nehta

Dispense Record

CDA Implementation Guide

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Draft for Trial Implementation

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Document Information

Document owner

Document Owner
The National Clinical Terminology and Information Service

Related documents

Name	Version/Release Date
Electronic Medications Management - Electronic Transfer of Prescriptions Endpoint Specification	Release 1, Version 1.0, Issued 11 November 2009
Data Types in NEHTA Specifications: A Profile of the ISO 21090 Specification	Version 1.0, Issued September 2010
Dispense Record Structured Document Template	Version 3.1, Issued November 2010
ETP Business Process and Requirements Specification	Release 1, Issued 30 October 2009
ETP Technical Requirements Specification	Release 1, Issued 30 October 2009
ETP Logical Information Model	Release 1, Issued 30 October 2009
ETP Technical Architecture	Release 1, Issued 30 October 2009
Participation Data Specification	Version 3.0, Issued September 2010

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1 Introduction

1.1 Document Purpose and Scope

The purpose of this document is to provide a guide to implementing the 'logical' model detailed by NEHTA's Dispense Record Structured Document Template (DR SDT) as an HL7 Clinical Document Architecture Release 2 (CDA) XML document. This guide is based on Version 3.1 of the DR SDT [NEHT2010t]. The primary aim of the guide is to take implementers step by step through mapping each data component of the DR 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 a Dispense Record. The resulting CDA document would be used for the electronic exchange of Dispense Records 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 Dispense Record Definition

A Dispense Record is defined in [NEHT2010t] as:

> A dispense record documents activity associated with the dispensing of a single prescribed item within a single dispensing event. If an item is prescribed with repeats there will be one dispense record for the original prescription, and one for each repeat.

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).

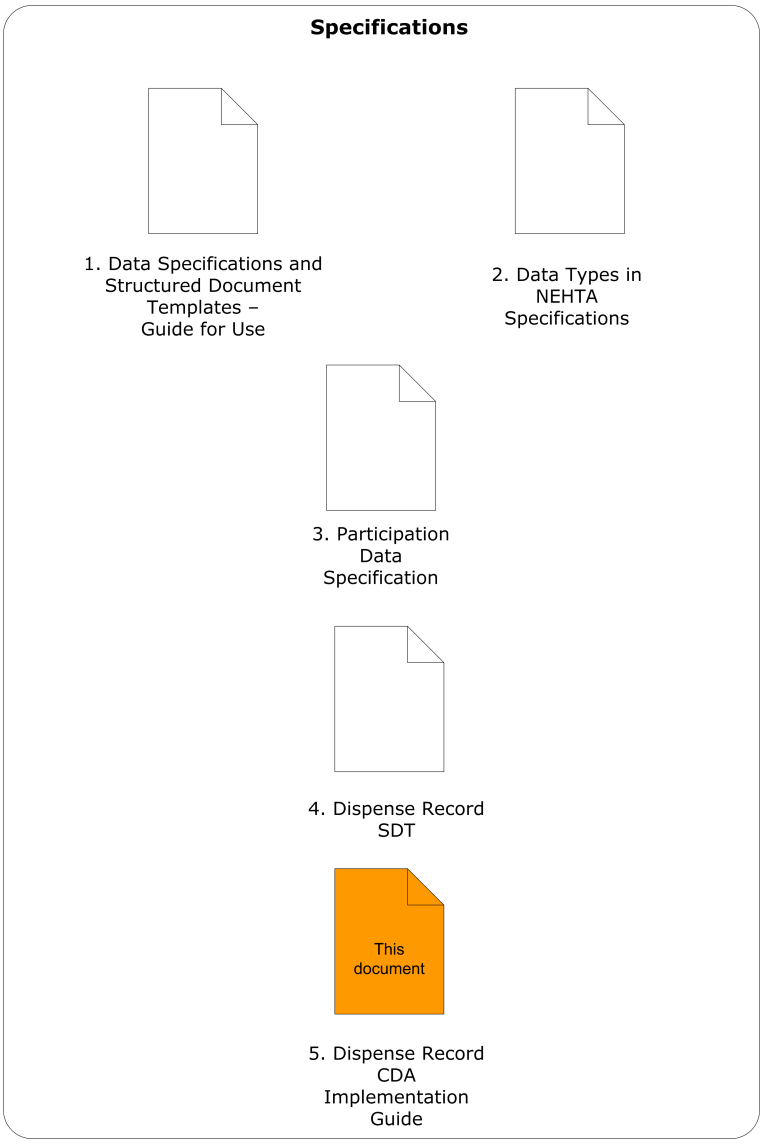
1.4 Intended Audience

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 [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 Specifications and Structured Document Templates – Guide for Use [NEHT2010d] – describes the generic data structures, data types, keywords and icons used within the Structured Document Template.

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

3. Participation Data Specification [NEHT2010i] – contains the full specification which forms the basis of all participations contained in NEHTA Structured Document Templates.

4. Dispense Record – Structured Document Template [NEHT2010t] – clinical content specification describing the logical data structures, data components, and value domains which constitute a Dispense Record.

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 [NEHT2005a].

1.7 Keywords

Where used in this document, the keywords **MUST**, **SHOULD**, **MAY**, **MUST NOT** and **SHOULD NOT** are to be interpreted as described in [RFC2119].

Keywords used in this document

Keyword	Interpretation
MUST	This word, or the terms '**REQUIRED**' or '**SHALL**', 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).
MUST NOT	This phrase, or the phrase '**SHALL NOT**' means that the definition is an absolute prohibition of the specification.
SHOULD NOT	This phrase, or the phrase '**NOT RECOMMENDED**' means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.

1.8 Conformance

This document describes how a DR SDT is implemented as a CDA document. Conformance can be claimed to this *Implementation Guide*, either with regard to instances of Dispense Record CDA XML documents, or to systems that consume or produce Dispense Record CDA XML documents. When a conformance claim is made, it is made against this document, i.e. '*Dispense Record: CDA Implementation Guide v2.1*'.

A conformant document has the following properties:

- It **MUST** be a valid HL7 CDA instance. In particular:
  - It **MUST** be valid against the HL7 CDA Schema (once extensions have been removed, see W3C XML Schema).
  - It **MUST** conform to the HL7 V3 R1 data type specification.
  - It **MUST** render correctly using the HL7 provided CDA transform.
- It **MUST** be valid against the Australian CDA DR Schema that accompanies this specification.
- It **MUST** use the mappings as they are stated in this document.
- It **MUST** use all fixed values as specified in the mappings. (e.g. @attribute="`FIXED_VALUE`").

- It **MUST** use vocabularies and codes sets as specified in the mappings, unless the vocabulary has been explicitly stated as:

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

- It **MUST** adhere to all cardinalities as specified in the mappings.
- It **MUST** be valid against the additional conformance requirements that are established in this document.
- The data as contained in the data types **MUST** conform to the additional data type specification [NEHT2010c].
- 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 **MUST** be represented in the narrative.

A system that *produces* Dispense Record CDA documents may claim conformance if all the documents it produces are conformant to this guide.

A system that *consumes* Dispense Record 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. Note: conformant systems that consume Dispense Record CDA documents are not required to process all the structured data entries in the CDA document but they **MUST** be able to correctly render the document for end-users when appropriate (see 2.1 Clinical Document Architecture Release 2).

1.9 Lifecycle and Document Management

Electronic Transfer of Prescription (ETP) supports repository service interfaces that allow for a document to be stored in a repository (and therefore made available for retrieval). These interfaces also allow for an existing document to be effectively "withdrawn from publication". The ETP service does not, however, represent a complex lifecycle for any of the clinical documents that it manages. That is, it does not support:

- revision of an existing document,
- appending of information to an existing document,
- replacement of an existing document,
- any form of transformation or translation of an existing document.

For this reason the CDA header elements used to represent relationships between CDA documents are not used in ETP.

For more details on the lifecycle of a Dispense Record please refer to the ETP Business Process and Requirements Specification - Release 1 [NEHT2009i].

1.10 Digital Signature

See Known Issues.

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

1.11 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
Clinical Document Architecture Release 2	How is structured text different from structured data? Is the statement intended to assert "text" and "coded data"? Is the "structured text" is intended to mean "marked up text"? And if yes, how is it different from "narratives" that are "CDA defined hypertext"?
6 *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 for ETP. i.e. Custodian is mandatory in CDA - what would this be in ETP?
Schema	The CDA Schema has been modified to include some HL7 R2 data type constructs specifically to accommodate mapping Minimum Interval Between Repeats. This approach needs to be verified.
AS 5017-2006: Health Care Client Identifier Geographic Area	The Health Care Client Identifier Geographic Area vocabulary table lists displayName, code, codeSystemName and codeSystem while only the displayName is used in the mapping. Verification of using only the displayName needs to be performed.
code	The explanation of how to use the code element in the Common Patterns chapter needs to be revisited.
Throughout document	The ids on roles are not clearly explained. The following guidance is given in the comments field of the mapping table: UUID This is a technical identifier that is used for system purposes such as matching. This explanation needs to be clarified.
Throughout document	Australian vs American spelling - in cases where definitions have been taken from HL7 documentation, the American spelling has been preserved, e.g. organization rather than organisation.
time	Need to give guidance on timezones for time values. This may be something that should be enforced for all time values.
Entity Identifier	Conformance statements in the comments column need to be verified.
Digital Signature	A solution to the issue of how best to include digital signatures in CDA documents is still being worked on. A conclusion as to the best solution to the problem is expected to be reached by the end of 2010.

2 Guide for Use

This document describes how to properly implement the Australian DR SDT as a conformant HL7 CDA XML document. The Dispense Record is built in two parts:

1. A *Structured Document Template* (SDT), which, in conjunction with its related documents (see Document Map), describes the Dispense Record, 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 Dispense Record 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 DR 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 structured text or a combination of both structured text and structured data. The structured text can be transformed to XHTML and displayed to a human. The structured data allows machine processing of the information shown in the renderable portion.

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 DR 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 9 *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 Model

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.

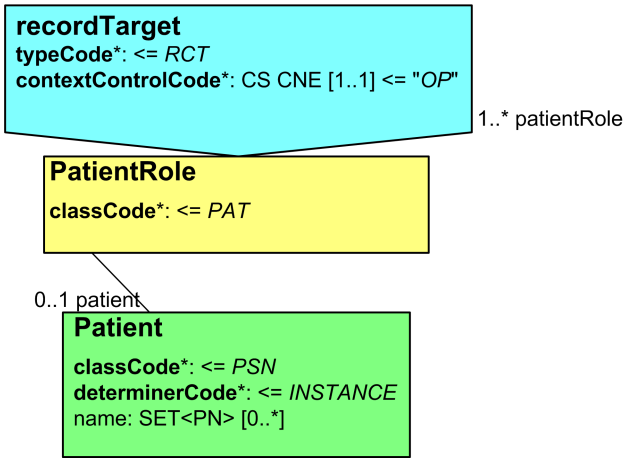


Figure 2.1. CDA Model for Example - Header Part

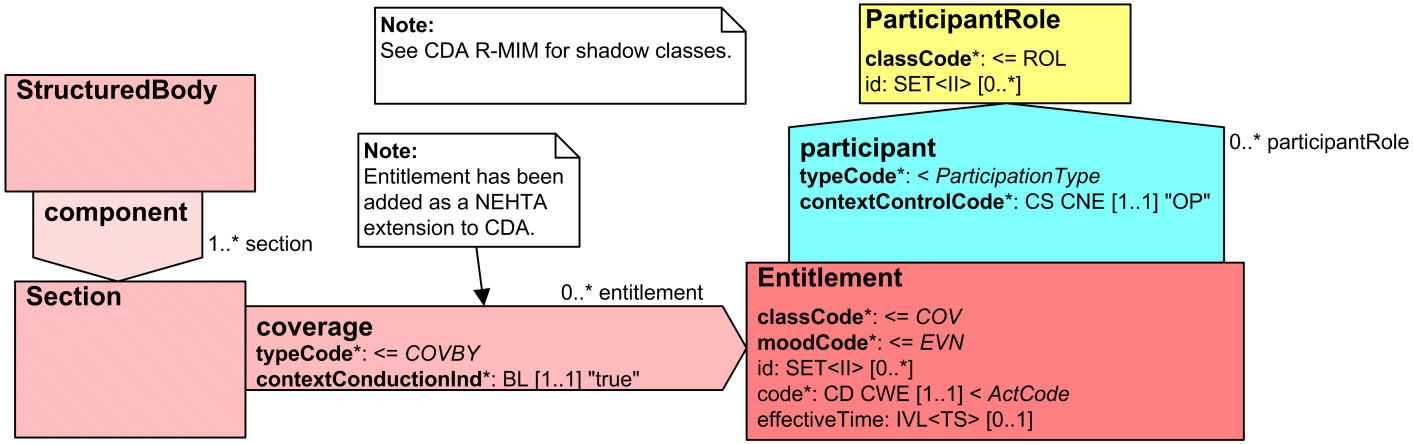


Figure 2.2. CDA Model for Example - Body Part

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	The person the prescription is for. The intended recipient of the prescribed items.	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.	Required CDA element. If there are any entitlements for Subject of Care this value **MUST** be the same as: ClinicalDocument/ component/ structuredBody/ component[disp_item]/ 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.
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[disp_item]/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.	**MUST** hold the same value as ClinicalDocument/ recordTarget /patientRole/ **id**.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Subject of Care > Participant > Entitlement > **Entitlement Number**	A number or code issued for the purpose of identifying the entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	1..1	ext:coverage2/ext:entitlement/**ext:id**		
Subject of Care > Participant > Entitlement > **Entitlement Type**	The description of the scope of an entitlement.	1..1	ext:coverage2/ext:entitlement/**ext:code**	NCTIS: Admin Codes - Entitlement Type	See <code> for available attributes.
Subject of Care > Participant > Entitlement > **Entitlement Validity Duration**	The time interval for which an entitlement is valid.	0..1	ext:coverage2/ext:entitlement/**ext:effectiveTime**		

The Subject of Care (Patient) section is part of the context section of the 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 1.0 of these extensions are incorporated in the namespace <http://ns.electronichealth.net.au/Ci/Cda/Extensions/1.0> as shown in the CDA example output throughout this document. Future versions of will be versioned as per the following example:

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

2.4 W3C XML Schema

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

The modified DR 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.

Dispense Records that conform to this specification **MUST** validate against the DR CDA Schema that accompanies this specification, and **MUST** 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 DR 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 Dispense Record Context Data Hierarchy

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

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

	DISPENSE RECORD		
CONTEXT			
		SUBJECT OF CARE	1..1
		DISPENSER	1..1
		DISPENSING ORGANISATION	1..1

4 Dispense Record Content Data Hierarchy

As represented in the data hierarchy below, the content part of the DR SDT contains information pertaining to the process of an authorised dispenser dealing out and making ready for supply a therapeutic good that requires a prescription, for the use of a subject of care.

The data hierarchy is a logical representation of the data components in the context section of a dispense record, and is not intended to represent how the data contents are represented in a CDA document.

	DISPENSE RECORD			
CONTENT				
		DISPENSE ITEM		1..1
		ID	Dispense Item Identifier	1..1
			DateTime of Dispense Event	1..1
		ID	Prescription Item Identifier	1..1
			Therapeutic Good Identification	1..1
		T	Formula	0..1
		T	Quantity of Therapeutic Good	1..1
			Brand Substitution Occurred	1..1
		123	Maximum Number of Repeats	1..1
		123	Number of this Dispense	1..1
			Claim Category Type	1..1
		T	Label Instruction	0..1
			Early Supply With Pharmaceutical Benefit	0..1
		T	Additional Comments	0..1

5 Administrative Observations

The DR 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 Model

Figure 5.1, “CDA Model for Administrative Observations” shows a subset of the CDA model containing those classes being referred to in the CDA Mapping. The Administrative Observations section is composed of a Section class related to its context ClinicalDocument.structuredBody through a component relationship.

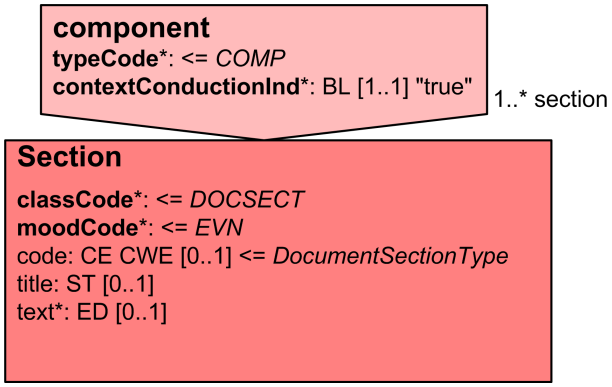


Figure 5.1. CDA Model for Administrative Observations

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		component/section/[admin_obs]/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			component[admin_obs]/section/**title="Administrative Observations"**		
			component[admin_obs]/section/**text**		See Appendix A, *CDA Narratives*

Example 5.1. 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/2.0"
 …
 >
   <!-- 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>
```

6 CDA Header

This chapter contains elements that are not specified in the DR SDT specification. These elements include CDA specific header elements (both required and optional) and data elements described in Electronic Medications Management - Electronic Transfer of Prescriptions Endpoint Specification (EPS) [NEHT2009q]. 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 [HL7CDAR2].

6.1 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	Essential	1..1
Custodian	Essential	1..1
EncompassingEncounter	Essential	1..1

CDA Model

Figure 6.1, “CDA Model for ClinicalDocument”

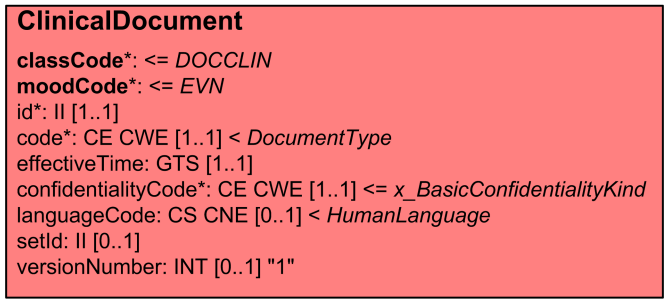


Figure 6.1. CDA Model for ClinicalDocument

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_HD00040"**		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..1			
ClinicalDocument/templateId/**@root="1.2.36.1.2001.1001.101.100.16112"**		1..1		docType	The healthcare context-specific name of the published Structured Document Template Specification.
ClinicalDocument/templateId/**@extension="2.1"**		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	
ClinicalDocument/**code**	The code specifying the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note).	0..1			A dispense record documents activity associated with the dispensing of a single prescribed item within a single dispensing event. If an item is prescribed with repeats there will be one dispense record for the original prescription, and one for each repeat.
ClinicalDocument/code/**@code="100.16112"**					
ClinicalDocument/code/**@codeSystem="1.2.36.1.2001.1001.101"**					
ClinicalDocument/code/**@codeSystemName="NCTIS Data Components"**					
ClinicalDocument/code/**@displayName="Dispense Record"**					
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>

CDA Schema Data Element	Definition	Card	Vocab	EPS Element	Comments
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.		
ClinicalDocument/**versionNumber/@number="1"**	An integer value used to version successive replacement documents.	0..1			This value is always "1".

Example

Example 6.1. 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/2.0"
 …
 >
   <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
   <templateId root="1.2.36.1.2001.1001.101.100.16122" extension="2.1"/>
   <id root="87BC5B88-7928-11DF-987D-B36FDFD72085"/>
   <code code="100.16122"
     codeSystem="1.2.36.1.2001.1001.101"
     codeSystemName="NCTIS Data Components"
       displayName="Dispense Record"/>
   <effectiveTime value="201001061249"/>
   <confidentialityCode nullFlavor="NA"/>
   <languageCode code="en-AU"/>
   <setId root="72B73F82-7928-11DF-B81A-A36FDFD72085"/>
   <versionNumber value="1"/>

   …

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

      …

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

6.1.1 LegalAuthenticator

Identification

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

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Essential	1..1

CDA Model

Figure 6.2, “CDA Model for LegalAuthenticator”

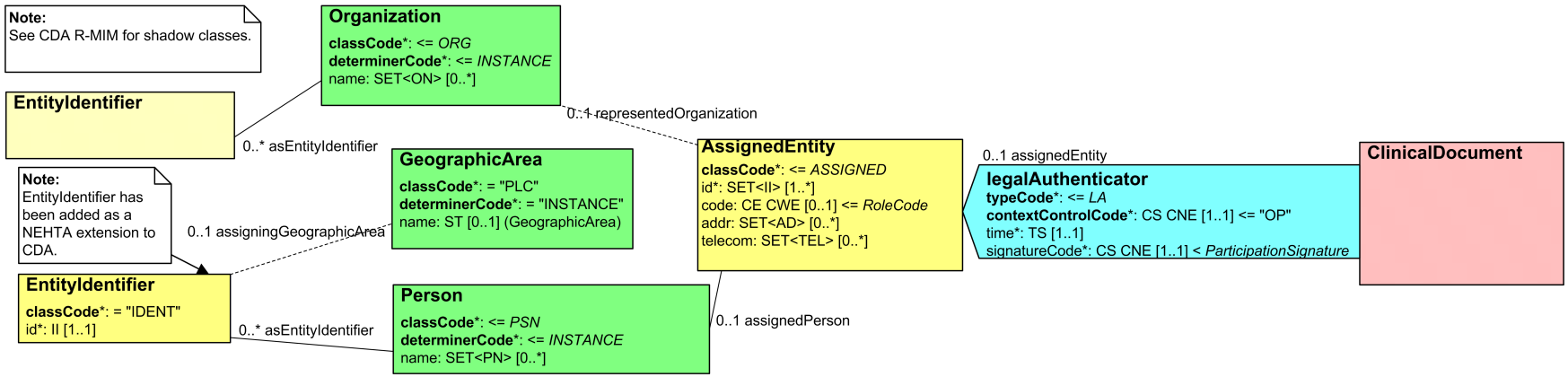


Figure 6.2. CDA Model for LegalAuthenticator

CDA Mapping

Note

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

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

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
LegalAuthenticator	Represents a participant who has legally authenticated the document.	1..1		
LegalAuthenticator/**time/@value**	Indicates the time of authentication.	1..1		
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.	
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.	1..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).	1..*		See common pattern: Person Name.
LegalAuthenticator/assignedEntity/**representedOrganization**	The entity scoping the role (assignedEntity).	0..*		
LegalAuthenticator/assignedEntity/representedOrganization/**<Entity Identifier>**	A unique identifier for the scoping entity (represented organization) in this role (assignedEntity).	0..1		See common pattern: Entity Identifier.

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

CDA Schema Data Element	Definition	Card	Vocab	Comments
LegalAuthenticator/assignedEntity/representedOrganization/**name**	A non-unique textual identifier or moniker for the entity (representedOrganization).	0..1		

Example

Example 6.2. 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/1.0"
 …
 >

 …

 <!-- 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>
```

6.1.2 Custodian

Identification

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

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Essential	1..1

CDA Model

Figure 6.3, “CDA Model for Custodian”

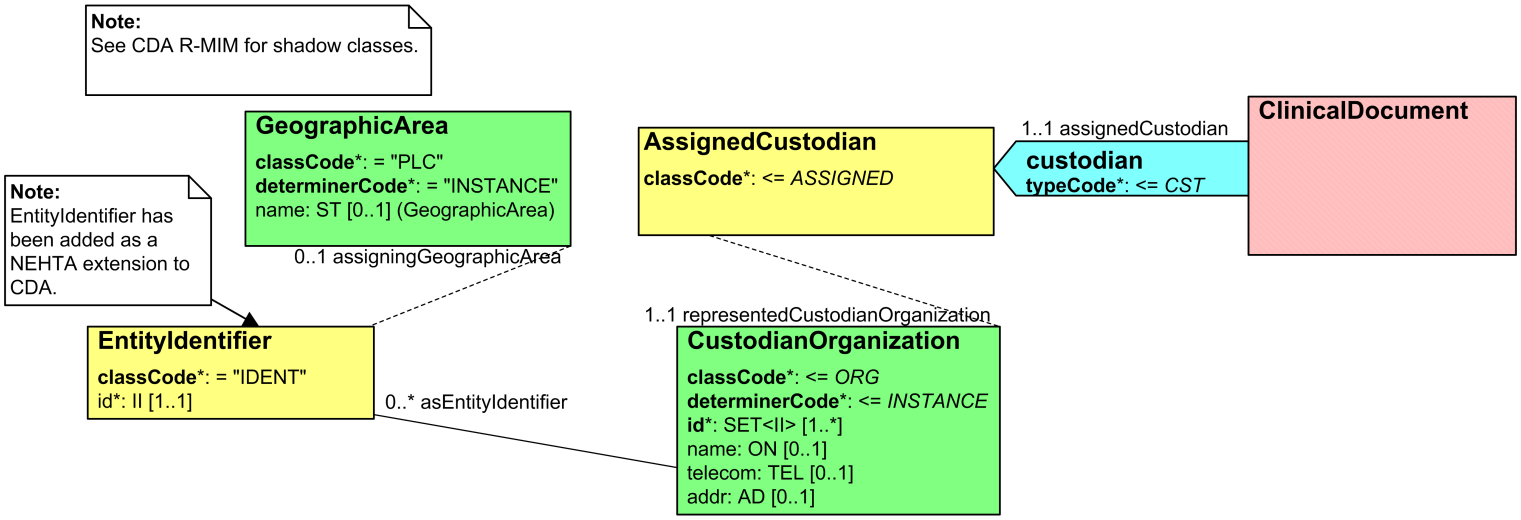


Figure 6.3. CDA Model for Custodian

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.	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..*		
custodian/assignedCustodian/representedCustodianOrganization/**<Electronic Communication Detail>**	The telecom of the steward organization.	0..*		See common pattern: Electronic Communication Detail.
custodian/assignedCustodian/representedCustodianOrganization/**<Address>**	The address of the steward organization	0..*		See common pattern: Address.

Example

Example 6.3. Custodian Body XML Fragment

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

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/2.0"
 …
 >

   …

   <!-- 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>
```

6.1.3 EncompassingEncounter

Identification

Name	EncompassingEncounter
Definition	Represents the setting of the clinical encounter during which the documented act(s) or ServiceEvent occurred.

Relationships

Parent

Name	Obligation	Occurrence
ClinicalDocument	Essential	1..1

CDA Model

Figure 6.4, “CDA Model for EncompassingEncounter”

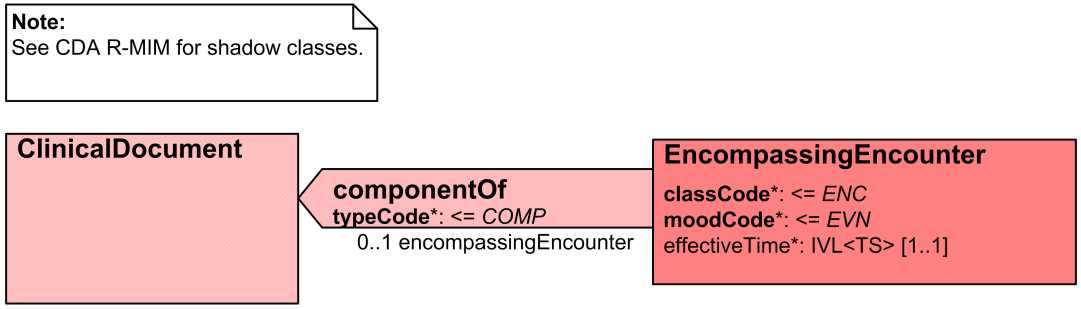


Figure 6.4. CDA Model for EncompassingEncounter

CDA Mapping

CDA Schema Data Element	Definition	Card	Vocab	Comments
Context: ClinicalDocument				
componentOf/encompassingEncounter	The setting of the clinical encounter during which the documented act(s) or ServiceEvent occurred.	1..1		
componentOf/encompassingEncounter/**effectiveTime/@nullFlavor="NA"**	The clinically or operationally relevant time of the encompassingEncounter, exclusive of administrative activity.	1..1		

Example

Example 6.4. EncompassingEncounter 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/2.0"
 …
 >

 <!-- Begin CDA Header -->

 …

 <componentOf>
  <encompassingEncounter>
   <!-- This is a mandatory element -->
   <effectiveTime nullFlavor="NA" />

   …

  </encompassingEncounter>
 </componentOf>

 …

 <!-- End CDA Header -->

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

 …

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

7 Context Data Specification - CDA Mapping

7.1 DISPENSE RECORD

Identification

Name	DISPENSE RECORD
Metadata Type	Structured Document
Identifier	ES-16112

Relationships

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

Data Type	Name	Obligation	Occurrence
	SUBJECT OF CARE	Essential	1..1
	DISPENSER	Essential	1..1
	DISPENSING ORGANISATION	Essential	1..1

CDA Model

Figure 7.1, “CDA Header Model for Dispense Record Context” shows a subset of the CDA model containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

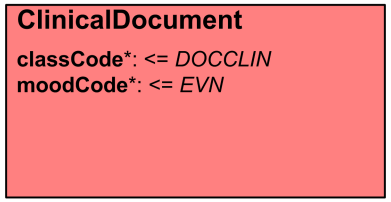


Figure 7.1. CDA Header Model for Dispense Record Context

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
Dispense Record	A dispense record documents activity associated with the dispensing of a single prescribed item within a single dispensing event. If an item is prescribed with repeats there will be one dispense record for the original prescription, and one for each repeat.	1..1	**ClinicalDocument**		
Dispense Record > ***Subject of Care***	See: SUBJECT OF CARE				
Dispense Record > ***Dispenser***	See: DISPENSER				
Dispense Record > ***DispensingOrganisation***	See: DISPENSING ORGANISATION				

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

Example 7.1. Dispense Record 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="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/2.0"
 …
 >

   …

   <!-- Begin CDA Header -->

   …

  <!-- End CDA Header -->

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

        …

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

7.1.1 SUBJECT OF CARE

Identification

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

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	DISPENSE RECORD	Essential	1..1

CDA Model

Figure 7.2, “CDA Model for Subject of Care - Header” and Figure 7.3, “CDA Model for Subject of Care - Body” show a subset of the CDA model containing those classes being referred to in the CDA Mapping. This data component maps to both CDA Header and CDA Body 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.

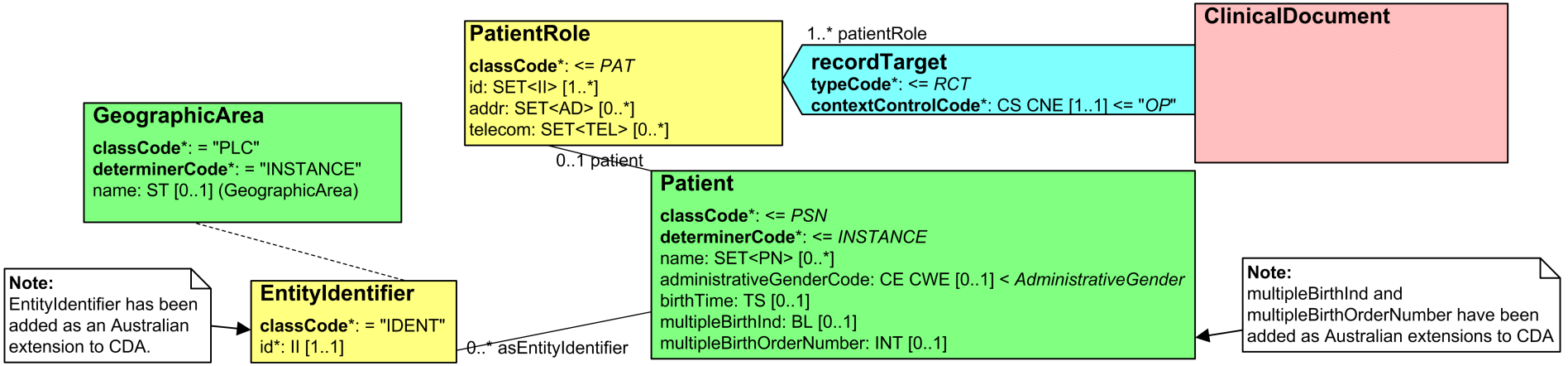


Figure 7.2. CDA Model for Subject of Care - Header

Entitlement is mapped to the Entitlement CDA extension and Date of Birth and Age Details are mapped to the Administrative Observations Section.

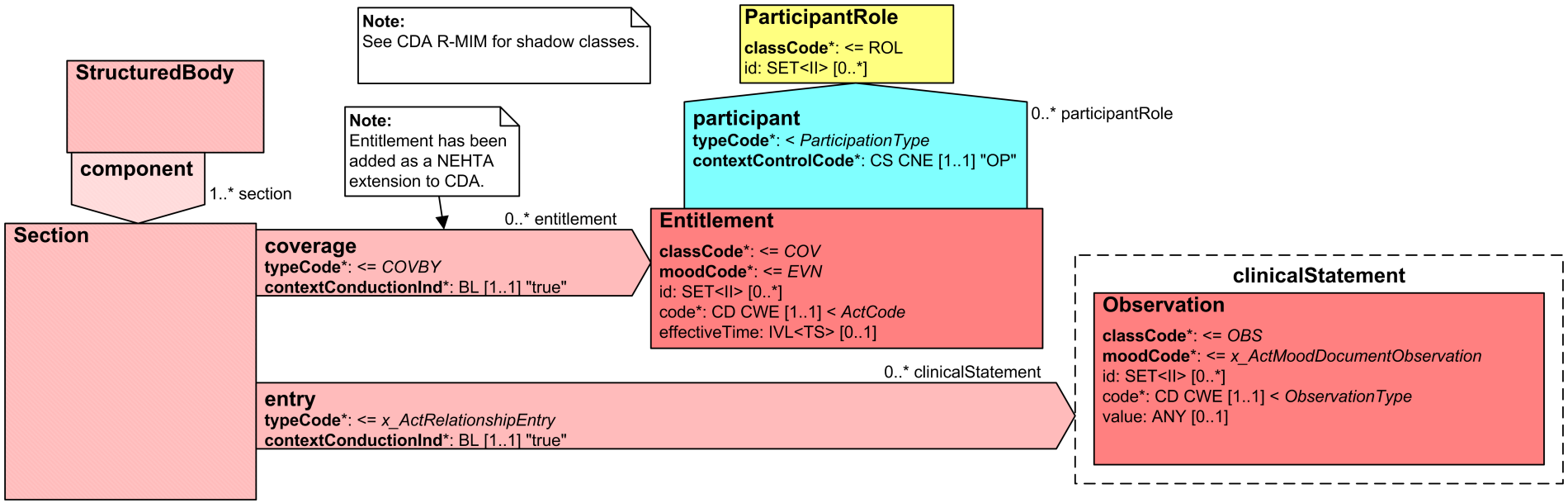


Figure 7.3. CDA Model for Subject of Care - Body

CDA Mapping

Note

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

When national standard code sets become available, they **MUST** be used and the non-standard code sets **MUST** 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	The person the prescription is for. The intended recipient of the prescribed items.	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.	Required CDA element. If there are any entitlements for Subject of Care this value **MUST** be the same as: ClinicalDocument/ component/ structuredBody/ component[disp_item]/ 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 **MUST** have an implementation specific fixed value meaning "Subject".	Not mapped directly, encompassed implicitly in recordTarget/ typeCode = "RCT" (optional, fixed value).
Subject of Care >**Role**	The involvement or role of the participant in the related action from a healthcare perspective rather than the specific participation perspective.	1..1	n/a	The value of Role will be an implementation specific value with a meaning of "Patient", "Client" or similar.	Not mapped directly, encompassed implicitly in recordTarget/ patientRole/ classCode = "PAT" (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 > **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..1	recordTarget/patientRole/patient/**<Entity Identifier>**	The value of Entity Identifier **MUST** 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..1	recordTarget/patientRole/**<Address>**	Address **MUST** 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		This logical NEHTA data component has no mapping to CDA.
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..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.
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 > Person or Organisation or Device > 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.
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 5 *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 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]/**@typeCode="DRIV"**		
			entry[calc_age]/**observation**		
			entry[calc_age]/observation/**@classCode="OBS"**		
			entry[calc_age]/observation/**@moodCode="EVN"**		
			entry[calc_age]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[calc_age]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	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.
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]/**@typeCode="DRIV"**		
			entry[dob_acc]/**observation**		
			entry[dob_acc]/observation/**@classCode="OBS"**		
			entry[dob_acc]/observation/**@moodCode="EVN"**		
			entry[dob_acc]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[dob_acc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	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).

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 > **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).
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.
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]/**@typeCode="DRIV"**		
			entry[age]/**observation**		
			entry[age]/observation/**@classCode="OBS"**		
			entry[age]/observation/**@moodCode="EVN"**		
			entry[age]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[age]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	See <id> for available attributes.
			entry[age]/observation/**value:INT**		

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]/**@typeCode="DRIV"**		
			entry[age_acc]/**observation**		
			entry[age_acc]/observation/**@classCode="OBS"**		
			entry[age_acc]/observation/**@moodCode="EVN"**		
			entry[age_acc]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[age_acc]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	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.
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]/**@typeCode="DRIV"**		
			entry[brth_plr]/**observation**		
			entry[brth_plr]/observation/**@classCode="OBS"**		
			entry[brth_plr]/observation/**@moodCode="EVN"**		
			entry[brth_plr]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[brth_plr]/observation/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	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**		
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[disp_item]/section		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
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.	**MUST** hold the same value as ClinicalDocument/ recordTarget/ patientRole/ **id**.
Subject of Care > Participant > Entitlement > **Entitlement Number**	A number or code issued for the purpose of identifying the entitlement or right of a participant to act in a given capacity (as defined by Entitlement Type) within a healthcare context.	1..1	ext:coverage2/ext:entitlement/**ext:id**		
Subject of Care > Participant > Entitlement > **Entitlement Type**	The description of the scope of an entitlement.	1..1	ext:coverage2/ext:entitlement/**ext:code**	NCTIS: Admin Codes - Entitlement Type	See <code> for available attributes.
Subject of Care > Participant > Entitlement > **Entitlement Validity Duration**	The time interval for which an entitlement is valid.	0..1	ext:coverage2/ext:entitlement/**ext:effectiveTime**		

Example 7.2. 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/2.0"
 …
 >

      …

   <!-- Begin Subject of Care - Header Part -->
 <recordTarget>
  <patientRole>
   <!-- This system generated id is used for matching subject of care details such as Entitlement, Date of Birth Details and Age Details -->
   <id root="270D5FEE-78EC-11DF-ACA6-FF24DFD72085"/>

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

   <!-- Electronic Communication Details -->
   <telecom use="H" value="tel:0499999999"/>
   <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"/><!-- See Administrative Observations for further Date of Birth and Age Details -->

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

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="IHI" extension="8003601234567890" root="1.2.36.1.2001.1003.0"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
     </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
   </patient>
  </patientRole>
 </recordTarget>
 <!-- End Subject of Care - Header Part -->
```

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

        <!-- Begin Dispense Item section -->
        <component>
           <section>

              …

              <!-- Begin Subject of Care Entitlement -->
              <ext:coverage2 typeCode="COVBY">
                 <ext:entitlement classCode="COV" moodCode="EVN">
                    <ext:id root="1.2.36.174030967.0.5" extension="1234567892"
                       assigningAuthorityName="Medicare Australia"/>
                    <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="200701010101"/>
                       <high value="202701010101"/>
                    </ext:effectiveTime>
                    <ext:participant typeCode="BEN">
                       <ext:participantRole classCode="PAT">
                          <!-- Same as the recordTarget/patientRole/id -->
                          <ext:id root="270D5FEE-78EC-11DF-ACA6-FF24DFD72085"/>
                       </ext:participantRole>
                    </ext:participant>
                 </ext:entitlement>
              </ext:coverage2>
              <!-- End Subject of Care Entitlement -->

             …

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

        …

        <!-- 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/>

    <!-- Begin Date of Birth is Calculated From Age -->
    <entry typeCode="DRIV"><!-- [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 typeCode="DRIV"><!-- [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 typeCode="DRIV"><!-- [age] -->
       <observation classCode="OBS" moodCode="EVN">
        <id root="CCF0D55C-EFD0-11DF-BEA2-A6CCDFD72085"/>
        <code code="103.20109"
          codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Age"/>
        <value value="54" xsi:type="INT"/>
       </observation>
      </entry><!-- [age] -->
      <!-- End Age -->

      <!-- Age Accuracy Indicator -->
      <entry typeCode="DRIV"><!-- [age_acc] -->
       <observation classCode="OBS" moodCode="EVN">
        <id root="C629C9F4-EFD0-11DF-AA9E-96CCDFD72085"/>
        <code code="102.16242"
          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 typeCode="DRIV"><!-- [birth_plr] -->
       <observation classCode="OBS" moodCode="EVN">
        <id root="C1EE2646-EFD0-11DF-8D9C-95CCDFD72085"/>
        <code code="102.16242"
          codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Age Accuracy Indicator"/>
        <value value="3" xsi:type="INT"/>
       </observation>
      </entry><!-- [birth_plr] -->
     </section>
    </component><!-- [admin_obs] -->
    <!-- End Administrative Observations section -->

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

7.1.2 DISPENSER

Identification

Name	DISPENSER
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	DISPENSE RECORD	Essential	1..1

CDA Model

Figure 7.4, “CDA Model for Dispenser” shows a subset of the CDA model containing those classes being referred to in the CDA Mapping. This data component maps to CDA Header elements.

The DISPENSER 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.

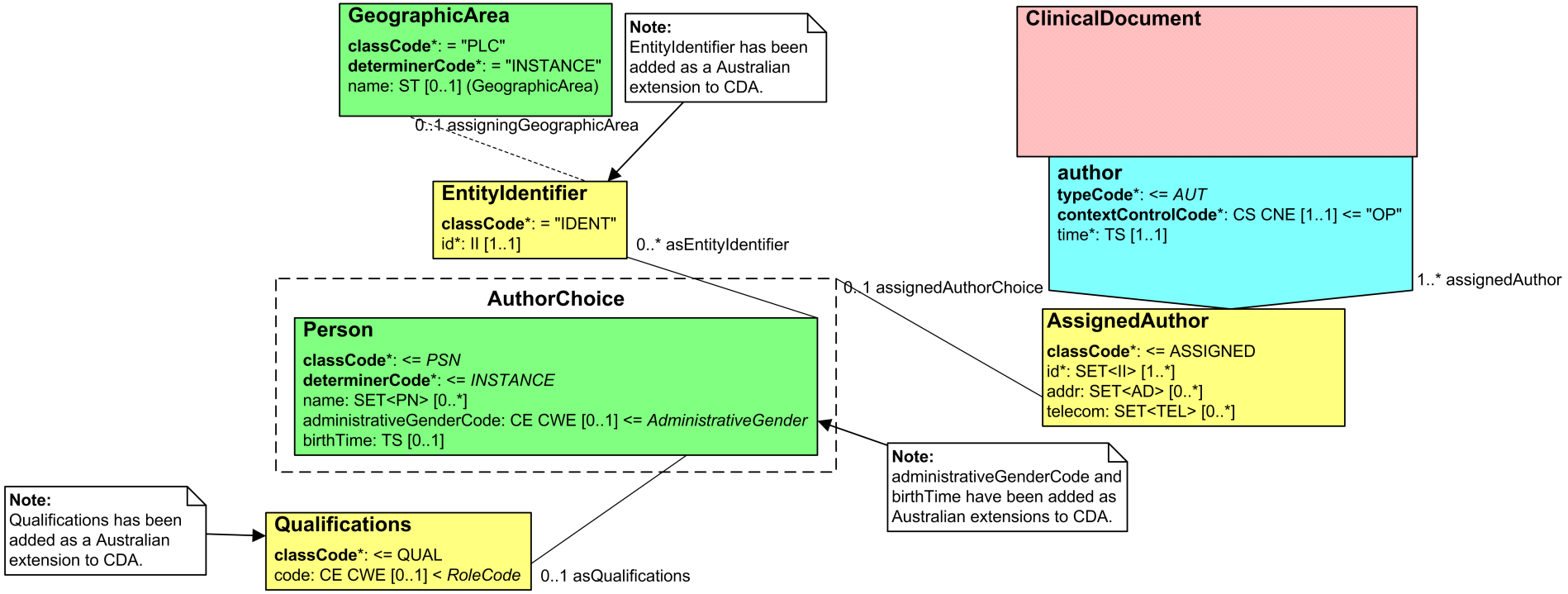


Figure 7.4. CDA Model for Dispenser

CDA Mapping

Note

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClincalDocument		
Dispenser	The healthcare provider who made the therapeutic good available.	1..1	**author**		
Dispenser > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	n/a	Although the SDT specifies that the value of this element must be "Dispenser", the CDA mapping will be AUT (author).	Not mapped directly, encompassed implicitly in author/typeCode="AUT" (optional, fixed value).
Dispenser > **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**		
			author/assignedAuthor/code/**@code="2515"**		
			author/assignedAuthor/code/**@codeSystem="2.16.840.1.113883.13.62"**		
			author/assignedAuthor/code/**@codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006"**		
			author/assignedAuthor/code/**@displayName="Pharmacists"**		
n/a	n/a	1..1	author/assignedAuthor/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	Required CDA element.
See DISPENSE RECORD (DateTime of Dispense Event)	n/a	1..1	author/**time**		Dispense Record > Dispense Item > DateTime of Dispense Event maps to this required CDA element. 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
Dispenser > **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**		
Dispenser > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..1	author/assignedAuthor/assignedPerson/**<Entity Identifier>**	The value of Entity Identifier **MUST** be an Australian HPI-I.	See common pattern: Entity Identifier.
Dispenser > 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..1	author/assignedAuthor/**<Address>**		See common pattern: Address.
Dispenser > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	0..*	author/assignedAuthor/**<Electronic Communication Detail>**		See common pattern: Electronic Communication Detail.
Dispenser > 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.
Dispenser > 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.
Dispenser > 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..1	author/assignedAuthor/assignedPerson/<Person Name>		See common pattern: Person Name.
Dispenser > Participant > Person or Organisation or Device > **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.
Dispenser > Participant > Person or Organisation or Device > 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	author/assignedAuthor/assignedPerson/**ext:administrativeGenderCode**	AS 5017-2006 Health Care Client Identifier Sex	See Australian CDA extension: Administrative Gender Code.
Dispenser > Participant > Person or Organisation or Device > 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.
Dispenser > Participant > Person or Organisation or Device > Demographic Data > Date of Birth Detail > **Date of Birth**	The date of birth of the person.	1..1	author/assignedAuthor/assignedPerson/**ext:birthTime**		See Australian CDA extension: Birth Time. See <time> for available attributes.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispenser > Participant > **Qualifications**	A list of professional certifications, and certificates recognising having passed a course.	0..1	author/assignedAuthor/assignedPerson/**ext:asQualifications**		See Australian CDA extension: Qualifications.
			author/assignedAuthor/assignedPerson/ext:asQualifications/**@classCode="QUAL"**		
			author/assignedAuthor/assignedPerson/ext:asQualifications/**ext:code/@originalText**	Qualifications is a text field, so the text list is entered in the originalText field of the code element.	

Example 7.3. Dispenser 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/2.0"
 …
 >

   …

   <!-- Begin Dispenser -->
 <author>
  <!-- DateTime of Dispense Act -->
  <time value="200910201235"/>
  <assignedAuthor>

   <!-- This system generated id is used for matching Dispenser details -->
   <id root="f8cd07db-a5ce-443c-a143-6870b518c7fe"/>

   <!-- Role -->
   <code code="2515"
     codeSystem="2.16.840.1.113883.13.62"
     codeSystemName="1220.0 - ANZSCO - Australian and New Zealand Standard Classification
           of Occupations, First Edition, 2006"
     displayName="Pharmacists"/>

   <!-- Address -->
   <addr use="H">
    <streetAddressLine>1 Pharmacist 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>
     <given>Helpful</given>
     <family>Pharmacist</family>
     <suffix>Senior</suffix>
    </name>

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

    <!-- Birth date -->
    <ext:birthTime value="19450402"/>

    <!-- Entity Identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
     <ext:id assigningAuthorityName="HPI-I" extension="800361999999" root="1.2.36.1.2001.1003.0"/>
     <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
```

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

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

    …


    <component>
       <structuredBody>

       …

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

7.1.3 DISPENSING ORGANISATION

Identification

Name	DISPENSING ORGANISATION
Metadata Type	Data Group
Identifier	DG-10296

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	DISPENSE RECORD	Essential	1..1

CDA Model

Figure 7.5, “CDA Model for Dispensing Organisation (Header)” and Figure 7.6, “CDA Model for Dispensing Organisation (Body)” show a subset of the CDA model containing those classes being referred to in the CDA Mapping. This data component maps to both CDA Header elements and CDA Body elements.

The DISPENSING ORGANISATION 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.

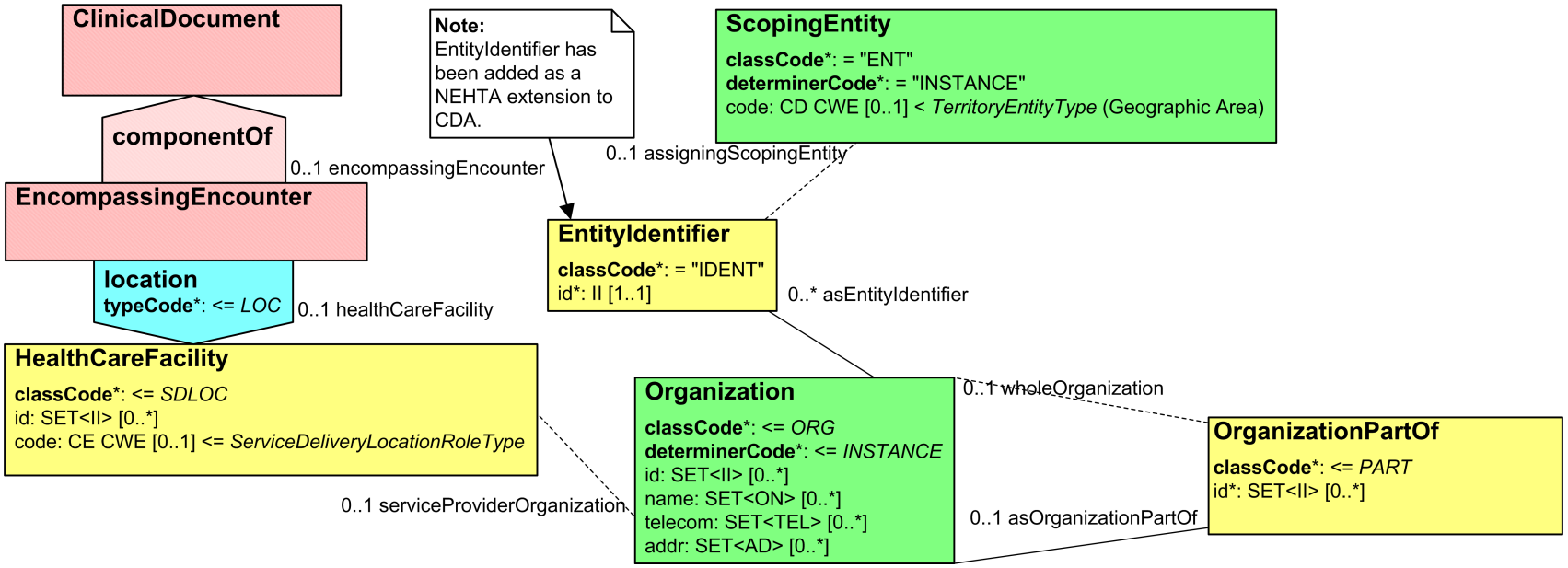


Figure 7.5. CDA Model for Dispensing Organisation (Header)

Entitlement maps to the entitlement Australian CDA extension.

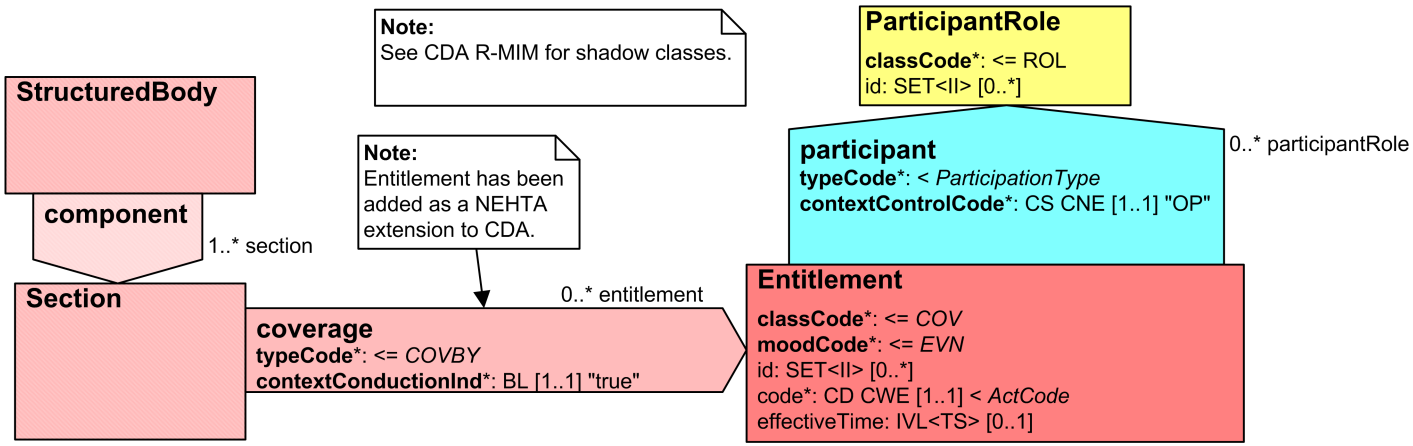


Figure 7.6. CDA Model for Dispensing Organisation (Body)

CDA Mapping

Note

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

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements			Context: ClinicalDocument/componentOf/encompassingEncounter		
Dispensing Organisation	The organisation which the dispenser is working for when they dispense the item.	1..1	**location**		
Dispensing Organisation > **Participation Type**	The categorisation of the nature of the participant's involvement in the healthcare event described by this participation.	1..1	n/a	Although the SDT specifies that the value of this element must be "Dispensary", the CDA mapping will be LOC (location).	Not mapped directly, encompassed implicitly in location/typeCode="LOC" (optional, fixed value).
n/a	n/a		location/**healthCareFacility/id**	UUID This is a technical identifier that is used for system purposes such as matching.	If there are any entitlements this value **MUST** be the same as ClinicalDocument/component/ structuredBody/ component[disp_item]/ section/ ext:coverage/ ext:entitlement/ **ext:id** where participantRole/ @classCode = "SDLOC".
Dispensing 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	location/healthCareFacility/**code**	The value of Role will be an implementation specific value with a meaning of “Pharmacy” or similar.	
			location/healthCareFacility/code/**code="PHARM"**		
			location/healthCareFacility/code/**codeSystem="2.16.840.1.113883.1.11.17660"**		
			location/healthCareFacility/code/**codeSystemName="HL7 ServiceDeliveryLocatonRoleType"**		
			location/healthCareFacility/code/**displayName="Pharmacy"**		
Dispensing 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	location/healthCareFacility/**serviceProviderOrganization/asOrganizationPartOf/wholeOrganization**		

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

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispensing Organisation > Participant > **Entity Identifier**	A number or code issued for the purpose of identifying a participant within a healthcare context.	1..1	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Entity Identifier>**	The value of Entity Identifier **MUST** be an Australian HPI-O.	See common pattern: Entity Identifier.
Dispensing 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..1	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Address>**	Address **MUST** have an Address Purpose value of “Business”.	Australian or International Address **MUST** be instantiated as an Australian Address. See common pattern: Address.
Dispensing Organisation > Participant > **Electronic Communication Detail**	The electronic communication details of entities.	1..*	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/**<Electronic Communication Detail>**	At least one Electronic Communication Medium **MUST** have a value of "Telephone" or "Mobile".	See common pattern: Electronic Communication Detail.
Dispensing 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		This logical NEHTA data component has no mapping to CDA.
Dispensing 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 location/ healthCareFacility/ serviceProviderOrganization/ asOrganizationPartOf/ wholeOrganization.
Dispensing Organisation > 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**		
Dispensing 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	location/healthCareFacility/serviceProviderOrganization/**name**		
Dispensing 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	location/healthCareFacility/serviceProviderOrganization/asOrganizationPartOf/wholeOrganization/name/**@use**	AS 4846-2006: Health Care Provider Organisation Name Usage	
CDA Body Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[disp_item]/section		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispensing Organisation > 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"**		If Claim Category Type has a value other than “No benefit”, then one ENTITLEMENT **MUST** have a Medicare Pharmacy Approval Number as a value.
			ext:coverage2/**ext:entitlement**		
			ext:coverage2/ext:entitlement/**@classCode="COV"**		
			ext:coverage2/ext:entitlement/**@moodCode="EVN"**		
			ext:coverage2ext:entitlement/**ext:participant/@typeCode="HLD"**		
			ext:coverage2/ext:entitlement/ext:participant/**ext:participantRole/@classCode="SDLOC"**		
			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.	**MUST** hold the same value as ClinicalDocument/ componentOf/ encompassingEncounter/ location/ healthCareFacility/ **id**.
Dispensing Organisation > 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**		
Dispensing Organisation > 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 If the value of Medical Benefit Category Type is "1" (PBS), "2" (RPBS) or "3" (CTG), exactly one ENTITLEMENT MUST have an Entitlement Type with the value "11" (Medicare Pharmacy Approval Number).	
Dispensing Organisation > Participant > Entitlement > **Entitlement Validity Duration**	The time interval for which an entitlement is valid.	0..1	ext:coverage2/ext:entitlement/**ext:effectiveTime**		

Example 7.4. Dispensing 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/2.0"
 …
 >

 <!-- Begin CDA Header -->
   …

 <componentOf>
  <encompassingEncounter>
   <!-- This is a mandatory element -->
   <effectiveTime
    nullFlavor="NA"/>

   <!-- Begin Dispensing Organisation -->
   <location>
    <healthCareFacility>
     <id root="873D7B46-F10B-11DF-B5FB-34A7DFD72085"/>
     <code
      code="PHARM"
      codeSystem="2.16.840.1.113883.1.11.17660"
      codeSystemName="HL7 ServiceDeliveryLocatonRoleType"
      displayName="Pharmacy"/>
     <serviceProviderOrganization>

      <!-- Department/Unit Name -->
      <name>Community Pharmacy</name>
      <asOrganizationPartOf>
       <id root="D96FDB98-79CE-11DF-B171-B147E0D72085"/>
       <wholeOrganization>

        <!-- Organisation Name -->
        <name use="ORGB">Community Pharmacy Group</name>

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

        <!-- Address -->
        <addr>
         <streetAddressLine>1 Pharmacy 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="1.2.36.1.2001.1003.0.800362777777"/>
         <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
         </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
       </wholeOrganization>
      </asOrganizationPartOf>
     </serviceProviderOrganization>
```

```
    </healthCareFacility>
   </location>
   <!-- End Dispensing Organisation -->

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

   …

   <!-- Begin CDA Body -->
 <component>
  <structuredBody>
   <!-- Begin Dispense Item Section -->
   <component><!-- [disp_item] -->
    <section>
     …

     <!-- Begin Dispensing Organisation Entitlement -->
     <ext:coverage2 typeCode="COVBY">
      <ext:entitlement classCode="COV" moodCode="EVN">
       <ext:id assigningAuthorityName="Medicare Australia"
           extension="1234567892"
             root="1.2.36.174030967.0.5"/>
       <ext:code>
        <originalText>Approval to Supply Medications under the PBS</originalText>
       </ext:code>
       <ext:effectiveTime>
        <low value="200701010101"/>
        <high value="202701010101"/>
       </ext:effectiveTime>
       <ext:participant typeCode="HLD">
        <ext:participantRole classCode="SDLOC">
         <!-- Same as ClinicalDocument/componentOf/encompassingEncounter/location/healthCareFacility/id -->
         <ext:id root="873D7B46-F10B-11DF-B5FB-34A7DFD72085"/>
        </ext:participantRole>
       </ext:participant>
      </ext:entitlement>
     </ext:coverage2>
     <!-- End Dispensing Organisation Entitlement -->

    </section>
   </component><!-- [disp] -->
   <!-- End Dispense section -->

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

8 Content Data Specification - CDA Mapping

8.1 DISPENSE RECORD

Identification

Name	DISPENSE RECORD
Metadata Type	Structured Document
Identifier	ES-16112

Relationships

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

Data Type	Name	Obligation	Occurrence
	DISPENSE ITEM	Essential	1..1

CDA Model

Figure 8.1, “CDA Model for Dispense Record” shows a subset of the CDA model containing those classes being referred to in the CDA Mapping. This data component maps to CDA Body elements.

The Dispense Record 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.

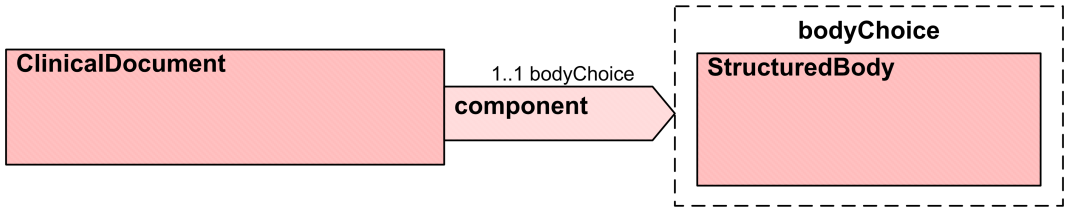


Figure 8.1. CDA Model for Dispense Record

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Header Data Elements					
Dispense Record	A dispense record documents activity associated with the dispensing of a single prescribed item within a single dispensing event. If an item is prescribed with repeats there will be one dispense record for the original prescription, and one for each repeat.	1..1	**ClinicalDocument**		
CDA Body Level 2 Data Elements					
Dispense Record (Body)	See above.	1..1	ClinicalDocument/**component/structuredBody**		

Example 8.1. Dispense Record 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/2.0"
 …
 >

   …

   <!-- Begin CDA Header -->

   …

   <!-- End CDA Header -->

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

      …

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

8.1.1 DISPENSE ITEM

Identification

Name	DISPENSE ITEM
Metadata Type	Data Group
Identifier	DG-16210

Relationships

Parent

Data Type	Name	Obligation	Occurrence
	DISPENSE RECORD	Essential	1..1

CDA Model

Figure 8.2, “CDA Model for Dispense Item” shows a subset of the CDA model containing those classes being referred to in the CDA Mapping.

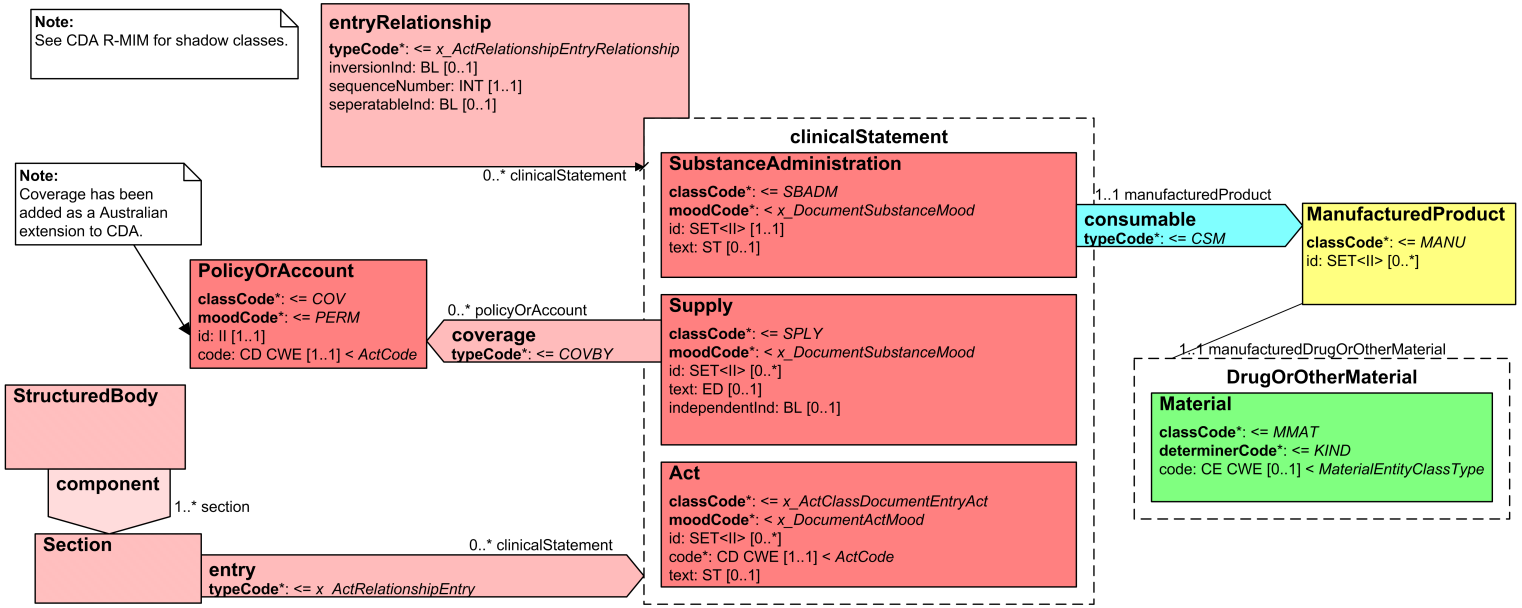


Figure 8.2. CDA Model for Dispense Item

CDA Mapping

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
CDA Level 2 Data Elements			Context: ClinicalDocument/component/structuredBody		
Dispense Item	Details of a therapeutic good with its use by a subject of care and related information.	1..1	**component[disp_item]/section/code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			component[disp_item]/section/**title="Dispense Item"**		
			component[disp_item]/section/**text**		See Appendix A, *CDA Narratives*
CDA Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody/component[disp_item]/section		
		1..1	**entry/@typeCode="DRIV"**		
			entry[sbadm]/**substanceAdministration**		
			entry[sbadm]/substanceAdministration/**@moodCode="RQO"**		
			entry[sbadm]/substanceAdministration/**@classCode="SBADM"**		
			entry[sbadm]/substanceAdministration/**statusCode**	"active" if there are more repeats to be dispensed. "completed" if the last repeat has been dispensed.	
Dispense Item > **Dispense Item Identifier**	A string generated by an EDS (Electronic Prescribing System) to uniquely identify an action of dispensing a therapeutic good.	1..1	entry[sbadm]/substanceAdministration/**entryRelationship[sply]/@typeCode="COMP"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/**supply**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**@moodCode="RQO"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**@classCode="SPLY"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**independentInd/@value="false"**		Signals that the supply cannot stand alone without its containing substanceAdministration.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**id**		See <id> for available attributes.
CDA Header Elements			Context: ClinicalDocument		
Dispense Item > **DateTime of Dispense Event**	The date (and optionally time) when an authorised pharmacist or dispenser dispensed (or attempted to dispense) a prescribed item.	1..1	**author/time/@value**		See DISPENSER. This element maps to the author (dispenser) time.
CDA Level 3 Data Elements			Context: ClinicalDocument/component/structuredBody		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispense Item > **Prescription Item Identifier**	A string generated by an EPS (Electronic Prescribing System) to uniquely identify an instruction to use a therapeutic good.	1..1	entry[sbadm]/substanceAdministration/**id**		See <id> for available attributes.
Dispense Item > **Therapeutic Good Identification**	Identifies a therapeutic good, which is broadly defined as a good which is represented in any way to be, or is likely to be taken to be, for therapeutic use Definition (unless specifically excluded or included under Section 7 of the Therapeutic Goods Act 1989).	1..1	entry[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 children MPUU 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.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispense Item > **Formula**	The recipe for compounding a medicine.	0..1	entry[sbadm]/substanceAdministration/**entryRelationship[form]/@typeCode="COMP"**		
			entry[sbadm]/substanceAdministration/entryRelationship[form]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[form]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[form]/act/**@moodCode="RQO"**		
			entry[sbadm]/substanceAdministration/entryRelationship[form]/act/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	
			entry[sbadm]/substanceAdministration/entryRelationship[form]/act/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[form]/act/**text:ST**		
Dispense Item > **Quantity of Therapeutic Good**	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.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**text:ST**		
Dispense Item **> Brand Substitution Occurred**	Indicates whether or not the substitution of a prescribed medication with a different brand name of the same medication occurred when the medication was dispensed/supplied.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**entryRelationship[brand]/@typeCode="COMP"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[brand]/**observation**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[brand]/observation/**@classCode="OBS"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[brand]/observation/**@moodCode="EVN"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[brand]/observation/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[brand]/observation/**value:BL**		
Dispense Item > **Maximum Number of Repeats**	The number of times the supply of the prescribed item may be repeated under the terms of this prescription.	1..1	entry[sbadm]/substanceAdministration/**repeatNumber**		This value is the maximum number of repeats + 1 because repeatNumber includes the initial dispense.
			entry[sbadm]/substanceAdministration/repeatNumber/**high**		
			entry[sbadm]/substanceAdministration/repeatNumber/high/**@value**		
Dispense Item > **Number of this Dispense**	A numeric value that represents the dispense number or sequence number that has been reached for a therapeutic good prescribed with repeats. This count includes the first dispense. It has the value 1 when there are no repeats.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/**sequenceNumber**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispense Item > **Claim Category Type**	Indicates the category of pharmaceutical benefits applicable to the item being dispensed.	1..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**ext:coverage[claim]/@typeCode="COVBY"**		See Australian CDA extension: Coverage.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[claim]/**ext:policyOrAccount**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[claim]/ext:policyOrAccount/**@classCode="COV"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[claim]/ext:policyOrAccount/**@moodCode="PERM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[claim]/ext:policyOrAccount/**ext:code**	NCTIS: Admin Codes - Claim Category Type	See <code> for available attributes.
Dispense Item > **Label Instruction**	Dispenser instructions to the subject of care concerning the therapeutic good.	0..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**entryRelationship[label]/@typeCode="COMP"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/**act**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/act/**@classCode="INFRM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/act/**@moodCode="RQO"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/act/**id**	UUID This is a technical identifier that is used for system purposes such as matching.	See <id> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/act/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/entryRelationship[label]/act/**text:ST**		

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
Dispense Item > **Early Supply With Pharmaceutical Benefit**	Indicates whether or not the supply of the therapeutic good meets the criteria of a pharmaceutical benefit despite being supplied within the specified minimum supply interval.	0..1	entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/**ext:coverage[early]/@typeCode="COVBY"**		If this entry is present Early Supply With Pharmaceutical Benefit is true, if this entry is not present Early Supply With Pharmaceutical Benefit is false See Australian CDA extension: Coverage.
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[early]/**ext:policyOrAccount**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[early]/ext:policyOrAccount/**@classCode="COV"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[early]/ext:policyOrAccount/**@moodCode="PERM"**		
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[early]/ext:policyOrAccount/**ext:id**	UUID This is a technical identifier that is used for system purposes such as matching.	
			entry[sbadm]/substanceAdministration/entryRelationship[sply]/supply/ext:coverage[early]/ext:policyOrAccount/**ext:code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
Dispense Item > **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.	See <id> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**code**	NCTIS: Admin Codes - Sections/Entries	See <code> for available attributes.
			entry[sbadm]/substanceAdministration/entryRelationship[cmts]/act/**text:ST**		

Example 8.2. Dispense Item XML Fragment

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

<ClinicalDocument
 xmlns="urn:hl7-org:v3"
 xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/2.0"
 …
 >

 <!-- Begin CDA Header -->

 …

 <!-- End CDA Header -->

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

   <!-- Begin Dispense Item Section -->
   <component><!-- [disp_item] -->
    <section>
     <code code="101.16211"
       codeSystem="1.2.36.1.2001.1001.101"
       codeSystemName="NCTIS Data Components"
       displayName="Dispense Item"/>

     <!-- Begin Dispense Item Narrative -->
     <title>Dispense Item</title>
     <text>

      …

     </text>
     <!-- End Dispense Narrative -->

     <!-- Begin Dispense Item entry-->
     <entry typeCode="DRIV"><!-- [item] -->

      <substanceAdministration classCode="SBADM" moodCode="RQO">

       <!-- Prescription Item Identifier -->
       <id root="080C5AC2-C835-11DE-81C9-B16456D89593"/>

       <!-- Maximum number of repeats -->
       <repeatNumber>
        <high value="2"/>
       </repeatNumber>

       <!-- Therapeutic Good Identification -->
       <consumable>
        <manufacturedProduct>
         <manufacturedMaterial>
          <code>
           <originalText>Paracetamol 500mg + codeine phosphate 30 mg tablet</originalText>
          </code>
         </manufacturedMaterial>
        </manufacturedProduct>
       </consumable>
```

```
<!--  Begin Formula-->
<entryRelationship typeCode="COMP"><!-- [form] -->
 <act classCode="INFRM" moodCode="RQO">
  <id root="0C704162-EFC8-11DF-8D6E-2EBFDFD72085"/>
  <code code="103.16272"
   codeSystem="1.2.36.1.2001.1001.101"
   codeSystemName="NCTIS Data Components"
   displayName="Formula"/>
  <text>BORIC ACID, OLIVE OIL AND ZINC OXIDE (BOZ) Ointment:
   Boric Acid 1% in Paraffin Ointment B.P. 25
   Olive Oil 25
   Zinc Oxide Ointment to 100</text>
 </act>
</entryRelationship><!-- [form] -->
<!--  End Formula -->

<!-- Additional Comments -->
<entryRelationship typeCode="COMP"><!-- [cmts] -->
 <act classCode="INFRM" moodCode="EVN">
  <id root="12AC380C-D1E1-11DE-B505-09BE56D89593"/>
  <code code="103.16044"
    codeSystem="1.2.36.1.2001.1001.101"
    codeSystemName="NCTIS Data Components"
    displayName="Additional Comments"/>
  <text>Phoned doctor to clarify medication.</text>
 </act>
</entryRelationship><!-- [cmts] -->

<entryRelationship typeCode="COMP"><!-- [sply] -->

 <!-- Number of this dispense -->
 <sequenceNumber value="2"/>

 <supply classCode="SPLY" moodCode="RQO">

  <!-- Dispense Item Identifier -->
  <id root="5DBAE0AE-79E4-11DF-B5A5-0BDCDED72085"/>

  <!-- Quantity of Therapeutic Good -->
  <text>25 tablets</text>

  <statusCode code="completed"/>

  <!-- Signals that the supply cannot stand alone without its containing substanceAdministration -->
  <independentInd value="false"/>

  <!-- Begin Brand substitution occurred -->
  <entryRelationship typeCode="COMP"><!-- [brand] -->
   <observation classCode="OBS" moodCode="EVN">
    <id root="3B5D4176-79E6-11DF-88FB-26DEDED72085"/>
    <code code="103.16064"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Brand substitution occurred"/>
    <value value="true" xsi:type="BL"/>
   </observation>
  </entryRelationship><!-- [brand] -->
  <!-- Begin Brand substitution occurred -->

  <!-- Begin Label instruction -->
  <entryRelationship typeCode="COMP"><!-- [label] -->
   <act classCode="INFRM" moodCode="RQO">
    <id root="44A5C28B-FF87-FE9C-70BE-D015B397B9E6"/>
    <code code="103.16109"
      codeSystem="1.2.36.1.2001.1001.101"
```

```
            codeSystemName="NCTIS Data Components"
            displayName="Label Instruction"/>
           <text xsi:type="ST">Store below 30°C</text>
          </act>
         </entryRelationship><!-- [label] -->
         <!-- End Label instruction -->

         <!-- Begin Claim category type -->
         <ext:coverage typeCode="COVBY"><!-- [claim] -->
          <ext:policyOrAccount classCode="COV" moodCode="PERM">
           <ext:code code="1"
               codeSystem="1.2.36.1.2001.1001.101.104.16095"
               codeSystemName="NCTIS Medical Benefit Category Type Values"
               displayName="PBS"/>
          </ext:policyOrAccount>
         </ext:coverage><!-- [claim] -->
         <!-- End Claim category type -->

         <!-- Begin Early Supply With Pharmaceutical Benefit -->
         <ext:coverage typeCode="COVBY"><!-- [early] -->
          <ext:policyOrAccount classCode="COV" moodCode="PERM">
           <ext:id root="B81A3952-F11F-11DF-9842-43BBDFD72085"/>
           <ext:code code="103.16348"
            codeSystem="1.2.36.1.2001.1001.101"
            codeSystemName="NCTIS Data Components"
            displayName="Early Supply With Pharmaceutical Benefit"/>
          </ext:policyOrAccount>
         </ext:coverage><!-- [early] -->
         <!-- End Early Supply With Pharmaceutical Benefit -->

        </supply>
       </entryRelationship><!-- [sply] -->
      </substanceAdministration>
     </entry><!-- [item] -->
     <!-- End Dispense item entry -->

     …

    </section>
   </component><!-- [disp] -->
   <!-- End Dispense section -->

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

</ClinicalDocument>
```

9 Common Patterns

9.1 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*
- any combination of the above.

A *displayName* is highly recommended.

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

Where used, the *codeSystem* attribute **MUST** 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 **MUST** contain a human readable description of the code value.

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

Where used, the *originalText* element **MUST** 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.

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

Example 9.1. code

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

9.2 id

The <code> 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.

All ClinicalStatement acts must have an id element.

Example 9.2. id

```
<id root="2.16.840.1.113883.19" extension="123A45" />
<ext:id root="1.2.36.123456789" assigningAuthorityName="Australian Business Number (ABN)" />
```

9.3 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.

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 9.3. 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 9.4. 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 9.5. Interval timestamp 1

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

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

Example 9.6. 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 **MUST** 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 9.7. 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.

9.4 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.	Cardinality comes from linking parent.	**ext:asEntityIdentifier**		See Australian CDA extension: Entity-Identifier.
			ext:asEntityIdentifier/**@classCode="IDENT"**		
			ext:asEntityIdentifier/**ext:id**		
			ext:asEntityIdentifier/ext:id/**@root**	Attribute @root **MUST** be used, **MUST** be an OID and **MUST NOT** be a UUID. Attribute @root **MUST** be a globally unique object identifier (OID) that identifies the combination of geographic area, issuer and type. If no such OID exists, it **MUST** be defined before any identifiers can be created.	
			ext:asEntityIdentifier/ext:id/**@extension**	Attribute @extension **MAY** be used and if it is used, **MUST** 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: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. AS 5017-2006: Health Care Client Identifier Geographic Area	

Example 9.8. 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 -->
<ext:asEntityIdentifier classCode="IDENT">
   <ext:id root="1.2.36.174030967.0.5" extension="1234567892" assigningAuthorityName="Australian Medicare number" />
   <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
   </ext:assigningGeographicArea>
</ext:asEntityIdentifier>


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

9.5 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 9.9. 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>
```

9.6 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.
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.
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**		
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.

NEHTA SDT Data Component	Data Component Definition	Card	CDA Schema Data Element	Vocab	Comments
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.
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Unit Type**	The specification of the type of a separately identifiable portion within a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/**unitType**	AS 5017 (2006) - Healthcare Client Identification: Australian Unit Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Unit Type [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Unit Number**	The specification of the number or identifier of a building/complex, marina etc. to clearly distinguish it from another.	0..1	addr/**unitID**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Address Site Name**	The full name used to identify the physical building or property as part of its location.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Level Type**	Descriptor used to classify the type of floor or level of a multistorey building/complex.	0..1	addr/**additionalLocator**	AS 5017 (2006) - Healthcare Client Identification: Australian Level Type [SA2006a] AS 4846 (2006) - Healthcare Provider Identification: Australian Level Type [SA2006b]	
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Level Number**	Descriptor used to identify the floor or level of a multistorey building/complex.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Number**	The numeric or alphanumeric reference number of a house or property that is unique within a street name.	0..1	addr/**houseNumber**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Lot Number**	The Australian Lot reference allocated to an address in the absence of street numbering.	0..1	addr/**additionalLocator**		
Address > Australian or International Address > Australian Address > Structured Australian Address Line > **Australian Street Name**	The name that identifies a public thoroughfare and differentiates it from others in the same suburb/town/locality.	0..1	addr/**streetName**		

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

Example 9.10. 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>
```

9.7 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**	AS 5017-2006: Health Care Client Electronic Communication Usage Code -> HL7:TelecommunicationAddressUse	Space separated list of codes.
Electronic Communication Detail > **Electronic Communication Usage Code**	The manner of use that is applied to an electronic communication medium.	0..1	telecom/**@use**	AS 5017-2006: Health Care Client Electronic Communication Usage Code -> HL7:TelecommunicationAddressUse	Space separated list of codes.
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 9.11. 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" />
```

10 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. [HL7CDAR2].

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

10.1 EntityIdentifier

Figure 10.1, “CDA Model for EntityIdentifier”

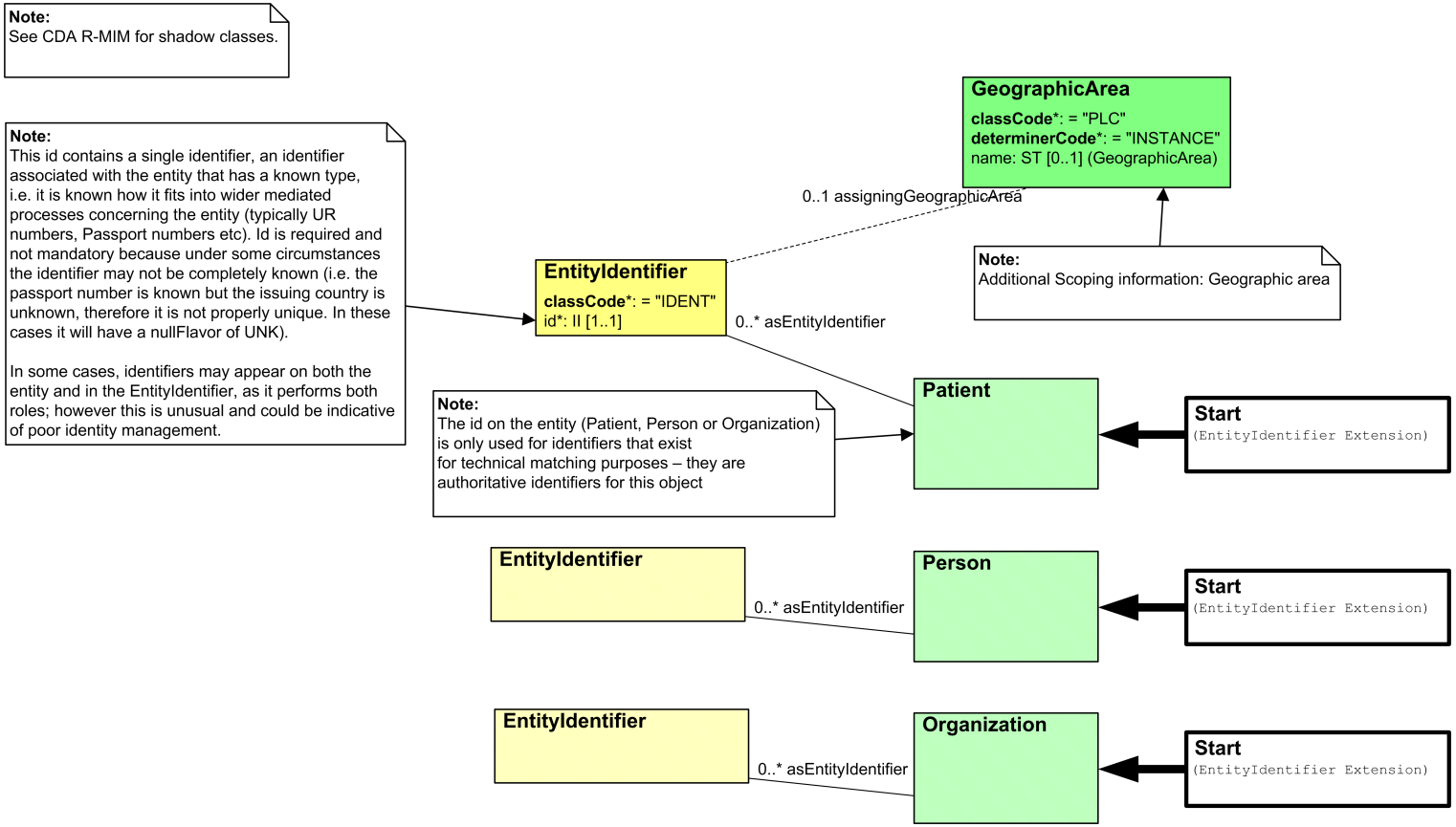


Figure 10.1. CDA Model for EntityIdentifier

10.2 Multiple Birth

Figure 10.2, “CDA Model for Patient Multiple Birth”

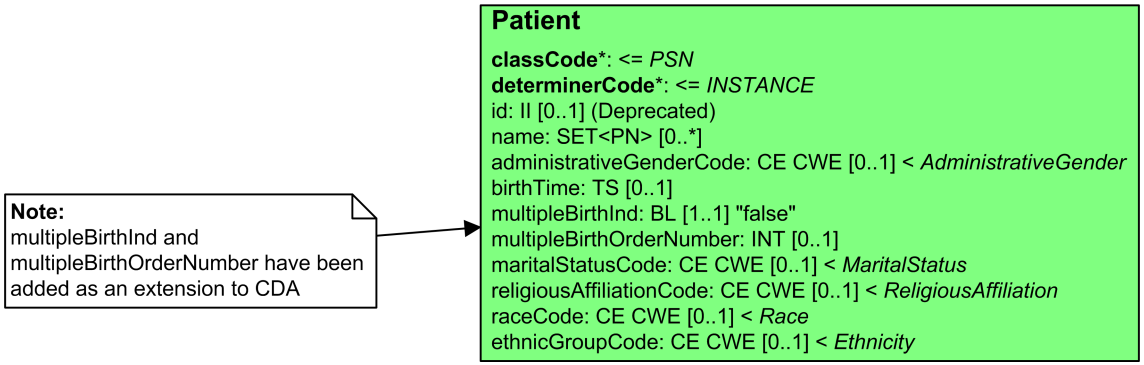


Figure 10.2. CDA Model for Patient Multiple Birth

10.3 Administrative Gender Code

Figure 10.3, “CDA Model for Administrative Gender Code”

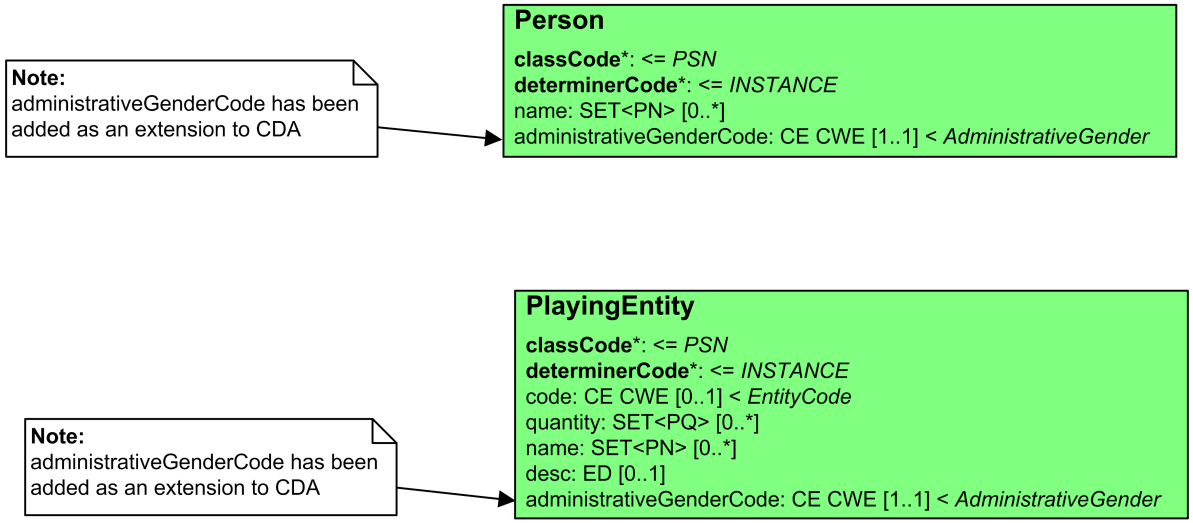


Figure 10.3. CDA Model for Administrative Gender Code

10.4 Birth Time

Figure 10.4, “CDA Model for Birth Time”

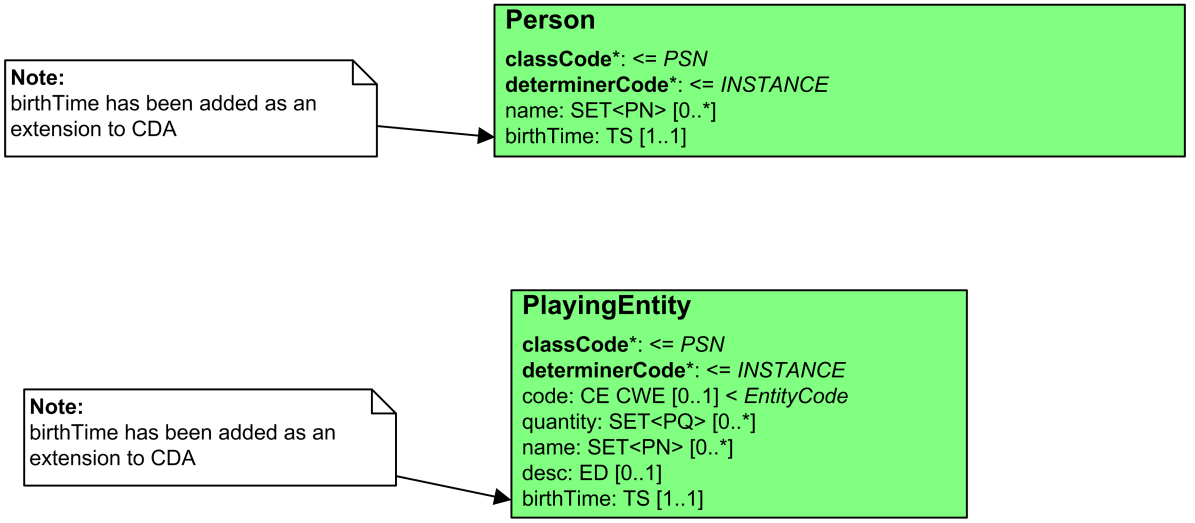


Figure 10.4. CDA Model for Birth Time

10.5 Employment

Figure 10.5, “CDA Model for Employment”

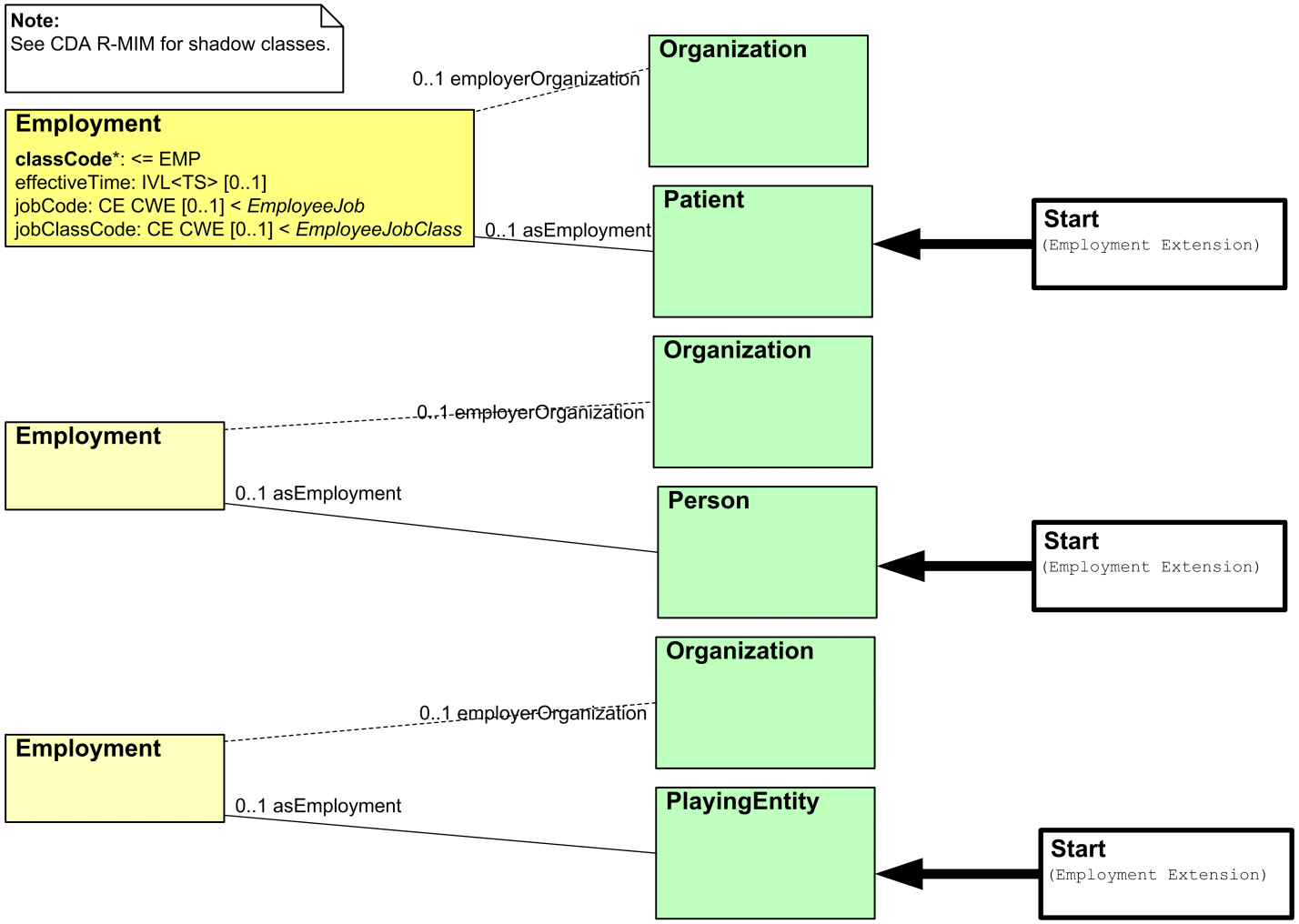


Figure 10.5. CDA Model for Employment

10.6 Qualifications

Figure 10.6, “CDA Model for Qualifications”

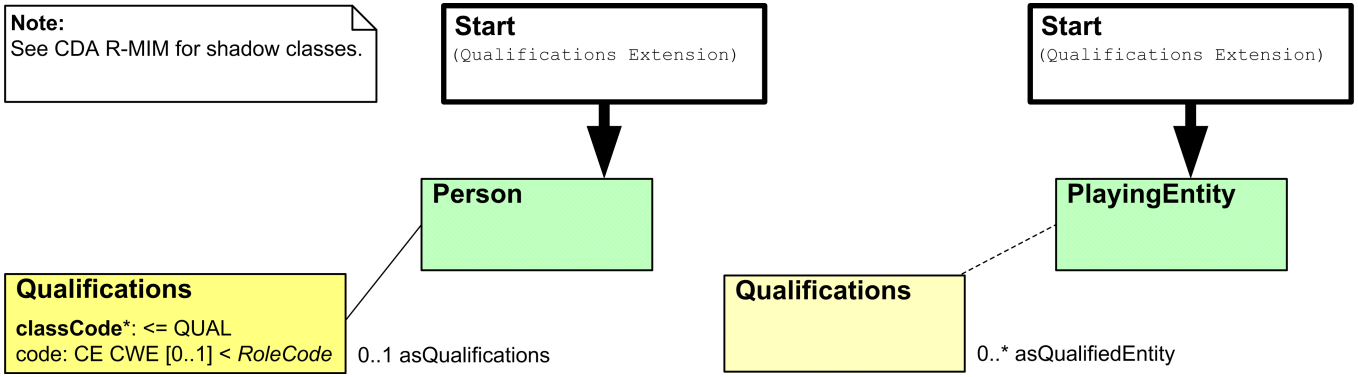


Figure 10.6. CDA Model for Qualifications

10.7 Entitlement

Figure 10.7, “CDA Model for Entitlement”

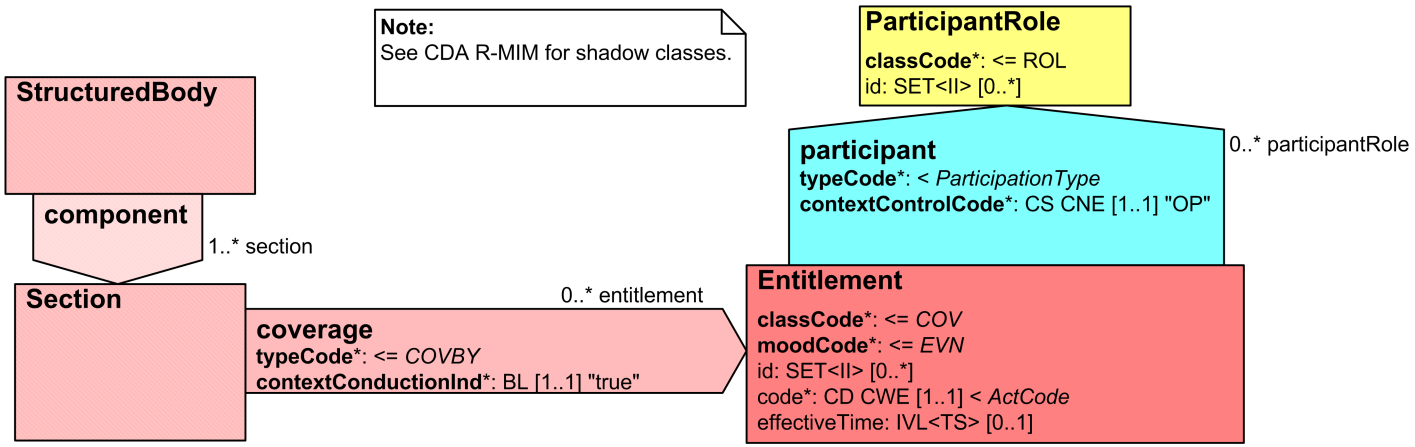


Figure 10.7. CDA Model for Entitlement

10.8 Policy

Figure 10.8, “CDA Model for Policy”

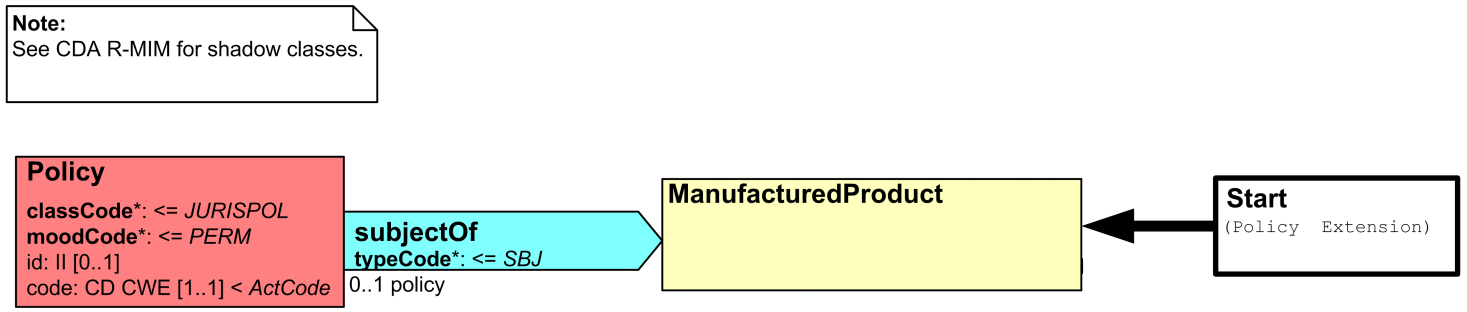


Figure 10.8. CDA Model for Policy

10.9 Coverage

Figure 10.9, “CDA Model for Coverage”

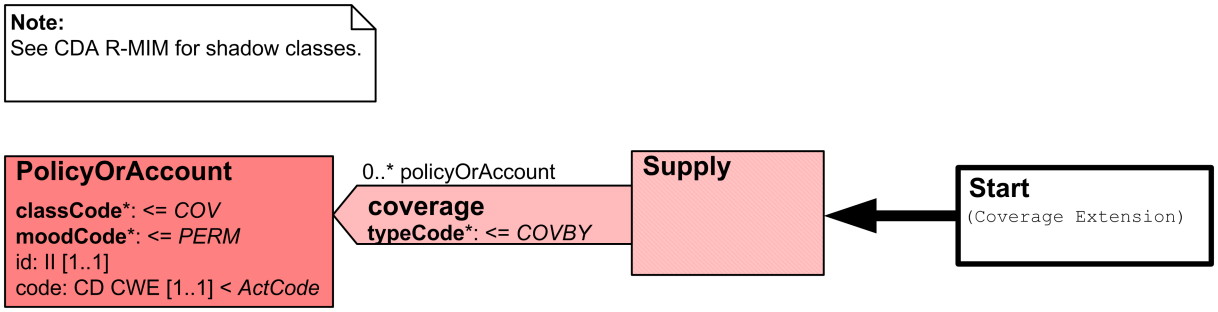


Figure 10.9. CDA Model for Coverage

11 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 11.1. All values

```
<code
   code="103.16044.4.1.1"
   codeSystem="1.2.36.1.2001.1001"
   codeSystemName="NCTIS DATA COMPONENTS"
   displayName="Additional Comments" />
```

Example 11.2. One value

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

11.1 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

11.2 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

11.3 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

11.4 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)

11.5 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**		

11.6 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

11.7 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.

11.8 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	

11.9 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

11.10 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

11.11 NCTIS: Admin Codes - Sections/Entries

displayName	code	codeSystemName	codeSystem
Additional Comments	103.16044	NCTIS Data Components	1.2.36.1.2001.1001.101
Administrative Observations	102.16080	NCTIS Data Components	1.2.36.1.2001.1001.101
Age	103.20109	NCTIS Data Components	1.2.36.1.2001.1001.101
Age Accuracy Indicator	102.16242	NCTIS Data Components	1.2.36.1.2001.1001.101
Birth Plurality	103.16249	NCTIS Data Components	1.2.36.1.2001.1001.101
Brand Substitution Occurred	103.16064	NCTIS Data Components	1.2.36.1.2001.1001.101
Date of Birth Accuracy Indicator	102.16234	NCTIS Data Components	1.2.36.1.2001.1001.101
Date of Birth is Calculated From Age	103.16233	NCTIS Data Components	1.2.36.1.2001.1001.101
Dispense	102.10105	NCTIS Data Components	1.2.36.1.2001.1001.101
Dispense Item	102.16211	NCTIS Data Components	1.2.36.1.2001.1001.101
Dispense Record	100.16112	NCTIS Data Components	1.2.36.1.2001.1001.101
Early Supply With Pharmaceutical Benefit	103.16348	NCTIS Data Components	1.2.36.1.2001.1001.101
Formula	103.16272	NCTIS Data Components	1.2.36.1.2001.1001.101
Label Instruction	103.16109	NCTIS Data Components	1.2.36.1.2001.1001.101
Qualifications	103.16268	NCTIS Data Components	1.2.36.1.2001.1001.101
Reason for Therapeutic Good	103.10141	NCTIS Data Components	1.2.36.1.2001.1001.101

11.12 NCTIS: Admin Codes - Claim Category Type

displayName	code	codeSystemName	codeSystem
G - General Benefit	1	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060
C - Concessional or Safety Net Concession Benefit	2	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060
E - Safety Net Entitlement Card Benefit	3	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060
R - RPBS Benefit	4	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060
CTG - Closing the Gap Benefit	5	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060
No benefit - This item is not covered by any Medicare registered benefit	9	Claim Category Type Values	1.2.36.1.2001.1001.101.104.16060

11.13 NCTIS: Admin Codes - Entitlement Type

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

11.14 HL7 v3 CDA: Act.moodCode

Code	Value	Definition
EVN	Event	The entry defines an actual occurrence of an event.
INT	Intent	The entry is intended or planned.
APT	Appointment	The entry is planned for a specific time and place.
ARQ	Appointment 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).

11.15 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)

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 **MUST** 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 **MUST** 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 **MUST NOT** rely upon their use.
  - In accordance with the requirement to completely represent Section contents, coded type values **MUST** include both originalText and displayName components where provided. The code component **SHOULD** be provided when a displayName is not available.
- It **MUST** completely and accurately represent the information encoded in the Section. Content **MUST NOT** be omitted from the narrative.
- It **MUST** conform to the content requirements of the CDA specification [HL7CDAR2] and/or XML Schema.

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

Note

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

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

Reference List

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

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

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

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

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

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

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

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

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

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

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

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

[NEHT2009i] National E-Health Transition Authority, 30 October 2009, *ETP Business Process and Requirements Specification*, Release 1, accessed 1 April 2010.
http://www.nehta.gov.au/e-communications-in-practice/emedication-management

[NEHT2009j] National E-Health Transition Authority, 30 October 2009, *ETP Technical Requirements Specification*, Release 1, accessed 1 April 2010.
http://www.nehta.gov.au/e-communications-in-practice/emedication-management

[NEHT2009k] National E-Health Transition Authority, 30 October 2009, *ETP Logical Information Model*, Release 1, accessed 1 April 2010.
http://www.nehta.gov.au/e-communications-in-practice/emedication-management

[NEHT2009l] National E-Health Transition Authority, 30 October 2009, *ETP Technical Architecture*, Release 1, accessed 1 April 2010.

http://www.nehta.gov.au/e-communications-in-practice/emedication-management

[NEHT2009q] National E-Health Transition Authority, 11 November 2009, *Electronic Medications Management - Electronic Transfer of Prescriptions Endpoint Specification*, Release 1, Version 1.0, accessed 2 June 2009.
http://www.nehta.gov.au/component/docman/doc_download/909-electronic-medications-management-etp-endpoint-specification-release-1-v10draft-for-comment

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

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

[NEHT2010d] National E-Health Transition Authority, September 2010, *Data Specifications and Structured Document Templates - Guide for Use*, Version 1.1, accessed 13 September 2010.
http://www.nehta.gov.au/component/docman/doc_download/1120-data-specifications-and-structured-document-templates-guide-for-use-v11

[NEHT2010i] National E-Health Transition Authority, September 2010, *Participation Data Specification*, Version 3.0, accessed 16 September 2010.
http://www.nehta.gov.au/component/docman/doc_download/1122-participation-data-specification-v30

[NEHT2010t] National E-Health Transition Authority, November 2010, *Dispense Record Structured Document Template*, Version 3.1, accessed [To Be Published].

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

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

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

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

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

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