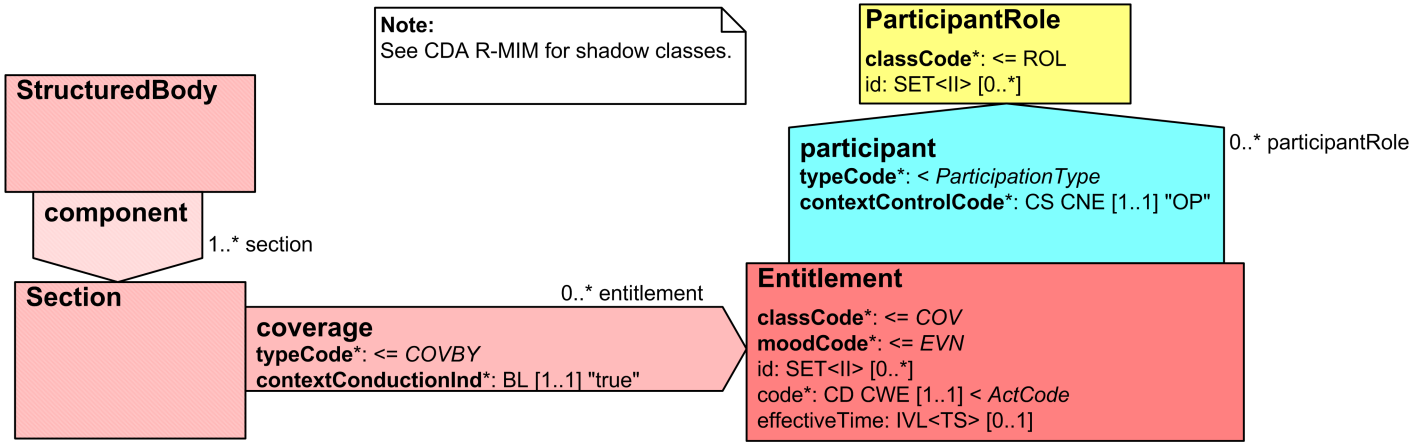

Figure 9.3. CDA R-MIM Representation

9.4 Multiple Birth

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

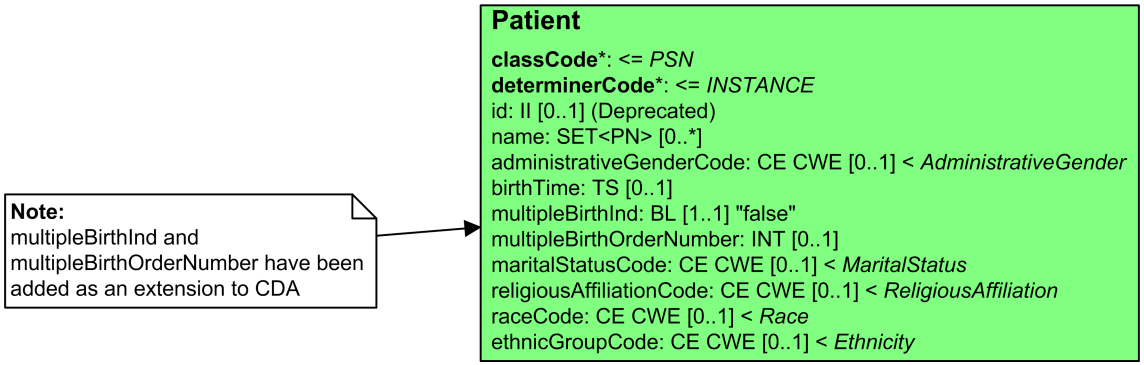

Figure 9.4. CDA R-MIM Representation

9.5 Administrative Gender Code

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

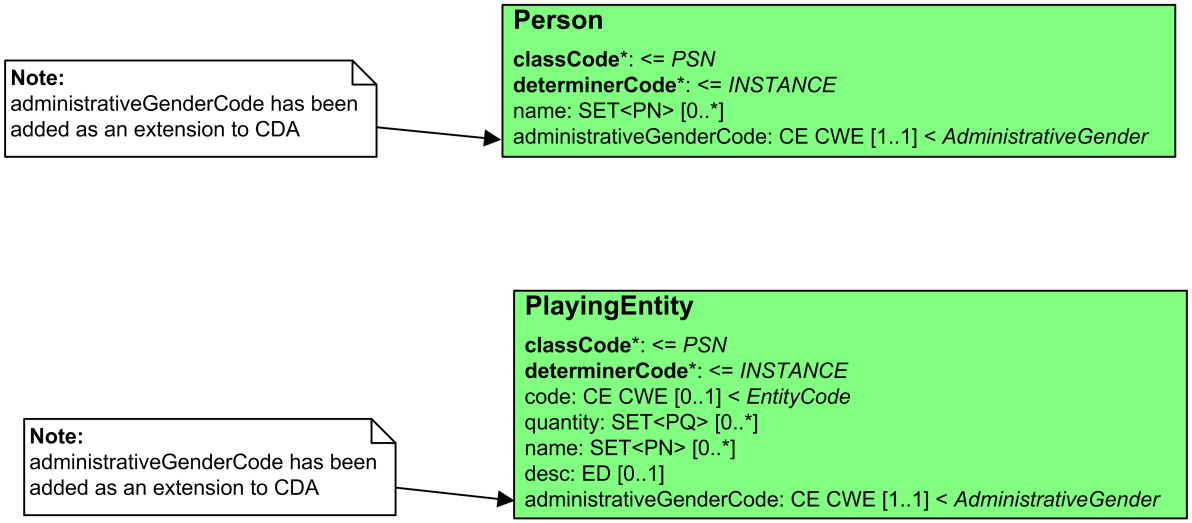

Figure 9.5. CDA R-MIM Representation

9.6 Birth Time

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

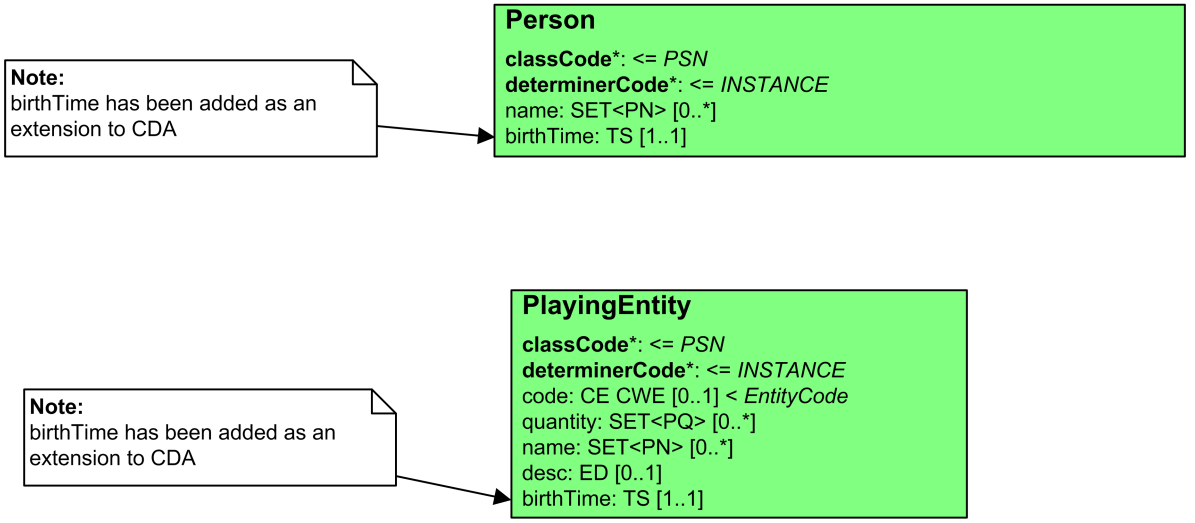

Figure 9.6. CDA R-MIM Representation

9.7 Deceased Time

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

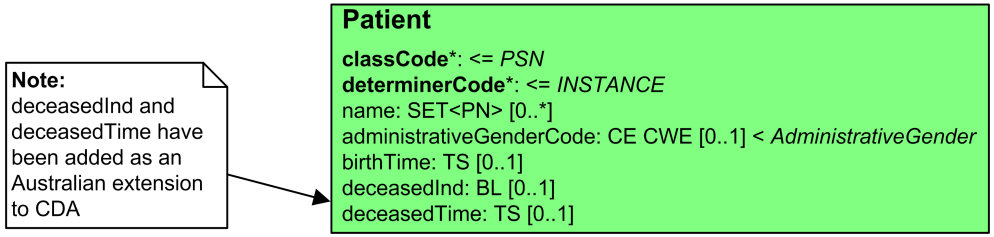

Figure 9.7. CDA R-MIM Representation

9.8 Employment

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

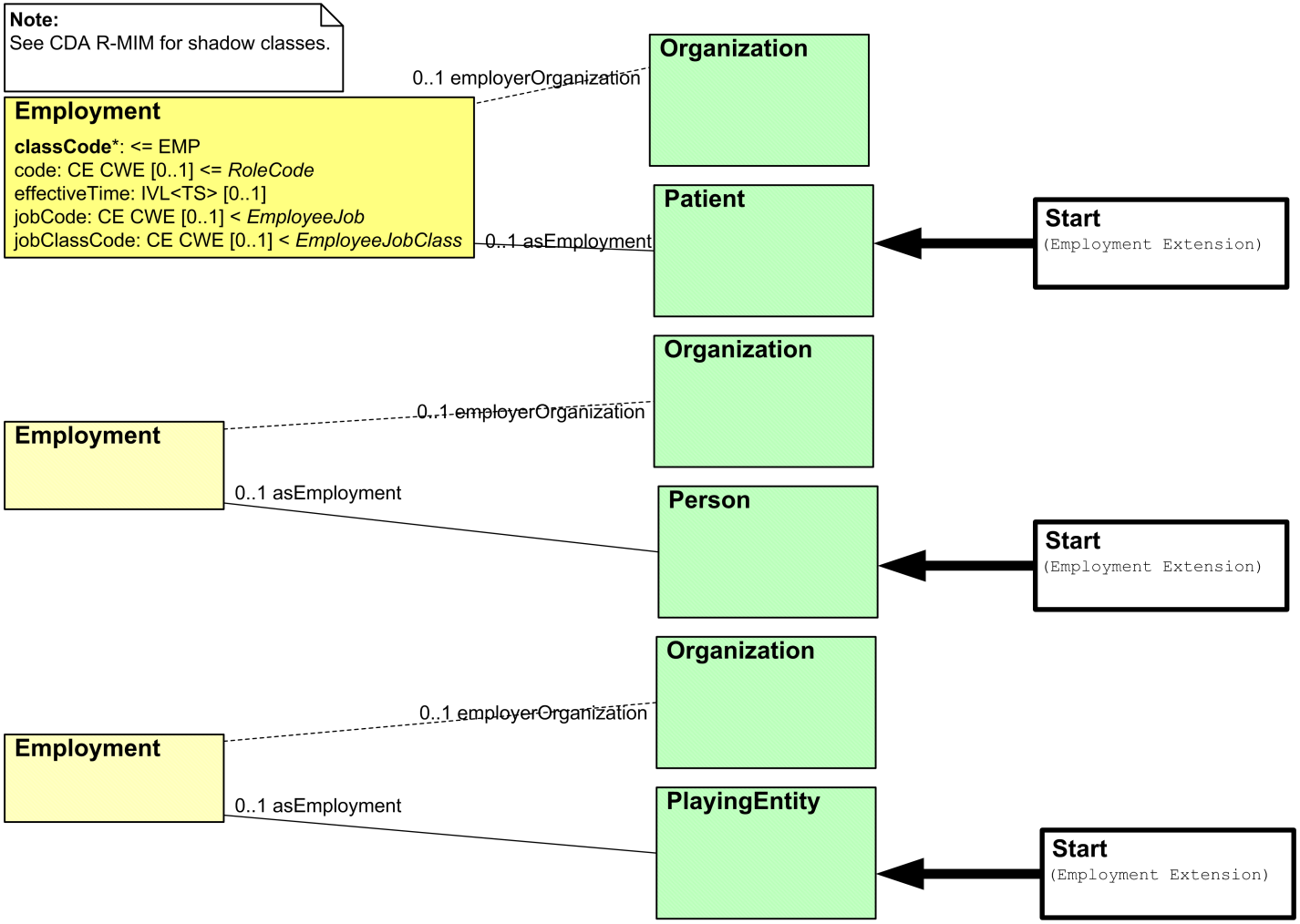

Figure 9.8. CDA R-MIM Representation

9.9 Qualifications

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

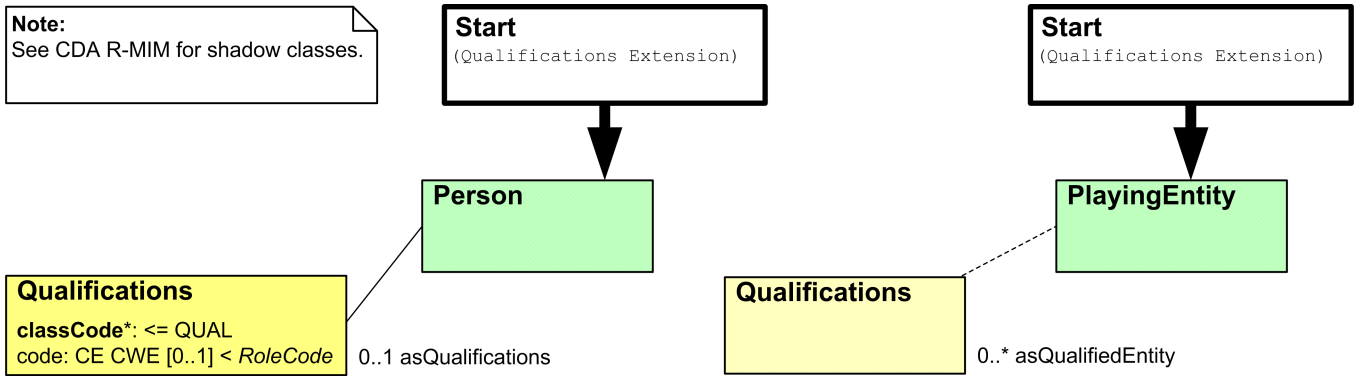

Figure 9.9. CDA R-MIM Representation

9.10 Container

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

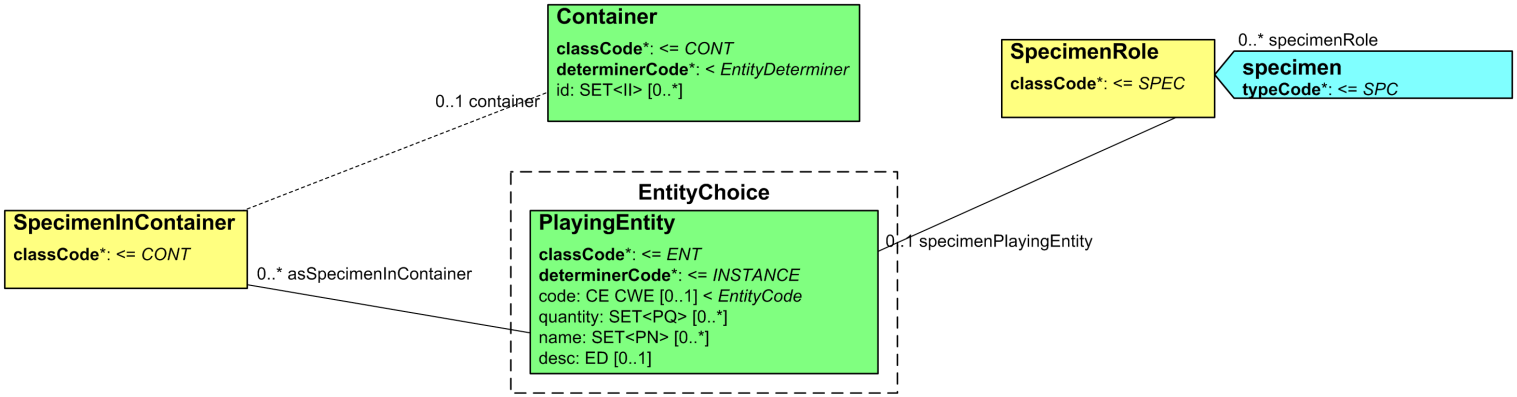

Figure 9.10. CDA R-MIM Representation

10 Vocabularies/Code Sets

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

Example 10.1. All values

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

Example 10.2. One value

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

10.1 HL7 v3: TelecommunicationAddressUse

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

10.2 AS 5017-2006 Health Care Client Identifier Sex

displayName	code	codeSystemName	codeSystem
Male	M	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Female	F	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Intersex or Indeterminate	I	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68
Not Stated/Inadequately Described	N	AS 5017-2006 Health Care Client Identifier Sex	2.16.840.1.113883.13.68

10.3 AS 5017-2006: Health Care Client Name Usage

Code Set AS 5017-2006 mapped to HL7 Name Use Code

Note

CDA Release 2 uses HL7 Data Types Release 1. For some of the AS 5017-2006 values there are no satisfactory equivalents in the HL7 Name Use R1 code set. In these cases (marked R2) an HL7 Name Use R2 code has been used.

Note

In cases (marked EXT) where there are no suitable HL7 codes, extension codes have been created.

AS 5017-2006 Code	AS 5017-2006 Alternative Code	AS 5017-2006 Descriptor	HL7 Name Use Code	HL7 Name Use Name	HL7 Name Use Definition
1	L	Registered Name (Legal Name)	**L**	(R1) Legal	(R1) Known as/conventional/the one you use
2	R	Reporting Name	**C**	(R1) License	(R1) As recorded on a license, record, certificate, etc. (only if different from legal name)
3	N	Newborn Name	**NB**	(EXT)	(EXT)
4	B	Professional or Business Name	**A**	(R1) Artist/Stage	(R1) Includes writer's pseudonym, stage name, etc
5	M	Maiden Name (Name at birth)	**M**	(R2) Maiden Name	A name used prior to marriage.
8	O	Other Name (Alias)	**P**	(R1) Pseudonym	(R1) A self asserted name that the person is using or has used

10.4 AS 4846-2006: Health Care Provider Organisation Name Usage

Code Set AS 5017-2006 Organisation Name Usage mapped to HL7 Name Use Code

Note

There are no suitable HL7 codes so extension codes have been created.

AS 4846-2006 Code	AS 4846-2006 Alternative Code	AS 4846-2006 Descriptor	HL7 Name Use Code	HL7 Name Use Name	HL7 Name Use Definition
1	U	Organizational unit/section/division name	**ORGU**	(EXT)	(EXT)
2	S	Service location name	**ORGS**	(EXT)	(EXT)
3	B	Business name	**ORGB**	(EXT)	(EXT)
4	L	Locally used name	**ORGL**	(EXT)	(EXT)
5	A	Abbreviated name	**ORGA**	(EXT)	(EXT)
6	E	Enterprise name	**ORGE**	(EXT)	(EXT)
8	X	Other	**ORGX**	(EXT)	(EXT)
9	Y	Unknown	**ORGY**	(EXT)	(EXT)

10.5 AS 5017-2006: Health Care Client Source of Death Notification

displayName	code	codeSystemName	codeSystem
Official death certificate or death register	D	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Health Care Provider	H	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Relative	R	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Other	O	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64
Unknown	U	AS 5017-2006 Health Care Client Source of Death Notification	2.16.840.1.113883.13.64

10.6 AS 5017-2006: Health Care Client Identifier Address Purpose

AS 5017-2006 mapped to HL7 Address Use Code

AS 5017-2006 Code	AS 5017-2006 Alternative Code	AS 5017-2006 Descriptor	HL7 Address Use Code	HL7 Address Use Name	HL7 Address Use Definition
1	B	Business	**WP**	Work Place	An office address. First choice for business related contacts during business hours.
2	M	Mailing or Postal	**PST**	Postal Address	Used to send mail.
3	T	Temporary Accommodation (individual provider only)	**TMP**	Temporary Address	A temporary address, may be good for visit or mailing.
4	R	Residential (permanent) (individual provider only)	**H**	Home Address	A communication address at a home.
9	U	Not Stated/Unknown/Inadequately Described	**In this case simply omit the Address Use Code**		

10.7 AS 5017-2006: Health Care Client Identifier Geographic Area

displayName	code	codeSystemName	codeSystem
Local Client (Unit Record) Identifier	L	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
Area/Region/District Identifier	A	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
State or Territory Identifier	S	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63
National Identifier	N	AS 5017-2006 Health Care Client Identifier Geographic Area	2.16.840.1.113883.13.63

10.8 AS 5017-2006: Health Care Client Electronic Communication Medium

AS 5017-2006 Code	AS 5017-2006 Descriptor	AS 5017-2006 Alternative Code	HL7 URLScheme Code	HL7 URLScheme Name	HL7 URLScheme Definition
1	Telephone (excluding mobile telephone)	T	**tel**	Telephone	A voice telephone number.
2	Mobile (cellular) telephone NOTE: Mobile will also need a TelecommunicationAddress Use code of MC (Mobile Contact) (see HL7 v3: TelecommunicationAddressUse)	M	**tel**	Telephone	A voice telephone number.
3	Facsimile machine	F	**fax**	Fax	A telephone number served by a fax device.
4	Pager NOTE: Pager will also need a TelecommunicationAddress Use code of PG (Pager) (see HL7 v3: TelecommunicationAddressUse)	P	**tel**	Telephone	A voice telephone number
5	Email	E	**mailto**	Mailto	Electronic mail address.

AS 5017-2006 Code	AS 5017-2006 Descriptor	AS 5017-2006 Alternative Code	HL7 URLScheme Code	HL7 URLScheme Name	HL7 URLScheme Definition
6	URL	U	Use the most appropriate code from the list below:		
			file	File	Host-specific local file names [RCF 1738]. Note that the file scheme works only for local files. There is little use for exchanging local file names between systems, since the receiving system likely will not be able to access the file.
			ftp	FTP	The File Transfer Protocol (FTP).
			http	HTTP	Hypertext Transfer Protocol.
			mllp	MLLP	The traditional HL7 Minimal Lower Layer Protocol. The URL has the form of a common IP URL e.g., mllp://<host>:<port>/ with <host> being the IP address or DNS hostname and <port> being a port number on which the MLLP protocol is served.
			modem	Modem	A telephone number served by a modem device.
			nfs	NFS	Network File System protocol. Some sites use NFS servers to share data files.
			telnet	Telnet	Reference to interactive sessions. Some sites, (e.g., laboratories) have TTY based remote query sessions that can be accessed through telnet.

10.9 AS 5017-2006: Health Care Client Electronic Communication Usage Code

AS 5017-2006 mapped to HL7 TelecommunicationAddressUse (HL7 TAU) Code

Code	Descriptor	Alternative Code	HL7 TAU Code	HL7 TAU Name	HL7 TAU Description
1	Business	B	**WP**	Work place	An office address. First choice for business related contacts during business hours.
2	Personal	P	**H**	Home address	A communication address at a home, attempted contacts for business purposes might intrude privacy and chances are one will contact family or other household members instead of the person one wishes to call. Typically used with urgent cases, or if no other contacts are available.
3	Both business and personal use	A	**WP H**	Both Work place and Home address	

10.10 AS 5017-2006 Australian State/Territory Identifier - Postal

Code	Descriptor
NSW	New South Wales
VIC	Victoria
QLD	Queensland
SA	South Australia
WA	Western Australia
TAS	Tasmania
NT	Northern Territory
ACT	Australian Capital Territory
U	Unknown

10.11 AS 5017-2006 Health Care Client Identifier Date Accuracy Indicator

The data elements that use this value set consist of a combination of three codes, each of which denotes the accuracy of one date component:

A – The referred date component is ‘accurately known’.

E – The referred date component is an ‘estimate’.

U – The referred date component is ‘unknown’.

This data elements that use this value set contains positional fields (DMY).

Field 1 (D) – refers to the accuracy of the ‘day component’.

Field 2 (M) – refers to the accuracy of the ‘month component’.

Field 3 (Y) – refers to the accuracy of the ‘year component’.

Note
The order of the date components in the HL7 date and time datatypes (YYYYMMDD) is the reverse of that specified above.

The possible combinations are as follows:

code	descriptor
AAA	Accurate date
AAE	Accurate day and month, estimated year
AEA	Accurate day, estimated month, accurate year
AAU	Accurate day and month, unknown year
AUA	Accurate day, unknown month, accurate year
AEE	Accurate day, estimated month and year
AUU	Accurate day, unknown month and year
AEU	Accurate day, estimated month, unknown year
AUE	Accurate day, unknown month

code	descriptor
EEE	Estimated date
EEA	Estimated day and month, accurate year
EAE	Estimated day, accurate month
EEU	Estimated day and month, unknown year
EUE	Estimated day, unknown month, estimated year
EAA	Estimated day, accurate month and year
EUU	Estimated day, unknown month and year
EAU	Estimated day, accurate month, unknown year
EUA	Estimated day, unknown month, accurate year
UUU	Unknown date
UUA	Unknown day and month, accurate year
UAU	Unknown day, accurate month, unknown year
UUE	Unknown day and month, estimated year
UEU	Unknown day, estimated month, unknown year
UAA	Unknown day, accurate month and year
UEE	Unknown day, estimated month and year
UAE	Unknown day, accurate month, estimated year
UEA	Unknown day, estimated month, accurate year

10.12 NCTIS: Admin Codes - Document Status

displayName	code	codeSystemName	codeSystem
Interim	I	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104
Final	F	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104
Withdrawn	W	NCTIS Document Status Values	1.2.36.1.2001.1001.101.104.20104

10.13 NCTIS: Admin Codes - Global Statement Values

displayName	code	codeSystemName	codeSystem
None known	01	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299
Not asked	02	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299
None supplied	03	NCTIS Global Statement Values	1.2.36.1.2001.1001.101.104.16299

10.14 NCTIS: Admin Codes - Entitlement Type

displayName	code	codeSystemName	codeSystem
Medicare Benefits	1	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Pensioner Concession	2	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Commonwealth Seniors Health Concession	3	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Health Care Concession	4	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health Gold Benefits	5	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health White Benefits	6	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Repatriation Health Orange Benefits	7	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Safety Net Concession	8	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Safety Net Entitlement	9	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Medicare Prescriber Number	10	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047
Medicare Pharmacy Approval Number	11	NCTIS Entitlement Type Values	1.2.36.1.2001.1001.101.104.16047

10.15 HL7 v2.4: Table 0123 Result Status

displayName	code	codeSystemName	codeSystem
Order received; specimen not yet received	O	HL7 Result Status	2.16.840.1.113883.12.123
No results available; specimen received, procedure incomplete	I	HL7 Result Status	2.16.840.1.113883.12.123
No results available; procedure scheduled, but not done	S	HL7 Result Status	2.16.840.1.113883.12.123
Some, but not all, results available	A	HL7 Result Status	2.16.840.1.113883.12.123
Preliminary: A verified early result is available, final results not yet obtained	P	HL7 Result Status	2.16.840.1.113883.12.123
Correction to results	C	HL7 Result Status	2.16.840.1.113883.12.123
Results stored; not yet verified	R	HL7 Result Status	2.16.840.1.113883.12.123
Final results; results stored and verified. Can only be changed with a corrected result.	F	HL7 Result Status	2.16.840.1.113883.12.123
No results available; Order cancelled.	X	HL7 Result Status	2.16.840.1.113883.12.123
No order on record for this test. (Used only on queries)	Y	HL7 Result Status	2.16.840.1.113883.12.123
No record of this patient. (Used only on queries)	Z	HL7 Result Status	2.16.840.1.113883.12.123

10.16 HL7 v3 CDA: Act.moodCode

Code	Value	Definition
EVN	Event	The entry defines an actual occurrence of an event.
INT	Intent	The entry is intended or planned.
APT	Appointment	The entry is planned for a specific time and place.
ARQ	Appointment Request	The entry is a request for the booking of an appointment.
PRMS	Promise	A commitment to perform the stated entry.
PRP	Proposal	A proposal that the stated entry be performed.
RQO	Request	A request or order to perform the stated entry.
DEF	Definition	The entry defines a service (master).

10.17 HL7 v3 CDA: RelatedDocument.typeCode

Code	Value	Definition
APND	Append	The current document is an addendum to the ParentDocument.
RPLC	Replace	The current document is a replacement of the ParentDocument.
XFRM	Transform	The current document is a transformation of the ParentDocument.

10.18 OIDs

codeSystem (OID)	codeSystemName
2.16.840.1.113883.13.62	1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006
2.16.840.1.113883.13.65	AIHW Mode of Separation
2.16.840.1.113883.6.96	SNOMED CT-AU
1.2.36.1.2001.1004.100	Australian Medicines Terminology (AMT)
2.16.840.1.113883.6.1	LOINC

10.19 METeOR 291036: Indigenous Status

displayName	code	codeSystemName	codeSystem
Aboriginal but not Torres Strait Islander origin	1	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Torres Strait Islander but not Aboriginal origin	2	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Both Aboriginal and Torres Strait Islander origin	3	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Neither Aboriginal nor Torres Strait Islander origin	4	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036
Not stated/inadequately described	9	METeOR Indigenous Status	2.16.840.1.113883.3.879.291036

10.20 NCTIS: Admin Codes - Result Status

displayName	code	codeSystemName	codeSystem
Registered [No result yet available.]	1	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Interim [This is an initial or interim result: data may be missing or verification not been performed.]	2	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Final [The result is complete and verified by the responsible practitioner.]	3	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Amended [The result has been modified subsequent to being Final, and is complete and verified by the practitioner.]	4	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501
Cancelled / Aborted [The result is not available because the examination was not started or completed.]	5	NCTIS Result Status Values	1.2.36.1.2001.1001.101.104.16501

10.21 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

Appendix A. CDA Narratives

CDA requires that each Section in its Body include a narrative block, containing a complete version of the section's encoded content using custom hypertext markup defined by HL7. It is clinically significant that the narrative is the human-readable and attestable part of a CDA document.

There is no canonical markup for specific CDA components, but some conformance points apply:

- The narrative block **SHALL** be encapsulated within text component of the CDA Section. The Section's title component **SHOULD** contain the Section's label, and will form the heading for the Section's narrative rendering.
- The narrative contents **SHALL** conform to the requirements specified in the CDA Rendering Specification.
  - In accordance with the requirement to completely represent Section contents, coded type values **SHALL** include both originalText and displayName components where provided. The code component **SHOULD** be provided when a displayName is not available.
- It **SHALL** completely and accurately represent the information encoded in the Section. Content **SHALL NOT** be omitted from the narrative.
- It **SHALL** conform to the content requirements of the CDA specification [HL7CDAR2] and/or XML Schema.

The examples provided in sections of this document and the separate full example provide some guidance for narrative block markup. They may be easily adapted as boilerplate markup.

Appendix B. Log of Changes

This appendix lists the major changes and fixes applied to this CDA Implementation Guide resulting from public feedback and internal testing.

Changes Version 3.1 09 February 2011 date to Version 3.1 16 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
1	6.1.1	Document Author	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
2	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Entity Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
3	6.1.1	Document Author	Cardinalities changed	Document Author > Participation Period changed to 0..1 [NB. This element is required by CDA and the cardinality is updated for consistency across documents only]	NEHTA	Document Review - not aligned with SCS	16 September 2011
4	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Detail > Organisation Name Usage changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
5	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Address changed to 0..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
6	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Demographic Data changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
7	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Demographic Data > Sex changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
8	6.1.1	Document Author	Cardinalities changed	Document Author > Participant > Person or Organisation or Device > Demographic Data > Date of Birth Detail changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
9	6.1.2	Subject Of Care	Cardinalities changed	Subject of Care > Participant > Entity Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
10	6.1.2	Subject Of Care	Cardinalities changed	Subject of Care > Participant > Address changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
11	6.1.2	Subject Of Care	Cardinalities changed	Subject of Care > Person or Organisation or Device > Person > Demographic Data > Date of Death Detail > Date of Death changed to 1..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
12	6.1.2	Subject Of Care	Date Type changed	Subject of Care > Person or Organisation or Device > Person > Demographic Data > Age Detail > Age changed to value:PQ	NEHTA	Document Review - not aligned with SCS	16 September 2011
13	6.1.2	Subject Of Care	Indigenous status added	Subject of Care > Participant > Person or Organisation or Device > Person > Demographic Data > Indigenous Status mapping added.	NEHTA	Document Review - not aligned with SCS	16 September 2011
14	6.1.3	Facility	Cardinalities changed	Facility > Participant > Entitiy Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
15	6.1.3	Facility	Cardinalities changed	Facility > Participant > Address changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
16	7.1.1.1	Encounter	Cardinalities changed	Encounter > Speciality changed to 1..*	NEHTA	Document Review	16 September 2011
17	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
18	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible health Professional At Time Of Discharge > Participant > Entitiy Identifier changed to 1..*	NEHTA	Document Review	16 September 2011
19	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible health Professional At Time Of Discharge > Participant > Address changed to 1..*	NEHTA	Document Review	16 September 2011
20	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible health Professional At Time Of Discharge > Participant > Person or Organisation or Device > Person > Demographic Data to 0..1	NEHTA	Document Review	16 September 2011
21	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible health Professional At Time Of Discharge > Participant > Person or Organisation or Device > Person > Demographic Data > Sex to 0..1	NEHTA	Document Review	16 September 2011
22	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible health Professional At Time Of Discharge > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail to 0..1	NEHTA	Document Review	16 September 2011
23	7.1.1.1.1	Responsible health Professional At Time Of Discharge	Cardinalities changed	Responsible Health Professional at Time of Discharge > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Detail > Organisation Name Usage to 0..1	NEHTA	Document Review	16 September 2011
24	7.1.1.1.2	Other Participant	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
25	7.1.2.2.1	Exclusion Staement - Ceased Medications	Added separate section.	Added separate section for Exclusion Statement - Ceased medications.	NEHTA	Document Review	16 September 2011
26	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
27	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Cardinalities changed	Nominated Primary Healthcare Provider > Participant > Entity Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
28	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Cardinalities changed	Nominated Primary Healthcare Provider > Participant > Address changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
29	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Cardinalities changed	Nominated Primary Healthcare Provider > Participant > Electronic Communication Detail changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
30	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Cardinalities changed	Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Demographic Data > Sex changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
31	7.1.3.1.1.1	Nominated Primary Healthcare Provider - Person	Cardinalities changed	Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Detail > Organisation Name Usage changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
32	7.1.4.1.1.1.1	Service Provider - Person	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
33	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Entity Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
34	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Address changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
35	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Person or Organisation or Device > Person > Demographic Data changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
36	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Person or Organisation or Device > Person > Demographic Data > Sex changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
37	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
38	7.1.4.1.1.1.1	Service Provider - Person	Cardinalities changed	Service Provider - Person > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Detail > Organisation Name Usage changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
39	7.1.4.2.1.1.1	Recommendation Recipient - Person	Added vocabulary link.	Added vocabulary link for wholeOrganisation/name/@use	NEHTA	Document Review	16 September 2011
40	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Entity Identifier changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
41	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Address changed to 1..*	NEHTA	Document Review - not aligned with SCS	16 September 2011
42	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Person or Organisation or Device > Person > Demographic Data changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
43	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Person or Organisation or Device > Person > Demographic Data > Sex changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
44	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Person or Organisation or Device > Person > Demographic Data > Date of birth Detail changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
45	7.1.4.2.1.1.1	Recommendation Recipient - Person	Cardinalities changed	Recommendation Recipient - Person > Participant > Person or Organisation or Device > Person > Employer Organisation > Organisation > Organisation Name Detail > Organisation Name Usage changed to 0..1	NEHTA	Document Review - not aligned with SCS	16 September 2011
46	10.13	NCTIS: Admin Codes - Global Statement Values	New value added	Added "None Supplied".	NEHTA	Values supplied insufficient for requirements.	16 September 2011
47	N/A	N/A	id comment.	Comment updated to: "This is a technical identifier that is used for system purposes such as matching. If a suitable internal key is not available, a UUID may be used"	NEHTA	Updated definition to better explain the use of id's.	16 September 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
48	7.1.1.5.1	Pathology Test Result	Added mappings.	Mappings added (previously a known issue).	NEHTA	Known issue resolution.	16 September 2011
49	7.1.1.5.2	Imaging Examination Result	Added mappings.	Mappings added (previously a known issue).	NEHTA	Known issue resolution.	16 September 2011
50	7.1.1.5.1.1	Test Specimen Detail	Corrected context path.	Path changed - From: "Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/entry[path_test_res]/observation/" To: "Context: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test_res]/entry[path_test_res]/observation/"	NEHTA	Document Feedback	16 September 2011

Changes Version 3.3.1 16 September 2011 to Version 3.3 2 December 2011

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
1	5.1.1	LegalAuthenticator	Cardinality	LegalAuthenticator was Essential 1..1 now optional 0..1	NEHTA	Alignment of specifications	2 Dec 2012
2	6.1	e-Discharge Summary	Cardinality	e-Discharge Summary > Health Event Identification Was 0..* Now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
3	6.1.1	DOCUMENT AUTHOR	Cardinality	Document Author > Participant > Electronic Communication Detail was 1..* and now 0..*	NEHTA	Alignment of specifications	2 Dec 2012
4	6.1.1	DOCUMENT AUTHOR	Cardinality	Document Author > Participant > Person or Organisation or Device > Person > Person Name was 1..1 now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
5	6.1.2	SUBJECT OF CARE	Cardinality	Subject of Care > Participant > Person or Organisation or Device > Person > Person Name was 1..1 and now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
6	6.1.3	FACILITY	Cardinality	Facility > Participant > Electronic Communication Detail was 1..* now 0..*	NEHTA	Alignment of specifications	2 Dec 2012
7	7.1.1.1	ENCOUNTER	Cardinality	Encounter > Location of Discharge was 1..1 now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
8	7.1.1.1.1	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE	Cardinality	Responsible Health Professional at Time of Discharge > Participant > Person or Organisation or Device > Person > Person Name was 1..1 now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
9	7.1.1.1.2	OTHER PARTICIPANT	Cardinality	participant/associatedEntity/id was 1..1 now 0..*	NEHTA	Alignment of specifications	2 Dec 2012
10	7.1.1.1.2	OTHER PARTICIPANT	Cardinality	Other Participant > Participant > Entity Identifier was 1..1 now 1..*/0..* If HPI-I available then is required otherwise optional	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
11	7.1.1.1.2	OTHER PARTICIPANT	Cardinality	Other Participant > Participant > Person or Organisation or Device > Person > Person Name participant/associatedEntity/associatedPerson/<PersonName> was 1..1 now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
12	7.1.1.1.2	OTHER PARTICIPANT	Cardinality	Other Participant > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
13	7.1.1.1.2	OTHER PARTICIPANT	Cardinality	Other Participant > Participant > Person or Organisation or Device > Demographic Data was 0..1 now If the Other Participant has an Australian HPI-I, then Demographic Data is PROHIBITED, otherwise it is OPTIONAL (0..0/0..1)	NEHTA	Alignment of specifications	2 Dec 2012
14	7.1.1.5.1	PATHOLOGY TEST RESULT	Cardinality	Pathology Test Result > Test Specimen Detail changed from optional 0..* to essential 1..*	NEHTA	Alignment of specifications	2 Dec 2012
15	7.1.1.5.1	PATHOLOGY TEST RESULT	Cardinality	Pathology Test Result > Test Result Representation was 0..* now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
16	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	TEST SPECIMEN DETAIL was 0..* now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
17	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
18	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Cardinality	Test Specimen Detail > Handling and Processing > Collection DateTime was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
19	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Cardinality	Result Group Specimen Detail > Handling and Processing was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
20	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Cardinality	Result Group Specimen Detail > Handling and Processing > Collection DateTime was 0..1 now 1..1	NEHTA	Alignment of specifications	2 Dec 2012
21	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	Cardinality	Nominated Primary Healthcare Provider (Person) was 0..1 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
22	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	Cardinality	Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Person Name was 1..1 and now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
23	7.1.3.1.1.2	NOMINATED PRIMARY HEALTHCARE PROVIDER - ORGANISATION	Cardinality	Nominated Primary Healthcare Provider (Organisation) was 1..* now 0..1	NEHTA	Alignment of specifications	2 Dec 2012
24	7.1.3.1.1.2	NOMINATED PRIMARY HEALTHCARE PROVIDER - ORGANISATION	Cardinality	Nominated Primary Healthcare Provider (Organisation) > Participant > Entity Identifier was 1..1 now 1..*	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
25	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Cardinality	Nominated Primary Healthcare Provider (Organisation) > Participant > Address was 0..* now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
26	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Cardinality	Nominated Primary Healthcare Provider (Organisation) > Participant > Electronic Communication Detail was 0..* now 1..*	NEHTA	Alignment of specifications	2 Dec 2012
27	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Cardinality	Service Provider > Participant > Address was 0..1 now 0..*	NEHTA	Alignment of specifications	2 Dec 2012
28	7.1.4.2.1.1.1	RECOMMENDATION RECIPIENT - PERSON	Cardinality	Recommendation Recipient > Participant > Person or Organisation or Device > Person > Person Name was 1..1 now 1..* Use Participation 3.2 Participation Specification 3.2 should be used instead of 3.1, with the following exceptions - restrictions in CDA implementation guide still apply with repect to multiple person names. That is, only a single person name is currently supported.	NEHTA	Alignment of specifications	2 Dec 2012
29	7.1.4.2.1.1.2	RECOMMENDATION RECIPIENT - ORGANISATION	Cardinality	Recommendation Recipient > Participant > Address was 0..1 now 0..*	NEHTA	Alignment of specifications	2 Dec 2012
30	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Code Change	Code changed (defined) Was: @code="103.16302" Now: @code="103.16302.4.3.1"	NEHTA	Alignment of specifications	2 Dec 2012
31	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Code Change	Code changed (defined) Was: @code="103.16302.4.3.1" Now: @code="103.16302.4.3.2"	NEHTA	Alignment of specifications	2 Dec 2012
32	7.1.2.1.2	THERAPEUTIC GOOD for 7.1.2.1. CURRENT MEDICATIONS ON DISCHARGE	Code Change	Therapeutic Good > Medication History > Change Detail > Reason for Change ClassCode and Code changed for change from Observation to act	NEHTA	Alignment of specifications	2 Dec 2012
33	7.1.2.2.1	EXCLUSION STATEMENT - MEDICATIONS	Code Change	Code changed (defined) Was: @code="102.16136.4.3.2" Now: @code="103.16302.4.3.3"	NEHTA	Alignment of specifications	2 Dec 2012
34	10.20	NCTIS: Admin Codes - Result Status	Code change	codeSysten OID change Was: 1.2.36.1.2001.1001.101.104.16502 Now: 1.2.36.1.2001.1001.101.104.16501	NEHTA	Alignment of specifications	2 Dec 2012
35	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Context changed	Exclusion Statement - Problems and Diagnoses > Global Statement has Component/Section mapping replaced by Entry Context: ClinicalDocument/component/structuredBody/component[event]/section/component[prob_visit]/section/component[excl_prob]/section changed to Context: ClinicalDocument/component/structuredBody/component[event]/section/component[prob_visit]/section/entry[gbl_prob]/observation	NEHTA	Alignment of specifications	2 Dec 2012
36	7.1.1.5.1	PATHOLOGY TEST RESULT	Context Changed	Pathology Test Result Context was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section Context now: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section	NEHTA	Alignment of specifications	2 Dec 2012
37	7.1.1.5.1	PATHOLOGY TEST RESULT	Context changed	Pathology Test Result > Test Request Details > Test Requested Name has clinical statement changed from entryRelationship[req_name]/act to entryRelationship[req_name]/observation	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
38	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Context Changed	Result Group Specimen Detail context changed Was: ClinicalDocument/component/structuredBody/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/ Now: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/entryRelationship[res_gp]/organizer/	NEHTA	Alignment of specifications	2 Dec 2012
39	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Context Changed	Imaging Examination Result Group Context was: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/entryRelationship/observation[im_exam_res]/entryRelationship[im_res_gp]/organizer Contex Now: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[im_exam_res]/component/entryRelationship[im_res_gp]/organizer	NEHTA	Alignment of specifications	2 Dec 2012
40	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Context changed	CDA Body Level 3 Data Elements changed from context Was Context: ClinicalDocument/component/structuredBody/component[health]/section/component[meds]/section/component[current]/section/component[excl_meds]/section/entry[gbl_meds]/observation Now Context: Context: ClinicalDocument/component/structuredBody/component[meds]/section/component[current]/section/entry[gbl_meds]/observation	NEHTA	Alignment of specifications	2 Dec 2012
41	7.1.2.1.2	THERAPEUTIC GOOD for 7.1.2.1. CURRENT MEDICATIONS ON DISCHARGE	Context changed	Context: ClinicalDocument/component/structuredBody/component[meds]/section/component[current]/section change from an observation to an act Was: entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/observation Now: entry[sbadm]/substanceAdministration/entryRelationship[change_detail]/observation/ entryRelationship[rsn_for_change]/act	NEHTA	Alignment of specifications	2 Dec 2012
42	7.1.2.2.1	EXCLUSION STATEMENT - CEASED MEDICATIONS	Contex Changed	Exclusion Statement - Ceased Medications Context was: ClinicalDocument/component/structuredBody/component[health]/section/component[meds]/section/component[ceased]/section/component[excl_meds]/section/ Context now: ClinicalDocument/component/structuredBody/component[meds]/section/component[current]/section/entry[gbl_meds]/observation	NEHTA	Alignment of specifications	2 Dec 2012
43	7.1.2.2.1	EXCLUSION STATEMENT - MEDICATIONS	Context changed	CDA Body Level 3 Data Elements changed from context Was Context: ClinicalDocument/component/structuredBody/component[health]/section/component[meds]/section/component[current]/section/component[excl_meds]/section/entry[gbl_meds]/observation Now Context: Context: ClinicalDocument/component/structuredBody/component[meds]/section/component[current]/section/entry[gbl_meds]/observation	NEHTA	Alignment of specifications	2 Dec 2012
44	7.1.3.2.1	EXCLUSION STATEMENT - ADVERSE REACTION	Context changed	Exclusion statement in earlier document had multiple entry/observations components for all types of adverse reactions, but now replaced with a single global exclusion statement	NEHTA	Alignment of specifications	2 Dec 2012
45	7.1.3.2.1	EXCLUSION STATEMENT - ADVERSE REACTION	Context changed	Exclusion Statement - Adverse Reactions > Global Statement has Component/Section replaced by Entry observation Context: ClinicalDocument/component/structuredBody/component[event]/section/component[prob_visit]/section/component[excl_prob]/section changed from component[excl_adv]/section/entry[gbl_adv]/observation to entry[gbl_adv]/observation	NEHTA	Alignment of specifications	2 Dec 2012
46	7.1.4.1.1.1.1	SERVICE PROVIDER - PERSON	Context changed	Service Provider (Person) Context was: ClinicalDocument/component/structuredBody/component[health]/section/component[arranged]/section/entry[service]/act/performer Context now: ClinicalDocument/component/structuredBody/component[plan]/section/component[arranged]/entry[service]/act/performer	NEHTA	Alignment of specifications	2 Dec 2012
47	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Context changed	Service Provider (Organisation) Context was: ClinicalDocument/performer Context now: ClinicalDocument/component/structuredBody/component[plan]/section/component[arranged]/section/entry[service]/act/performer	NEHTA	Alignment of specifications	2 Dec 2012
48	6.1.1	DOCUMENT AUTHOR	New Element (common Pattern Employment added)	Document Author > Participant > Person or Organisation or Device > Person > Employment Detail Is now defined as the common Pattern Employment and this removes the need for the previous requirement of assignedAuthor/representedOrganisation	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
49	7.1.1.1.1	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE	New Element (common Pattern Employment added)	Responsible Health Professional at Time of Discharge > Participant > Person or Organisation or Device > Person > Employment Detail is now defined as the common Pattern Employment and this removes the need for the previous requirement of representedOrganisation.	NEHTA	Alignment of specifications	2 Dec 2012
50	7.1.1.1.2	OTHER PARTICIPANT	New Element (common Pattern Employment added)	Document Author > Participant > Person or Organisation or Device > Person > Employment Detail Is now defined as the common Pattern Employment and this removes the need for the previous requirement of associatedEntity/scopingOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
51	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Removed	Exclusion Statement - Problems and Diagnoses Narrative removed.	NEHTA	Alignment of specifications	2 Dec 2012
52	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Removed	component[excl_prob]/section/entry[gbl_prob]/observation/id	NEHTA	Alignment of specifications	2 Dec 2012
53	7.1.1.5	DIAGNOSTIC INVESTIGATIONS	Removed	Diagnostic Investigations mapping for component[diag_inv]/section/text removed	NEHTA	Alignment of specifications	2 Dec 2012
54	7.1.1.5.1	PATHOLOGY TEST RESULT	CDA Element change	Pathology Test Result > Test Request Details > Test Requested Name Was: entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/act/text Now: entry[path_test_res]/observation/entryRelationship[req_dets]/act/entryRelationship[req_name]/observation/value:CD	NEHTA	Alignment of specifications	2 Dec 2012
55	7.1.1.5.1.1	TEST SPECIMEN DETAIL	New Data Component	Test Specimen Detail > Anatomical Site > Anatomical Location Image added with Optionality 0..*	NEHTA	Alignment of specifications	2 Dec 2012
56	7.1.1.5.1.1	TEST SPECIMEN DETAIL	XML Element change	Test Specimen Detail > Handling and Processing > DateTime Received Was : entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/effectiveTime Now : entryRelationship[spec]/observation/entryRelationship[date_rec]/observation/value:TS	NEHTA	Alignment of specifications	2 Dec 2012
57	7.1.1.5.1.1	TEST SPECIMEN DETAIL	XML Element change	Test Specimen Detail > Identifiers > Container Identifier Was : entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/id Now : entryRelationship[spec]/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id	NEHTA	Alignment of specifications	2 Dec 2012
58	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	New Data Component	Result Group SpecimenDetail > Anatomical Site > Anatomical Location Image added with Optionality 0..*	NEHTA	Alignment of specifications	2 Dec 2012
59	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	XML Element change	Result Group Specimen Detail > Handling and Processing > DateTime Received Was : component/observation/entryRelationship[date_rec]/observation/effectiveTime Now : component/observation/entryRelationship[date_rec]/observation/value:TS	NEHTA	Alignment of specifications	2 Dec 2012
60	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	XML Element change	Result Group Specimen Detail > Identifiers > Container Identifier Was : component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/id Now : component/observation/specimen/specimenRole/specimenPlayingEntity/ext:asSpecimenInContainer/ext:container/ext:id	NEHTA	Alignment of specifications	2 Dec 2012
61	7.1.2	MEDICATIONS	Added	New sections added: CURRENT MEDICATIONS ON DISCHARGE and CEASED MEDICATION as 1..1	NEHTA	Alignment of specifications	2 Dec 2012
62	7.1.2	MEDICATIONS	Removed	Exclusion statement medications	NEHTA	Alignment of specifications	2 Dec 2012
63	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Element Removed	component[excl_meds]/section/entry[gbl_meds]/observation/id removed	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
64	7.1.2.2.1	EXCLUSION STATEMENT - MEDICATIONS	Element Removed	component[excl_meds]/section/entry[gbl_meds]/observation/id removed	NEHTA	Alignment of specifications	2 Dec 2012
65	7.1.2.2.2	THERAPEUTIC GOOD for 7.1.2.2 CEASED MEDICATIONS	Added	New data component Therapeutic Good for ceased medications that matches the configuration for Therapeutic Good for Current Medications on Discharge	NEHTA	Alignment of specifications	2 Dec 2012
66	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	Element change	was participant/functionCode="PCP" now participant/functionCode/@code="PCP"	NEHTA	Alignment of specifications	2 Dec 2012
67	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	Removed	participant/associatedEntity/id was Essential 1..1 now removed.	NEHTA	Alignment of specifications	2 Dec 2012
68	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	removed	participant/associatedEntity/id removed but required CDA Element	NEHTA	Alignment of specifications	2 Dec 2012
69	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	New Element (common Pattern Employment added)	Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Employment Detail Is common Pattern Employment and removes associatedEntity/scopingOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
70	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	Removed	administrativeGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012
71	7.1.3.1.1.1	NOMINATED PRIMARY HEALTHCARE PROVIDER - PERSON	SDT Data Component	The SDT Data component defined as Document Author > Participant > Person or Organisation or Device > Person > Employment Detail is incorrect in document due to copy/paste and should be Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Employment Detail	NEHTA	Alignment of specifications	2 Dec 2012
72	7.1.3.1.1.2	NOMINATED PRIMARY HEALTHCARE PROVIDER - ORGANISATION	removed	participant/associatedEntity/id removed but required CDA Element	NEHTA	Alignment of specifications	2 Dec 2012
73	7.1.4.1.1.1.1	SERVICE PROVIDER - PERSON	Added	Service Provider > Participant > Person or Organisation or Device > Person > Person Name was added	NEHTA	Alignment of specifications	2 Dec 2012
74	7.1.4.1.1.1.1	SERVICE PROVIDER - PERSON	New Element (common Pattern Employment added)	Service Provider > Participant > Person or Organisation or Device > Person > Employment Detail is the new common Pattern Employment and removes the requirement for assignedEntity/representedOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
75	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Added	Service Provider > Participant > Person or Organisation or Device > Organisation > Department/Unit added as performer/assignedEntity/representedOrganization/name	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
76	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Added	Service Provider > Participant > Person or Organisation or Device > Organisation > Organisation Name Detail > Organisation Name Usage added as performer/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/name/@use	NEHTA	Alignment of specifications	2 Dec 2012
77	7.1.4.2.1.1.1	RECOMMENDATION RECIPIENT - PERSON	New Element (common Pattern Employment added)	Recommendation Recipient > Participant > Person or Organisation or Device > Person > Employment Detail is to use common Pattern Employment and removes assignedEntity/representedOrganisation	NEHTA	Alignment of specifications	2 Dec 2012
78	7.1.4.2.1.1.2	RECOMMENDATION RECIPIENT - ORGANISATION	Added	Prescriber Organisation > Participant > Person or Organisation or Device > Organisation > Department/Unit added as participant/assignedEntity/representedOrganization/name	NEHTA	Alignment of specifications	2 Dec 2012
79	7.1.4.2.1.1.2	RECOMMENDATION RECIPIENT - ORGANISATION	Added	Prescriber Organisation > Participant > Person or Organisation or Device > Organisation > Organisation Name Usage added as participant/assignedEntity/representedOrganization/asOrganizationPartOf/wholeOrganization/name/@use	NEHTA	Alignment of specifications	2 Dec 2012
80	8	Common Patterns: 8.4 Entity Identifier	Added	ext:asEntityIdentifier/ext:code	NEHTA	Alignment of specifications	2 Dec 2012
81	8	Common Patterns: 8.8 Employment	Added	New Employment common Pattern added	NEHTA	Alignment of specifications	2 Dec 2012
82	7.1.1.1.1	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE	Removed	administrativeGenderCode and birthTime removed.	NEHTA	Alignment of specifications	2 Dec 2012
83	7.1.1.1.2	OTHER PARTICIPANT	Removed	Other Participant > Participant > Entitlement: CDA Body Level 3 Data Elements for entitlement removed	NEHTA	Alignment of specifications	2 Dec 2012
84	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Removed	Exclusion Statement - Problems and Diagnoses > No Evidence Of has been removed	NEHTA	Alignment of specifications	2 Dec 2012
85	7.1.1.5.1	PATHOLOGY TEST RESULT	Removed	Pathology Test Result > Test Request Details > Receiver Order Identifier removed	NEHTA	Alignment of specifications	2 Dec 2012
86	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Removed	Examination Request Details > Receiver Order Identifier removed	NEHTA	Alignment of specifications	2 Dec 2012
87	7.1.1.5.3	CLINICAL SYNOPSIS	Removed	Clinical Synopsis removed from Diagnostic Investigations and defined in its own section 7.1.1.4	NEHTA	Alignment of specifications	2 Dec 2012
88	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Removed	Context: ClinicalDocument/component/structuredBody/component[health]/section/component[meds]/section/component[current]/section component[excl_meds]/section/code and title and text removed and added to 7.1.2.1 Current medications on Discharge as a new sub section.	NEHTA	Alignment of specifications	2 Dec 2012
89	7.1.2.2.1	EXCLUSION STATEMENT - MEDICATIONS	Removed	Context: ClinicalDocument/component/structuredBody/component[health]/section/component[meds]/section/component[current]/section component[excl_meds]/section/code title and text removed	NEHTA	Alignment of specifications	2 Dec 2012
90	7.1.3.2.1	EXCLUSION STATEMENT - ADVERSE REACTION	Removed	Exclusion Statement - Adverse Reactions Narrative removed.	NEHTA	Alignment of specifications	2 Dec 2012
91	6.1.1	DOCUMENT AUTHOR	Removed	administartiveGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
92	7.1.4.1.1.1.1	SERVICE PROVIDER - PERSON	Removed	administrativeGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012
93	7.1.4.2.1.1.1	RECOMMENDATION RECIPIENT - PERSON	Removed	administrativeGenderCode and birthTime extension removed.	NEHTA	Alignment of specifications	2 Dec 2012
94	7.1.1.5.2.2	EXAMINATION REQUEST DETAILS	Attribute details	Examination Request Details > Image Details > DICOM Series Identifier mapped to element entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/id has a requirement added (NB. The DICOM Series Identifier is placed in the root attribute.)	NEHTA	Alignment of specifications	2 Dec 2012
95	7.1.1.5.1	PATHOLOGY TEST RESULT	Removed Mapping	Removed mapping and example for SCS Data Component data element 'Pathology Test Result > Receiving Laboratory'	NEHTA	Alignment of specifications	2 Dec 2012

Changes Version 3.3 02 December 2011 date to Version 3.4 07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
1	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. This document describes how an eDS SDT is implemented as a CDA document. Conformance can be claimed to this Implementation Guide, either with regard to instances of e-Discharge Summary CDA XML documents, or to systems that consume or produce e-Discharge Summary CDA XML documents. When a conformance claim is made, it is made against this document, i.e. 'e-Discharge Summary: CDA Implementation Guide v3.3'. to This document describes how an e-Discharge Summary SDT is implemented as a CDA document. Conformance claims are not made against this Implementation Guide directly; rather, they are made against additional conformance profiles documented elsewhere. Any document that claims conformance to any derived conformance profile must meet these base requirements:	NEHTA	Document Feedback	07 March 2012
2	1.8	Conformance	Updated Conformance statement	Removed the following statements from the Conformance section. 1. A conformant document has the following properties. 2. It SHALL adhere to all cardinalities as specified in the mappings in this guide. 3. It SHOULD ensure that all the information in the CDA narrative sections is also present as coded entries. Note: it is a base CDA requirement that all data in the entries SHALL be represented in the narrative. 4. A system that produces e-Discharge Summary CDA documents may claim conformance if all the documents it produces are conformant to this guide.	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
3	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. It **SHALL** use vocabularies and codes sets as specified in the mappings, unless the vocabulary has been explicitly stated as: to If the vocabulary has been explicitly stated as 'NS' it must be interpreted as:	NEHTA	Document Feedback	07 March 2012
4	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. It SHALL be valid against the additional conformance requirements that are established in this document. to It SHALL be valid against the additional conformance requirements that are established in this document (i.e. any use of the word “SHALL” in uppercase and bold typeface).	NEHTA	Document Feedback	07 March 2012
5	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. The document SHALL conform to the requirements specified in the CDA Rendering Guide. to The document SHALL conform to the requirements specified in the CDA Rendering Specification.	NEHTA	Document Feedback	07 March 2012
6	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. Any additional content included in the CDA document that is not described by this implementation guide SHALL not qualify or negate content described by this guide and it SHALL be clinically safe for receivers of the document to ignore the non-narrative additions. to Any additional content included in the CDA document that is not described by this implementation guide SHALL not qualify or negate content described by this guide and it SHALL be clinically safe for receivers of the document to ignore the non-narrative additions when interpreting the existing content.	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
7	1.8	Conformance	Updated Conformance statement	Updated the conformance statement from. A system that consumes e-Discharge Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Note: conformant systems that consume e-Discharge Summary CDA documents are not required to process all the structured data entries in the CDA document but they SHALL be able to correctly render the document for endusers when appropriate (see 2.1 Clinical Document Architecture Release 2). to A system that consumes e-Discharge Summary CDA documents may claim conformance if it correctly processes conformant instance documents, including correctly understanding all the information in the header. It may, but is not required to, reject nonconformant documents. Conformant systems that consume e-Discharge Summary CDA documents are not required to process any or all of the structured data entries in the CDA document but they SHALL be able to correctly render the document for end-users when appropriate (see 2.1 Clinical Document Architecture Release 2).	NEHTA	Document Feedback	07 March 2012
8	1.8	Conformance	Updated Conformance statement	Added the following statements to the conformance section. Conformance Profiles of this document may make additional rules that override this document in regard to 1. Allowing the use of alternative value sets in place of the value sets specified in this document 2. Allowing the use of alternative identifiers in place of the HI Service identifiers 3. Making required data elements and/or section divisions optional	NEHTA	Document Feedback	07 March 2012
9	1.9	Known Issues	Updated text	Changed 'Does this data group need an Australian CDA extension:?' to 'This data group is currently not mapped to CDA'.	NEHTA	Document Feedback	07 March 2012
10	1.9	Known Issues	Updated text	Changed 'Does this element hold the same data as Facility > Role?' to 'This data group is currently not mapped to CDA'.	NEHTA	Document Feedback	07 March 2012
11	1.9	Known Issues	Added Known Issue	Added the following Known Issue Throughout document While every effort has been taken to ensure that the examples are consistent with consistent with the normative mappings in this message specification, care need to be taken when copying XML examples for implementation and validation.	NEHTA	Document Feedback	07 March 2012
12	1.9	Known Issues	Removed Known Issue	Removed the following Known Issue 5 CDA Header CDA Header concepts relevant to the creation of a valid CDA document are not defined with clear instruction and guidance on their intended use. i.e. Custodian is mandatory in CDA - what would this be in this document?	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
13	1.9	Known Issues	Removed Known Issue	Removed the following Known Issue Entity Identifier Conformance statements in the comments column need to be verified.	NEHTA	Document Feedback	07 March 2012
14	10.19	METeOR 291036: Indigenous Status	Updated CodeSystem	Updated CodeSystem from '2.16.840.1.113883.3.879' to '2.16.840.1.113883.3.879.291036' in the Indigenous Status CodeSet table.	NEHTA	Document Feedback	07 March 2012
15	2.3	CDA Extensions	Updated version numbers	Changed the current CDA extensions version and its namespace version number from 1.0 to 3.0 Changed the future CDA extension namespace version number reference from 2.0 to 4.0	NEHTA	Document Feedback	07 March 2012
16	3	e-Discharge Summary Data Hierarchy	Updated Data Hierarchy	Updated 'DIAGNOSTIC INVESTIGATIONS> PATHOLOGY TEST RESULT> TEST SPECIMEN DETAIL' cardinality from 0..* to 1..*	NEHTA	Document Feedback	07 March 2012
17	3	e-Discharge Summary Data Hierarchy	Updated Data Hierarchy	Updated 'TEST SPECIMEN DETAIL > Handling and Processing' cardinality from 0..1 to 1..1	NEHTA	Document Feedback	07 March 2012
18	3	e-Discharge Summary Data Hierarchy	Updated Data Hierarchy	Updated 'TEST SPECIMEN DETAIL > Handling and Processing > Collection DateTime' cardinality from 0..1 to 1..1	NEHTA	Document Feedback	07 March 2012
19	3	e-Discharge Summary Data Hierarchy	Updated Data Hierarchy	Updated 'Result Group Specimen Detail > Handling and Processing' cardinality from 0..1 to 1..1	NEHTA	Document Feedback	07 March 2012
20	3	e-Discharge Summary Data Hierarchy	Updated Data Hierarchy	Updated 'Result Group Specimen Detail > Handling and Processing > Collection DateTime' cardinality from 0..1 to 1..1	NEHTA	Document Feedback	07 March 2012
21	5.1	ClinicalDocument	Updated Mapping and XML example	Updated Mapping and XML example from: templateId/@extension="3.3" to: templateId/@extension="3.4"	NEHTA	Document Feedback	21 February 2012
22	5.1	ClinicalDocument	Updated Mapping and XML example fragment	Changed templateId/@root and XML example from. 1.2.36.1.2001.1001.101.100.20000 to 1.2.36.1.2001.1001.101.100.1002.4	NEHTA	Document Feedback	07 March 2012
23	5.1	ClinicalDocument	Updated Mapping	Changed templateId/@root 'Comments' column from. The healthcare context-specific name of the published Structured Content Specification. to The healthcare context-specific name of the published e-Discharge Summary CDA Implementaion Guide.	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
24	5.1	ClinicalDocument	Updated Cardinality and comment	Changed ClinicalDocument/templateId cardinality from 1..1 to 1..* in the mapping table. Added the following comment to the mapping table 'Comments' column. One or more template identifiers that indicate constraints on the CDA document that this document conforms to. One of the identifiers must be the templateId that identifies this specification (see immediately below). Additional template identifiers may be required by other specifications, such as the CDA Rendering Specification. Systems are not required to recognise any other the template identifiers than the one below in order to understand the document as a [type] but these identifiers may influence how the document must be handled.	NEHTA	Document Feedback	07 March 2012
25	5.1.1	LegalAuthenticator	Updated Mapping reference	Changed all occurances of 'LegalAuthenticator' in the mapping table to 'legalAuthenticator'.	NEHTA	Document Feedback	07 March 2012
26	6.1.1	DOCUMENT AUTHOR	Updated XML example fragment	Removed ext:administrativeGender and ext:birthTime elements from the XML example.	NEHTA	Document Feedback	10 February 2012
27	6.1.1	DOCUMENT AUTHOR	Updated Mapping	Added 'See common pattern:Entity Identifier' to the 'Document Author > Participant > Entity Identifier' Comments column.	NEHTA	Document Feedback	07 March 2012
28	6.1.2	SUBJECT OF CARE	Updated R-MIM representation	Added 0..1 as cardinality for assignedGeographicArea	NEHTA	Document Feedback	07 March 2012
29	7.1.1.1	ENCOUNTER	Updated XML example	Added @typeCode="DRIV" to the 'entry[specialty]' XML example.	NEHTA	Document Feedback	07 March 2012
30	7.1.1.1.1	RESPONSIBLE HEALTH PROFESSIONAL AT TIME OF DISCHARGE	Updated XML example fragment	Removed ext:administrativeGender and ext:birthTime elements from the XML example.	NEHTA	Document Feedback	10 February 2012
31	7.1.1.1.2	OTHER PARTICIPANT	Updated Mapping and XML example	Removed mapping and XML example for the following SCS Data elements Other Participant > Participant > Person or Organisation or Device > Demographic Data Other Participant > Participant > Person or Organisation or Device > Person > Demographic Data > Sex Other Participant > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail Other Participant > Participant > Person or Organisation or Device > Person > Demographic Data > Date of Birth Detail > Date of Birth	NEHTA	Document Feedback	07 March 2012
32	7.1.1.1.2	OTHER PARTICIPANT	Updated Mapping and XML example	Updated SCS Data Component Name from Document Author > Participant > Person or Organisation or Device > Person > Employment Detail Other Participant > Participant > Person or Organisation or Device > Person > Employment Detail	NEHTA	Document Feedback	07 March 2012
33	7.1.1.1.2	OTHER PARTICIPANT	Updated R-MIM representation	Removed administrativeGenderCode and birthTime from the CDA R-MIM diagram	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
34	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSE	Updated XML example fragment	Removed the entry[gbl_prob]/observation/id element from the XML example.	NEHTA	Document Feedback	10 February 2012

35	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Updated XML example	Changed 'Global Statement' XML example from
				`<entry typeCode="DRIV">>`
				to
				`<entry>>`
					NEHTA	Document Feedback	07 March 2012

36	7.1.1.2.1	EXCLUSION STATEMENT - PROBLEMS AND DIAGNOSES	Updated XML example	Changed 'Global Statement' code XML example from
				`<code code="103.16302" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Global Statement" />>`
				to
				`<code code="103.16302.4.3.1" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Global Statement" />>`
					NEHTA	Document Feedback	07 March 2012

37	7.1.1.3	CLINICAL INTERVENTIONS PERFORMED THIS VISIT	Updated XML example	Added @typeCode="DRIV" to the 'component[inter_visit]/section/entry[inter]' XML example.	NEHTA	Document Feedback	07 March 2012
38	7.1.1.4	CLINICAL SYNOPSIS	Updated XML example	Added @typeCode="DRIV" to the 'component[synop]/section/entry' XML example.	NEHTA	Document Feedback	07 March 2012
39	7.1.1.5	DIAGNOSTIC INVESTIGATIONS	Updated R-MIM Representation	Removed text attribute from the R-MIM Section class.	NEHTA	Document Feedback	10 February 2012
40	7.1.1.5	DIAGNOSTIC INVESTIGATIONS	Updated XML example	Removed text element from the XML example.	NEHTA	Document Feedback	10 February 2012
41	7.1.1.5.1	PATHOLOGY TEST RESULT	Updated XML example	Removed xsi:type="ED" attribute from observationMedia/value data elements.	NEHTA	Document Feedback	07 March 2012
42	7.1.1.5.1	PATHOLOGY TEST RESULT	Updated XML example	Updated 'Overall Pathology Test Result Status' XML fragment OID value from. 1.2.36.2001.1001.104.16501 to 1.2.36.2001.1001.101.104.16501	NEHTA	Document Feedback	07 March 2012
43	7.1.1.5.1	PATHOLOGY TEST RESULT	Updated Cardinality	Changed 'Test Speciment Detail'cardinality from '0..*' to '1..*' and 'Essential' to 'Optional' in the relationships table.	NEHTA	Document Feedback	10 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
44	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Updated context	Updated context from: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test_res]/entry[path_test_res]/observation/ to: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[path_test]/section/entry[path_test_res]/observation/	NEHTA	Document Feedback	10 February 2012
45	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Updated Mapping	Updated Mapping from: entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/text:ST to: entryRelationship[spec]/observation/entryRelationship[coll_set]/observation/value:ST	NEHTA	Document Feedback	21 February 2012

46	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example	Updated XML example for 'Test Specimen Detail > Handling and Processing > Collection Setting' from:
				`<text>Pathology Clinic</text>`
				to:
				`<value xsi:type="ST" value="Pathology Clinic" />`
					NEHTA	Document Feedback	21 February 2012

47	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example	Removed three occurrences of xsi:type="ED" attribute from observationMedia/value data elements.	NEHTA	Document Feedback	07 March 2012
48	7.1.1.5.1.1	TEST SPECIMEN DETAIL	Updated XML example fragment	Added ext: namespace prefix to id element in the XML example.	NEHTA	Document Feedback	10 February 2012

49	7.1.1.5.1.2	PATHOLOGY TEST RESULT GROUP	Updated XML example	Updated 'Pathology Test Result Group > Individual Pathology Test Result > Individual Pathology Test Result Value Normal Status' XML fragment from.
				`<interpretationCode code="N" />`
				to
				`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />`
				and
				`<interpretationCode code="HH" />`
				to
				`<interpretationCode code="HH" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="High alert" />`
					NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
50	7.1.1.5.1.2	PATHOLOGY TEST RESULT GROUP	Updated XML example	Updated SCS Data Component Name from: Individual Pathology Test Result Value Reference Range Details to: Individual Pathology Test Result Value Reference Range	NEHTA	Document Feedback	21 February 2012
51	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Updated XML example fragment	Added ext: namespace prefix to id element in the XML example.	NEHTA	Document Feedback	10 February 2012
52	7.1.1.5.1.2.1	Result Group Specimen Detail	Updated Mapping	Updated Mapping from: component/observation/entryRelationship[coll_set]/observation/text:ST to: component/observation/entryRelationship[coll_set]/observation/value:ST	NEHTA	Document Feedback	21 February 2012

53	7.1.1.5.1.2.1	RESULT GROUP SPECIMEN DETAIL	Updated XML example	Updated XML example for 'Result Group Specimen Detail > Handling and Processing > Collection Setting' from:
				`<text>Pathology Clinic</text>`
				to:
				`<value xsi:type="ST" value="Pathology Clinic" />`
					NEHTA	Document Feedback	21 February 2012

54	7.1.1.5.2	IMAGING EXAMINATION RESULT	Updated XML example fragment	Added qualifier element to the XML example.	NEHTA	Document Feedback	10 February 2012
55	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated XML example fragment	Added qualifier element to the XML example.	NEHTA	Document Feedback	10 February 2012
56	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated context	Updated context from: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[im_exam_res]/component/ to: ClinicalDocument/component/structuredBody/component[event]/section/component[diag_inv]/section/component[img_exam]/section/entry[img_exam_res]/observation/	NEHTA	Document Feedback	10 February 2012
57	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated XML example fragment	Added entry/Observation elements to the XML example.	NEHTA	Document Feedback	13 February 2012
58	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated SCS Data Component Name	Updated SCS Data Component Name from: Imaging Examination Result Group > Anatomical Site to: Imaging Examination Result Group > Anatomical Location	NEHTA	Document Feedback	21 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					

59	7.1.1.5.2.1	IMAGING EXAMINATION RESULT GROUP	Updated XML example	Updated 'Imaging Examination Result Group > Individual Imaging Examination Result > Imaging Examination Result Value Normal Status' XML fragment from.
				
				`<interpretationCode code="N" />`
				
				to
				
				`<interpretationCode code="N" codeSystemName="HL7 ObservationInterpretationNormality" codeSystem="2.16.840.1.113883.5.83" displayName="Normal" />`
					NEHTA	Document Feedback	07 March 2012

60	7.1.1.5.2.2	EXAMINATION REQUEST DETAILS	Updated Mapping	Updated 5 occurances of Examination Request Details > Image Details > DICOM Series Identifier mapping from entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/observation/ to entryRelationship[exam_req]/act/entryRelationship[exam_perf]/act/entryRelationship[img_det]/observation/entryRelationship[dicom_ser]/act/	NEHTA	Document Feedback	07 March 2012
61	7.1.1.5.2.2	EXAMINATION REQUEST DETAILS	Updated XML example	Removed xsi:type="ED" attribute from observationMedia/value data elements.	NEHTA	Document Feedback	07 March 2012
62	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Updated XML example fragment	Removed id element from the XML example.	NEHTA	Document Feedback	10 February 2012

63	7.1.2.1.1	EXCLUSION STATEMENT - MEDICATIONS	Updated XML example	Changed 'Global Statement' XML example from
				
				`<entry typeCode="DRIV">>`
				
				to
				
				`<entry>>`
					NEHTA	Document Feedback	07 March 2012

64	7.1.2.1.2	THERAPEUTIC GOOD: Example 7.22	Updated XML example fragment	Removed id element from the XML example.	NEHTA	Document Feedback	10 February 2012

65	7.1.2.2.1	EXCLUSION STATEMENT - MEDICATIONS	Updated XML example	Changed 'Global Statement' XML example from
				
				`<entry typeCode="DRIV">>`
				
				to
				
				`<entry>>`
					NEHTA	Document Feedback	07 March 2012

66	7.1.2.2.2	THERAPEUTIC GOOD	Updated Mapping	Added text element to the mapping.	NEHTA	Document Feedback	10 February 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
67	7.1.3.1.1.1	NOMINATED PRIMARY HEALTH-CARE PROVIDER - PERSON	Updated SCS Data Component Name from	Document Author > Participant > Person or Organisation or Device > Person > Employment Detail to Nominated Primary Healthcare Provider > Participant > Person or Organisation or Device > Person > Employment Detail	NEHTA	Document Feedback	07 March 2012
68	7.1.3.1.1.1	NOMINATED PRIMARY HEALTH-CARE PROVIDER - PERSON	Updated Mapping	Updated vocabulary reference for 'associatedEntity/@classCode' from 'HL7:RoleClassCodeAssociative' to 'HL7:RoleClassAssociative'	NEHTA	Document Feedback	07 March 2012
69	7.1.3.1.1.1	NOMINATED PRIMARY HEALTH-CARE PROVIDER - PERSON	Updated R-MIM Representation	Removed 'administrativeGenderCode' and 'birthTime' attributes and its 'Note' comment from the 'Person' class in the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
70	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated Mapping reference	Changed all occurances of 'Nominated Primary Healthcare Provider (Person)' in the mapping table to 'Nominated Primary Healthcare Provider(Organisation)'.	NEHTA	Document Feedback	07 March 2012
71	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated text from	Figure 7.29, “Nominated Primary Healthcare Provider” to Figure 7.29, “Nominated Primary Healthcare Provider (Organisation)”	NEHTA	Document Feedback	07 March 2012
72	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated text from	"Usual GP (ORGANISATION) data group" to "Nominated Primary Healthcare Provider (Organisation) data group”	NEHTA	Document Feedback	07 March 2012
73	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated SCS Data Component Name from	'Prescriber Organisation > Participant> Person or Organisation or Device >Organisation > Department/Unit' to 'Nominated Primary Healthcare Provider (Person) > Participant> Person or Organisation or Device >Organisation > Department/Unit'	NEHTA	Document Feedback	07 March 2012
74	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated SCS Data Component Name from	'Prescriber Organisation > Participant> Person or Organisation or Device >Organisation > Organisation Name Usage' to 'Nominated Primary Healthcare Provider (Person) > Participant> Person or Organisation or Device >Organisation > Organisation Name Usage'	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
75	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated Mapping	Updated Mapping from: participant/functionCode="PCP" to: participant/functionCode/@code="PCP"	NEHTA	Document Feedback	07 March 2012
76	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated Mapping	Updated Mapping from: participant/associatedEntity/participant/associatedEntity/@classCode to: participant/associatedEntity/@classCode	NEHTA	Document Feedback	07 March 2012
77	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Fixed typo	Changed 'Context: ClincalDocument' to 'Context: ClinicalDocument'.	NEHTA	Document Feedback	07 March 2012
78	7.1.3.1.1.2	NOMINATED PRIMARY HEALTH-CARE PROVIDER - ORGANISATION	Updated Mapping	Updated vocabulary reference for 'associatedEntity/@classCode' from 'HL7:RoleClassCodeAssociative' to 'HL7:RoleClassAssociative'	NEHTA	Document Feedback	07 March 2012

79	7.1.3.2.1	EXCLUSION STATE-MENT - ADVERSE REACTION	Updated XML ex-ample	Changed 'Global Statement' XML example from
				`<entry typeCode="DRIV">>`
				to
				`<entry>>`
					NEHTA	Document Feedback	07 March 2012

80	7.1.3.2.1	EXCLUSION STATE-MENT - ADVERSE REACTION	Fixed typo	Removed an unwanted typo 'C' below 'Figure 7.31. Exclusion Statement - Adverse Reaction' title.	NEHTA	Document Feedback	07 March 2012
81	7.1.4.1.1.1	SERVICE PROVIDER - PERSON	Updated R-MIM Representation	Removed 'administrativeGenderCode' and 'birthTime' attributes and its 'Note' comment from the 'Person' class in the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
82	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Updated Mapping context label from	'CDA Header Data Elements' to 'CDA Body Level 3 Data Elements'	NEHTA	Document Feedback	07 March 2012
83	7.1.4.1.1.1.2	SERVICE PROVIDER - ORGANISATION	Fixed typo	Changed 'ClincalStatement' to 'ClinicalStatement'	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
84	7.1.4.2.1.1.1	RECOMMENDATION RECIPIENT - PERSON	Updated Mapping context label from	'CDA Header Data Elements' to 'CDA Body Level 3 Data Elements'	NEHTA	Document Feedback	07 March 2012
85	7.1.4.2.1.1.2	RECOMMENDATION RECIPIENT - ORGANISATION	Updated SCS Data component mapping	Renamed 'Prescriber Organisation' to 'RECOMMENDATION RECIPIENT' for 'Unit' and 'Organisation Name Usage' mappings in the mapping table...	NEHTA	Document Feedback	10 February 2012
86	7.1.4.2.1.1.2	RECOMMENDATION RECIPIENT - ORGANISATION	Updated Mapping context label from	'CDA Header Data Elements' to 'CDA Body Level 3 Data Elements'	NEHTA	Document Feedback	07 March 2012
87	8.4	Entity Identifier	Updated cardinality	Updated cardinality column text from Cardinality comes from linking parent. to The cardinality of the group comes from the linking parent. The cardinality of the children data elements comes from the R-MIM diagram.	NEHTA	Document Feedback	07 March 2012
88	8.7	Electronic Communication Detail	Updated Vocabulary reference	Updated Vocab column text for 'Electronic Communication Medium' and 'Electronic Communication Usage Code' from AS 5017-2006: Health Care Client Electronic Communication Usage Code> HL7:TelecommunicationAddressUse. to HL7 v3: TelecommunicationAddressUse > HL7:TelecommunicationAddressUse.	NEHTA	Document Feedback	07 March 2012
89	8.7	Electronic Communication Detail	Updated Mapping comments	Added the following text to 'Electronic Communication Medium' and 'Electronic Communication Usage Code' comments column The 'AS 5017-2006: Health Care Client Electronic Communication Usage Code' section explains how to map AS 5017-2006 to HL7 TelecommunicationAddressUse (HL7 TAU) code.	NEHTA	Document Feedback	07 March 2012
90	8.8	Employment	Added Mapping	Added ext:asEmployment/@classCode mapping to the mapping table.	NEHTA	Document Feedback	07 March 2012
91	8.8	Employment	Updated Mapping	Changed employerOrganization to ext:employerOrganization in the mapping table.	NEHTA	Document Feedback	07 March 2012
92	8.8	Employment	Added Mapping	Added the following statement to the 'Employment Detail > Employer Organisation' row. There is a known issue in NEHTA Participation Data Specification for this logical Data Component's cardinality. Furthermore the corresponding CDA elements ext:asEmployment and ext:employerOrganization doesn't allow the cardinality to be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.	NEHTA	Document Feedback	07 March 2012

ID	Document Ref.		Change Type	Change Detail	Changed Instigated By	Rational For Change	Date Changed
	Section	Section Name					
93	8.8	Employment	Added Mapping	Added the following statement to the 'Employment Detail > Occupation' row. The corresponding CDA element ext:jobCode doesn't allow the cardinality be '0..*'/multiple. The cardinality SHALL be interpreted as '0..1' instead of '0..*'.	NEHTA	Document Feedback	07 March 2012
94	8.8	Employment	Updated Mapping	Added the 'Note' text above the Employment Mapping table.	NEHTA	Document Feedback	07 March 2012
95	Appendix A	CDA Narratives	Updated Conformance statement	Changed the following conformance point from. The narrative contents SHALL be completely and accurately rendered in a standards-compliant web browser by the transformation provided by HL7. Producers MAY assume that consumers are able to apply HL7's transformation. Producers MAY distribute transformations for alternate or enhanced rendering, but SHALL NOT rely upon their use. to The narrative contents SHALL conform to the requirements specified in the CDA Rendering Specification.	NEHTA	Document Feedback	07 March 2012
96	Appendix A	CDA Narratives	Updated Conformance statements	Removed the following conformance points. • CDA structured information generally takes the form of nested lists leading to either simple values or name-value pairs. It is usually marked up as either data tables or lists. Lists are often more attractive, particularly in automated generation, because they are more amenable to safe nesting. Also, HL7 narrative lists are well suited to name-value pairs because both the lists themselves and their items may have captions, which are well suited for labels (names). Style and formatting markup is often discarded by the default HL7 transformation • Note Implementers should test their chosen narrative markup early in the development process using the standard HL7 transformation in a web browser, to confirm that it renders completely	NEHTA	Document Feedback	07 March 2012
97	N/A	Reference List	Updated bibliography reference	Changed e-Discharge Summary SCS reference from National E-Health Transition Authority, 25 November 2011, e-Discharge Summary Structured Document Template, Version 3.3. to National E-Health Transition Authority, 25 November 2011, e-Discharge Summary Structured Document Template, Version 3.4.	NEHTA	Document Feedback	07 March 2012
98	Page ii	Copyright	Updated Copyright year	Changed year from '2011' to '2012'.	NEHTA	Document Feedback	07 March 2012
99	e-Discharge Summary Structured Document Template Reference	Throughout the document.	Updated bibliography reference	The document reference for e-Discharge Summary Structured Document Template bibliography reference has been updated throughout the document.	NEHTA	Document Feedback	07 March 2012

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