



## Shared Medicines List

### CDA Implementation Guide

22 October 2019 v1.0.0

Draft for internal use

Document ID: DH-2936:2020

Draft Version 003

**THIS SPECIFICATION IS AN UNTESTED DRAFT AND IS NOT SUITABLE FOR IMPLEMENTATION.**

DRAFT



DRAFT

#### **Disclaimer**

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

#### **Document control**

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

#### **Security**

The information contained herein must only be used for the purpose for which it is supplied and must not be disclosed other than explicitly agreed in writing with the Australian Digital Health Agency.

#### **Copyright © 2019 Australian Digital Health Agency**

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

OFFICIAL

# Document Information

## Key Information

<b>Owner</b>	National Health Chief Information Officer, Infrastructure Operations
<b>Contact for enquiries</b>	Australian Digital Health Agency Help Centre
t:	1300 901 001
e:	<a href="mailto:help@digitalhealth.gov.au">help@digitalhealth.gov.au</a>

## Product Version History

<b>Product ver- sion</b>	<b>Date sion</b>	<b>Release comments</b>
1.0.0	NaN NaN	<p>Initial public release. Implemented in FHIR Release 3 (STU).</p> <p>This version of the Shared Medicine List (SML) CDA implementation guide supports the exchange of medicines lists between healthcare providers, in an Australian healthcare context. Support is also provided for the more constrained Pharmacist Shared Medicines List (PSML).</p>

## Related Documents

<b>Name</b>	<b>Version/Release Date</b>
<a href="#">Shared Medicines List FHIR Implementation Guide</a>	Version 1.0.0 (Draft), Continuous Integration Build
<a href="#">Common - Clinical Document</a>	Version 1.5.2, Issued 28 February 2019
<a href="#">Pharmacist Shared Medicines List Business Requirements</a>	Version 2.0, Not yet published
<a href="#">Pharmacist Shared Medicines List Information Requirements</a>	Version 2.0, Not yet published
<a href="#">Representing Coding in CDA Documents Implementation Guidance</a>	Version 1.0, Issued 10 October 2011

DRAFT

# Acknowledgements

## Council of Australian Governments

The Australian Digital Health Agency is jointly funded by the Australian Government and all state and territory governments.

## Regenstrief Institute (LOINC)

This material contains content from [LOINC™](#). The LOINC table, LOINC codes, LOINC panels and forms file, and LOINC linguistic variants file are copyright © 1995-2015, Regenstrief Institute, Inc. and the Logical Observation Identifiers Names and Codes (LOINC) Committee and available at no cost under the license at the [LOINC Terms of Use](#). LOINC is a trademark of Regenstrief Institute, Inc., registered in the United States.

## IHTSDO (SNOMED CT)

This material includes SNOMED Clinical Terms™ (SNOMED CT®) which is used by permission of the International Health Terminology Standards Development Organisation (IHTSDO). All rights reserved. SNOMED CT® was originally created by The College of American Pathologists. "SNOMED" and "SNOMED CT" are registered trademarks of the [IHTSDO](#).

## HL7 FHIR

This product includes all or a portion of material that is HL7 FHIR Copyright © 2011+ HL7 licensed under Creative Commons "No Rights Reserved".

## HL7 International

This document includes excerpts of HL7™ International standards and other HL7 International material. HL7 International is the publisher and holder of copyright in the excerpts. The publication, reproduction and use of such excerpts is governed by the [HL7 IP Policy](#) and the HL7 International License Agreement. HL7 and CDA are trademarks of Health Level Seven International and are registered with the United States Patent and Trademark Office. FHIR is a registered trademark of Health Level Seven International.

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

DRAFT

# Table of Contents

<b>1. Introduction</b>	1
1.1. Document purpose and scope	1
1.2. Context and use	1
1.3. How to read this document	2
1.4. Editorial note	2
1.5. Intended audience	2
1.6. Known issues	2
<b>2. Guidance</b>	5
2.1. Clinical Document Architecture Release 2	5
2.2. Australian Digital Health Agency CDA extensions	6
2.3. Conformance conventions	7
2.4. Mapping presentation and structure	10
<b>3. Conformance</b>	13
3.1. Conformance requirements	13
3.2. CDA narratives	14
<b>4. Shared Medicines List hierarchy</b>	15
4.1. Logical hierarchy	15
4.2. Logical expanded hierarchy	17
<b>5. CDA Header templates</b>	23
5.1. ClinicalDocument	23
5.2. LegalAuthenticator	26
5.3. Administrative Observations	27
<b>6. Document CDA templates</b>	29
6.1. ClinicalDocument (Shared Medicines List Authored by Practitioner)	29
<b>7. Participation CDA templates</b>	33
7.1. recordTarget (Patient with Mandatory Identifier)	33
7.2. participant (Patient contact)	38
7.3. participant (generalPractitioner Base Organization)	40
7.4. participant (generalPractitioner Base Practitioner)	42
7.5. author (PractitionerRole with Practitioner with Mandatory Identifier)	44
7.6. custodian (Organization with Mandatory Identifier)	47
7.7. informationRecipient (Base Patient)	49
7.8. informationRecipient (Base PractitionerRole)	52
7.9. informationRecipient (Base RelatedPerson)	55
7.10. informationRecipient (Base Organization)	57
7.11. informant (Base Patient)	59
7.12. informant (Base RelatedPerson)	61
7.13. informant (Base Practitioner)	63
7.14. author (Base Patient)	65
7.15. author (Base PractitionerRole)	68
7.16. author (Base RelatedPerson)	71
7.17. participant (author Base Organization)	73
<b>8. Entity CDA templates</b>	75
8.1. providerOrganization (Base Organization)	75
8.2. participant (Organization contact)	77
8.3. representedOrganization (Base Organization)	79
8.4. receivedOrganization (Base Organization)	81
8.5. manufacturerOrganization (Base Organization)	83
8.6. assignedPerson (Practitioner with Mandatory Identifier)	85
8.7. assignedPerson (Base Practitioner)	87
8.8. informationRecipient (Base Practitioner)	89
8.9. wholeOrganization (Base Organization)	91
<b>9. Section CDA templates</b>	93
9.1. section (Allergies)	93
9.2. section (Medicines List)	95
<b>10. Act CDA templates</b>	97
10.1. encompassingEncounter (Summary of an Encounter for an Event)	97

10.2. encounter (Summary of an Encounter for an Event) .....	99
10.3. observation (Summary Statement of Allergy or Intolerance) .....	102
10.4. act (List of Medicine Items with Change Information Authored by Practitioner) .....	108
10.5. substanceAdministration (Medicine Item Statement) .....	112
10.6. manufacturedProduct (Base Medication) .....	118
10.7. observation (Assertion of No Relevant Finding) .....	122
10.8. ext:coverage (Practitioner qualification) .....	124
<b>11. Common patterns .....</b>	<b>127</b>
11.1. code .....	127
11.2. id .....	130
11.3. time .....	132
11.4. Entity Identifier .....	134
11.5. Personal Relationship .....	136
11.6. Qualification .....	138
11.7. Ingredient .....	139
11.8. Language Communication .....	141
<b>A. Complex data type mappings to CDA (R2) .....</b>	<b>143</b>
A.1. Identifier .....	144
A.2. HumanName as Base HumanName .....	149
A.3. Address .....	151
A.4. Address as AU Base Address .....	153
A.5. ContactPoint .....	155
A.6. Dosage as AU Base Dosage .....	157
A.7. Timing .....	161
A.8. CodeableConcept as a Medicine Item Code .....	167
<b>B. Examples .....</b>	<b>171</b>
B.1. Shared Medicines List example 1 .....	172
B.2. Shared Medicines List example 2 .....	184
B.3. Shared Medicines List example 3 .....	192
B.4. Shared Medicines List example 4 .....	199
<b>C. Mapping from requirements .....</b>	<b>205</b>
C.1. Mapping from PSML business requirements .....	206
C.2. Mapping from PSML information requirements .....	213
References .....	223

## List of Examples

11.1. code .....	128
11.2. id .....	131
11.3. Simple timestamp .....	132
11.4. Low time .....	132
11.5. Interval timestamp 1 .....	132
11.6. Interval timestamp 2 .....	133
11.7. Width time .....	133
11.8. Entity Identifier .....	135
11.9. Personal Relationship .....	137
11.10. Ingredient .....	140
11.11. Language Communication .....	142
A.1. Identifier .....	146
A.2. HumanName .....	150
A.3. Address .....	152
A.4. Address .....	154
A.5. ContactPoint .....	156
A.6. Dosage .....	159
A.7. Timing .....	164
A.8. CodeableConcept as Medicine Item Code .....	167
B.1. Pharmacist Shared Medicines List example 1 .....	172
B.2. Home Medicines Review Report for Mr. Lenny Matterson .....	184
B.3. Pharmacist Shared Medicines List example 3 .....	192
B.4. Ceased Medicines List .....	199

DRAFT

# 1 Introduction

## 1.1 Document purpose and scope

The primary aim of the implementation guide is to take implementers step by step through mapping each element of the Shared Medicines List (SML) model ([Shared Medicines List FHIR Implementation Guide \[DH2019h\]](#)) to a corresponding CDA attribute or element. The resulting CDA document can be used for the electronic exchange of SML information, such as a pharmacist shared medicines list (PSML) document, between healthcare providers.

Whilst this implementation guide is defined to support a generic practitioner-author list as a document, at the time of publication of this implementation guide it is expected that in the near term implementations will be of a pharmacist shared medicines list exchanged with the My Health Record.

This implementation guide is not to be used as a guide to presentation (or rendering) of the data. Beyond defining conformance requirements on CDA narratives it contains no information as to how the data described by it should be displayed and no such guidance should be inferred from This implementation guide.

Reference has been made to International and Australian Standards, and to Standards from Health Level Seven. The following standard is referred to in the text in such a way that some or all of its content constitutes requirements for the purposes of this specification: [HL7 Clinical Document Architecture \[HL7CDAR2\]](#).

Wherever possible, material in this specification is based on existing standards. All efforts have been made to minimise divergence from the HL7 Australia profiles of HL7 International standards ([Australian Base Implementation Guide \(AU Base 1.1\) \[HL7AUF3B2\]](#)) to provide for system interoperability and compatibility with other profiles. Issues of an editorial nature in the source material (such as spelling or punctuation errors) are intentionally reproduced.

## 1.2 Context and use

A CDA implementation guide is part of a package of documents and files that support the development of software to exchange a type of clinical document, a specification package.

An Agency clinical document specification package supports software developers to create and interpret instances of a clinical document. The core of each package is a specification of the information content of instances of the clinical document.

Supplementary contents of the package include statements of scenarios for which the specification is appropriate, guidance on implementing the specification, and guidance on testing purported instances.

The contents may include:

- statement of requirements
- CDA implementation guide (CDA IG) – a statement of constraints and custom extensions on [HL7 Clinical Document Architecture \[HL7CDAR2\]](#)
- FHIR implementation guide (FHIR IG) – a statement of constraints and custom extensions on [FHIR Release 3 \(STU\) \[HL7FHIR3\]](#)
- template package library – a set of Schematron schema to test conformance of CDA documents with the specification
- conformance profile – a statement of conformance requirements for exchanging documents within a particular scenario such as the My Health Record
- A set of release notes

Specification packages contain only files relevant to the particular clinical document. Specifications that are common to many clinical documents and should be considered part of the specification package, as directed by the relevant release note and conformance profile, are contained in the [Common - Clinical Document \[DH2019a\]](#).

## 1.3 How to read this document

This implementation guide contains descriptions of both constraints on the CDA and, where necessary, custom extensions to the CDA, for the purposes of fulfilling the requirements for Australian implementations of SML.

These descriptions are defined as a set of CDA templates (see [Conformance conventions](#)) presented in CDA mapping tables (see [Mapping presentation and structure](#)). The mapping tables take implementers step by step through mapping each element of the SML model to a corresponding CDA attribute or element.

A logical view of the SML model ([FHIR Release 3 \(STU\) \[HL7FHIR3\]](#) StructureDefinitions) is presented as a tree structure in a hierarchical table (see [4 Shared Medicines List hierarchy](#)). The SML model is published as a set of [FHIR Release 3 \(STU\) \[HL7FHIR3\]](#) profiles in [Shared Medicines List FHIR Implementation Guide \[DH2019h\]](#).

The starting point for the CDA templates is the clinical document model template defined in [ClinicalDocument \(Shared Medicines List Authored by Practitioner\)](#), which references the additional templates necessary to assert conformance for this implementation guide.

## 1.4 Editorial note

This implementation guide is an early working specification that is available for comment and review. It may be used to solicit feedback and to provide insight as to the expected content in a forthcoming stable and approved version of the specification.

This implementation guide may not be considered to be complete enough or sufficiently reviewed to be safe for implementation and use in production systems. It may have known issues and still be in development.

This implementation guide is intended to align to HL7 FHIR and is the result of work undertaken in conjunction with HL7 Australia.

## 1.5 Intended audience

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

This implementation guide and related artefacts are technical in nature and the audience is expected to be familiar with the language of health data specifications and to have some familiarity with health information standards and specifications, such as CDA and Standards Australia IT-014 documents. Definitions and examples are provided to clarify relevant terminology usage and intent.

## 1.6 Known issues

This section lists known issues with this specification at the time of publishing. We are working on solutions to these issues and encourage comments to help us develop these solutions.

Reference	Description
Source material errors	Material in this specification is based on existing standards and all efforts have been made to minimise divergence. Issues of an editorial nature in the source material (such as spelling or punctuation errors in an element description) are intentionally reproduced.

Reference	Description
Recording information that a medicine list contains medicine items packed in a dose administration aid	<p>National agreement on the inclusion of a statement or an indicator that a medicines list document includes medicine items packed in a dose administration aid (DAA) is not yet supported. A supporting data model would allow recording information about an individual receiving packed medicines so that consultations with healthcare providers and healthcare can be tailored to suit the individual. This has been raised in HL7 AU github for consideration in the HL7 AU Medications work group, see <a href="https://github.com/hl7au/au-fhir-base/issues/320">https://github.com/hl7au/au-fhir-base/issues/320</a>.</p> <p>In the interim, HL7 AU recommends supporting this requirement as a note in the medicines list (List.note). One possible way a sending system may indicate that one or more medicine items are packed, or not packed, by a pharmacy in a dose administration aid is with the text 'Packed medicines: Yes', 'Packed medicines: No', or 'Packed medicines: Unknown'.</p> <p>More information about dose administration aids: <a href="https://www.nps.org.au/australian-prescriber/articles/appropriate-use-of-dose-administration-aids#summary">https://www.nps.org.au/australian-prescriber/articles/appropriate-use-of-dose-administration-aids#summary</a>.</p>
PBS Medicine Item Codes	The PBS Medicines Item Codes value set, originating from the HL7 AU Base Medication profile, is a placeholder resource. Forthcoming work is expected to result in an authoritative value set published in the <a href="#">National Clinical Terminology Service (NCTS)</a> with the following canonical URL: <a href="https://healthterminologies.gov.au/fhir/ValueSet/australian-pbs-item-1">https://healthterminologies.gov.au/fhir/ValueSet/australian-pbs-item-1</a> . Implementers are to make use of the value set served via the NCTS when available.
GTIN for Medicines	No expansion is available for this value set using the associated code system published in the HL7 AU Base material. None of the concepts defined by the code system are included in the code system resource. Implementers are expected to have available an expansion that defines what codes are in the value sets to make use of this terminology.
MIMS Terminology	No expansion is available for this value set using the associated code system published in the HL7 AU Base material. None of the concepts defined by the code system are included in the code system resource. Implementers are expected to have available an expansion that defines what codes are in the value sets to make use of this terminology.

Reference	Description
Terminology publication	<p>The following terminology resources are not yet available in NCTS:</p> <ul style="list-style-type: none"><li>• <a href="#">Australian Pharmaceutical Benefits Scheme Schedule Item</a></li><li>• <a href="#">Healthcare Identifier Geographic Area</a></li><li>• <a href="#">Medicines Review Type</a></li><li>• <a href="#">Medicine Item Change from Practitioner Medicines Review</a></li><li>• <a href="#">Empty Reason HL7 v3 NullFlavor</a></li><li>• <a href="#">Non-Clinical Empty Reason (HL7 FHIR) to Empty Reason HL7 v3 NullFlavor</a></li><li>• <a href="#">NameUse (HL7 FHIR) to Common Person Name Use</a></li><li>• Medication &gt; medication-brand-name SNOMED CT code</li><li>• Medication &gt; medication-generic-name SNOMED CT code</li><li>• <a href="#">Information Recipient Type HL7 v3</a></li></ul>

DRAFT

## 2 Guidance

### 2.1 Clinical Document Architecture Release 2

A CDA document is an XML document built following the rules described in the CDA specification, which conforms to the HL7 CDA schema provided by HL7. The CDA document is based on the semantics provided by the [HL7 V3 RIM, Data types and Vocabulary \[HL7V3DT\]](#).

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

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

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

All clinical information is required to 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.

The rendered narrative can stand alone as a source of authenticated information for consuming parties. Content from the CDA body is not to be omitted from the narrative.

Further information and conformance requirements on the CDA narrative is available in [CDA narratives](#).

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

- [HL7 Clinical Document Architecture \[HL7CDAR2\]](#)
- [HL7 V3 RIM, Data types and Vocabulary \[HL7V3DT\]](#)
- [CDA Examples \[RING2009\]](#)
- [CDA Validation Tools: infoway\\_release\\_2\\_2X\\_18.zip \[INFO2009\]](#)

## 2.2 Australian Digital Health Agency CDA extensions

As part of the CDA, standard extensions are allowed as follows:

Locally-defined markup may be used when local semantics have no corresponding representation in the CDA specification. CDA seeks to standardize the highest level of shared meaning while providing a clean and standard mechanism for tagging meaning that is not shared. In order to support local extensibility requirements, it is permitted to include additional XML elements and attributes that are not included in the CDA schema. These extensions should not change the meaning of any of the standard data items, and receivers must be able to safely ignore these elements. Document recipients must be able to faithfully render the CDA document while ignoring extensions.

Extensions may be included in the instance in a namespace other than the HL7v3 namespace, but must not be included within an element of type ED (e.g., <text> within <procedure>) since the contents of an ED datatype within the conformant document may be in a different namespace. Since all conformant content (outside of elements of type ED) is in the HL7 namespace, the sender can put any extension content into a foreign namespace (any namespace other than the HL7 namespace). Receiving systems must not report an error if such extensions are present. [HL7 Clinical Document Architecture \[HL7CDAR2\]](#)

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.

These Australian Digital Health Agency CDA extensions have been added to the Australian Digital Health Agency CDA schema and are incorporated in the namespace <http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0> as shown in [Appendix B, Examples](#). Future versions of CDA extensions will be versioned as per the following example:

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

The Australian Digital Health Agency CDA schema therefore differs from the base HL7 CDA W3C XML schema (referred to in this document as the HL7 CDA schema). CDA documents which include extensions will fail to validate against the HL7 CDA schema – this is a known limitation.

A shared medicines list document that conforms to this specification will validate against the Australian Digital Health Agency CDA schema that accompanies this specification, and will 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 requirements](#).

## 2.3 Conformance conventions

### Templates

This implementation guide specifies the CDA templates for implementing the document model that is the subject of this implementation guide, i.e. Shared Medicines List. A CDA template is a set of constraints, and where necessary, custom extensions to [HL7 Clinical Document Architecture \[HL7CDAR2\]](#).

In this implementation guide CDA templates are presented in a CDA mapping table and indicated by the presence of a `templateId`.

Template identifiers (`templateId`) are unique to each CDA template. When valued in an instance, the template identifier signals the imposition of a set of template-defined constraints. The root value of this attribute (e.g. `@root="1.2.36.1.2001.1001.100.1002.226"`) provides a unique identifier for the template in question. The extension value of this attribute (e.g. `@extension="1.0"`) provides the version identifier for the template in question.

### Open and closed templates

A CDA template may be either an open template or a closed template. In an open template all of the features of the CDA R2 base specification [HL7 V3 RIM, Data types and Vocabulary \[HL7V3DT\]](#) are allowed except as constrained by explicitly specified constraints. In a closed template everything that is allowed must be explicitly specified and nothing further may be allowed.

For example if a specification of a CDA template says nothing about the use of the `id` element:

- In an open template context this means that `id` is allowed as specified in the schema
- In a closed template context this means that no use of `id` is allowed

The template context in this implementation guide is that of an open template unless otherwise stated.

### Terminology binding

Vocabulary is specified in this implementation guide, in some cases binding an element to a value set or binding an attribute to a single fixed code. For guidance on coding common clinical concepts in CDA documents see [Representing Coding in CDA Documents Implementation Guidance \[NEHT2011bv\]](#).

A value set binding, if present in this specification, will be specified in the "Constraints and comments" column of a CDA mapping table as the title of the value set (hyperlinked to its definition) followed by identification of the binding strength (hyperlinked to its definition), e.g. [v3 Code System ParticipationFunction \(required\)](#).

## Conformance verbs

Where used in this document, the keywords **SHALL**, **SHOULD**, **MAY**, **SHALL NOT** and **SHOULD NOT** from [Key Words for Use in RFCs to Indicate Requirement Levels \[RFC2119\]](#) are to be interpreted as described in the table below.

### Conformance verbs

Conformance verb	Interpretation
<b>SHALL</b>	<p>An absolute requirement.</p> <p>Where <b>SHALL</b> appears in any conformance constraint it indicates a mandatory requirement.</p> <p>Where <b>SHALL</b> is applied to the occurrences of an element or attribute then that element or attribute must be present but can be null if the value is not known and the value has not been constrained to not allow a null value.</p>
<b>SHOULD</b>	<p>A requirement that is considered best practice or recommendation for inclusion. There may be valid reasons to ignore an item, but the full implications must be understood and carefully weighed before choosing a different course.</p> <p>Where <b>SHOULD</b> appears in an conformance constraint that constrains the allowed occurrences of an item it indicates that the item may not be present but does not override the upper bound of the cardinality range.</p> <p>For a sending application where <b>SHOULD</b> is applied to the occurrences of an item then that item must be present if a sending application has the data for that data element. If the value is not known the element or attribute does not need to be included.</p> <p>Implementers must support an optional requirement.</p>
<b>MAY</b>	<p>A requirement that can be included or omitted as the author decides with no implications.</p> <p>Where <b>MAY</b> appears in a conformance constraint that constrains the allowed occurrences of an item it indicates that the item may not be present but does not override the upper bound of the cardinality range.</p> <p>Implementers must support an optional requirement.</p>
<b>SHALL NOT</b>	<p>An absolute prohibition.</p> <p>Where <b>SHALL NOT</b> appears in any conformance constraint it indicates a mandatory prohibition requirement.</p>

Conformance verb	Interpretation
<b>SHOULD NOT</b>	A requirement that is considered best practice or recommendation for against inclusion. There may be valid reasons to ignore an item, but the full implications must be understood and carefully weighed before choosing a different course.  Where <b>SHOULD NOT</b> appears in a conformance constraint that constrains the allowed occurrences of an item it indicates that the item may not be present but does not override the upper bound of the cardinality range.  For a sending application where <b>SHOULD NOT</b> is applied to the occurrences of then that element or attribute must be present if a sending application has the data for that data element. If the value is not known the element or attribute does not need to be included.  Implementers must support an optional requirement.

## Cardinality

The cardinality range specifies the allowable occurrences within a document instance. Cardinality range is specified in the format "m..n" where m is the minimum allowed members of the set (lower bound) and n is the maximum allowed members of the set (upper bound). The allowed values for m and n are 0, any positive integer, and \*.

The table below demonstrates a representative set of examples of cardinality range and how to interpret that cardinality range; p is positive integer greater than the minimum allowed members of the set.

Cardinality range	Interpretation
0..0	zero (explicitly prohibited)
0..1	zero or one
1..1	exactly one
0..*	zero or more
1..*	at least one
2..*	at least two
1..p	at least one and not more than p
2..p	at least two and not more than p

## 2.4 Mapping presentation and structure

The Shared Medicines List implementation guide is intended to support multiple usage scenarios; some templates described within this implementation guide are reused across usage scenarios and other implementation guides.

CDA templates are located within a templates chapter, e.g. [9 Section CDA templates](#). The heading for each child section identifies the CDA schema element that is templated, and may also identify the name of part of the SML model that template corresponds to, e.g. observation (Summary Statement of Allergy or Intolerance) defines the CDA template of the observation CDA schema element to represent the logical model for Summary Statement of Allergy or Intolerance.

The CDA templates described in this implementation guide are presented in table format and will be either:

- a mapping of each logical element of the logical model (i.e. profiled FHIR resources published in [Shared Medicines List FHIR Implementation Guide \[DH2019h\]](#)) to a corresponding CDA attribute or element, or
- a set of CDA attributes or elements with specified infrastructure or control requirements that are not sourced from the logical model but necessary to conform to for the purposes for supporting the usage scenarios in a CDA implementation.

### Legend for a CDA mapping table for a logical element / logical model

A CDA mapping table aims to take implementers step by step through mapping each element of the SML model to a corresponding CDA attribute or element. The following section describes in more detail the fields used to present the mapping content in this implementation guide.

Implementation guidance specific to the usage scenarios expected to be supported by this implementation guide may be present above the mapping table. This content is informative; there may be valid reasons not to follow this guidance, but the full implications must be understood and carefully weighed before choosing a different course.

### x.x CDA schema element (logical model / logical element)

## CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA conformance level, e.g. CDA Header, CDA Body Level 3 Data Elements</b>					
The logical hierarchical path in the SML model expressed using names of the elements in the SML model.  If there is a name in round brackets after the path, this is the label for that element or resource.  The text in <b>bold</b> (the last in the path) is the subject for this row.  i.e. Parent (Label) > Child  e.g. AllergyIntolerance (Summary Statement of Allergy or Intolerance) > <b>patient</b>	The description of the element in the SML model.	<p>The cardinality of the element in the SML model. This cardinality is applied to the mapped CDA schema element in the following manner:</p> <ul style="list-style-type: none"> <li>the most strict minimum occurrence takes precedence, for example a logical element of "gender" may be 0..1 but the mapped CDA schema element of "administrativeGenderCode" is 1..1; the most strict minimum cardinality of the CDA schema element is to be applied</li> <li>the maximum occurrence is to be interpreted as applying to a pattern 'like this' and does not constrain the absolute maximum occurrences of the CDA schema element unless otherwise stated, for example the logical element of "section(Allergies)" is 0..1, the mapped CDA schema element of "component/section" is 0..*; this should be understood that the maximum occurrences of a component/section that conforms to the pattern of 'section(Allergies)' may be supplied but that the maximum occurrences of other sections is not constrained unless there is a constraint present in the CDA constraints and comment column.</li> </ul> <p>(See <a href="#">Conformance conventions</a>)</p> <p>The root element of each template will typically express an inherited cardinality from the parent element in a parent template by stating: "Cardinality comes from linking element"</p>	<p>The type of the element (hyper-linked to the definition of the <a href="#">[HL7FHIR3]</a> type) in the SML model.</p> <p>This may be expressed as a type that is further constrained by a model in the convention &lt;type&gt; as &lt;model name&gt;, e.g. <a href="#">Patient</a> as Patient with Mandatory Identifier.</p>	<p>The CDA schema element(s) in the CDA template that correspond to the model element.</p> <p>The syntax for this is similar to XPath: {/name{[index]}}n</p> <p>Where:</p> <ul style="list-style-type: none"> <li>{ } indicates optional</li> <li>{ }n means a section that may repeat</li> <li>[index] differentiates two similar mappings</li> </ul> <p>Example:</p> <p><b>participant[location]</b> participant[location]/@typeCode="ORG" participant[location]/associatedEntity participant[location]/associatedEntity/@classCode="SDLOC" participant[location]/associatedEntity/code</p> <p>A sequence of names refers to the XML path in the CDA document. The path always starts from the context as defined in the grey header row above each group of mapping rows.</p> <p>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 Digital Health Agency CDA schema.</p> <p>An index after the name, such as "participation[location]" implies that there can be two or more templates of a participation CDA schema element or that the CDA schema element name may be repeated in one or more templates. The indexes differentiate which CDA schema element is referenced in the path.</p> <p>It is possible for one model element to map to more than one CDA schema element.</p>	<p>Constraints on the CDA schema element(s).</p> <p>Terminology binding, identified by a hyperlinked value set title followed by the terminology binding strength (hyperlinked to the definition of the binding strength). When applicable, followed by a reference to a footnote that provides a hyperlink to related concept map.</p> <p>e.g. <a href="#">Address Type HL7 v3 (required)</a><sup>1</sup></p> <p>Additional information about the mapping and/or constraints which are identified by conformance verbs (See <a href="#">Conformance conventions</a>).</p> <p>e.g.</p> <p>The common pattern <b>code SHALL</b> be applied.</p>

<sup>1</sup>Note: The source terminology binding on address type[\[DH2019h\]](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [v3 map for AddressType](#) concept map.



# 3 Conformance

## 3.1 Conformance requirements

This document describes how the SML model is implemented as a CDA document. Conformance claims are not made against this implementation guide directly; rather, they are made against additional conformance profiles documented elsewhere. Any document that claims conformance to any derived conformance profile **SHALL** meet these base requirements:

- It **SHALL** be a valid HL7 CDA instance. In particular:
  - It **SHALL** be valid against the HL7 CDA schema (once extensions have been removed).
  - It **SHALL** conform to the HL7 V3 R1 data type specification.
  - It **SHALL** conform to the semantics of the RIM and Structural Vocabulary.
- It **SHALL** be valid against the Australian Digital Health Agency CDA schema that accompanies this implementation guide after any additional extensions not in the Australian Digital Health Agency extension namespace have been removed, along with any other CDA content not described by this implementation guide.
- It **SHALL** use the mappings as they are stated in this document.
- It **SHALL** use all fixed values specified in the mappings (e.g. @attribute="FIXED\_VALUE").
- It **SHALL** be valid against the additional conformance requirements that are established in this document (i.e. any normative use of the word "shall" identified by the term presented in uppercase and bold typeface).
- The narrative **SHALL** conform to the requirements described in this implementation guide.
- The document **SHALL** conform to the requirements specified in the CDA Rendering Specification [\[NEHT2012s\]](#).
- Any additional content included in the CDA document that is not described by this implementation guide **SHALL NOT** qualify or negate content described by this implementation guide and it **SHALL** be clinically safe for receivers of the document to ignore the non-narrative additions when interpreting the existing content.

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

Conformance profiles of this document **MAY** make additional rules that override this document in regard to:

- Allowing the use of alternative value sets in place of the value sets specified in this document.
- Allowing the use of alternative identifiers in place of the Healthcare Identifiers Service identifiers.
- Making required data elements and section divisions optional.

## 3.2 CDA narratives

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

It is a [HL7 Clinical Document Architecture \[HL7CDAR2\]](#) requirement that all clinical information **SHALL** be marked up in CDA narratives.

It is a [HL7 Clinical Document Architecture \[HL7CDAR2\]](#) requirement that the rendered narrative **SHALL** be able to stand alone as a source of authenticated information for consuming parties. Content from the CDA body **SHALL NOT** be omitted from the narrative.

There is no canonical markup for specific CDA components, but some conformance requirements apply:

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

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

# 4 Shared Medicines List hierarchy

A shared medicines list document is defined as:

A list of medicines authored by a practitioner at a point in time that describes the medicines an individual is taking.  
*Shared Medicines List FHIR Implementation Guide [DH2019h]*

## 4.1 Logical hierarchy

The hierarchy below provides a logical view of the Shared Medicines List model as a tree structure in a hierarchical table; it is not intended to represent how the data contents are represented in a CDA document.

Each row contains information about a single element. The top level row contains two occupied cells: Name of the document model, and the Type (hyperlinked to the definition of the type).

Each following row contains three occupied cells: Name of the child element in the model, Cardinality (the lower and upper bounds on how many times this element is allowed to appear in the resource), and the Type (hyperlinked to the definition of the type). Type may be expressed as a type that is further constrained by a referenced model, e.g. Patient as Base Patient.

Name	Cardinality	Type
Composition (Shared Medicines List)		<a href="#">Composition</a> as Shared Medicines List Authored by Practitioner
composition-author-role	1..1	<a href="#">Reference(PractitionerRole</a> as PractitionerRole with Practitioner with Mandatory Identifier)
information-recipient	0..*	<a href="#">Reference(Practitioner</a> as Base Practitioner   <a href="#">Patient</a> as Base Patient   <a href="#">RelatedPerson</a> as Base RelatedPerson   <a href="#">PractitionerRole</a> as Base PractitionerRole   <a href="#">Organization</a> as Base Organization)
identifier	0..1	<a href="#">Identifier</a>
status	1..1	<a href="#">code</a>
type	1..1	<a href="#">CodeableConcept</a>
subject	1..1	<a href="#">Reference(Patient</a> as Patient with Mandatory Identifier)
encounter	0..1	<a href="#">Reference(Encounter</a> as Summary of an Encounter for an Event)
date	1..1	<a href="#">dateTime</a>
author	1..1	<a href="#">Reference(Practitioner</a> as Practitioner with Mandatory Identifier)
title	1..1	<a href="#">string</a>
attester (Legal Attester)	1..1	<a href="#">BackboneElement</a>
mode	1..1	<a href="#">code</a>
time	1..1	<a href="#">dateTime</a>
party	1..1	<a href="#">Reference(Practitioner</a> as Practitioner with Mandatory Identifier)
custodian	1..1	<a href="#">Reference(Organization</a> as Organization with Mandatory Identifier)
section (Allergies)	0..1	<a href="#">BackboneElement</a>
title	1..1	<a href="#">string</a>
code	1..1	<a href="#">CodeableConcept</a>
text	1..1	<a href="#">Narrative</a>
entry	0..*	<a href="#">Reference(AllergyIntolerance</a> as Summary Statement of Allergy or Intolerance)
emptyReason	0..1	<a href="#">CodeableConcept</a>
section (Medicines List)	1..*	<a href="#">BackboneElement</a>

Name			Cardinality	Type
		title	1..1	<a href="#">string</a>
		code	1..1	<a href="#">CodeableConcept</a>
		text	1..1	<a href="#">Narrative</a>
		entry	0..1	<a href="#">Reference(List as List of Medicine Items with Change Information Authored by Practitioner   Observation as Assertion of No Relevant Finding)</a>
		emptyReason	0..1	<a href="#">CodeableConcept</a>

DRAFT

## 4.2 Logical expanded hierarchy

The hierarchy below provides an expanded logical view of the Shared Medicines List model as a tree structure in a hierarchical table that includes the structure of the first level of referenced models; it is not intended to represent how the data contents are represented in a CDA document.

Each row contains information about a single element. The top level row contains two occupied cells: Name of the document model, and the Type (hyperlinked to the definition of the type).

Each following row contains three occupied cells: Name of the child element in the model, Cardinality (the lower and upper bounds on how many times this element is allowed to appear in the resource), and the Type (hyperlinked to the definition of the type). Type may be expressed as a type that is further constrained by a referenced model, e.g. Patient as Base Patient.

Name		Cardinality	Type
Composition (Shared Medicines List)			<a href="#">Composition</a> as Shared Medicines List Authored by Practitioner
	composition-author-role	1..1	<a href="#">Reference(PractitionerRole</a> as PractitionerRole with Practitioner with Mandatory Identifier)
	identifier	0..*	<a href="#">Identifier</a>
	active	0..1	<a href="#">boolean</a>
	period	0..1	<a href="#">Period</a>
	practitioner	1..1	<a href="#">Reference(Practitioner</a> as Practitioner with Mandatory Identifier)
	organization	0..1	<a href="#">Reference(Organization</a> as Base Organization)
	code	0..*	<a href="#">CodeableConcept</a>
	specialty	0..*	<a href="#">CodeableConcept</a>
	location	0..*	<a href="#">Reference(Location)</a>
	healthcareService	0..*	<a href="#">Reference(HealthcareService)</a>
	telecom	0..*	<a href="#">ContactPoint</a>
	availableTime	0..*	<a href="#">BackboneElement</a>
	daysOfWeek	0..*	<a href="#">code</a>
	allDay	0..1	<a href="#">boolean</a>
	availableStartTime	0..1	<a href="#">time</a>
	availableEndTime	0..1	<a href="#">time</a>
	notAvailable	0..*	<a href="#">BackboneElement</a>
	description	1..1	<a href="#">string</a>
	during	0..1	<a href="#">Period</a>
	availabilityExceptions	0..1	<a href="#">string</a>
	information-recipient	0..*	<a href="#">Reference(Practitioner</a> as Base Practitioner)
	identifier	0..*	<a href="#">Identifier</a>
	active	0..1	<a href="#">boolean</a>
	name	0..*	<a href="#">HumanName</a> as Base HumanName
	telecom	0..*	<a href="#">ContactPoint</a>
	address	0..*	<a href="#">Address</a>
	gender	0..1	<a href="#">code</a>
	birthDate	0..1	<a href="#">date</a>
	qualification	0..*	<a href="#">BackboneElement</a>
	identifier	0..*	<a href="#">Identifier</a>
	code	1..1	<a href="#">CodeableConcept</a>
	period	0..1	<a href="#">Period</a>
	issuer	0..1	<a href="#">Reference(Organization</a> as Base Organization)

Name			Cardinality	Type
		communication	0..*	<a href="#">CodeableConcept</a>
	information-recipient		0..*	<a href="#">Reference(Patient as Base Patient)</a>
		birthPlace	0..1	<a href="#">Address</a>
		indigenous-status	0..1	<a href="#">Coding</a>
		closing-the-gap-registration	0..1	<a href="#">boolean</a>
		patient-mothersMaidenName	0..1	<a href="#">string</a>
		identifier	0..*	<a href="#">Identifier</a>
		active	0..1	<a href="#">boolean</a>
		name	0..*	<a href="#">HumanName as Base HumanName</a>
		telecom	0..*	<a href="#">ContactPoint</a>
		gender	0..1	<a href="#">code</a>
		birthDate	0..1	<a href="#">date</a>
			0..1	<a href="#">Coding</a>
		birthTime	0..1	<a href="#">dateTime</a>
		deceased[x]	0..1	<a href="#">boolean   dateTime</a>
			0..1	<a href="#">Coding</a>
		address	0..*	<a href="#">Address</a>
		maritalStatus	0..1	<a href="#">CodeableConcept</a>
		multipleBirth[x]	0..1	<a href="#">boolean   integer</a>
		contact	0..*	<a href="#">BackboneElement</a>
			0..*	<a href="#">CodeableConcept</a>
		relationship	0..*	<a href="#">CodeableConcept</a>
			0..1	<a href="#">HumanName as Base HumanName</a>
		telecom	0..*	<a href="#">ContactPoint</a>
			0..1	<a href="#">Address</a>
		address	0..1	<a href="#">code</a>
			0..1	<a href="#">Organization as Base Organization</a>
		organization	0..1	<a href="#">Reference(Organization as Base Organization)</a>
		period	0..1	<a href="#">Period</a>
		communication	0..*	<a href="#">BackboneElement</a>
			1..1	<a href="#">CodeableConcept</a>
		language	0..1	<a href="#">boolean</a>
			0..1	<a href="#">generalPractitioner</a>
		preferred	0..1	<a href="#">Reference(Practitioner as Base Practitioner   Organization as Base Organization)</a>
			0..1	<a href="#">managingOrganization</a>
	information-recipient		0..*	<a href="#">Reference(RelatedPerson as Base RelatedPerson)</a>
		identifier	0..*	<a href="#">Identifier</a>
			0..1	<a href="#">active</a>
		name	0..*	<a href="#">HumanName as Base HumanName</a>
		telecom	0..*	<a href="#">ContactPoint</a>
			0..*	<a href="#">Address</a>
		address	0..1	<a href="#">code</a>
			0..1	<a href="#">gender</a>
		birthDate	0..1	<a href="#">date</a>
		qualification	0..*	<a href="#">BackboneElement</a>
			0..*	<a href="#">Identifier</a>
		code	1..1	<a href="#">CodeableConcept</a>
			0..1	<a href="#">period</a>
		issuer	0..1	<a href="#">Reference(Organization as Base Organization)</a>
		communication	0..*	<a href="#">CodeableConcept</a>

Name		Cardinality	Type
	information-recipient	0..*	<a href="#">Reference(PractitionerRole as Base PractitionerRole)</a>
	identifier	0..*	<a href="#">Identifier</a>
	active	0..1	<a href="#">boolean</a>
	period	0..1	<a href="#">Period</a>
	practitioner	1..1	<a href="#">Reference(Practitioner as Practitioner with Mandatory Identifier)</a>
	organization	0..1	<a href="#">Reference(Organization as Base Organization)</a>
	code	0..*	<a href="#">CodeableConcept</a>
	specialty	0..*	<a href="#">CodeableConcept</a>
	location	0..*	<a href="#">Reference(Location)</a>
	healthcareService	0..*	<a href="#">Reference(HealthcareService)</a>
	telecom	0..*	<a href="#">ContactPoint</a>
	availableTime	0..*	<a href="#">BackboneElement</a>
	daysOfWeek	0..*	<a href="#">code</a>
	allDay	0..1	<a href="#">boolean</a>
	availableStartTime	0..1	<a href="#">time</a>
	availableEndTime	0..1	<a href="#">time</a>
	notAvailable	0..*	<a href="#">BackboneElement</a>
	description	1..1	<a href="#">string</a>
	during	0..1	<a href="#">Period</a>
	availabilityExceptions	0..1	<a href="#">string</a>
	information-recipient	0..*	<a href="#">Reference(Organization as Base Organization)</a>
	identifier	0..*	<a href="#">Identifier</a>
	active	0..1	<a href="#">boolean</a>
	type	0..*	<a href="#">CodeableConcept</a>
	name	0..1	<a href="#">string</a>
	alias	0..*	<a href="#">string</a>
	telecom	0..*	<a href="#">ContactPoint</a>
	address	0..*	<a href="#">Address</a>
	partOf	0..1	<a href="#">Reference(Organization as Base Organization)</a>
	contact	0..*	<a href="#">BackboneElement</a>
	purpose	0..1	<a href="#">CodeableConcept</a>
	name	0..1	<a href="#">HumanName as Base HumanName</a>
	telecom	0..*	<a href="#">ContactPoint</a>
	address	0..1	<a href="#">Address</a>
	identifier	0..1	<a href="#">Identifier</a>
	status	1..1	<a href="#">code</a>
	type	1..1	<a href="#">CodeableConcept</a>
	subject	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>
	birthPlace	0..1	<a href="#">Address</a>
	indigenous-status	0..1	<a href="#">Coding</a>
	closing-the-gap-registration	0..1	<a href="#">boolean</a>
	patient-mothersMaidenName	0..1	<a href="#">string</a>
	identifier	1..*	<a href="#">Identifier</a>
	active	0..1	<a href="#">boolean</a>
	name	0..*	<a href="#">HumanName as Base HumanName</a>
	telecom	0..*	<a href="#">ContactPoint</a>

Name			Cardinality	Type
	gender		0..1	<a href="#">code</a>
	birthDate		0..1	<a href="#">date</a>
	date-accuracy-indicator		0..1	<a href="#">Coding</a>
	birthTime		0..1	<a href="#">dateTime</a>
	deceased[x]		0..1	<a href="#">boolean</a>   <a href="#">dateTime</a>
	date-accuracy-indicator		0..1	<a href="#">Coding</a>
	address		0..*	<a href="#">Address</a>
	maritalStatus		0..1	<a href="#">CodeableConcept</a>
	multipleBirth[x]		0..1	<a href="#">boolean</a>   <a href="#">integer</a>
	contact		0..*	<a href="#">BackboneElement</a>
	relationship		0..*	<a href="#">CodeableConcept</a>
	name		0..1	<a href="#">HumanName</a> as Base HumanName
	telecom		0..*	<a href="#">ContactPoint</a>
	address		0..1	<a href="#">Address</a>
	gender		0..1	<a href="#">code</a>
	organization		0..1	<a href="#">Reference(Organization)</a> as Base Organization
	period		0..1	<a href="#">Period</a>
	communication		0..*	<a href="#">BackboneElement</a>
	language		1..1	<a href="#">CodeableConcept</a>
	preferred		0..1	<a href="#">boolean</a>
	generalPractitioner		0..*	<a href="#">Reference(Practitioner)</a> as Base Practitioner   <a href="#">Organization</a> as Base Organization
	managingOrganization		0..1	<a href="#">Reference(Organization)</a> as Base Organization
encounter			0..1	<a href="#">Reference(Encounter)</a> as Summary of an Encounter for an Event)
	encounter-description		0..1	<a href="#">string</a>
	status		1..1	<a href="#">code</a>
	class		0..1	<a href="#">Coding</a>
	type		0..*	<a href="#">CodeableConcept</a>
	subject		1..1	<a href="#">Reference(Patient)</a> as Patient with Mandatory Identifier)
	period		1..1	<a href="#">Period</a>
	reason		0..*	<a href="#">CodeableConcept</a>
date			1..1	<a href="#">dateTime</a>
author			1..1	<a href="#">Reference(Practitioner)</a> as Practitioner with Mandatory Identifier)
	identifier		1..*	<a href="#">Identifier</a>
	active		0..1	<a href="#">boolean</a>
	name		0..*	<a href="#">HumanName</a> as Base HumanName
	telecom		0..*	<a href="#">ContactPoint</a>
	address		0..*	<a href="#">Address</a>
	gender		0..1	<a href="#">code</a>
	birthDate		0..1	<a href="#">date</a>
	qualification		0..*	<a href="#">BackboneElement</a>
	identifier		0..*	<a href="#">Identifier</a>
	code		1..1	<a href="#">CodeableConcept</a>
	period		0..1	<a href="#">Period</a>
	issuer		0..1	<a href="#">Reference(Organization)</a> as Base Organization)
	communication		0..*	<a href="#">CodeableConcept</a>

Name	Cardinality		Type
title	1..1		<a href="#">string</a>
attester (Legal Attester)	1..1		<a href="#">BackboneElement</a>
mode	1..1		<a href="#">code</a>
time	1..1		<a href="#">dateTime</a>
party	1..1		<a href="#">Reference(<a href="#">Practitioner</a> as Practitioner with Mandatory Identifier)</a>
identifier	1..*		<a href="#">Identifier</a>
active	0..1		<a href="#">boolean</a>
name	0..*		<a href="#">HumanName as Base HumanName</a>
telecom	0..*		<a href="#">ContactPoint</a>
address	0..*		<a href="#">Address</a>
gender	0..1		<a href="#">code</a>
birthDate	0..1		<a href="#">date</a>
qualification	0..*		<a href="#">BackboneElement</a>
identifier	0..*		<a href="#">Identifier</a>
code	1..1		<a href="#">CodeableConcept</a>
period	0..1		<a href="#">Period</a>
issuer	0..1		<a href="#">Reference(<a href="#">Organization</a> as Base Organization)</a>
communication	0..*		<a href="#">CodeableConcept</a>
custodian	1..1		<a href="#">Reference(<a href="#">Organization</a> as Organization with Mandatory Identifier)</a>
identifier	1..*		<a href="#">Identifier</a>
active	0..1		<a href="#">boolean</a>
type	0..*		<a href="#">CodeableConcept</a>
name	0..1		<a href="#">string</a>
alias	0..*		<a href="#">string</a>
telecom	0..*		<a href="#">ContactPoint</a>
address	0..*		<a href="#">Address</a>
partOf	0..1		<a href="#">Reference(<a href="#">Organization</a> as Base Organization)</a>
contact	0..*		<a href="#">BackboneElement</a>
purpose	0..1		<a href="#">CodeableConcept</a>
name	0..1		<a href="#">HumanName as Base HumanName</a>
telecom	0..*		<a href="#">ContactPoint</a>
address	0..1		<a href="#">Address</a>
section (Allergies)	0..1		<a href="#">BackboneElement</a>
title	1..1		<a href="#">string</a>
code	1..1		<a href="#">CodeableConcept</a>
text	1..1		<a href="#">Narrative</a>
entry	0..*		<a href="#">Reference(<a href="#">AllergyIntolerance</a> as Summary Statement of Allergy or Intolerance)</a>
author-related-person	0..1		<a href="#">Reference(<a href="#">RelatedPerson</a> as Base RelatedPerson)</a>
clinicalStatus	0..1		<a href="#">code</a>
verificationStatus	1..1		<a href="#">code</a>
type	0..1		<a href="#">code</a>
code	1..1		<a href="#">CodeableConcept</a>
patient	1..1		<a href="#">Reference(<a href="#">Patient</a> as Patient with Mandatory Identifier)</a>
onset[x]	0..1		<a href="#">dateTime, Age, Period, Range</a>

Name				Cardinality	Type
		recorder		0..1	<a href="#">Reference(Patient as Base Patient   Practitioner as Base Practitioner)</a>
		note		0..*	<a href="#">Annotation</a>
		reaction		0..*	<a href="#">BackboneElement</a>
			substance	0..1	<a href="#">CodeableConcept</a>
			manifestation	1..*	<a href="#">CodeableConcept</a>
		emptyReason			0..1
	section (Medicines List)			1..*	<a href="#">BackboneElement</a>
		title		1..1	<a href="#">string</a>
		code		1..1	<a href="#">CodeableConcept</a>
		text		1..1	<a href="#">Narrative</a>
		entry		0..1	<a href="#">Reference(List as List of Medicine Items with Change Information Authored by Practitioner)</a>
			author-role	1..1	<a href="#">Reference(PractitionerRole as PractitionerRole with Practitioner with Mandatory Identifier)</a>
			status	1..1	<a href="#">code</a>
			title	0..1	<a href="#">string</a>
			code	1..1	<a href="#">CodeableConcept</a>
			subject	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>
			encounter	0..1	<a href="#">Reference(Encounter as Summary of an Encounter for an Event)</a>
			date	1..1	<a href="#">dateTime</a>
			source	1..1	<a href="#">Reference(Practitioner as Practitioner with Mandatory Identifier)</a>
			note	0..*	<a href="#">Annotation</a>
			entry	1..*	<a href="#">BackboneElement</a>
			change-description	0..1	<a href="#">string</a>
			flag	1..1	<a href="#">CodeableConcept</a>
			item	1..1	<a href="#">Reference(MedicationStatement as Medicine Item Statement)</a>
		entry		0..1	<a href="#">Reference(Observation as Assertion of No Relevant Finding)</a>
			status	1..1	<a href="#">code</a>
			code	1..1	<a href="#">CodeableConcept</a>
			subject	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>
			effective[x]	0..1	<a href="#">dateTime   Period</a>
			performer	0..*	<a href="#">Reference(Practitioner as Base Practitioner)   Organization as Base Organization)   RelatedPerson as Base RelatedPerson)   Patient as Base Patient)</a>
			value[x]	1..1	<a href="#">CodeableConcept</a>
		emptyReason		0..1	<a href="#">CodeableConcept</a>

# 5 CDA Header templates

This chapter contains the CDA Header requirements for this implementation guide; these are infrastructure or control requirements that are not sourced from the Shared Medicines List model.

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

## 5.1 ClinicalDocument

### CDA mapping

CDA schema element	CDA element description	CDA card	CDA constraints and comments
CDA Header Data Elements		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	<p>This template <b>SHALL</b> be a closed template.</p> <p>All attributes of the ClinicalDocument element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.</p> <p>The CDA document <b>SHALL</b> be valid against the Australian Digital Health Agency CDA schema after any additional extensions not in the Australian Digital Health Agency extension namespace have been removed.</p>
ClinicalDocument/realmCode	A realmCode signals the imposition of realm-specific constraints. The value identifies the realm in question.	0..*	All attributes of the realmCode element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/typeId	A technology-neutral explicit reference to the CDA Release 2 specification.	1..1	
ClinicalDocument/typeId/@extension="POCD_HD000040"		1..1	The unique identifier for the CDA Release 2 Hierarchical Description.
ClinicalDocument/typeId/@root="2.16.840.1.113883.1.3"		1..1	The OID for HL7 Registered models.

CDA schema element	CDA element description	CDA card	CDA constraints and comments
ClinicalDocument/templateId	A templateId signals the imposition of a set of template-defined constraints. The value provides a unique identifier for the templates in question.	1..*	<p>All attributes of the templateId element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.</p> <p>Exactly one template identifier <b>SHALL</b> indicate the constraints defined in this mapping table and have @root="1.2.36.1.2001.1001.102.101.100033" and @extension="1.0".</p> <p>Exactly one template identifier <b>SHALL</b> indicate the constraints defined in the CDA Rendering Specification [NEHT2012s] and have @root="1.2.36.1.2001.1001.100.149" and @extension="1.0".</p> <p>In addition to the template identifiers above, a template identifier is expected for the clinical document model as per <a href="#">ClinicalDocument (Shared Medicines List Authored by Practitioner)</a>. Additional template identifiers may be required by other specifications.</p> <p>Systems are not required to recognise any other template identifiers than the clinical document model templateId in order to understand the document as a [type] but these identifiers may influence how the document must be handled.</p>
ClinicalDocument/id	Represents the unique instance identifier of a clinical document.	1..1	<p>All attributes of the id element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed with the exception that @nullFlavor <b>SHALL NOT</b> be present.</p> <p>The common pattern <b>id</b> <b>SHALL</b> be applied.</p>
ClinicalDocument/code	The code specifying the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note).	1..1	<p>All attributes of the code element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed with the exception that @nullFlavor <b>SHALL NOT</b> be present.</p> <p>The common pattern <b>code</b> <b>SHALL</b> be applied.</p>
ClinicalDocument/title	Represents the title of the document.	0..1	
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	<p>All attributes of the effectiveTime element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed with the exception that @nullFlavor <b>SHALL NOT</b> be present.</p> <p>The common pattern <b>time</b> <b>SHALL</b> be applied.</p>
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	Specifies the human language of character data (whether they be in contents or attribute values).	0..1	<Language Code> – <DIALECT> The <Language Code> <b>SHALL</b> be "en". The <DIALECT> <b>SHOULD</b> be "AU".
ClinicalDocument/languageCode/@code		1..1	
ClinicalDocument/setId	Represents an identifier that is common across all document revisions.	0..1	<p>All attributes of the setId element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.</p> <p>The common pattern <b>id</b> <b>SHALL</b> be applied.</p>
ClinicalDocument/versionNumber	An integer value used to version successive replacement documents.	0..1	
ClinicalDocument/versionNumber/@value		1..1	
ClinicalDocument/ext:completionCode	The lifecycle status of a document.	1..1	<p>All attributes of the completionCode element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed with the exception that @nullFlavor <b>SHALL NOT</b> be present.</p> <p>The common pattern <b>code</b> <b>SHALL</b> be applied.</p> <p><a href="#">Australian Healthcare Clinical Document Architecture Document Lifecycle Status (required)</a></p>

CDA schema element	CDA element description	CDA card	CDA constraints and comments
ClinicalDocument/recordTarget	Represents the medical record that this document belongs to.	1..1	All attributes and elements of the recordTarget element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/author	Represents the humans and/or machines that authored the document.	1..1	All attributes and elements of the author element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/dataEnterer	Represents the participant who has transformed a dictated note into text.	0..1	All attributes and elements of the dataEnterer element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/informant	Represents an informant (or source of information) who provides relevant information, such as the parent of a comatose patient who describes the patient's behavior prior to the onset of coma. Unless otherwise stated, the patient is implicitly the informant.	0..*	All attributes and elements of the informant element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/custodian	Represents the organization from which the document originates and 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	All attributes and elements of the custodian element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/informationRecipient	Represents a recipient who should receive a copy of the document.	0..*	All attributes and elements of the informationRecipient element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/legalAuthenticator	Represents a participant who has legally authenticated the document.	0..1	All attributes and elements of the legalAuthenticator element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/authenticator	Represents a participant who has attested to the accuracy of the document, but who does not have privileges to legally authenticate the document. An example would be a resident physician who sees a patient and dictates a note, then later signs it.	0..*	All attributes and elements of the authenticator element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/participant	Represents a participant not explicitly mentioned by other classes that was somehow involved.	0..*	All attributes and elements of the participant element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/inFulfillmentOf	Relates the current document to an order this document fulfills (in whole or in part).	0..*	All attributes and elements of the inFulfillmentOf element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/documentationOf	Relates the current document to the related event that this document is documentation of.	0..*	All attributes and elements of the documentationOf element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/relatedDocument	Relates the current document to a parent document.	0..*	All attributes and elements of the relatedDocument element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/authorization	Relates the current document to consents associated with this document. The consent authorizes or certifies acts specified in the current document.	0..*	All attributes and elements of the authorization element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/componentOf	Relates the current document to the encounter. The current document is a documentation of events that occurred during the encounter.	0..1	All attributes and elements of the componentOf element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.
ClinicalDocument/component	Relates the associated document body as a component of the document.	1..1	All attributes and elements of the component element defined by the Australian Digital Health Agency CDA schema <b>SHALL</b> be allowed.

## 5.2 LegalAuthenticator

### CDA mapping

CDA schema element	CDA element description	CDA card	CDA constraints and comments
<b>CDA Header Data Elements</b>			Context: /ClinicalDocument/
legalAuthenticator	Represents a participant who has legally authenticated the document.	Cardinality comes from linking element	
legalAuthenticator/templateId	The use of templateId signals the imposition of a set of template-defined constraints.	1..1	
legalAuthenticator/templateId/@root="1.2.36.1.2001.1001.102.101.100012"		1..1	
legalAuthenticator/templateId/@extension="1.0"		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	A legalAuthenticator is a person in the role of an assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).	1..1	
legalAuthenticator/assignedEntity/code	The specific kind of role.	0..1	The common pattern <a href="#">code</a> SHALL be applied.
legalAuthenticator/assignedEntity/id	A unique identifier for the player entity in this role.	1..1	The common pattern <a href="#">id</a> SHALL be applied.
legalAuthenticator/assignedEntity/assignedPerson	The entity playing the role (assignedEntity) is a person.	1..1	
legalAuthenticator/assignedEntity/assignedPerson/ext:asEntityIdentifier	The entity identifier of the person.	0..*	The common pattern <a href="#">Entity Identifier</a> SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
legalAuthenticator/assignedEntity/addr	A postal address for the entity (assignedPerson) while in the role (assignedEntity).	0..*	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
legalAuthenticator/assignedEntity/telecom	A telecommunication address for the entity (assignedPerson) while in the role (assignedEntity).	0..*	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
legalAuthenticator/assignedEntity/assignedPerson/name	A non-unique textual identifier or moniker for the entity (assignedPerson).	0..*	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
legalAuthenticator/assignedEntity/representedOrganization	The entity scoping the role (assignedEntity).	0..1	
legalAuthenticator/assignedEntity/representedOrganization/ext:asEntityIdentifier	A unique identifier for the scoping entity (represented organization) in this role (assignedEntity).	0..*	The common pattern <a href="#">Entity Identifier</a> SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
legalAuthenticator/assignedEntity/representedOrganization/name	A non-unique textual identifier or moniker for the entity (representedOrganization).	0..*	

## 5.3 Administrative Observations

### CDA mapping

CDA schema element	CDA element description	CDA card	CDA constraints and comments
Conformance level comes from linking elements	Context: /ClinicalDocument/component/structuredBody/		
component[admin_obs]	The SML document model contains a number of elements for which there are no equivalent elements at that point in the hierarchical structure of the model mapped into CDA. These elements are considered to be "Administrative Observations" about the encounter, the patient or some other participant.	Cardinality comes from linking element	ClinicalDocument <b>SHALL</b> contain at most one Administrative Observation section. The Administrative Observations section <b>SHALL NOT</b> be populated if there are no entries or text to go in it.
component[admin_obs]/section		1..1	
component[admin_obs]/section/templateId		1..1	The use of templateId signals the imposition of a set of template-defined constraints.
component[admin_obs]/section/templateId/@root="1.2.36.1.2001.1001.102.101.100000"		1..1	
component[admin_obs]/section/templateId/@extension="1.0"		1..1	
component[admin_obs]/section/id	An observation included in this section is an observation relating to the patient (i.e. recordTarget) unless a reference to a different entity is instantiated as part of that observation (e.g. observation/participant/participantRole).	0..1	The common pattern <b>id</b> <b>SHALL</b> be applied.
component[admin_obs]/section/code		1..1	
component[admin_obs]/section/code/@code="102.16080"		1..1	
component[admin_obs]/section/code/@codeSystem="1.2.36.1.2001.1001.101"		1..1	NCTIS Data Components
component[admin_obs]/section/code/@displayName		0..1	displayName <b>SHOULD</b> be "Administrative Observations".
component[admin_obs]/section/title="Administrative Observations"		0..1	
component[admin_obs]/section/text		0..1	text <b>SHALL</b> conform to requirements defined in <a href="#">CDA narratives</a> .



# 6 Document CDA templates

This chapter contains mapping from the Composition (Shared Medicines List) model to a CDA clinical document class, expressed as a series of CDA templates that describe how the CDA document is composed.

CDA templates are expected to be reused from one document type (or Composition model) to another. Each CDA template is presented under a heading in the format of "CDA schema element" ("model name") where "CDA schema element" is the root element for a CDA template and "model name" is the name of a model that constrains an element in the Shared Medicines List hierarchy.

## 6.1 ClinicalDocument (Shared Medicines List Authored by Practitioner)

The following are the overarching usage scenarios this template is intended to support:

- A clinical information system (CIS) sends or receives a practitioner authored shared medicines list document with the My Health Record system
- A contracted service provider (CSP) sends or receives a practitioner authored shared medicines list document with the My Health Record system
- A CIS sends or receives a practitioner authored shared medicines list document with another CIS or CSP
- A CSP sends or receives a practitioner authored shared medicines list document with a CIS or another CSP
- A registered portal or registered repository receives a practitioner authored shared medicines list document

An expected usage scenario; further scoping the above overarching scenarios is:

- A practitioner authored shared medicines list document exchanged as a pharmacist shared medicines list (PSML)

## CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>				Context: /	
Composition	A list of medicines authored by a practitioner at a point in time that describes the medicines an individual is taking.	0..*	<a href="#">DomainResource</a>	<b>ClinicalDocument[sml]</b>	In CDA the maximum occurrences of ClinicalDocument is 1. Although the model indicates that Composition is 0..*, in a CDA implementation this is limited to 0..1.  In addition to this template, ClinicalDocument <b>SHALL</b> conform to the template defined in <a href="#">ClinicalDocument</a> .  All instances of ClinicalDocument/informationRecipient <b>SHALL</b> conform to one of the templates defined in: <a href="#">informationRecipient (Base Patient)</a> or <a href="#">informationRecipient (Base RelatedPerson)</a> or <a href="#">informationRecipient (Base PractitionerRole)</a> or <a href="#">informationRecipient (Base Organization)</a> .
				<b>ClinicalDocument[sml]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>ClinicalDocument[sml]/templateId/@root="1.2.36.1.2001.1001.102.101.100065"</b>	
				<b>ClinicalDocument[sml]/templateId/@extension="1.0"</b>	
Composition > <b>composition-author-role</b>	A practitioner role that authored this composition. This is not to be confused with who typed in the information.	1..1	<a href="#">Reference(PractitionerRole as PractitionerRole with Practitioner with Mandatory Identifier)</a>	<b>ClinicalDocument[sml]/author</b>	author <b>SHALL</b> conform to the template defined in <a href="#">author (PractitionerRole with Practitioner with Mandatory Identifier)</a> .
Composition > <b>information-recipient</b>	A recipient who should receive a copy of the composition. A recipient is an entity to whom a copy of the composition is directed at the time of authoring of the composition.	0..*	<a href="#">Reference(Practitioner as Base Practitioner   Patient as Base Patient   RelatedPerson as Base RelatedPerson   PractitionerRole as Base PractitionerRole   Organization as Base Organization)</a>	<b>ClinicalDocument[sml]/informationRecipient</b>	In CDA an information-recipient (Practitioner) is part of information-recipient (PractitionerRole).  informationRecipient <b>SHALL</b> conform to one of the templates defined in: <a href="#">informationRecipient (Base Patient)</a> or <a href="#">informationRecipient (Base RelatedPerson)</a> or <a href="#">informationRecipient (Base PractitionerRole)</a> or <a href="#">informationRecipient (Base Organization)</a> .
Composition > <b>identifier</b>	Logical identifier for the composition, assigned when created. This identifier stays constant as the composition is changed over time.	0..1	<a href="#">Identifier</a>	<b>ClinicalDocument[sml]/setId</b>	
Composition > <b>status</b>	The workflow/clinical status of this composition. The status is a marker for the clinical standing of the document.	1..1	<a href="#">code</a>	<b>ClinicalDocument[sml]/ext:completionCode</b>	The common pattern code <b>SHALL</b> be applied.  <a href="#">Australian Healthcare Clinical Document Architecture, Document Lifecycle Status (required)<sup>1</sup></a>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Composition > <b>type</b>	Specifies the particular kind of composition (e.g. History and Physical, Discharge Summary, Progress Note). This usually equates to the purpose of making the composition.	1..1	<a href="#">CodeableConcept</a>	ClinicalDocument[sml]/code	
				ClinicalDocument[sml]/code/@code="56445-0"	
				ClinicalDocument[sml]/code/@codeSystem="2.16.840.1.113883.6.1"	LOINC
				ClinicalDocument[sml]/code/@displayName	displayName <b>SHOULD</b> be "Medication summary".
Composition > <b>subject</b>	Who or what the composition is about. The composition can be about a person, (patient or healthcare practitioner), a device (e.g. a machine) or even a group of subjects (such as a document about a herd of livestock, or a set of patients that share a common exposure).	1..1	<a href="#">Reference(Patient)</a> as Patient with Mandatory Identifier	ClinicalDocument[sml]/recordTarget	recordTarget <b>SHALL</b> conform to the template defined in <a href="#">recordTarget (Patient with Mandatory Identifier)</a> .
Composition > <b>encounter</b>	Describes the clinical encounter or type of care this documentation is associated with.	0..1	<a href="#">Reference(En-counter)</a> as Summary of an Encounter for an Event	ClinicalDocument[sml]/componentOf[enc]	When sending a PSML, encounter is expected to be sent. encompassingEncounter <b>SHALL</b> conform to the template defined in <a href="#">encompassingEncounter (Summary of an Encounter for an Event)</a> .
				ClinicalDocument[sml]/componentOf[enc]/encompassingEncounter	
Composition > <b>date</b>	The composition editing time, when the composition was last logically changed by the author.	1..1	<a href="#">dateTime</a>	ClinicalDocument[sml]/author/time	The common pattern <b>time</b> <b>SHALL</b> be applied.
Composition > <b>author</b>	Identifies who is responsible for the information in the composition, not necessarily who typed it in.	1..1	<a href="#">Reference(Practitioner)</a> as Practitioner with Mandatory Identifier	ClinicalDocument[sml]/author	In CDA an author (Practitioner) is part of composition-author-role (PractitionerRole). author <b>SHALL</b> conform to the template defined in <a href="#">author (PractitionerRole with Practitioner with Mandatory Identifier)</a> .
Composition > <b>title</b>	Official human-readable label for the composition.	1..1	<a href="#">string</a>	ClinicalDocument[sml]/title	
Composition > <b>attester (Legal Attester)</b>	A participant who has attested to the accuracy of the composition/document.	1..1	<a href="#">BackboneElement</a>	ClinicalDocument[sml]/legalAuthenticator	legalAuthenticator <b>SHALL</b> conform to the template defined in <a href="#">LegalAuthenticator</a> .
Composition > attester (Legal Attester) > <b>mode</b>	The type of attestation the authenticator offers.	1..1	<a href="#">code</a>	n/a	Not mapped separately, the logical mode of "legal" is implicit in legalAuthenticator.
Composition > attester (Legal Attester) > <b>time</b>	When the composition was attested by the party.	1..1	<a href="#">dateTime</a>	n/a	Not mapped separately, implicit in legalAuthenticator/time/@value.
Composition > attester (Legal Attester) > <b>party</b>	Who attested the composition in the specified way.	1..1	<a href="#">ReferencePractitioner</a> as Practitioner with Mandatory Identifier	n/a	Not mapped separately, implicit in legalAuthenticator/assignedEntity. The practitioner <b>SHALL</b> have an identifier (legalAuthenticator/assignedEntity/assignedPerson/ext:asEntityIdentifier).
Composition > <b>custodian</b>	Identifies the organization or group who is responsible for ongoing maintenance of and access to the composition/document information.	1..1	<a href="#">Reference(Organization)</a> as Organization with Mandatory Identifier	ClinicalDocument[sml]/custodian	custodian <b>SHALL</b> conform to the template defined in <a href="#">custodian (Organization with Mandatory Identifier)</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Composition > <b>section (Allergies)</b>	Information about allergies or intolerances. Information may include allergies or intolerances that have been identified or reported, or may include statements that a patient is not known to have an allergy or category of allergies.	0..1	<a href="#">BackboneElement</a>	ClinicalDocument[sml]/component/structuredBody/component[allergy]	When sending a PSML, this section is expected only if at least one statement of allergy or intolerance can be sent. section <b>SHALL</b> conform to the template defined in <a href="#">section (Allergies)</a> .
				ClinicalDocument[sml]/component/structuredBody/component[allergy]/section	
Composition > <b>section (Medicines List)</b>	Information about medicines. This may include self-prescribed, clinician prescribed and nonprescription medicines, as well as all regular, intermittent and as required medicines pertinent to a patient. Information may also include changes to the therapy, including dose changes, new medicines and ceased medicines.	1..*	<a href="#">BackboneElement</a>	ClinicalDocument[sml]/component/structuredBody/component[meds]	When sending a PSML, this is expected as either: <ul style="list-style-type: none"> <li>• a History of Medication section (section/code=@code="10160-0"), or</li> <li>• a Current Medicines section (section/code=@code="101.32009") and, optionally a Ceased Medicines section (section/code=@code="101.32027")</li> </ul> section <b>SHALL</b> conform to the template defined in <a href="#">section (Medicines List)</a> .
				ClinicalDocument[sml]/component/structuredBody/component[meds]/section	

<sup>1</sup>Note: The source terminology binding on status in Shared Medicines List [\[DH2019h\]](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [CompositionStatus \(HL7 FHIR\) to Australian Healthcare Clinical Document Architecture Document Lifecycle Status](#) concept map.

# 7 Participation CDA templates

This chapter contains mapping from the Individual (e.g. Patient with Mandatory Identifier) and Entity (e.g. Organization with Mandatory Identifier) models to CDA participation classes, expressed as a series of CDA templates that describe how each CDA participation is composed.

CDA templates are expected to be reused from one document type (or Composition model) to another. Each CDA template is presented under a heading in the format of "CDA schema element" ("model name") where "CDA schema element" is the root element for a CDA template and "model name" is the name of a model that constrains an element in the Shared Medicines List hierarchy.

## 7.1 recordTarget (Patient with Mandatory Identifier)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA Header Data Elements					Context: /ClinicalDocument/
Patient	Demographics and other administrative information about an individual receiving care or other health-related services.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<code>recordTarget[pat]</code>	
				<code>recordTarget[pat]/templateId</code>	The use of templateId signals the imposition of a set of template-defined constraints.
				<code>recordTarget[pat]/templateId/@root="1.2.36.1.2001.1001.102.101.100004"</code>	
				<code>recordTarget[pat]/templateId/@extension="1.0"</code>	The common pattern <code>id</code> SHALL be applied.
				<code>recordTarget[pat]/patientRole/id</code>	
				<code>recordTarget[pat]/patientRole/patient</code>	
Patient > <b>birthPlace</b>	The registered place of birth of the patient. A system may use the address.text if they don't store the birthPlace address in discrete elements.	0..1	<a href="#">Address</a>	<code>recordTarget[pat]/patientRole/patient/birthplace</code>	
				<code>recordTarget[pat]/patientRole/patient/birthplace/place</code>	
				<code>recordTarget[pat]/patientRole/patient/birthplace/place/addr</code>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > <b>indigenous-status</b>	National Health Data Dictionary (NHDD) based indigenous status for a patient.	0..1	<a href="#">Coding</a>	<code>recordTarget[pat]/patientRole/patient/ethnicGroupCode</code>	When sending to the My Health Record, indigenous-status is expected to be sent.  The common pattern <code>code</code> SHALL be applied.  <a href="#">Australian Indigenous Status (required)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/ See <a href="#">Administrative Observations</a> .
Patient > <b>closing-the-gap-registration</b>	Indication for eligibility for the Closing the Gap program.	0..1	<a href="#">boolean</a>	<a href="#">entry[close_gap]</a> <a href="#">entry[close_gap]/observation</a> <a href="#">entry[close_gap]/observation/@classCode="OBS"</a> <a href="#">entry[close_gap]/observation/@moodCode="EVN"</a> <a href="#">entry[close_gap]/observation/code</a> <a href="#">entry[close_gap]/observation/code/@code="103.32011"</a> <a href="#">entry[close_gap]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</a> <a href="#">entry[close_gap]/observation/code/@displayName</a> <a href="#">entry[close_gap]/observation/value</a>	NCTIS Data Components displayName <b>SHOULD</b> be "Closing the Gap Copayment Eligibility Indicator". closing-the-gap-registration is "true" if eligible for Closing the Gap co-payment. value/@xsi:type <b>SHALL</b> be "BL".
Patient > <b>patient-mothersMaidenName</b>	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	0..1	<a href="#">string</a>	<a href="#">entry[mothers_name]</a> <a href="#">entry[mothers_name]/observation</a> <a href="#">entry[mothers_name]/observation/@classCode="OBS"</a> <a href="#">entry[mothers_name]/observation/@moodCode="EVN"</a> <a href="#">entry[mothers_name]/observation/code</a> <a href="#">entry[mothers_name]/observation/code/@code="103.10245"</a> <a href="#">entry[mothers_name]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</a> <a href="#">entry[mothers_name]/observation/code/@displayName</a> <a href="#">entry[mothers_name]/observation/value</a>	NCTIS Data Components displayName <b>SHOULD</b> be "Mother's Original Family Name". value/@xsi:type <b>SHALL</b> be "ST".
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Patient > <b>identifier</b>	An identifier for this patient.	1..*	<a href="#">Identifier</a>	<a href="#">recordTarget[pat]/patientRole/patient/ext:asEntityIdentifier</a>	When sending to the My Health Record, an IHI is expected. The common pattern <a href="#">Entity Identifier</a> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Patient > <b>active</b>	Whether this patient record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>name</b>	A name associated with the individual.	0..*	<a href="#">HumanName</a> as Base HumanName	recordTarget[pat]/patientRole/patient/ <b>name</b>	<p>When sending to the My Health Record, family name is expected to be sent.</p> <p>The model Base HumanName is not applied to this CDA schema element.</p> <p>Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a>.</p>
Patient > <b>telecom</b>	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0..*	<a href="#">ContactPoint</a>	recordTarget[pat]/patientRole/ <b>telecom</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Patient > <b>gender</b>	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	recordTarget[pat]/patientRole/patient/ <b>administrativeGenderCode</b>	<p>In the Australian Digital Health Agency CDA schema the minimum occurrence of administrativeGenderCode is 1.</p> <p>Although administrativeGenderCode is required, a sending system may send a patient without gender by instantiating administrativeGenderCode/@nullFlavor="NI". No other nullFlavor value <b>SHALL</b> be allowed.</p> <p>When sending to the My Health Record, gender is expected to be sent.</p> <p>The common pattern <a href="#">code</a> <b>SHALL</b> be applied.</p> <p><a href="#">AdministrativeGender (required)</a></p>
Patient > <b>birthDate</b>	The date of birth for the individual.	0..1	<a href="#">date</a>	recordTarget[pat]/patientRole/patient/ <b>birthTime</b>	<p>When sending to the My Health Record, birthDate is expected to be sent.</p> <p>The common pattern <a href="#">time</a> <b>SHALL</b> be applied.</p>
<b>CDA Header Data Elements</b>				Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/ See <a href="#">Administrative Observations</a> .	
Patient > birthDate > <b>date-accuracy-indicator</b>	General date accuracy indicator coding.	0..1	<a href="#">Coding</a>	entry[dob_acc]	
				entry[dob_acc]/observation	
				entry[dob_acc]/observation/@classCode="OBS"	
				entry[dob_acc]/observation/@moodCode="EVN"	
				entry[dob_acc]/observation/code	
				entry[dob_acc]/observation/code/@code="102.16234"	
				entry[dob_acc]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				entry[dob_acc]/observation/code/@displayName	displayName <b>SHOULD</b> be "Date of Birth Accuracy Indicator".
				entry[dob_acc]/observation/value	value/@xsi:type <b>SHALL</b> be "CD". <a href="#">Date Accuracy Indicator (required)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Patient > birthDate > patient-birthTime	The time of day that the Patient was born. This includes the date to ensure that the timezone information can be communicated effectively.	0..1	<a href="#">dateTime</a>	n/a	Not mapped separately, encompassed in patientRole/patient/birthTime.
Patient > deceased[x]	Indicates if the individual is deceased or not. Deceased date accuracy indicator is optional.	0..1	<a href="#">boolean</a>   <a href="#">dateTime</a>	recordTarget[pat]/patientRole/patient/ext:deceasedInd recordTarget[pat]/patientRole/patient/ext:deceasedTime	Only one of ext:deceasedInd or ext:deceasedTime <b>SHOULD</b> be instantiated.
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/ See <a href="#">Administrative Observations</a>
Patient > deceased[x] > date-accuracy-indicator	General date accuracy indicator coding.	0..1	<a href="#">Coding</a>	entry[dod_acc] entry[dod_acc]/observation entry[dod_acc]/observation/@classCode="OBS" entry[dod_acc]/observation/@moodCode="EVN" entry[dod_acc]/observation/code entry[dod_acc]/observation/code/@code="102.16252" entry[dod_acc]/observation/code/@codeSystem="1.2.36.1.2001.1001.101" entry[dod_acc]/observation/code/@displayName entry[dod_acc]/observation/value	NCTIS Data Components displayName <b>SHOULD</b> be "Date of Death Accuracy Indicator". value/@xsi:type <b>SHALL</b> be "CD". <a href="#">Date Accuracy Indicator (required)</a>
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Patient > address	Addresses for the individual.	0..*	<a href="#">Address</a>	recordTarget[pat]/patientRole/addr	When sending to the My Health Record, address is not expected to be sent.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > maritalStatus	This field contains a patient's most recent marital (civil) status.	0..1	<a href="#">CodeableConcept</a>	recordTarget[pat]/patientRole/patient/maritalStatusCode	The common pattern <b>code</b> <b>SHALL</b> be applied.  maritalStatusCode/originalText or maritalStatusCode/@displayName <b>SHALL</b> be included.  <a href="#">Marital Status Codes (extensible)</a>
Patient > multipleBirth[x]	Indicates whether the patient is part of a multiple (bool) or indicates the actual birth order (integer).	0..1	<a href="#">boolean</a>   <a href="#">integer</a>	recordTarget[pat]/patientRole/patient/ext:multipleBirthInd recordTarget[pat]/patientRole/patient/ext:multipleBirthOrderNumber	Only one of ext:multipleBirthInd or ext:multipleBirthOrderNumber <b>SHOULD</b> be instantiated.
Patient > contact	A contact party (e.g. guardian, partner, friend) for the patient.	0..*	<a href="#">BackboneElement</a>	participant[pat_contact]	In CDA a patient's contact is represented by a participant. participant <b>SHALL</b> conform to the template defined in <a href="#">participant (Patient contact)</a> .

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>communication</b>	Languages which may be used to communicate with the patient about his or her health.	0..*	<a href="#">BackboneElement</a>	recordTarget[pat]/patientRole/patient/languageCommunication	
Patient > communication > <b>lan-guage</b>	The ISO-639-1 alpha 2 code in lower case for the language, optionally followed by a hyphen and the ISO-3166-1 alpha 2 code for the region in upper case; e.g. 'en' for English, or 'en-US' for American English versus 'en-EN' for England English.	1..1	<a href="#">CodeableConcept</a>	recordTarget[pat]/patientRole/patient/languageCommunication/languageCode	This CDA schema element is of type CodedSimpleValue (CS). <a href="#">Common Languages in Australia (extensible)</a>
Patient > communication > <b>pre-fferred</b>	Indicates whether or not the patient prefers this language (over other languages he masters up a certain level).	0..1	<a href="#">boolean</a>	recordTarget[pat]/patientRole/patient/languageCommunication/preferenceInd	
Patient > <b>generalPractitioner</b>	Patient's nominated care provider.	0..*	<a href="#">Reference( Organization as Base Organization Practitioner as Base Practitioner)</a>	participant[gen_prac]	participant <b>SHALL</b> conform to one of the templates defined in: <a href="#">participant (generalPractitioner Base Organization)</a> or <a href="#">participant (generalPractitioner Base Practitioner)</a> .
Patient > <b>managingOrganization</b>	Organization that is the custodian of the patient record.	0..1	<a href="#">Reference(Organiza-tion as Base Organiz-ation)</a>	recordTarget[pat]/patientRole/providerOrganization[manag_org]	providerOrganization <b>SHALL</b> conform to the template defined in <a href="#">providerOrganization (Base Organization)</a> .

## 7.2 participant (Patient contact)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Patient > <b>contact</b>	A contact party (e.g. guardian, partner, friend) for the patient.	Cardinality comes from linking element	<a href="#">BackboneElement</a>	<b>participant[pat_contact]</b>	The patient's contact <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>name (participant[pat_contact]/associatedEntity/associatedPerson/name), or</li> <li>telecom (participant[pat_contact]/associatedEntity/telecom), or</li> <li>address (participant[pat_contact]/associatedEntity/ad-dr), or</li> <li>organization (participant[pat_contact]/associatedEntity/scopingOrganization)</li> </ul>
				<b>participant[pat_contact]/@typeCode="IND"</b>	
				<b>participant[pat_contact]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>participant[pat_contact]/templateId/@root="1.2.36.1.2001.1001.102.101.100056"</b>	
				<b>participant[pat_contact]/templateId/@extension="1.0"</b>	
				<b>participant[pat_contact]/associatedEntity</b>	
				<b>participant[pat_contact]/associatedEntity/@classCode="CON"</b>	
				<b>participant[pat_contact]/associatedEntity/id</b>	The common pattern <b>id</b> <b>SHALL</b> be applied.
Patient > <b>contact &gt; relationship</b>	The nature of the relationship between the patient and the contact person.	0..*	<a href="#">CodeableConcept</a>	<b>participant[pat_contact]/associatedEntity/associatedPerson/ext:personalRelationship</b>	The common pattern <b>Personal Relationship</b> <b>SHALL</b> be applied.  ext:personalRelationship/ext:code/originalText or ext:personalRelationship/ext:code/@displayName <b>SHALL</b> be included.  ext:personalRelationship/ext:code <a href="#">Contact Relationship Type (extensible)</a>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Patient > contact > name	A name associated with the contact person.	0..1	<a href="#">HumanName</a> as Base HumanName	participant[pat_contact]/associatedEntity/associatedPerson/ <b>name</b>	The model Base HumanName is not applied to this CDA schema element.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Patient > contact > telecom	A contact detail for the person, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	participant[pat_contact]/associatedEntity/ <b>telecom</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Patient > contact > address	Address for the contact person.	0..1	<a href="#">Address</a>	participant[pat_contact]/associatedEntity/ <b>addr</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > contact > gender	Administrative Gender - the gender that the contact person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	participant[pat_contact]/associatedEntity/associatedPerson/ <b>ext:administrativeGenderCode</b>	The common pattern <a href="#">code</a> SHALL be applied. <a href="#">AdministrativeGender (required)</a>
Patient > contact > organization	Organization on behalf of which the contact is acting or for which the contact is working.	0..1	<a href="#">Reference(Organiza-tion as Base Organiza-tion)</a>	participant[pat_contact]/associatedEntity/ <b>scopingOrganization</b> participant[pat_contact]/associatedEntity/scopingOrganization/@classCode="ORG"	contact > organization template is not currently defined.
Patient > contact > period	The period during which this contact person or organization is valid to be contacted relating to this patient.	0..1	<a href="#">Period</a>	n/a	This logical element has no mapping to CDA.

## 7.3 participant (generalPractitioner Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>		Context: /ClinicalDocument/			
Organization	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	participant[gen_prac_org]	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (participant[gen_prac_org]/associatedEntity/scopingOrganization/ext:asEntityIdentifier), or</li> <li>• name (participant[gen_prac_org]/associatedEntity/scopingOrganization/name)</li> </ul>
				participant[gen_prac_org]/@typeCode="PART"	
				participant[gen_prac_org]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				participant[gen_prac_org]/templateId/@root="1.2.36.1.2001.1001.102.101.100036"	
				participant[gen_prac_org]/templateId/@extension="1.0"	
				participant[gen_prac_org]/functionCode/@code="PCP"	
				participant[gen_prac_org]/associatedEntity	
				participant[gen_prac_org]/associatedEntity/@classCode="PROV"	
				participant[gen_prac_org]/associatedEntity/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	participant[gen_prac_org]/associatedEntity/scopingOrganization/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	participant[gen_prac_org]/associatedEntity/code	In CDA the maximum occurrences of associatedEntity/code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code</b> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	participant[gen_prac_org]/associatedEntity/scopingOrganization/name	In CDA name and alias are represented by scopingOrganization/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	participant[gen_prac_org]/associatedEntity/scopingOrganization/name	In CDA name and alias are represented by scopingOrganization/name.
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	participant[gen_prac_org]/associatedEntity/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	participant[gen_prac_org]/associatedEntity/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organiza-tion as Base Organiza-tion)</a>	participant[gen_prac_org]/associatedEntity/scopingOrganization/asOrganizationPartOf participant[gen_prac_org]/associatedEntity/scopingOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization SHALL conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>				Context: /ClinicalDocument/	
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 7.4 participant (generalPractitioner Base Practitioner)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>					
Practitioner	A person who is directly or indirectly involved in the provisioning of healthcare.	Cardinality comes from linking element	<a href="#">DomainResource</a>	Context: /ClinicalDocument/	
				participant[gen_prac_prac]	The practitioner <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:asEntityIdentifier), or</li> <li>• name (participant[gen_prac_prac]/associatedEntity/associatedPerson/name)</li> </ul>
				participant[gen_prac_prac]/@typeCode="PART"	
				participant[gen_prac_prac]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				participant[gen_prac_prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100037"	
				participant[gen_prac_prac]/templateId/@extension="1.0"	
				participant[gen_prac_prac]/functionCode/@code="PCP"	
				participant[gen_prac_prac]/associatedEntity	
				participant[gen_prac_prac]/associatedEntity/@classCode="PROV"	
				participant[gen_prac_prac]/associatedEntity/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
				participant[gen_prac_prac]/associatedEntity/code	This CDA schema element <b>SHALL</b> be interpreted as optional.  The common pattern <b>code</b> <b>SHALL</b> be applied.  <a href="#">Australian and New Zealand Standard Classification of Occupations (preferred)</a>
Practitioner > identifier	An identifier that applies to this person in this role.	0..*	<a href="#">Identifier</a>	participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Practitioner > active	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Practitioner > name	The name(s) associated with the practitioner.	0..*	<a href="#">HumanName</a> as Base HumanName	participant[gen_prac_prac]/associatedEntity/associatedPerson/name	The model Base HumanName is not applied to this CDA schema element.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > <b>telecom</b>	A contact detail for the practitioner, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	participant[gen_prac_prac]/associatedEntity/telecom	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Practitioner > <b>address</b>	Address(es) of the practitioner that are not role specific (typically home address). Work addresses are not typically entered in this property as they are usually role dependent.	0..*	<a href="#">Address</a>	participant[gen_prac_prac]/associatedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Practitioner > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:administrativeGenderCode	The common pattern <a href="#">code</a> <b>SHALL</b> be applied. <a href="#">AdministrativeGender (required)</a>
Practitioner > <b>birthDate</b>	The date of birth for the practitioner.	0..1	<a href="#">date</a>	participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:birthTime	
Practitioner > <b>qualification</b>	Qualifications obtained by training and certification.	0..*	<a href="#">BackboneElement</a>	See: instantiation choices	<p>It is possible that the qualification may be able to be captured as a complex structure or as a text list.</p> <p><b>instantiation choices:</b></p> <p>If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as ext:Qualifications/@classCode="QUAL". See <a href="#">&lt;Qualification&gt;</a> for available attributes.</p> <p>If more information can be captured than a narrative list then qualification is expected to be instantiated as ext:coverage2[prac_qual] and <b>SHALL</b> conform to the template defined in <a href="#">ext:coverage (Practitioner qualification)</a>.</p>
Practitioner > <b>communication</b>	A language the practitioner is able to use in patient communication.	0..*	<a href="#">CodeableConcept</a>	participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:languageCommunication	The common pattern <a href="#">Language Communication</a> <b>SHALL</b> be applied.

## 7.5 author (PractitionerRole with Practitioner with Mandatory Identifier)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: /ClinicalDocument/	
PractitionerRole	A specific set of Roles/Locations/specialties/services that a practitioner may perform at an organization for a period of time.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<a href="#">author[prac_rol]</a>	The use of templateId signals the imposition of a set of template-defined constraints.
				<a href="#">author[prac_rol]/templateId</a>	
				<a href="#">author[prac_rol]/templateId/@root="1.2.36.1.2001.1001.102.101.100006"</a>	
				<a href="#">author[prac_rol]/templateId/@extension="1.0"</a>	
				<a href="#">author[prac_rol]/assignedAuthor</a>	The common pattern <a href="#">id</a> <b>SHALL</b> be applied.
				<a href="#">author[prac_rol]/assignedAuthor/id</a>	
PractitionerRole > <a href="#">identifier</a>	Business identifiers for practitioner in a role.	0..*	<a href="#">Identifier</a>	<a href="#">author[prac_rol]/assignedAuthor/assignedPerson/ext:asEntityIdentifier</a>	In CDA the identifier for both PractitionerRole and Practitioner for an author participation are included in assignedPerson/ext:asEntityIdentifier.  When sending to the My Health Record, an HPI-I is expected.  Cardinality of ext:asEntityIdentifier <b>SHALL</b> be interpreted as 1..*.  The common pattern <a href="#">Entity Identifier</a> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
PractitionerRole > <a href="#">active</a>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <a href="#">period</a>	The period during which the person is authorized to act as a practitioner in these role(s) for the organization.	0..1	<a href="#">Period</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <a href="#">practitioner</a>	Practitioner that is able to provide the defined services for the organization.	1..1	<a href="#">Reference(Practitioner as Practitioner with Mandatory Identifier)</a>	<a href="#">author[prac_rol]/assignedAuthor/assignedPerson</a>	assignedPerson <b>SHALL</b> conform to the template defined in <a href="#">assignedPerson (Practitioner with Mandatory Identifier)</a> .
PractitionerRole > <a href="#">organization</a>	The organization where the Practitioner performs the roles associated.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	<a href="#">author[prac_rol]/assignedAuthor/representedOrganization</a>	representedOrganization <b>SHALL</b> conform to the template defined in <a href="#">representedOrganization (Base Organization)</a> .

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments																		
PractitionerRole > code	Roles which this practitioner is authorized to perform for the organization.	0..*	<a href="#">CodeableConcept</a>	author[prac_rol]/assignedAuthor/code	<p>In CDA the maximum occurrences of assignedAuthor/code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.</p> <p>A code equivalent to the provider's professional role, e.g. 159011008  Community pharmacist  is expected.</p> <p>The common pattern <b>code SHALL</b> be applied.</p> <p>code/originalText or code/@displayName <b>SHALL</b> be included.</p> <p><a href="#">Australian and New Zealand Standard Classification of Occupations (preferred)</a> or <a href="#">Practitioner Role (preferred)</a><sup>1</sup></p>																		
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/ See <a href="#">Administrative Observations</a> .																		
PractitionerRole > specialty					<table border="1"> <tr><td><b>entry[specialty]</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation/@classCode="OBS"</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation/@moodCode="EVN"</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation/code</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation/code/@code="103.16028"</b></td><td></td></tr> <tr><td><b>entry[specialty]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</b></td><td>NCTIS Data Components</td></tr> <tr><td><b>entry[specialty]/observation/code/@displayName</b></td><td>displayName <b>SHOULD</b> be "Specialty".</td></tr> <tr><td><b>entry[close_gap]/observation/value</b></td><td> <p>The common pattern <b>code SHALL</b> be applied.</p> <p>value/@xsi:type <b>SHALL</b> be "CD".</p> <p>value/originalText or value/@displayName <b>SHALL</b> be included.</p> <p><a href="#">Practitioner Role (preferred)</a></p> </td></tr> </table>	<b>entry[specialty]</b>		<b>entry[specialty]/observation</b>		<b>entry[specialty]/observation/@classCode="OBS"</b>		<b>entry[specialty]/observation/@moodCode="EVN"</b>		<b>entry[specialty]/observation/code</b>		<b>entry[specialty]/observation/code/@code="103.16028"</b>		<b>entry[specialty]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</b>	NCTIS Data Components	<b>entry[specialty]/observation/code/@displayName</b>	displayName <b>SHOULD</b> be "Specialty".	<b>entry[close_gap]/observation/value</b>	<p>The common pattern <b>code SHALL</b> be applied.</p> <p>value/@xsi:type <b>SHALL</b> be "CD".</p> <p>value/originalText or value/@displayName <b>SHALL</b> be included.</p> <p><a href="#">Practitioner Role (preferred)</a></p>
<b>entry[specialty]</b>																							
<b>entry[specialty]/observation</b>																							
<b>entry[specialty]/observation/@classCode="OBS"</b>																							
<b>entry[specialty]/observation/@moodCode="EVN"</b>																							
<b>entry[specialty]/observation/code</b>																							
<b>entry[specialty]/observation/code/@code="103.16028"</b>																							
<b>entry[specialty]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</b>	NCTIS Data Components																						
<b>entry[specialty]/observation/code/@displayName</b>	displayName <b>SHOULD</b> be "Specialty".																						
<b>entry[close_gap]/observation/value</b>	<p>The common pattern <b>code SHALL</b> be applied.</p> <p>value/@xsi:type <b>SHALL</b> be "CD".</p> <p>value/originalText or value/@displayName <b>SHALL</b> be included.</p> <p><a href="#">Practitioner Role (preferred)</a></p>																						
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/																		
PractitionerRole > location	The location(s) at which this practitioner provides care.	0..*	<a href="#">Reference(Location)</a>	n/a	In CDA the location where care is provided during an encounter is included in ClinicalDocument/componentOf/enccompassingEncounter/location/HealthCareFacility.																		
PractitionerRole > healthcareService	The list of healthcare services that this worker provides for this role's Organization/Location(s).	0..*	<a href="#">Reference(Health-careService)</a>	n/a	This logical element has no mapping to CDA.																		

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > <b>telecom</b>	Contact details that are specific to the role/location/service.	0..*	<a href="#">ContactPoint</a>	author[prac_rol]/assignedAuthor/telecom	In CDA the telecom for both PractitionerRole and Practitioner for an author participation are included in assignedAuthor/telecom.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
PractitionerRole > <b>availableTime</b>	A collection of times that the Service Site is available.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>notAvailable</b>	The HealthcareService is not available during this period of time due to the provided reason.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>availabilityExceptions</b>	A description of site availability exceptions, e.g. public holiday availability. Succinctly describing all possible exceptions to normal site availability as details in the available Times and not available Times.	0..1	<a href="#">string</a>	n/a	This logical element has no mapping to CDA.

<sup>1</sup>Note: The source representation of this terminology binding on code in PractitionerRole with Practitioner with Mandatory Identifier [DH2019h] is as an optional slice on the [coding](#) part of the code element. In the representation of the model presented in this specification it is normalised as a set of preferred bindings.

## 7.6 custodian (Organization with Mandatory Identifier)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: /ClinicalDocument/	
<b>Organization</b>	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>custodian[org]</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>custodian[org]/templateId</b>	
				<b>custodian[org]/templateId/@root="1.2.36.1.2001.1001.102.101.10002"</b>	
				<b>custodian[org]/templateId/@extension="1.0"</b>	
				<b>custodian[org]/assignedCustodian</b>	
				<b>custodian[org]/assignedCustodian/representedCustodianOrganization</b>	
				<b>custodian[org]/assignedCustodian/representedCustodianOrganization/id</b>	
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	1..*	<a href="#">Identifier</a>	custodian[org]/assignedCustodian/representedCustodianOrganization/ext:asEntityIdentifier	The common pattern <b>id SHALL</b> be applied.  When sending to the My Health Record, an HPI-O is expected.  The common pattern <b>Entity Identifier SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	custodian[org]/assignedCustodian/representedCustodianOrganization/ <b>name</b>	In CDA name and alias are represented by representedCustodianOrganization/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	custodian[org]/assignedCustodian/representedCustodianOrganization/ <b>telecom</b>	In CDA the maximum occurrences of representedCustodianOrganization/telecom is 1. Although the model indicates that telecom is 0..*, in a CDA implementation this is limited to 0..1.  telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> .  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	custodian[org]/assignedCustodian/representedCustodianOrganization/addr	<p>addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a>.</p> <p>In CDA the maximum occurrences of representedCustodianOrganization/addr is 1. Although the model indicates that address is 0..*, in a CDA implementation this is limited to 0..1.</p> <p>Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a>.</p>
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	n/a	This logical element has no mapping to CDA.
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <b>participant (Organization contact)</b> .

## 7.7 informationRecipient (Base Patient)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: /ClinicalDocument/	
Patient	Demographics and other administrative information about an individual receiving care or other health-related services.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informationRecipient[pat]	The patient <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>name (informationRecipient[pat]/intendedRecipient/informationRecipient/name), or</li> <li>identifier (informationRecipient[pat]/intendedRecipient/informationRecipient/ext:asEntityIdentifier)</li> </ul>
				informationRecipient[pat]/@typeCode	<a href="#">Information Recipient Type HL7 v3 (required)</a>
				informationRecipient[pat]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informationRecipient[pat]/templateId/@root="1.2.36.1.2001.1001.102.101.100022"	
				informationRecipient[pat]/templateId/@extension="1.0"	
				informationRecipient[pat]/intendedRecipient	
				informationRecipient[pat]/intendedRecipient/@classCode="ASSIGNED"	This CDA schema element attribute <b>SHALL</b> be interpreted as optional.
				informationRecipient[pat]/intendedRecipient/id	information-recipient (patient) is represented in CDA by an information recipient with the same id as the patient that is the subject of this document.  This id <b>SHALL</b> hold the same value as patientRole/id.  The common pattern <a href="#">id</a> <b>SHALL</b> be applied.
				informationRecipient[pat]/intendedRecipient/ext:code	
				informationRecipient[pat]/intendedRecipient/ext:code/@code="ONESELF"	
				informationRecipient[pat]/intendedRecipient/ext:code/@codeSystem="2.16.840.1.113883.5.111"	
				informationRecipient[pat]/intendedRecipient/informationRecipient	
Patient > birthPlace	The registered place of birth of the patient. A system may use the address.text if they don't store the birthPlace address in discrete elements.	0..1	<a href="#">Address</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthPlace/place/addr.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>indigenous-status</b>	National Health Data Dictionary (NHDD) based indigenous status for a patient.	0..1	<a href="#">Coding</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ethnicGroupCode.
Patient > <b>closing-the-gap-registration</b>	Indication for eligibility for the Closing the Gap program.	0..1	<a href="#">boolean</a>	n/a	Not mapped directly for this participant; this is implicit in entry[close_gap]/observation/value.
Patient > <b>patient-mothersMaidenName</b>	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	0..1	<a href="#">string</a>	n/a	Not mapped directly for this participant; this is implicit in entry[mothers_name]/observation/value.
Patient > <b>identifier</b>	An identifier for this patient.	0..*	<a href="#">Identifier</a>	informationRecipient[pat]/intendedRecipient/informationRecipient/ext:asEntityIdentifier	The common pattern <a href="#">Entity Identifier</a> SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Patient > <b>active</b>	Whether this patient record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>name</b>	A name associated with the individual.	0..*	<a href="#">HumanName</a> as Base HumanName	informationRecipient[pat]/intendedRecipient/informationRecipient/name	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Patient > <b>telecom</b>	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0..*	<a href="#">ContactPoint</a>	informationRecipient[pat]/intendedRecipient/telecom	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Patient > <b>gender</b>	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	informationRecipient[pat]/intendedRecipient/informationRecipient/ext:administrativeGenderCode	The common pattern <a href="#">code</a> SHALL be applied. <a href="#">AdministrativeGender (required)</a>
Patient > <b>birthDate</b>	The date of birth for the individual.	0..1	<a href="#">date</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthTime.
Patient > <b>deceased[x]</b>	Indicates if the individual is deceased or not. Deceased date accuracy indicator is optional.	0..1	<a href="#">boolean</a>   <a href="#">dateTime</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:deceasedTime or patientRole/patient/ext:deceasedInd.
Patient > <b>address</b>	Addresses for the individual.	0..*	<a href="#">Address</a>	informationRecipient[pat]/intendedRecipient/addr	When sending to the My Health Record, address is not expected to be sent. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > <b>maritalStatus</b>	This field contains a patient's most recent marital (civil) status.	0..1	<a href="#">CodeableConcept</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/maritalStatusCode.
Patient > <b>multipleBirth[x]</b>	Indicates whether the patient is part of a multiple (bool) or indicates the actual birth order (integer).	0..1	<a href="#">boolean</a>   <a href="#">integer</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:multipleBirthInd or patientRole/patient/multipleBirthOrderNumber.
Patient > <b>contact</b>	A contact party (e.g. guardian, partner, friend) for the patient.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>communication</b>	Languages which may be used to communicate with the patient about his or her health.	0..*	<a href="#">BackboneElement</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/languageCommunication.
Patient > <b>generalPractitioner</b>	Patient's nominated care provider.	0..*	<a href="#">Reference(<a href="#">Organization</a> as Base Organization <a href="#">Practitioner</a> as Base Practitioner)</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>managingOrganization</b>	Organization that is the custodian of the patient record.	0..1	<a href="#">Reference(<a href="#">Organization</a> as Base Organization)</a>	n/a	This logical element has no mapping to CDA.

## 7.8 informationRecipient (Base PractitionerRole)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements					Context: /ClinicalDocument/
PractitionerRole	A specific set of Roles/Locations/specialties/services that a practitioner may perform at an organization for a period of time.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informationRecipient[prac_rol]	The practitioner role <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• practitioner role or practitioner identifier (informationRecipient[prac_rol]/intendedRecipient/informationRecipient[prac]/ext:asEntityIdentifier), or</li> <li>• practitioner name (informationRecipient[prac_rol]/intendedRecipient/informationRecipient[prac]/name)</li> </ul>
				informationRecipient[prac_rol]/@typeCode	<a href="#">Information Recipient Type HL7 v3 (required)</a>
				informationRecipient[prac_rol]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informationRecipient[prac_rol]/templateId/@root="1.2.36.1.2001.1001.102.101.100078"	
				informationRecipient[prac_rol]/templateId/@extension="1.0"	
				informationRecipient[prac_rol]/intendedRecipient	
				informationRecipient[prac_rol]/intendedRecipient/@classCode="ASSIGNED"	This CDA schema element attribute <b>SHALL</b> be interpreted as optional.
				informationRecipient[prac_rol]/intendedRecipient/id	The common pattern <a href="#">id</a> <b>SHALL</b> be applied.
PractitionerRole > <a href="#">identifier</a>	Business identifiers for practitioner in a role.	0..*	<a href="#">Identifier</a>	informationRecipient[prac_rol]/intendedRecipient/informationRecipient/ext:asEntityIdentifier	In CDA the identifier for both PractitionerRole and Practitioner for an informationRecipient participation are included in intendedRecipient/informationRecipient/ext:asEntityIdentifier.  The common pattern <a href="#">Entity Identifier</a> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
PractitionerRole > <a href="#">period</a>	The period during which the person is authorized to act as a practitioner in these role(s) for the organization.	0..1	<a href="#">Period</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <a href="#">practitioner</a>	Practitioner that is able to provide the defined services for the organisation.	0..1	<a href="#">Reference(Practitioner as Base Practitioner)</a>	informationRecipient[prac_rol]/intendedRecipient/informationRecipient	informationRecipient <b>SHALL</b> conform to the template defined in <a href="#">informationRecipient (Base Practitioner)</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > organization	The organization where the Practitioner performs the roles associated.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	informationRecipient[prac_rol]/intendedRecipient/receivedOrganization	receivedOrganization <b>SHALL</b> conform to the template defined in <a href="#">receivedOrganization (Base Organization)</a> .
PractitionerRole > code	Roles which this practitioner is authorized to perform for the organization.	0..*	<a href="#">CodeableConcept</a>	informationRecipient[prac_rol]/intendedRecipient/ext:code	In CDA the maximum occurrences of intendedRecipient/ext:code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  <a href="#">Australian and New Zealand Standard Classification of Occupations (preferred)</a> or <a href="#">Practitioner Role (preferred)</a> <sup>1</sup>
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/ See <a href="#">Administrative Observations</a> .
PractitionerRole > specialty	Specific specialty of the practitioner.	0..*	<a href="#">CodeableConcept</a>	<b>entry[specialty]</b>	
				<b>entry[specialty]/observation</b>	
				<b>entry[specialty]/observation/@classCode="OBS"</b>	
				<b>entry[specialty]/observation/@moodCode="EVN"</b>	
				<b>entry[specialty]/observation/code</b>	
				<b>entry[specialty]/observation/code/@code="103.16028"</b>	
				<b>entry[specialty]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</b>	NCTIS Data Components
				<b>entry[specialty]/observation/code/@displayName</b>	displayName <b>SHOULD</b> be "Specialty".
				<b>entry[close_gap]/observation/value</b>	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  value/@xsi:type <b>SHALL</b> be "CD".  value/originalText or value/@displayName <b>SHALL</b> be included.  <a href="#">Practitioner Role (preferred)</a>
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
PractitionerRole > location	The location(s) at which this practitioner provides care.	0..*	<a href="#">Reference(Location)</a>	n/a	In CDA the location where care is provided during an encounter is included in ClinicalDocument/componentOf/encompassingEncounter/location/HealthCareFacility.
PractitionerRole > healthcareService	The list of healthcare services that this worker provides for this role's Organization/Location(s).	0..*	<a href="#">Reference(HealthcareService)</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > telecom	Contact details that are specific to the role/location/service.	0..*	<a href="#">ContactPoint</a>	informationRecipient[prac_rol]/intendedRecipient/telecom	In CDA the telecom for both PractitionerRole and Practitioner for an informationRecipient participation are included in intendedRecipient/telecom.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > <b>availableTime</b>	A collection of times that the Service Site is available.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>notAvailable</b>	The HealthcareService is not available during this period of time due to the provided reason.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>availabilityExceptions</b>	A description of site availability exceptions, e.g. public holiday availability. Succinctly describing all possible exceptions to normal site availability as details in the available Times and not available Times.	0..1	<a href="#">string</a>	n/a	This logical element has no mapping to CDA.

<sup>1</sup>Note: The source representation of this terminology binding on code in [DH2019h] is as an optional slice on the [coding](#) part of the code element. In the representation of the model presented in this specification it is normalised as a set of preferred bindings.

## 7.9 informationRecipient (Base RelatedPerson)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: /ClinicalDocument/	
RelatedPerson	Information about a person that is involved in the care for a patient, but who is not the target of healthcare, nor has a formal responsibility in the care process.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informationRecipient[rel_per]	The related person <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (informationRecipient[rel_per]/intendedRecipient/informationRecipient/name), or</li> <li>• identifier (informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:asEntityIdentifier), or</li> <li>• relationship (informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:personalRelationship)</li> </ul>
				informationRecipient[rel_per]/@typeCode	<a href="#">Information Recipient Type HL7 v3 (required)</a>
				informationRecipient[rel_per]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informationRecipient[rel_per]/templateId/@root="1.2.36.1.2001.1001.102.101.100021"	
				informationRecipient[rel_per]/templateId/@extension="1.0"	
				informationRecipient[rel_per]/intendedRecipient	
				informationRecipient[rel_per]/intendedRecipient/@classCode="ASSIGNED"	This CDA schema element attribute <b>SHALL</b> be interpreted as optional.
				informationRecipient[rel_per]/intendedRecipient/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
RelatedPerson > identifier	Identifier for a person within a particular scope.	0..*	<a href="#">Identifier</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
RelatedPerson > <b>active</b>	Whether this related person record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
RelatedPerson > <b>patient</b>	The patient this person is related to.	1..1	<a href="#">Reference(Patient) as Base Patient</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole.
RelatedPerson > <b>relationship</b>	The nature of the relationship between a patient and the related person.	0..1	<a href="#">CodeableConcept</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/ informationRecipient/ext:personalRelationship	The common pattern <a href="#">Personal Relationship</a> <b>SHALL</b> be applied.  ext:personalRelationship/ext:code/originalText or ext:personalRelationship/ext:code/@displayName <b>SHALL</b> be included.  ext:personalRelationship/ext:code <a href="#">Related Person Relationship Type (extensible)</a>
RelatedPerson > <b>name</b>	A name associated with the person.	0..*	<a href="#">HumanName as Base HumanName</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/name	The model Base HumanName is not applied to this CDA schema element.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
RelatedPerson > <b>telecom</b>	A contact detail for the person, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	informationRecipient[rel_per]/intendedRecipient/telecom	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
RelatedPerson > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:administrativeGenderCode	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  <a href="#">AdministrativeGender (required)</a>
RelatedPerson > <b>birthDate</b>	The date on which the related person was born.	0..1	<a href="#">date</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:birthTime	The common pattern <a href="#">time</a> <b>SHALL</b> be applied.
RelatedPerson > <b>address</b>	Address where the related person can be contacted or visited.	0..*	<a href="#">Address</a>	informationRecipient[rel_per]/intendedRecipient/addr	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
RelatedPerson > <b>period</b>	The period of time that this relationship is considered to be valid. If there are no dates defined, then the interval is unknown.	0..1	<a href="#">Period</a>	informationRecipient[rel_per]/intendedRecipient/informationRecipient/ext:personalRelationship[related]/ext:effectiveTime	The common pattern <a href="#">time</a> <b>SHALL</b> be applied.

## 7.10 informationRecipient (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: /ClinicalDocument/	
<b>Organization</b>	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informationRecipient[org]/	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (informationRecipient[org]/intendedRecipient/receivedOrganization/ext:asEntityIdentifier), or</li> <li>• name (informationRecipient[org]/intendedRecipient/receivedOrganization/name)</li> </ul>
				informationRecipient[org]/@typeCode	<a href="#">Information Recipient Type HL7 v3 (required)</a>
				informationRecipient[org]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informationRecipient[org]/templateId/@root="1.2.36.1.2001.1001.102.101.100023"	
				informationRecipient[org]/templateId/@extension="1.0"	
				informationRecipient[org]/intendedRecipient	This CDA schema element attribute <b>SHALL</b> be interpreted as optional.
				informationRecipient[org]/intendedRecipient/@classCode="ASSIGNED"	
				informationRecipient[org]/intendedRecipient/id	
				informationRecipient[org]/intendedRecipient/receivedOrganization	
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	informationRecipient[org]/intendedRecipient/receivedOrganization/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	informationRecipient[org]/intendedRecipient/ext:code	In CDA the maximum occurrences of intendedRecipient/ext:code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code</b> <b>SHALL</b> be applied.  ext:code/originalText or ext:code/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	informationRecipient[org]/intendedRecipient/receivedOrganization/name	In CDA name and alias are represented by receivedOrganization/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	informationRecipient[org]/intendedRecipient/receivedOrganization/name	In CDA name and alias are represented by receivedOrganization/name.
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	informationRecipient[org]/intendedRecipient/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	informationRecipient[org]/intendedRecipient/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	informationRecipient[org]/intendedRecipient/receivedOrganization/asOrganizationPartOf informationRecipient[org]/intendedRecipient/receivedOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>				Context: /ClinicalDocument/	
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<a href="#">participant[org_contact]</a>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 7.11 informant (Base Patient)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>				Context: Comes from linking element	
Patient	Demographics and other administrative information about an individual receiving care or other health-related services.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informant[pat]	The patient <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>name (informant[pat]/assignedEntity/assignedPerson/name), or</li> <li>identifier (informant[pat]/assignedEntity/assignedPerson/ext:asEntityIdentifier)</li> </ul>
				informant[pat]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informant[pat]/templateId/@root="1.2.36.1.2001.1001.102.101.100051"	
				informant[pat]/templateId/@extension="1.0"	
				informant[pat]/assignedEntity	
				informant[pat]/assignedEntity/id	This id <b>SHALL</b> hold the same value as patientRole/id. The common pattern <b>id</b> <b>SHALL</b> be applied.
				informant[pat]/assignedEntity/code	
				informant[pat]/assignedEntity/code/@code="ONESELF"	
				informant[pat]/assignedEntity/code/@codeSystem="2.16.840.1.113883.5.111"	
				informant[pat]/assignedEntity/assignedPerson	
Patient > birthPlace	The registered place of birth of the patient. A system may use the address.text if they don't store the birthPlace address in discrete elements.	0..1	<a href="#">Address</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthplace/place/addr.
Patient > indigenous-status	National Health Data Dictionary (NHDD) based indigenous status for a patient.	0..1	<a href="#">Coding</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ethnicGroupCode.
Patient > closing-the-gap-registration	Indication for eligibility for the Closing the Gap program.	0..1	<a href="#">boolean</a>	n/a	Not mapped directly for this participant; this is implicit in entry[close_gap]/observation/value.
Patient > patient-mothersMaidenName	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	0..1	<a href="#">string</a>	n/a	Not mapped directly for this participant; this is implicit in entry[mothers_name]/observation/value.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>identifier</b>	An identifier for this patient.	0..*	<a href="#">Identifier</a>	informant[pat]/assignedEntity/assignedPerson/ <a href="#">ext:asEntityIdentifier</a>	The common pattern <a href="#">Entity Identifier</a> SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Patient > <b>active</b>	Whether this patient record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>name</b>	A name associated with the individual.	0..*	<a href="#">HumanName</a> as Base HumanName	informant[pat]/assignedEntity/assignedPerson/ <a href="#">name</a>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Patient > <b>telecom</b>	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0..*	<a href="#">ContactPoint</a>	informant[pat]/assignedEntity/ <a href="#">telecom</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Patient > <b>gender</b>	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	informant[pat]/assignedEntity/assignedPerson/ <a href="#">ext:administrativeGenderCode</a>	The common pattern <a href="#">code</a> SHALL be applied. <a href="#">AdministrativeGender (required)</a>
Patient > <b>birthDate</b>	The date of birth for the individual.	0..1	<a href="#">date</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthTime.
Patient > <b>deceased[x]</b>	Indicates if the individual is deceased or not. Deceased date accuracy indicator is optional.	0..1	<a href="#">boolean</a>   <a href="#">dateTime</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:deceasedTime or patientRole/patient/ext:deceasedInd.
Patient > <b>address</b>	Addresses for the individual.	0..*	<a href="#">Address</a>	informant[pat]/assignedEntity/ <a href="#">addr</a>	When sending to the My Health Record, address is not expected to be sent. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > <b>maritalStatus</b>	This field contains a patient's most recent marital (civil) status.	0..1	<a href="#">CodeableConcept</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/maritalStatusCode.
Patient > <b>multipleBirth[x]</b>	Indicates whether the patient is part of a multiple (bool) or indicates the actual birth order (integer).	0..1	<a href="#">boolean</a>   <a href="#">integer</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:multipleBirthInd or patientRole/patient/multipleBirthOrderNumber.
Patient > <b>contact</b>	A contact party (e.g. guardian, partner, friend) for the patient.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>communication</b>	Languages which may be used to communicate with the patient about his or her health.	0..*	<a href="#">BackboneElement</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/languageCommunication.
Patient > <b>generalPractitioner</b>	Patient's nominated care provider.	0..*	<a href="#">Reference(Organization as Base Organization   Practitioner as Base Practitioner)</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>managingOrganization</b>	Organization that is the custodian of the patient record.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	n/a	This logical element has no mapping to CDA.

## 7.12 informant (Base RelatedPerson)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
<b>RelatedPerson</b>	Information about a person that is involved in the care for a patient, but who is not the target of healthcare, nor has a formal responsibility in the care process.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informant[rel_per]	The related person <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (informant[rel_per]/relatedEntity/relatedPerson/name), or</li> <li>• identifier (informant[rel_per]/relatedEntity/relatedPerson/ext:asEntityIdentifier), or</li> <li>• relationship (informant[rel_per]/relatedEntity/relatedPerson/ext:personalRelationship)</li> </ul>
				informant[rel_per]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informant[rel_per]/templateId/@root="1.2.36.1.2001.1001.102.101.100052"	
				informant[rel_per]/templateId/@extension="1.0"	
				informant[rel_per]/relatedEntity	
				informant[rel_per]/relatedEntity/@classCode="PRS"	
				informant[rel_per]/relatedEntity/code	This CDA schema element <b>SHALL</b> be interpreted as optional. The common pattern <b>code</b> <b>SHALL</b> be applied.
<b>RelatedPerson &gt; identifier</b>	Identifier for a person within a particular scope.	0..*	<a href="#">Identifier</a>	informant[rel_per]/relatedEntity/relatedPerson/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
				n/a	This logical element has no mapping to CDA.
<b>RelatedPerson &gt; active</b>	Whether this related person record is in active use.	0..1	<a href="#">boolean</a>	n/a	
<b>RelatedPerson &gt; patient</b>	The patient this person is related to.	1..1	<a href="#">Reference(Patient as Base Patient)</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient.
<b>RelatedPerson &gt; relationship</b>	The nature of the relationship between a patient and the related person.	0..1	<a href="#">CodeableConcept</a>	informant[rel_per]/relatedEntity/relatedPerson/ext:personalRelationship	The common pattern <b>Personal Relationship</b> <b>SHALL</b> be applied. ext:personalRelationship/ext:code/originalText or ext:personalRelationship/ext:code/@displayName <b>SHALL</b> be included. ext:personalRelationship/ext:code <a href="#">Related Person Relationship Type (extensible)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
RelatedPerson > <b>name</b>	A name associated with the person.	0..*	<a href="#">HumanName</a> as Base HumanName	informant[rel_per]/relatedEntity/relatedPerson/ <b>name</b>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
RelatedPerson > <b>telecom</b>	A contact detail for the person, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	informant[rel_per]/relatedEntity/ <b>telecom</b>	
RelatedPerson > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	informant[rel_per]/relatedEntity/relatedPerson/ <a href="#">ext:administrativeGenderCode</a>	The common pattern <a href="#">code SHALL</a> be applied. <a href="#">AdministrativeGender (required)</a>
RelatedPerson > <b>birthDate</b>	The date on which the related person was born.	0..1	<a href="#">date</a>	informant[rel_per]/relatedEntity/relatedPerson/ <a href="#">ext:birthTime</a>	The common pattern <a href="#">time SHALL</a> be applied.
RelatedPerson > <b>address</b>	Address where the related person can be contacted or visited.	0..*	<a href="#">Address</a>	informant[rel_per]/relatedEntity/ <a href="#">addr</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address   Address as AU Base Address</a> .
RelatedPerson > <b>period</b>	The period of time that this relationship is considered to be valid. If there are no dates defined, then the interval is unknown.	0..1	<a href="#">Period</a>	informant[rel_per]/relatedEntity/relatedPerson/ <a href="#">ext:personalRelationship[related]/ext:effectiveTime</a>	The common pattern <a href="#">time SHALL</a> be applied.

## 7.13 informant (Base Practitioner)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Practitioner	A person who is directly or indirectly involved in the provisioning of healthcare.	Cardinality comes from linking element	<a href="#">DomainResource</a>	informant[prac]	The practitioner <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (informant[prac]/assignedEntity/assignedPerson/ext:asEntityIdentifier), or</li> <li>• name (informant[prac]/assignedEntity/assignedPerson/name)</li> </ul>
				informant[prac]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				informant[prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100053"	
				informant[prac]/templateId/@extension="1.0"	
				informant[prac]/assignedEntity	
				informant[prac]/assignedEntity/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
				informant[prac]/assignedEntity/code	This CDA schema element <b>SHALL</b> be interpreted as optional. The common pattern <b>code</b> <b>SHALL</b> be applied. <a href="#">Australian and New Zealand Standard Classification of Occupations (preferred)</a>
				informant[prac]/assignedEntity/assignedPerson	
Practitioner > <b>identifier</b>	An identifier that applies to this person in this role.	0..*	<a href="#">Identifier</a>	informant[prac]/assignedEntity/assignedPerson/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Practitioner > <b>active</b>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Practitioner > <b>name</b>	The name(s) associated with the practitioner.	0..*	<a href="#">HumanName</a> as Base HumanName	informant[prac]/assignedEntity/assignedPerson/name	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Practitioner > <b>telecom</b>	A contact detail for the practitioner, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	informant[prac]/assignedEntity/telecom	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > <b>address</b>	Address(es) of the practitioner that are not role specific (typically home address). Work addresses are not typically entered in this property as they are usually role dependent.	0..*	<a href="#">Address</a>	informant[prac]/assignedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Practitioner > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	informant[prac]/assignedEntity/assignedPerson/ext:administrativeGenderCode	The common pattern <b>code SHALL</b> be applied. <a href="#">AdministrativeGender (required)</a>
Practitioner > <b>birthDate</b>	The date of birth for the practitioner.	0..1	<a href="#">date</a>	informant[prac]/assignedEntity/assignedPerson/ext:birthTime	The common pattern <b>time SHALL</b> be applied.
Practitioner > <b>qualification</b>	Qualifications obtained by training and certification.	0..*	<a href="#">BackboneElement</a>	See: instantiation choices	<p>It is possible that the qualification may be able to be captured as a complex structure or as a text list.</p> <p><b>instantiation choices:</b></p> <p>If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as ext:Qualifications/@classCode="QUAL". See <a href="#">&lt;Qualification&gt;</a> for available attributes.</p> <p>If more information can be captured than a narrative list then qualification is expected to be instantiated as ext:coverage2[prac_qual] and <b>SHALL</b> conform to the template defined in <a href="#">ext:coverage (Practitioner qualification)</a>.</p>
Practitioner > <b>communication</b>	A language the practitioner is able to use in patient communication.	0..*	<a href="#">CodeableConcept</a>	informant[prac]/assignedEntity/assignedPerson/ext:languageCommunication	The common pattern <a href="#">Language Communication</a> <b>SHALL</b> be applied.

## 7.14 author (Base Patient)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Patient	Demographics and other administrative information about an individual receiving care or other health-related services.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>author[pat]</b>	The patient <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>name (<b>author[pat]/assignedAuthor/assignedPerson/name</b>), or</li> <li>identifier (<b>author[pat]/assignedAuthor/assignedPerson/ext:asEntityIdentifier</b>)</li> </ul>
				<b>author[pat]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>author[pat]/templateId/@root="1.2.36.1.2001.1001.102.101.100084"</b>	
				<b>author[pat]/templateId/@extension="1.0"</b>	
				<b>author[pat]/assignedAuthor/id</b>	The common pattern <b>id</b> <b>SHALL</b> be applied.
				<b>author[pat]/assignedAuthor/code</b>	
				<b>author[pat]/assignedAuthor/code/@code="ONESELF"</b>	
				<b>author[pat]/assignedAuthor/code/@codeSystem="2.16.840.1.113883.5.111"</b>	
				<b>author[pat]/assignedAuthor/assignedPerson</b>	
Patient > <b>birthPlace</b>	The registered place of birth of the patient. A system may use the address.text if they don't store the birthPlace address in discrete elements.	0..1	<a href="#">Address</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthPlace/place/addr.
Patient > <b>indigenous-status</b>	National Health Data Dictionary (NHDD) based indigenous status for a patient.	0..1	<a href="#">Coding</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ethnicGroupCode.
Patient > <b>closing-the-gap-registration</b>	Indication for eligibility for the Closing the Gap program.	0..1	<a href="#">boolean</a>	n/a	Not mapped directly for this participant; this is implicit in entry[close_gap]/observation/value.
Patient > <b>patient-mothersMaiden-Name</b>	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	0..1	<a href="#">string</a>	n/a	Not mapped directly for this participant; this is implicit in entry[mothers_name]/observation/value.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>identifier</b>	An identifier for this patient.	0..*	<a href="#">Identifier</a>	author[pat]/assignedAuthor/assignedPerson/ <a href="#">ext:asEntityIdentifier</a>	The value of one identifier <b>SHALL</b> be an Australian IHI.  The common pattern <a href="#">Entity Identifier</a> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Patient > <b>active</b>	Whether this patient record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>name</b>	A name associated with the individual.	0..*	<a href="#">HumanName</a> as Base HumanName	author[pat]/assignedAuthor/assignedPerson/ <a href="#">name</a>	The model Base HumanName is not applied to this CDA schema element.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base Human-Name</a> .
Patient > <b>telecom</b>	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0..*	<a href="#">ContactPoint</a>	author[pat]/assignedAuthor/ <a href="#">telecom</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Patient > <b>gender</b>	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	author[pat]/assignedAuthor/assignedPerson/ <a href="#">ext:administrativeGenderCode</a>	The common pattern <a href="#">code</a> <b>SHALL</b> be applied. <a href="#">AdministrativeGender (required)</a>
Patient > <b>birthDate</b>	The date of birth for the individual.	0..1	<a href="#">date</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthTime.
Patient > <b>deceased[x]</b>	Indicates if the individual is deceased or not. Deceased date accuracy indicator is optional.	0..1	<a href="#">boolean</a>   <a href="#">dateTime</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:deceasedTime or patientRole/patient/ext:deceasedInd.
Patient > <b>address</b>	Addresses for the individual.	0..*	<a href="#">Address</a>	author[pat]/assignedAuthor/ <a href="#">addr</a>	When sending to the My Health Record, address is not expected to be sent.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Patient > <b>maritalStatus</b>	This field contains a patient's most recent marital (civil) status.	0..1	<a href="#">CodeableConcept</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/maritalStatusCode.
Patient > <b>multipleBirth[x]</b>	Indicates whether the patient is part of a multiple (bool) or indicates the actual birth order (integer).	0..1	<a href="#">boolean</a>   <a href="#">integer</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:multipleBirthInd or patientRole/patient/multipleBirthOrderNumber.
Patient > <b>contact</b>	A contact party (e.g. guardian, partner, friend) for the patient.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
Patient > <b>communication</b>	Languages which may be used to communicate with the patient about his or her health.	0..*	<a href="#">BackboneElement</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/languageCommunication.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Patient > <b>generalPractitioner</b>	Patient's nominated care provider.	0..*	<a href="#">Reference(</a> <a href="#">Organization</a> as Base Organization <a href="#">Practitioner</a> as Base Practitioner)	n/a	This logical element has no mapping to CDA.
Patient > <b>managingOrganization</b>	Organization that is the custodian of the patient record.	0..1	<a href="#">Reference(Organization</a> as Base Organization)	n/a	This logical element has no mapping to CDA.

## 7.15 author (Base PractitionerRole)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements					Context: Comes from linking elements
<b>PractitionerRole</b>	A specific set of Roles/Locations/specialties/services that a practitioner may perform at an organization for a period of time.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>author[prac_rol]</b>	The practitioner role <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• practitioner role or practitioner identifier (<b>author[prac_rol]/assignedAuthor/assignedPerson[prac]/ext:asEntityIdentifier</b>), or</li> <li>• practitioner name (<b>author[prac_rol]/assignedAuthor/assignedPerson[prac]/name</b>)</li> </ul>
				<b>author[prac_rol]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>author[prac_rol]/templateId/@root="1.2.36.1.2001.1001.102.101.100085"</b>	
				<b>author[prac_rol]/templateId/@extension="1.0"</b>	
				<b>author[prac_rol]/assignedAuthor</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>author[prac_rol]/assignedAuthor/id</b>	
PractitionerRole > <b>identifier</b>	Business identifiers for practitioner in a role.	0..*	<a href="#">Identifier</a>	<b>author[prac_rol]/assignedAuthor/assignedPerson/ext:asEntityIdentifier</b>	In CDA the identifier for both PractitionerRole and Practitioner for an author participation are included in assignedPerson/ext:asEntityIdentifier.  When sending to the My Health Record, an HPI-I is expected.  The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
PractitionerRole > <b>active</b>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>period</b>	The period during which the person is authorized to act as a practitioner in these role(s) for the organization.	0..1	<a href="#">Period</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>practitioner</b>	Practitioner that is able to provide the defined services for the organization.	0..1	<a href="#">Reference(Practitioner as Base Practitioner)</a>	<b>author[prac_rol]/assignedAuthor/assignedPerson</b>	assignedPerson <b>SHALL</b> conform to the template defined in <a href="#">assignedPerson (Base Practitioner)</a> .

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > organization	The organization where the Practitioner performs the roles associated.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	author[prac_rol]/assignedAuthor/representedOrganization	representedOrganization <b>SHALL</b> conform to the template defined in <a href="#">representedOrganization (Base Organization)</a> .
PractitionerRole > code	Roles which this practitioner is authorized to perform for the organization.	0..*	<a href="#">CodeableConcept</a>	author[prac_rol]/assignedAuthor/code	In CDA the maximum occurrences of assignedAuthor/code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  A code equivalent to the provider's professional role, e.g. 159011008  Community pharmacist  is expected.  The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  <a href="#">Australian and New Zealand Standard Classification of Occupations (preferred)</a> or <a href="#">Practitioner Role (preferred)</a> <sup>1</sup>
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/component/structuredBody/component@admin_obs]/section/ See <a href="#">Administrative Observations</a> .
PractitionerRole > specialty					<a href="#">entry[specialty]</a> <a href="#">entry[specialty]/observation</a> <a href="#">entry[specialty]/observation/@classCode="OBS"</a> <a href="#">entry[specialty]/observation/@moodCode="EVN"</a> <a href="#">entry[specialty]/observation/code</a> <a href="#">entry[specialty]/observation/code/@code="103.16028"</a> <a href="#">entry[specialty]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</a> NCTIS Data Components <a href="#">entry[specialty]/observation/code/@displayName</a> displayName <b>SHOULD</b> be "Specialty". <a href="#">entry[close_gap]/observation/value</a> The common pattern <a href="#">code</a> <b>SHALL</b> be applied. value/@xsi:type <b>SHALL</b> be "CD". value/originalText or value/@displayName <b>SHALL</b> be included. <a href="#">Practitioner Role (preferred)</a>
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
PractitionerRole > location	The location(s) at which this practitioner provides care.	0..*	<a href="#">Reference(Location)</a>	n/a	In CDA the location where care is provided during an encounter is included in ClinicalDocument/componentOf/encompassingEncounter/location/HealthCareFacility.
PractitionerRole > healthcareService	The list of healthcare services that this worker provides for this role's Organization/Location(s).	0..*	<a href="#">Reference(Health-careService)</a>	n/a	This logical element has no mapping to CDA.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > <b>telecom</b>	Contact details that are specific to the role/location/service.	0..*	<a href="#">ContactPoint</a>	author[prac_rol]/assignedAuthor/telecom	In CDA the telecom for both PractitionerRole and Practitioner for an author participation are included in assignedAuthor/telecom.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
PractitionerRole > <b>availableTime</b>	A collection of times that the Service Site is available.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>notAvailable</b>	The HealthcareService is not available during this period of time due to the provided reason.	0..*	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
PractitionerRole > <b>availabilityExceptions</b>	A description of site availability exceptions, e.g. public holiday availability. Succinctly describing all possible exceptions to normal site availability as details in the available Times and not available Times.	0..1	<a href="#">string</a>	n/a	This logical element has no mapping to CDA.

<sup>1</sup>Note: The source representation of this terminology binding on code in PractitionerRole with Practitioner with Mandatory Identifier [DH2019h] is as an optional slice on the [coding](#) part of the code element. In the representation of the model presented in this specification it is normalised as a set of preferred bindings.

## 7.16 author (Base RelatedPerson)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
RelatedPerson	Information about a person that is involved in the care for a patient, but who is not the target of healthcare, nor has a formal responsibility in the care process.	Cardinality comes from linking elements	<a href="#">DomainResource</a>	author[rel_per]	The related person <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>name (author[rel_per]/assignedAuthor/assignedPerson/name), or</li> <li>identifier (author[rel_per]/assignedAuthor/assignedPerson/ext:asEntityIdentifier), or</li> <li>relationship (author[rel_per]/assignedAuthor/assignedPerson/ext:personalRelationship)</li> </ul>
				author[rel_per]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				author[rel_per]/templateId/@root="1.2.36.1.2001.1001.102.101.100083"	
				author[rel_per]/templateId/@extension="1.0"	
				author[rel_per]/assignedAuthor	
				author[rel_per]/assignedAuthor/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
				author[rel_per]/assignedAuthor/code	
				author[rel_per]/assignedAuthor/code/@code="AGNT"	
				author[rel_per]/assignedAuthor/code/@codeSystem="2.16.840.1.113883.5.110"	
				author[rel_per]/assignedAuthor/assignedPerson	
RelatedPerson > identifier	Identifier for a person within a particular scope.	0..*	<a href="#">Identifier</a>	author[rel_per]/assignedAuthor/assignedPerson/ext:asEntityIdentifier	When sending to the My Health Record, an IHI is expected. The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
RelatedPerson > active	Whether this related person record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
RelatedPerson > patient	The patient this person is related to.	1..1	<a href="#">Reference(Patient as Base Patient)</a>	n/a	Not mapped directly for this participant; this is implicit in patientRole.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
RelatedPerson > <b>relationship</b>	The nature of the relationship between a patient and the related person.	0..1	<a href="#">CodeableConcept</a>	author[rel_per]/assignedAuthor/assignedPerson/ext:personalRelationship	The common pattern <a href="#">Personal Relationship</a> SHALL be applied. ext:personalRelationship/ext:code/originalText or ext:personalRelationship/ext:code/@displayName SHALL be included. ext:personalRelationship/ext:code <a href="#">Related Person Relationship Type (extensible)</a>
RelatedPerson > <b>name</b>	A name associated with the person.	0..*	<a href="#">HumanName</a> as Base HumanName	author[rel_per]/assignedAuthor/assignedPerson/ <b>name</b>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
RelatedPerson > <b>telecom</b>	A contact detail for the person, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	author[rel_per]/assignedAuthor/ <b>telecom</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
RelatedPerson > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	author[rel_per]/assignedAuthor/assignedPerson/ext:administrativeGenderCode	The common pattern <a href="#">code</a> SHALL be applied. <a href="#">AdministrativeGender (required)</a>
RelatedPerson > <b>birthDate</b>	The date on which the related person was born.	0..1	<a href="#">date</a>	author[rel_per]/assignedAuthor/assignedPerson/ext:birthTime	The common pattern <a href="#">time</a> SHALL be applied.
RelatedPerson > <b>address</b>	Address where the related person can be contacted or visited.	0..*	<a href="#">Address</a>	author[rel_per]/assignedAuthor/ <b>addr</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address   Address as AU Base Address</a> .
RelatedPerson > <b>period</b>	The period of time that this relationship is considered to be valid. If there are no dates defined, then the interval is unknown.	0..1	<a href="#">Period</a>	author[rel_per]/assignedAuthor/assignedPerson/ext:personalRelationship[related]/ext:effectiveTime	The common pattern <a href="#">time</a> SHALL be applied.

## 7.17 participant (author Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>				Context: Comes from linking elements	
Organization	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	participant[org_aut]	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (participant[org_aut]/participantRole/scopingEntity/ext:asEntityIdentifier), or</li> <li>• name (participant[org_aut]/participantRole/scopingEntity/name)</li> </ul>
				participant[org_aut]/@type="AUT"	
				participant[org_aut]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				participant[org_aut]/templateId/@root="1.2.36.1.2001.1001.102.101.100088"	
				participant[org_aut]/templateId/@extension="1.0"	
				participant[org_aut]/participantRole	
				participant[org_aut]/participantRole/@classCode="ASSIGNED"	
				participant[org_aut]/participantRole/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
				participant[org_contact]/participantRole/scopingEntity	
				participant[org_contact]/participantRole/scopingEntity/typeCode="ORG"	
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	participant[org_aut]/participantRole/scopingEntity/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	participant[org_aut]/participantRole/code	In CDA the maximum occurrences of participantRole/code is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code</b> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	participant[org_aut]/participantRole/scopingEntity/ <b>name</b>	In CDA name and alias are represented by scopingEntity/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	participant[org_aut]/participantRole/scopingEntity/ <b>name</b>	In CDA name and alias are represented by scopingEntity/name.
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	participant[org_aut]/participantRole/ <b>telecom</b>	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	participant[org_aut]/participantRole/ <b>addr</b>	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address   Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	participant[org_aut]/ <b>asOrganizationPartOf</b> participant[org_aut]/asOrganizationPartOf/ <b>wholeOrganization</b>	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>				Context: /ClinicalDocument/	
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

# 8 Entity CDA templates

This chapter contains mapping from the Individual (e.g. Patient with Mandatory Identifier) and Entity (e.g. Organization with Mandatory Identifier) models to CDA entity classes, expressed as a series of CDA templates that describe how each CDA entity is composed.

CDA templates are expected to be reused from one document type (or Composition model) to another. Each CDA template is presented under a heading in the format of "CDA schema element" ("model name") where "CDA schema element" is the root element for a CDA template and "model name" is the name of a model that constrains an element in the Shared Medicines List hierarchy.

## 8.1 providerOrganization (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements		Context: Comes from linking elements			
Organization	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	providerOrganization[manag_org]	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"><li>• identifier (providerOrganization[manag_org]/ext:asEntityIdentifier), or</li><li>• name (providerOrganization[manag_org]/name)</li></ul>
				providerOrganization[manag_org]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				providerOrganization[manag_org]/templateId/@root="1.2.36.1.2001.1001.102.101.100034"	
				providerOrganization[manag_org]/templateId/@extension="1.0"	
				providerOrganization[manag_org]/id	The common pattern <b>id</b> <b>SHALL</b> be applied.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	providerOrganization[manag_org]/ext:asEntityIdentifier	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > active	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	providerOrganization[manag_org]/standardIndustryClassCode	In CDA the maximum occurrences of providerOrganization/standardIndustryClassCode is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code SHALL</b> be applied.  standardIndustryClassCode/originalText or standardIndustryClassCode/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	providerOrganization[manag_org]/name	In CDA name and alias are represented by providerOrganization/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	providerOrganization[manag_org]/name	In CDA name and alias are represented by providerOrganization/name.
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	providerOrganization[manag_org]/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> .  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	providerOrganization[manag_org]/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> .  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address   Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	providerOrganization[manag_org]/asOrganizationPartOf	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
				providerOrganization[manag_org]/asOrganizationPartOf/wholeOrganization	
<b>CDA Header Data Elements</b>					
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 8.2 participant (Organization contact)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>				Context: Comes from linking elements	
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	Cardinality comes from linking element	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	
				<b>participant[org_contact]/@typeCode="IND"</b>	
				<b>participant[org_contact]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>participant[org_contact]/templateId/@root="1.2.36.1.2001.1001.102.101.100035"</b>	
				<b>participant[org_contact]/templateId/@extension="1.0"</b>	
				<b>participant[org_contact]/associatedEntity</b>	
				<b>participant[org_contact]/associatedEntity/@classCode="CON"</b>	
				<b>participant[org_contact]/associatedEntity/scopingOrganization</b>	
				<b>participant[org_contact]/associatedEntity/scopingOrganization/@classCode="ORG"</b>	This CDA schema element attribute <b>SHALL</b> be interpreted as optional.
				<b>participant[org_contact]/associatedEntity/scopingOrganization/id</b>	Organization > contact is represented in CDA by a participant that is scoped by the Organization for which they are a contact.  This id <b>SHALL</b> hold the same value as the organization this is a contact for (the value in this id element <b>SHALL</b> be present in a separate participation).  The common pattern <b>id</b> <b>SHALL</b> be applied.
Organization > contact > <b>purpose</b>	Indicates a purpose for which the contact can be reached.	0..1	<a href="#">CodeableConcept</a>	<b>participant[org_contact]/associatedEntity/code</b>	The common pattern <b>code</b> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">ContactEntityType (extensible)</a>
Organization > contact > <b>name</b>	A name associated with the contact.	0..1	<a href="#">HumanName as Base HumanName</a>	<b>participant[org_contact]/associatedEntity/associatedPerson</b>	
				<b>participant[org_contact]/associatedEntity/associatedPerson/name</b>	The model Base HumanName is not applied to this CDA schema element.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > contact > <b>telecom</b>	A contact detail (e.g. a telephone number or an email address) by which the party may be contacted.	0..*	<a href="#">ContactPoint</a>	participant[org_contact]/associatedEntity/telecom	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > contact > <b>address</b>	Visiting or postal addresses for the contact.	0..1	<a href="#">Address</a>	participant[org_contact]/associatedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .

## 8.3 representedOrganization (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Organization	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>representedOrganization</b>	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (<b>representedOrganization/name</b>), or</li> <li>• identifier (<b>representedOrganization/ext:asEntityIdentifier</b>)</li> </ul>
				<b>representedOrganization/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>representedOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100039"</b>	
				<b>representedOrganization/templateId/@extension="1.0"</b>	
				<b>representedOrganization/id</b>	The common pattern <b>id SHALL</b> be applied.
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	<b>representedOrganization/ext:asEntityIdentifier</b>	The common pattern <b>Entity Identifier SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	<b>representedOrganization/standardIndustryClassCode</b>	In CDA the maximum occurrences of <b>representedOrganization/standardIndustryClassCode</b> is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code SHALL</b> be applied.  <b>standardIndustryClassCode/originalText</b> or <b>standardIndustryClassCode/@displayName SHALL</b> be included.  <a href="#">OrganizationType (example)</a>
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	<b>representedOrganization/name</b>	In CDA name and alias are represented by <b>representedOrganization/name</b> .
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	<b>representedOrganization/name</b>	In CDA name and alias are represented by <b>representedOrganization/name</b> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	representedOrganization/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	representedOrganization/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	representedOrganization/asOrganizationPartOf representedOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>					
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 8.4 receivedOrganization (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
<b>Organization</b>	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>receivedOrganization</b>	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (<b>receivedOrganization/name</b>), or</li> <li>• identifier (<b>receivedOrganization/ext:asEntityIdentifier</b>)</li> </ul>
				<b>receivedOrganization/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>receivedOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100070"</b>	
				<b>receivedOrganization/templateId/@extension="1.0"</b>	
				<b>receivedOrganization/id</b>	The common pattern <b>id</b> <b>SHALL</b> be applied.
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	<b>receivedOrganization/ext:asEntityIdentifier</b>	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	<b>receivedOrganization/standardIndustryClassCode</b>	In CDA the maximum occurrences of <b>receivedOrganization/standardIndustryClassCode</b> is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code</b> <b>SHALL</b> be applied.  <b>standardIndustryClassCode/originalText</b> or <b>standardIndustryClassCode/@displayName</b> <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	<b>receivedOrganization/name</b>	In CDA name and alias are represented by <b>receivedOrganization/name</b> .
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	<b>receivedOrganization/name</b>	In CDA name and alias are represented by <b>receivedOrganization/name</b> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	receivedOrganization/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	receivedOrganization/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	receivedOrganization/asOrganizationPartOf receivedOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 8.5 manufacturerOrganization (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Organization	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	manufacturerOrganization	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (manufacturerOrganization/name), or</li> <li>• identifier (manufacturerOrganization/ext:asEntityIdentifier)</li> </ul>
				manufacturerOrganization/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				manufacturerOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100071"	
				manufacturerOrganization/templateId/@extension="1.0"	
				manufacturerOrganization/id	The common pattern <b>id SHALL</b> be applied.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	manufacturerOrganization/ext:asEntityIdentifier	The common pattern <b>Entity Identifier SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > active	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	manufacturerOrganization/standardIndustryClassCode	In CDA the maximum occurrences of manufacturerOrganization/standardIndustryClassCode is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code SHALL</b> be applied.  standardIndustryClassCode/originalText or standardIndustryClassCode/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>
Organization > name	A name associated with the organization.	0..1	<a href="#">string</a>	manufacturerOrganization/name	In CDA name and alias are represented by manufacturerOrganization/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	manufacturerOrganization/name	In CDA name and alias are represented by manufacturerOrganization/name.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	manufacturerOrganization/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	manufacturerOrganization/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	manufacturerOrganization/asOrganizationPartOf manufacturerOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>					
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

## 8.6 assignedPerson (Practitioner with Mandatory Identifier)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Practitioner	A person who is directly or indirectly involved in the provisioning of healthcare.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<a href="#">assignedPerson[prac]</a>	The use of templateId signals the imposition of a set of template-defined constraints.
				<a href="#">assignedPerson[prac]/templateId</a>	
				<a href="#">assignedPerson[prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100040"</a>	
				<a href="#">assignedPerson[prac]/templateId/@extension="1.0"</a>	
Practitioner > <a href="#">identifier</a>	An identifier that applies to this person in this role.	1..*	<a href="#">Identifier</a>	<a href="#">assignedPerson[prac]/ext:asEntityIdentifier</a>	When sending to the My Health Record, an HPI-I is expected. The common pattern <a href="#">Entity Identifier SHALL</a> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Practitioner > <a href="#">active</a>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Practitioner > <a href="#">name</a>	The name(s) associated with the practitioner.	0..*	<a href="#">HumanName as Base HumanName</a>	<a href="#">assignedPerson[prac]/name</a>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Practitioner > <a href="#">telecom</a>	A contact detail for the practitioner, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	<a href="#">telecom</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Practitioner > <a href="#">address</a>	Address(es) of the practitioner that are not role specific (typically home address). Work addresses are not typically entered in this property as they are usually role dependent.	0..*	<a href="#">Address</a>	<a href="#">addr</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Practitioner > <a href="#">gender</a>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	<a href="#">assignedPerson[prac]/ext:administrativeGenderCode</a>	The common pattern <a href="#">code SHALL</a> be applied. <a href="#">AdministrativeGender (required)</a>
Practitioner > <a href="#">birthDate</a>	The date of birth for the practitioner.	0..1	<a href="#">date</a>	<a href="#">assignedPerson[prac]/ext:birthTime</a>	The common pattern <a href="#">time SHALL</a> be applied.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > <b>qualification</b>	Qualifications obtained by training and certification.	0..*	<a href="#">BackboneElement</a>	See: instantiation choices	<p>It is possible that the qualification may be able to be captured as a complex structure or as a text list.</p> <p><b>instantiation choices:</b></p> <p>If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as <code>assignedPerson[prac]/ext:Qualifications/@classCode="QUAL"</code>. See <a href="#">&lt;Qualification&gt;</a> for available attributes.</p> <p>If more information can be captured than a narrative list then qualification is expected to be instantiated as <code>ext:coverage2[prac_qual]</code> and <b>SHALL</b> conform to the template defined in <a href="#">ext:coverage (Practitioner qualification)</a>.</p>
Practitioner > <b>communication</b>	A language the practitioner is able to use in patient communication.	0..*	<a href="#">CodeableConcept</a>	<code>assignedPerson[prac]/ext:languageCommunication</code>	The common pattern <a href="#">Language Communication</a> <b>SHALL</b> be applied.

## 8.7 assignedPerson (Base Practitioner)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Practitioner	A person who is directly or indirectly involved in the provisioning of healthcare.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<a href="#">assignedPerson[prac]</a>	The use of templateId signals the imposition of a set of template-defined constraints.
				<a href="#">assignedPerson[prac]/templateId</a>	
				<a href="#">assignedPerson[prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100086"</a>	
				<a href="#">assignedPerson[prac]/templateId/@extension="1.0"</a>	
Practitioner > <a href="#">identifier</a>	An identifier that applies to this person in this role.	0..*	<a href="#">Identifier</a>	<a href="#">assignedPerson[prac]/ext:asEntityIdentifier</a>	The common pattern <a href="#">Entity Identifier SHALL</a> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Practitioner > <a href="#">active</a>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Practitioner > <a href="#">name</a>	The name(s) associated with the practitioner.	0..*	<a href="#">HumanName as Base HumanName</a>	<a href="#">assignedPerson[prac]/name</a>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Practitioner > <a href="#">telecom</a>	A contact detail for the practitioner, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	<a href="#">telecom</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Practitioner > <a href="#">address</a>	Address(es) of the practitioner that are not role specific (typically home address). Work addresses are not typically entered in this property as they are usually role dependent.	0..*	<a href="#">Address</a>	<a href="#">addr</a>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Practitioner > <a href="#">gender</a>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	<a href="#">assignedPerson[prac]/ext:administrativeGenderCode</a>	The common pattern <a href="#">code SHALL</a> be applied. <a href="#">AdministrativeGender (required)</a>
Practitioner > <a href="#">birthDate</a>	The date of birth for the practitioner.	0..1	<a href="#">date</a>	<a href="#">assignedPerson[prac]/ext:birthTime</a>	The common pattern <a href="#">time SHALL</a> be applied.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > <b>qualification</b>	Qualifications obtained by training and certification.	0..*	<a href="#">BackboneElement</a>	See: instantiation choices	<p>It is possible that the qualification may be able to be captured as a complex structure or as a text list.</p> <p><b>instantiation choices:</b></p> <p>If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as <code>assignedPerson[prac]/ext:Qualifications/@classCode="QUAL"</code>. See <a href="#">&lt;Qualification&gt;</a> for available attributes.</p> <p>If more information can be captured than a narrative list then qualification is expected to be instantiated as <code>ext:coverage2[prac_qual]</code> and <b>SHALL</b> conform to the template defined in <a href="#">ext:coverage (Practitioner qualification)</a>.</p>
Practitioner > <b>communication</b>	A language the practitioner is able to use in patient communication.	0..*	<a href="#">CodeableConcept</a>	<code>assignedPerson[prac]/ext:languageCommunication</code>	The common pattern <a href="#">Language Communication</a> <b>SHALL</b> be applied.

## 8.8 informationRecipient (Base Practitioner)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context comes from linking elements	
Practitioner	A person who is directly or indirectly involved in the provisioning of healthcare.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>informationRecipient[prac]</b>	The practitioner <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• identifier (<b>informationRecipient[prac]/ext:asEntityIdentifier</b>), or</li> <li>• name (<b>informationRecipient[prac]/name</b>)</li> </ul>
				<b>informationRecipient[prac]/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>informationRecipient[prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100005"</b>	
				<b>informationRecipient[prac]/templateId/@extension="1.0"</b>	
				<b>informationRecipient[prac]/id</b>	The common pattern <b>id</b> <b>SHALL</b> be applied.
Practitioner > <b>identifier</b>	An identifier that applies to this person in this role.	0..*	<a href="#">Identifier</a>	<b>informationRecipient[prac]/ext:asEntityIdentifier</b>	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Practitioner > <b>active</b>	Whether this practitioner's record is in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Practitioner > <b>name</b>	The name(s) associated with the practitioner.	0..*	<a href="#">HumanName as Base HumanName</a>	<b>informationRecipient[prac]/name</b>	The model Base HumanName is not applied to this CDA schema element. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">HumanName as Base HumanName</a> .
Practitioner > <b>telecom</b>	A contact detail for the practitioner, e.g. a telephone number or an email address.	0..*	<a href="#">ContactPoint</a>	<b>telecom</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Practitioner > <b>address</b>	Address(es) of the practitioner that are not role specific (typically home address). Work addresses are not typically entered in this property as they are usually role dependent.	0..*	<a href="#">Address</a>	<b>addr</b>	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Practitioner > <b>gender</b>	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	0..1	<a href="#">code</a>	<b>informationRecipient[prac]/ext:administrativeGenderCode</b>	The common pattern <b>code</b> <b>SHALL</b> be applied. <a href="#">AdministrativeGender (required)</a>
Practitioner > <b>birthDate</b>	The date of birth for the practitioner.	0..1	<a href="#">date</a>	<b>informationRecipient[prac]/ext:birthTime</b>	The common pattern <b>time</b> <b>SHALL</b> be applied.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > <b>qualification</b>	Qualifications obtained by training and certification.	0..*	<a href="#">BackboneElement</a>	See: instantiation choices	<p>It is possible that the qualification may be able to be captured as a complex structure or as a text list.</p> <p><b>instantiation choices:</b></p> <p>If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as <code>informationRecipient[prac]/ext:Qualifications/@classCode="QUAL"</code>. See <a href="#">&lt;Qualification&gt;</a> for available attributes.</p> <p>If more information can be captured than a narrative list then qualification is expected to be instantiated as <code>ext:coverage2[prac_qual]</code> and <b>SHALL</b> conform to the template defined in <a href="#">ext:coverage (Practitioner qualification)</a>.</p>
Practitioner > <b>communication</b>	A language the practitioner is able to use in patient communication.	0..*	<a href="#">CodeableConcept</a>	<code>informationRecipient[prac]/ext:languageCommunication</code>	The common pattern <a href="#">Language Communication</a> <b>SHALL</b> be applied.

## 8.9 wholeOrganization (Base Organization)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
<b>Organization</b>	A formally or informally recognized grouping of people or organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions, corporations, departments, community groups, healthcare practice groups, etc.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<b>wholeOrganization</b>	The organization <b>SHALL</b> have at least: <ul style="list-style-type: none"> <li>• name (wholeOrganization/name), or</li> <li>• identifier (wholeOrganization/ext:asEntityIdentifier)</li> </ul>
				<b>wholeOrganization/templateId</b>	The use of templateId signals the imposition of a set of template-defined constraints.
				<b>wholeOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100087"</b>	
				<b>wholeOrganization/templateId/@extension="1.0"</b>	
				<b>wholeOrganization/id</b>	The common pattern <b>id</b> <b>SHALL</b> be applied.
Organization > <b>identifier</b>	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0..*	<a href="#">Identifier</a>	<b>wholeOrganization/ext:asEntityIdentifier</b>	The common pattern <b>Entity Identifier</b> <b>SHALL</b> be applied. Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Identifier</a> .
Organization > <b>active</b>	Whether the organization's record is still in active use.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Organization > <b>type</b>	The kind(s) of organization that this is.	0..*	<a href="#">CodeableConcept</a>	<b>wholeOrganization/standardIndustryClassCode</b>	In CDA the maximum occurrences of wholeOrganization/standardIndustryClassCode is 1. Although the model indicates that code is 0..*, in a CDA implementation this is limited to 0..1.  The common pattern <b>code</b> <b>SHALL</b> be applied.  standardIndustryClassCode/originalText or standardIndustryClassCode/@displayName <b>SHALL</b> be included.  <a href="#">OrganizationType (example)</a>
Organization > <b>name</b>	A name associated with the organization.	0..1	<a href="#">string</a>	<b>wholeOrganization/name</b>	In CDA name and alias are represented by wholeOrganization/name.
Organization > <b>alias</b>	A list of alternate names that the organization is known as, or was known as in the past.	0..*	<a href="#">string</a>	<b>wholeOrganization/name</b>	In CDA name and alias are represented by wholeOrganization/name.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > <b>telecom</b>	A contact detail for the organization.	0..*	<a href="#">ContactPoint</a>	wholeOrganization/telecom	telecom/@use <a href="#">Organization Telecom Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">ContactPoint</a> .
Organization > <b>address</b>	An address for the organization.	0..*	<a href="#">Address</a>	wholeOrganization/addr	addr/@use <a href="#">Organization Address Use HL7 V3 (required)</a> . Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Address</a>   <a href="#">Address as AU Base Address</a> .
Organization > <b>partOf</b>	The organization of which this organization forms a part.	0..1	<a href="#">Reference(Organization as Base Organization)</a>	wholeOrganization/asOrganizationPartOf wholeOrganization/asOrganizationPartOf/wholeOrganization	wholeOrganization/asOrganizationPartOf/wholeOrganization <b>SHALL</b> conform to the template defined in <a href="#">wholeOrganization (Base Organization)</a> .
<b>CDA Header Data Elements</b>					Context: /ClinicalDocument/
Organization > <b>contact</b>	Contact for the organization for a certain purpose.	0..*	<a href="#">BackboneElement</a>	<b>participant[org_contact]</b>	participant[org_contact] <b>SHALL</b> conform to the template defined in <a href="#">participant (Organization contact)</a> .

# 9 Section CDA templates

This chapter contains mapping from the section (e.g. Medicines List) models to CDA section classes, expressed as a series of CDA templates that describe how each CDA section is composed.

CDA templates are expected to be reused from one document type (or Composition model) to another. Each CDA template is presented under a heading in the format of "CDA schema element" ("model name") where "CDA schema element" is the root element for a CDA template and "model name" is the name of a model that constrains an element in the Shared Medicines List hierarchy.

## 9.1 section (Allergies)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA Body Level 3 Data Elements				Context: Comes from linking elements	
section	Information about allergies or intolerances. Information may include allergies or intolerances that have been identified or reported, or may include statements that a patient is not known to have an allergy or category of allergies.	Cardinality comes from linking element	<a href="#">BackboneElement</a>	section[ai]	This section <b>SHALL</b> contain at least one entry (entry) or an emptyReason (@nullFlavor) but <b>SHALL NOT</b> contain both.
				section[ai]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				section[ai]/templateId/@root="1.2.36.1.2001.1001.102.101.100069"	
				section[ai]/templateId/@extension="1.0"	
section > title	The label for this particular section. This will be part of the rendered content for the document, and is often used to build a table of contents.	1..1	<a href="#">string</a>	section[ai]/title	
section > code	A code identifying the kind of content contained within the section. This must be consistent with the section title.	1..1	<a href="#">CodeableConcept</a>	section[ai]/code	
				section[ai]/code/@code="48765-2"	
				section[ai]/code/@codeSystem="2.16.840.1.113883.6.1"	LOINC
				section[ai]/code/@displayName	displayName <b>SHOULD</b> be "Allergies &or adverse reactions".
section > text	A human-readable narrative that contains the attested content of the section, used to represent the content of the resource to a human. The narrative need not encode all the structured data, but is required to contain sufficient detail to make it 'clinically safe' for a human to just read the narrative.	1..1	<a href="#">Narrative</a>	section[ai]/text	text <b>SHALL</b> conform to requirements defined in <a href="#">CDA narratives</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
section > <b>entry</b>	A reference to the actual resource from which the narrative in the section is derived.	0..*	<a href="#">Reference(AllergyIntolerance)</a> as Summary Statement of Allergy or Intolerance	section[ai]/entry[adv]	A statement of allergy or intolerance can be sent to state that a patient does have an allergy or category of allergies or it can be sent to state that they do not e.g. 716186003  No known allergy  716184000  No known latex allergy . observation <b>SHALL</b> conform to the template defined in <a href="#">observation (Summary Statement of Allergy or Intolerance)</a> .
				section[ai]/entry[adv]/observation	
section > <b>emptyReason</b>	If the section is empty, why the list is empty. An empty section typically has some text explaining the empty reason.	0..1	<a href="#">CodeableConcept</a>	section[ai]/@nullFlavor	<p><a href="#">Empty Reason HL7 v3 NullFlavor (required)<sup>1</sup></a></p> <p>The nullFlavor attribute is used to represent the reason a section is empty of clinical content.</p>

<sup>1</sup>Note: The source terminology binding on emptyReason in Allergies [DH2019h] and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [Non-Clinical Empty Reason \(HL7 FHIR\) to Empty Reason HL7 v3 NullFlavor](#) concept map.

## 9.2 section (Medicines List)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Body Level 3 Data Elements</b>				Comes from linking elements	
section	Information about medicines. This may include self-prescribed, clinician prescribed and nonprescription medicines, as well as all regular, intermittent and as required medicines pertinent to a patient. Information may also include changes to the therapy, including dose changes, new medicines and ceased medicines.	Cardinality comes from linking element	<a href="#">BackboneElement</a>	section[med]	This section <b>SHALL</b> contain an entry (entry) or an emptyReason (@nullFlavor) but <b>SHALL NOT</b> contain both.  A Ceased Medicines section (code@code="101.32027") <b>SHALL NOT</b> have an assertion of no relevant finding entry (entry/observation/code/@code="ASSERTION").
				section[med]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				section[med]/templateId/@root="1.2.36.1.2001.1001.102.101.100077"	
				section[med]/templateId/@extension="1.0"	
section > title	The label for this particular section. This will be part of the rendered content for the document, and is often used to build a table of contents.	1..1	<a href="#">string</a>	section[med]/title	
section > code	A code identifying the kind of content contained within the section. This must be consistent with the section title.	1..1	<a href="#">CodeableConcept</a>	section[med]/code	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">History Of Medication Use List Type (required)</a>
section > text	A human-readable narrative that contains the attested content of the section, used to represent the content of the resource to a human. The narrative need not encode all the structured data, but is required to contain sufficient detail to make it 'clinically safe' for a human to just read the narrative.	1..1	<a href="#">Narrative</a>	section[med]/text	text <b>SHALL</b> conform to requirements defined in <a href="#">CDA narratives</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
section > <b>entry</b>	A reference to the actual resource from which the narrative in the section is derived.	0..1	<a href="#">Reference</a> ( <a href="#">List</a> as List of Medicine Items with Change Information Authored by Practitioner   <a href="#">Observation</a> as Assertion of No Relevant Finding)	section[med]/entry[meds]  See: instantiation choices	<b>instantiation choices:</b> If entry is a <a href="#">List</a> then it <b>SHALL</b> be instantiated as section[med]/entry[meds]/act. act <b>SHALL</b> conform to the template defined in <a href="#">act (List of Medicine Items with Change Information Authored by Practitioner)</a> ; that act <b>SHALL</b> have the same code as this section. If entry is an <a href="#">Observation</a> then it <b>SHALL</b> be instantiated as section[med]/entry[meds]/observation. observation <b>SHALL</b> conform to the template defined in <a href="#">observation (Assertion of No Relevant Finding)</a> and <b>SHALL</b> assert that there are no known current medications (observation/value/@code="1234391000168107").
section > <b>emptyReason</b>	If the section is empty, why the list is empty. An empty section typically has some text explaining the empty reason.	0..1	<a href="#">CodeableConcept</a>	section[med]/@nullFlavor	<a href="#">Empty Reason HL7 v3 NullFlavor (required)<sup>1</sup></a> The nullFlavor attribute is used to represent the reason a section is empty of clinical content.

<sup>1</sup>Note: The source terminology binding on emptyReason in Medicines List [\[DH2019h\]](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [Non-Clinical Empty Reason \(HL7 FHIR\) to Empty Reason HL7 v3 NullFlavor](#) concept map.

# 10 Act CDA templates

This chapter contains mapping from the Composition (Shared Medicines List) model and entry (e.g. Summary Statement of Allergy or Intolerance) models to CDA act classes, expressed as a series of CDA templates that describe how each CDA act is composed.

CDA templates are expected to be reused from one document type (or Composition model) to another. Each CDA template is presented under a heading in the format of "CDA schema element" ("model name") where "CDA schema element" is the root element for a CDA template and "model name" is the name of a model that constrains an element in the Shared Medicines List hierarchy.

## 10.1 encompassingEncounter (Summary of an Encounter for an Event)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA Header Data Elements		Context: /ClinicalDocument/componentOf/			
Encounter	An interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient.	Cardinality comes from linking element	<a href="#">DomainResource</a>	encompassingEncounter[event]	The use of templateId signals the imposition of a set of template-defined constraints.
				encompassingEncounter[event]/templateId	
				encompassingEncounter[event]/templateId/@root="1.2.36.1.2001.1001.102.101.100064"	
				encompassingEncounter[event]/templateId/@extension="1.0"	
				encompassingEncounter[event]/id	The common pattern <a href="#">id</a> <b>SHALL</b> be applied.  This id <b>SHALL</b> hold the same value as encounter[event]/id.
Encounter > <a href="#">encounter-description</a>	Description, overview or summary of a clinical event and its reasons.	0..1	<a href="#">string</a>	n/a	Not mapped directly for this model; this is implicit in encounter[event]/text.
Encounter > <a href="#">status</a>	planned   arrived   triaged   in-progress   onleave   finished   cancelled +.	1..1	<a href="#">code</a>	n/a	Not mapped directly for this model; this is implicit in encounter[event]/statusCode.
Encounter > <a href="#">class</a>	inpatient   outpatient   ambulatory   emergency +.	0..1	<a href="#">Coding</a>	encompassingEncounter[event]/code	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  <a href="#">ActEncounterCode</a> ( <a href="#">required</a> )  This code <b>SHALL</b> hold the same value as encounter[event]/code.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Encounter > <b>type</b>	Specific type of encounter (e.g. e-mail consultation, surgical day-care, skilled nursing, rehabilitation).	0..*	<a href="#">CodeableConcept</a>	n/a	This logical element has no mapping to CDA.
Encounter > <b>subject</b>	The patient or group present at the encounter.	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>	n/a	Not mapped directly for this model; this is implicit in patientRole.
Encounter > <b>period</b>	The start and end time of the encounter.	1..1	<a href="#">Period</a>	encompassingEncounter[event]/effectiveTime	The common pattern <b>time SHALL</b> be applied.  This effectiveTime <b>SHALL</b> hold the same value as encounter[event]/effectiveTime.
Encounter > <b>reason</b>	Reason the encounter takes place, expressed as a code. For admissions, this can be used for a coded admission diagnosis.	0..*	<a href="#">CodeableConcept</a>	n/a	Not mapped directly for this model; this is implicit in encounter[event]/entryRelationship[reason]/observation/value.

## 10.2 encounter (Summary of an Encounter for an Event)

### CDA mapping

Logical element	Logical element description	Logical- al card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Encounter	An interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient.	Cardinal- ity comes from linking element	<a href="#">DomainResource</a>	encounter[event]	This encounter provides further information from the same encounter that is captured in encompassingEncounter.
				encounter[event]/@classCode="ENC"	
				encounter[event]/@moodCode="EVN"	
				encounter[event]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				encounter[event]/templateId/@root="1.2.36.1.2001.1001.102.101.100062"	
				encounter[event]/templateId/@extension="1.0"	
				encounter[event]/id	This id will hold the same value as encompassingEncounter/id.  The common pattern <a href="#">id</a> <b>SHALL</b> be applied.
Encounter > <b>encounter-description</b>	Description, overview or summary of a clinical event and its reasons.	0..1	<a href="#">string</a>	encounter[event]/text	
Encounter > <b>status</b>	planned   arrived   triaged   in-progress   onleave   finished   cancelled +.	1..1	<a href="#">code</a>	encounter[event]/statusCode	This CDA schema element is of type CodedSimpleValue (CS).  <a href="#">Encounter Act Status HL7 V3 (required)</a> <sup>1</sup>  statusCode/@code <b>SHOULD</b> be "completed".
Encounter > <b>class</b>	inpatient   outpatient   ambulatory   emergency +.	0..1	<a href="#">Coding</a>	encounter[event]/code	This code will hold the same value as encompassingEncounter/code.  The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">ActEncounterCode (required)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Encounter > <b>type</b>	Specific type of encounter (e.g. e-mail consultation, surgical day-care, skilled nursing, rehabilitation).	0..*	<a href="#">CodeableConcept</a>	encounter[event]/entryRelationship[type] encounter[event]/entryRelationship[type]/@typeCode="COMP" encounter[event]/entryRelationship[type]/observation encounter[event]/entryRelationship[type]/observation/@classCode="OBS" encounter[event]/entryRelationship[type]/observation/@moodCode="EVN" encounter[event]/entryRelationship[type]/observation/code encounter[event]/entryRelationship[type]/observation/code/@code="103.17018" encounter[event]/entryRelationship[type]/observation/code/@codeSystem="1.2.36.1.2001.1001.101" encounter[event]/entryRelationship[type]/observation/code/@displayName encounter[event]/entryRelationship[type]/observation/value	NCTIS Data Components <b>displayName</b> SHOULD be "Category". The common pattern <b>code</b> SHALL be applied. value/@xsi:type SHALL be "CD". value/originalText or value/@displayName SHALL be included. <a href="#">Encounter Type (preferred)</a> When sending a PSML, preferred terminology binding is: <a href="#">Medicines Review Type (preferred)</a>
Encounter > <b>subject</b>	The patient or group present at the encounter.	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>	n/a	Not mapped directly for this model; this is implicit in patientRole.
Encounter > <b>period</b>	The start and end time of the encounter.	1..1	<a href="#">Period</a>	encounter[event]/effectiveTime	This effectiveTime will hold the same value as encompassingEncounter/effectiveTime. The common pattern <b>time</b> SHALL be applied.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Encounter > <b>reason</b>	Reason the encounter takes place, expressed as a code. For admissions, this can be used for a coded admission diagnosis.	0..*	<a href="#">CodeableConcept</a>	encounter[event]/entryRelationship[reason] encounter[event]/entryRelationship[reason]/@typeCode="RSON" encounter[event]/entryRelationship[reason]/observation encounter[event]/entryRelationship[reason]/observation/@classCode="OBS" encounter[event]/entryRelationship[reason]/observation/@moodCode="EVN" encounter[event]/entryRelationship[reason]/observation/code encounter[event]/entryRelationship[reason]/observation/code/@code="103.10141" encounter[event]/entryRelationship[reason]/observation/code/@codeSystem="1.2.36.1.2001.1001.101" encounter[event]/entryRelationship[reason]/observation/code/@displayName encounter[event]/entryRelationship[reason]/observation/statusCode/@code="completed" encounter[event]/entryRelationship[reason]/observation/value	NCTIS Data Components displayName <b>SHOULD</b> be "Clinical Indication". The common pattern <b>code</b> <b>SHALL</b> be applied. value/@xsi:type <b>SHALL</b> be "CD". value/originalText or value/@displayName <b>SHALL</b> be included. <a href="#">Encounter Reason Codes (preferred)</a>

<sup>1</sup>Note: The source terminology binding on status in Summary of an Encounter for an Event [DH2019h](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [EncounterStatus \(HL7 FHIR\) to Encounter Act Status HL7 v3](#) concept map.

## 10.3 observation (Summary Statement of Allergy or Intolerance)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
AllergyIntolerance	Risk of harmful or undesirable, physiological response which is unique to an individual and associated with exposure to a substance.	Cardinality comes from linking element	DomainResource	<p><b>observation[allergy]</b></p> <p><b>observation[allergy]/@classCode="OBS"</b></p> <p><b>observation[allergy]/@moodCode="EVN"</b></p> <p><b>observation[allergy]/templateId</b></p> <p><b>observation[allergy]/templateId/@root="1.2.36.1.2001.1001.102.101.100014"</b></p> <p><b>observation[allergy]/templateId/@extension="1.0"</b></p> <p><b>observation[allergy]/code</b></p>	<p>Where only a substance is available (e.g. 111088007   Latex) and not a statement of allergy or intolerance (e.g. 300916003   Allergy to latex), the substance will be sent in code (observation[allergy]/value), and optionally in substance (participant[agent]/participantRole/playingEntity/code).</p> <p>An AllergyIntolerance has the concepts of an author-related-person or a recorder but not both. In CDA, author-related-person and recorder are mapped to observation/author. In this template the maximum occurrences of observation/author <b>SHALL</b> be 1 such that observation/author is limited to 0..1.</p> <p>All instances of an observation/author <b>SHALL</b> conform to one of the templates defined in: <a href="#">author (Base RelatedPerson)</a> or <a href="#">author (Base Patient)</a> or <a href="#">author (Base PractitionerRole)</a>.</p> <p>clinicalStatus (entryRelationship[clin_status]/observation) <b>SHALL</b> be instantiated if verificationStatus (entryRelationship[ver_status]/observation/value/@code) is not "entered-in-error".</p> <p>The use of templateId signals the imposition of a set of template-defined constraints.</p> <p>This CDA schema element is expected to be populated with AllergyIntolerance type.</p> <p>Where type is unavailable, a default code is provided and <b>SHALL</b> be instantiated as code@code="102.15517", code@displayName="Adverse Reaction", code@codeSystem="1.2.36.1.2001.1001.101".</p>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
AllergyIntolerance > author-related-person	Reference to related person that recorded the record and takes responsibility for its content.	0..1	<a href="#">Reference(Related-Person as Base RelatedPerson)</a>	observation[allergy]/author	If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author.  author <b>SHALL</b> conform to the template defined in <a href="#">author (Base RelatedPerson)</a> .
AllergyIntolerance > clinical-Status	The clinical status of the allergy or intolerance.	0..1	<a href="#">code</a>	observation[allergy]/entryRelationship[clin_status]	
				observation[allergy]/entryRelationship[clin_status]/@typeCode="COMP"	
				observation[allergy]/entryRelationship[clin_status]/observation	
				observation[allergy]/entryRelationship[clin_status]/observation/@classCode="OBS"	
				observation[allergy]/entryRelationship[clin_status]/observation/@moodCode="EVN"	
				observation[allergy]/entryRelationship[clin_status]/observation/code	
				observation[allergy]/entryRelationship[clin_status]/observation/code/@code="103.32013"	
				observation[allergy]/entryRelationship[clin_status]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				observation[allergy]/entryRelationship[clin_status]/observation/code/@displayName	displayName <b>SHOULD</b> be "Clinical Status".
				observation[allergy]/entryRelationship[clin_status]/observation/value	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  value/@xsi:type <b>SHALL</b> be "CD".  value/@value <b>SHOULD</b> be "active".  <a href="#">AllergyIntolerance Clinical Status (required)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
AllergyIntolerance > verification-Status	Assertion about certainty associated with the propensity, or potential risk, of a reaction to the identified substance (including pharmaceutical product).	1..1	<a href="#">code</a>	observation[allergy]/entryRelationship[ver_status] observation[allergy]/entryRelationship[ver_status]/@typeCode="COMP" observation[allergy]/entryRelationship[ver_status]/observation observation[allergy]/entryRelationship[ver_status]/observation/@classCode="OBS" observation[allergy]/entryRelationship[ver_status]/observation/@moodCode="EVN" observation[allergy]/entryRelationship[ver_status]/observation/code observation[allergy]/entryRelationship[ver_status]/observation/code/@code="103.32012" observation[allergy]/entryRelationship[ver_status]/observation/code/@codeSystem="1.2.36.1.2001.1001.101" observation[allergy]/entryRelationship[ver_status]/observation/code/@displayName observation[allergy]/entryRelationship[ver_status]/observation/value	NCTIS Data Components <b>displayName</b> SHOULD be "Verification Status". The common pattern <a href="#">code</a> SHALL be applied. value/@xsi:type SHALL be "CD". value/@value SHOULD be "unconfirmed" or "confirmed". <a href="#">AllergyIntolerance Verification Status (required)</a>
AllergyIntolerance > type	Identification of the underlying physiological mechanism for the reaction risk.	0..1	<a href="#">code</a>	observation[allergy]/code	The common pattern <a href="#">code</a> SHALL be applied. <a href="#">AllergyIntoleranceType (required)</a>
AllergyIntolerance > code	Code for an allergy or intolerance statement (either a positive or a negated/excluded statement). This may be a code for a substance or pharmaceutical product that is considered to be responsible for the adverse reaction risk (e.g., 'Latex'), an allergy or intolerance condition (e.g., 'Latex allergy'), or a negated/excluded code for a specific substance or class (e.g., 'No latex allergy') or a general or categorical negated statement (e.g., 'No known allergy', 'No known drug allergies').	1..1	<a href="#">CodeableConcept</a>	observation[allergy]/value	The common pattern <a href="#">code</a> SHALL be applied. value/@xsi:type SHALL be "CD". value/originalText or value/@displayName SHALL be included. <a href="#">Indicator of Hypersensitivity or Intolerance to Substance (preferred)<sup>1</sup></a>
AllergyIntolerance > patient	The patient who has the allergy or intolerance.	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>	n/a	Not mapped directly for this model; this is implicit in patientRole.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
AllergyIntolerance > onset[x]	Estimated or actual date, date-time, or age when allergy or intolerance was identified.	0..1	<a href="#">dateTime</a>   <a href="#">Age</a>   <a href="#">Period</a>   <a href="#">Range</a>	See: instantiation choices	<p>The common pattern <a href="#">time</a> <b>SHALL</b> be applied.</p> <p><b>instantiation choices:</b></p> <p>If onset[x] is a <a href="#">dateTime</a> then it <b>SHALL</b> be instantiated as observation[allergy]/effectiveTime/low/@value.</p> <p>If onset[x] is an <a href="#">Age</a> then it <b>SHALL</b> be instantiated as observation[allergy]/entryRelationship[onset]/observation/value. value/@xsi:type <b>SHALL</b> be "PO". The code for observation[allergy]/entryRelationship[onset]/observation/code <b>SHALL</b> be code/@code="445518008" and code/@codeSystem="2.16.840.1.113883.6.96".</p> <p>If onset[x] is a <a href="#">Period</a> then it <b>SHALL</b> be instantiated as observation[allergy]/effectiveTime/low/@value.</p> <p>If onset[x] is a <a href="#">Range</a> then it <b>SHALL</b> be instantiated as observation[allergy]/effectiveTime/low/@value.</p>
AllergyIntolerance > recorder	Individual who recorded the record and takes responsibility for its content.	0..1	<a href="#">Reference(Patient as Base Patient   Practitioner as Base Practitioner)</a>	observation[allergy]/author	<p>If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author.</p> <p>In CDA an author (Practitioner) is part of an author (PractitionerRole).</p> <p>author <b>SHALL</b> conform to one of the templates defined in: <a href="#">author (Base Patient)</a> or <a href="#">author (Base PractitionerRole)</a>.</p>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
AllergyIntolerance > note	Additional narrative about the propensity for the Adverse Reaction, not captured in other fields.	0..*	<a href="#">Annotation</a>	observation[allergy]/entryRelationship[note]	
				observation[allergy]/entryRelationship[note]/@typeCode="COMP"	
				observation[allergy]/entryRelationship[note]/act	
				observation[allergy]/entryRelationship[note]/act/@classCode="ACT"	
				observation[allergy]/entryRelationship[note]/act/@moodCode="EVN"	
				observation[allergy]/entryRelationship[note]/act/code	
				observation[allergy]/entryRelationship[note]/act/code/@code="103.16044"	
				observation[allergy]/entryRelationship[note]/act/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				observation[allergy]/entryRelationship[note]/act/code/@displayName	displayName <b>SHOULD</b> be "Additional Comments".
				observation[allergy]/entryRelationship[note]/act/author	This CDA schema element <b>SHALL</b> be interpreted as optional.  If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author.
AllergyIntolerance > reaction	Details about each adverse reaction event linked to exposure to the identified substance.	0..*	<a href="#">BackboneElement</a>	observation[allergy]/entryRelationship[react]	
				observation[allergy]/entryRelationship[react]/@typeCode="COMP"	
				observation[allergy]/entryRelationship[react]/observation	
				observation[allergy]/entryRelationship[react]/observation/@classCode="OBS"	
				observation[allergy]/entryRelationship[react]/observation/@moodCode="EVN"	
				observation[allergy]/entryRelationship[react]/observation/code	
				observation[allergy]/entryRelationship[react]/observation/code/@code="102.16474"	
				observation[allergy]/entryRelationship[react]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				observation[allergy]/entryRelationship[react]/observation/code/@displayName	displayName <b>SHOULD</b> be "Reaction Event".

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
AllergyIntolerance > reaction > substance	Identification of the specific substance (or pharmaceutical product) considered to be responsible for the Adverse Reaction event. Note: the substance for a specific reaction may be different from the substance identified as the cause of the risk, but it must be consistent with it. For instance, it may be a more specific substance (e.g. a brand medication) or a composite product that includes the identified substance. It must be clinically safe to only process the 'code' and ignore the 'reaction.substance'.	0..1	<a href="#">CodeableConcept</a>	observation[allergy]/entryRelationship[react]/observation/participant[agent]  observation[allergy]/entryRelationship[react]/observation/participant[agent]/@typeCode="CAGNT"  observation[allergy]/entryRelationship[react]/observation/participant[agent]/participantRole  observation[allergy]/entryRelationship[react]/observation/participant[agent]/participantRole/playingEntity  observation[allergy]/entryRelationship[react]/observation/participant[agent]/participantRole/playingEntity/code	The common pattern <a href="#">code SHALL</a> be applied.  code/originalText or code/@displayName <a href="#">SHALL</a> be included.  <a href="#">Adverse Reaction Agent (preferred)</a> <sup>2</sup>
AllergyIntolerance > reaction > manifestation	Clinical symptoms and/or signs that are observed or associated with the adverse reaction event.	1..*		observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/@typeCode="MFST"  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/@inversionInd="true"  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/observation  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/observation/@classCode="OBS"  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/observation/@moodCode="EVN"  observation[allergy]/entryRelationship[react]/observation/entryRelationship[mfst]/observation/code	The common pattern <a href="#">code SHALL</a> be applied.  code/originalText or code/@displayName <a href="#">SHALL</a> be included.  <a href="#">Clinical Finding (preferred)</a> <sup>3</sup>

<sup>1</sup>Note: The source representation of the terminology binding on code in Summary Statement of Allergy or Intolerance [\[DH2019h\]](#) is as an optional slice on the [coding](#) part of the code element. In the representation of the model presented in this specification it is normalised as a preferred binding.

<sup>2</sup>Note: The source representation of the terminology binding on substance in Summary Statement of Allergy or Intolerance [\[DH2019h\]](#) is as an optional slice on the [coding](#) part of the substance element. In the representation of the model presented in this specification it is normalised as a preferred binding.

<sup>3</sup>Note: The source representation of the terminology binding on manifestation in Summary Statement of Allergy or Intolerance [\[DH2019h\]](#) is as an optional slice on the [coding](#) part of the manifestation element. In the representation of the model presented in this specification it is normalised as a preferred binding.

## 10.4 act (List of Medicine Items with Change Information Authored by Practitioner)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
List	A list of medicines authored by a practitioner at a point in time that describes the medicines an individual is taking.	Cardinality comes from linking element	<a href="#">DomainResource</a>	act[med_lst]	When sending a Ceased Medicines List (code@code="101.32027"), entry items (entryRelationship[item]/substanceAdministration) are only expected to be ceased medicine items.  When sending a Current Medicines List (code@code="101.32009"), entry items (entryRelationship[item]/substanceAdministration) are only expected to be new or existing medicine items and no ceased medicine items.  When sending a PSML, and the List is a History of Medication (code@code="10160-0"), at least one entry item (entryRelationship[item]/substanceAdministration) is expected to be sent with at least one new or existing medicine item.  A List has the concepts of an author-role and a source. In CDA, author-role and source are both part of act/author. In this template the maximum occurrences of act/author <b>SHALL</b> be 1 such that act/author is limited to 1..1.
				act[med_lst]/@classCode="ACT"	
				act[med_lst]/@moodCode="EVN"	
				act[med_lst]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.
				act[med_lst]/templateId/@root="1.2.36.1.2001.1001.102.101.100067"	
				act[med_lst]/templateId/@extension="1.0"	
List > author-role	Identifies the practitioner role responsible for the information in the resource (aka author), not necessarily who typed it in.	1..1	<a href="#">Reference(PractitionerRole as PractitionerRole with Practitioner with Mandatory Identifier)</a>	act[med_lst]/author	This author will hold the same value as ClinicalDocument/author.  author <b>SHALL</b> conform to the template defined in <a href="#">author (PractitionerRole with Practitioner with Mandatory Identifier)</a> .
List > status	Indicates the current state of this list.	1..1	<a href="#">code</a>	act[med_lst]/statusCode act[med_lst]/statusCode/@code="active"	The logical status of "current" is mapped to "active" in CDA.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
List > <b>title</b>	A label for the list assigned by the author.	0..1	<a href="#">string</a>	n/a	This logical element has no mapping to CDA.  In CDA this is supported in either the narrative or the title of the applicable section.
List > <b>code</b>	This code defines the purpose of the list - why it was created.	1..1	<a href="#">CodeableConcept</a>	act[med_lst]/code	The common pattern <a href="#">code</a> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">History Of Medication Use List Type (required)</a>
List > <b>subject</b>	The common subject (or patient) of the resources that are in the list, if there is one.	1..1	<a href="#">Reference(Patient as Patient with Mandatory Identifier)</a>	n/a	Not mapped directly for this model; this is implicit in patientRole.
List > <b>encounter</b>	The encounter that is the context in which this list was created.	0..1	<a href="#">Reference(Encounter as Summary of an Encounter for an Event)</a>	act[med_lst]/entryRelationship[enc] act[med_lst]/entryRelationship[enc]/@typeCode="COMP" act[med_lst]/entryRelationship[enc]/encounter	encounter <b>SHALL</b> conform to the template defined in <a href="#">encounter (Summary of an Encounter for an Event)</a> .
List > <b>date</b>	The date that the list was prepared.	1..1	<a href="#">dateTime</a>	act[med_lst]/effectiveTime	The common pattern <a href="#">time</a> <b>SHALL</b> be applied.  This CDA schema element will hold the same value as ClinicalDocument/author/time.
List > <b>source</b>	The entity responsible for deciding what the contents of the list were. Where the list was created by a human, this is the same as the author of the list.	1..1	<a href="#">Reference(Practitioner as Practitioner with Mandatory Identifier)</a>	act[med_lst]/author	This author will hold the same value as ClinicalDocument/author.  In CDA an author (Practitioner) is part of an author (PractitionerRole).  <a href="#">author</a> <b>SHALL</b> conform to the template defined in <a href="#">author (PractitionerRole with Practitioner with Mandatory Identifier)</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
List > note	Comments that apply to the overall list.	0..*	<a href="#">Annotation</a>	act[med_lst]/entryRelationship[note] act[med_lst]/entryRelationship[note]/@typeCode="COMP" act[med_lst]/entryRelationship[note]/act act[med_lst]/entryRelationship[note]/act/@classCode="INFRM" act[med_lst]/entryRelationship[note]/act/@moodCode="EVN" act[med_lst]/entryRelationship[note]/act/code act[med_lst]/entryRelationship[note]/act/code/@code="103.16044" act[med_lst]/entryRelationship[note]/act/code/@codeSystem="1.2.36.1.2001.1001.101" act[med_lst]/entryRelationship[note]/act/code/@displayName act[med_lst]/entryRelationship[note]/act/author act[med_lst]/entryRelationship[note]/act/effectiveTime act[med_lst]/entryRelationship[note]/act/text	NCTIS Data Components displayName <b>SHOULD</b> be "Additional Comments". This CDA schema element <b>SHALL</b> be interpreted as optional. If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author. This CDA schema element <b>SHALL</b> be interpreted as optional. The common pattern <a href="#">time</a> <b>SHALL</b> be applied. If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author/time. text/@xsi:type <b>SHALL</b> be "ST".
List > entry	List of medicine type entries	1..*	<a href="#">BackboneElement</a>	act[med_lst]/entryRelationship[item] act[med_lst]/entryRelationship[item]/@typeCode="COMP"	
List > entry > change-description	Description of a change including the reason for change.	0..1	<a href="#">string</a>	//entryRelationship[flag]/observation/text	A change-description will provide the narrative to accompany the flag and may include reasons for stopping or introducing a medicine item, or describe the narrative of the change itself e.g. dose, form, route, frequency.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
List > entry > <b>flag</b>	The flag allows the system constructing the list to indicate the role and significance of the item in the list.	1..1	<a href="#">CodeableConcept</a>	<pre>//entryRelationship[flag]</pre> <pre>//entryRelationship[flag]/@typeCode="SUBJ"</pre> <pre>//entryRelationship[flag]/@inversionInd="true"</pre> <pre>//entryRelationship[flag]/observation</pre> <pre>//entryRelationship[flag]/observation/@classCode="OBS"</pre> <pre>//entryRelationship[flag]/observation/@moodCode="EVN"</pre> <pre>//entryRelationship[flag]/observation/code</pre> <pre>//entryRelationship[flag]/observation/code/@code="288533004"</pre> <pre>//entryRelationship[flag]/observation/code/@codeSystem="2.16.840.1.113883.6.96"</pre> <pre>//entryRelationship[flag]/observation/code/@displayName</pre> <pre>//entryRelationship[flag]/observation/value</pre>	<p>A flag (entryRelationship[flag]) <b>SHALL</b> be instantiated as a direct child of item (entryRelationship[item]).</p> <p>For example act[med_lst]/entryRelationship[item]/substanceAdministration[med_stat]/entryRelationship[flag].</p>
List > entry > <b>item</b>	A reference to the actual resource from which data was derived.	1..1	<a href="#">Reference(MedicineItemStatement as Medicine Item Statement)</a>	<pre>act[med_lst]/entryRelationship[item]</pre> <pre>act[med_lst]/entryRelationship[item]/substanceAdministration</pre>	<p>substanceAdministration <b>SHALL</b> conform to the template defined in <a href="#">substanceAdministration (Medicine Item Statement)</a>.</p>

## 10.5 substanceAdministration (Medicine Item Statement)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments				
Conformance level comes from linking elements				Context: Comes from linking elements					
<b>MedicationStatement</b>	A record of a medication that is being consumed by a patient. A MedicationStatement may indicate that the patient may be taking the medication now, or has taken the medication in the past or will be taking the medication in the future. The source of this information can be the patient, significant other (such as a family member or spouse), or a clinician. A common scenario where this information is captured is during the history taking process during a patient visit or stay. The medication information may come from sources such as the patient's memory, from a prescription bottle, or from a list of medications the patient, clinician or other party maintains. The primary difference between a medication statement and a medication administration is that the medication administration has complete administration information and is based on actual administration information from the person who administered the medication. A medication statement is often, if not always, less specific. There is no required date/time when the medication was administered, in fact we only know that a source has reported the patient is taking this medication, where details such as time, quantity, or rate or even medication product may be incomplete or missing or less precise. As stated earlier, the medication statement information may come from the patient's memory, from a prescription bottle or from a list of medications the patient, clinician or other party maintains. Medication administration is more formal and is not missing detailed information.	Cardinality comes from linking element	substanceAdministration[med_stat]	A MedicationStatement has the concepts of a single informationSource. In CDA, informationSource is mapped to substanceAdministration/informant. In this template the maximum occurrences of substanceAdministration/informant <b>SHALL</b> be 1 such that substanceAdministration/informant is limited to 0..1.					
			substanceAdministration[med_stat]/@classCode="SBADM"	All instances of substanceAdministration/informant <b>SHALL</b> conform to one of the templates defined in: <a href="#">informant (Base RelatedPerson)</a> or <a href="#">informant (Base Patient)</a> or <a href="#">informant (Base Practitioner)</a> .					
			substanceAdministration[med_stat]/@moodCode	When sending a PSML, this is expected to be "EVN". <b>SHALL NOT</b> be "RQO". <a href="#">HL7 v3 Value Set ActMood (required)</a>					
			substanceAdministration[med_stat]/templateId	The use of templateId signals the imposition of a set of template-defined constraints.					
substanceAdministration[med_stat]/templateId/@root="1.2.36.1.2001.1001.102.101.100066"									
substanceAdministration[med_stat]/templateId/@extension="1.0"									
MedicationStatement > identifier	External identifier - FHIR will generate its own internal identifiers (probably URLs) which do not need to be explicitly managed by the resource. The identifier here is one that would be used by another non-FHIR system - for example an automated medication pump would provide a record each time it operated; an administration while the patient was off the ward might be made with a different system and entered after the event. Particularly important if these records have to be updated.	0..*	<a href="#">Identifier</a>	substanceAdministration[med_stat]/id	The common pattern <a href="#">id</a> <b>SHALL</b> be applied.				

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
MedicationStatement > <b>context</b>	The encounter or episode of care that establishes the context for this MedicationStatement.	0..1	<a href="#">Reference(Encounter)</a> as Summary of an Encounter for an Event)	substanceAdministration[med_stat]/entryRelationship[context]  substanceAdministration[med_stat]/entryRelationship[context]/@typeCode="COMP"  substanceAdministration[med_stat]/entryRelationship[context]/@inversionInd="true"  substanceAdministration[med_stat]/entryRelationship[context]/encounter	
MedicationStatement > <b>status</b>	A code representing the patient or other source's judgment about the state of the medication used that this statement is about. Generally this will be active or completed.	1..1	<a href="#">code</a>	substanceAdministration[med_stat]/statusCode	This CDA schema element is of type CodedSimpleValue (CS).  <a href="#">Medication Act Status HL7 v3 (required)</a> <sup>1</sup>
MedicationStatement > <b>category</b>	Indicates where type of medication statement and where the medication is expected to be consumed or administered.	0..1	<a href="#">CodeableConcept</a>	substanceAdministration[med_stat]/entryRelationship[category]  substanceAdministration[med_stat]/entryRelationship[category]/@typeCode="COMP"  substanceAdministration[med_stat]/entryRelationship[category]/observation  substanceAdministration[med_stat]/entryRelationship[category]/observation/@classCode="OBS"  substanceAdministration[med_stat]/entryRelationship[category]/observation/@moodCode="EVN"  substanceAdministration[med_stat]/entryRelationship[category]/observation/code  substanceAdministration[med_stat]/entryRelationship[category]/observation/code/@code="276339004"  substanceAdministration[med_stat]/entryRelationship[category]/observation/code/@codeSystem="2.16.840.1.113883.6.96"  substanceAdministration[med_stat]/entryRelationship[category]/observation/code/@displayName  substanceAdministration[med_stat]/entryRelationship[category]/observation/value	SNOMED CT  displayName SHOULD be "Environment".  The common pattern <a href="#">code</a> SHALL be applied. value/@xsi:type SHALL be "CD". value/originalText or value/@displayName SHALL be included.  <a href="#">MedicationStatementCategory (preferred)</a>
MedicationStatement > <b>medication[x]</b>	Identifies the medication being administered. This is either a link to a resource representing the details of the medication or a simple attribute carrying a code that identifies the medication from a known list of medications.	1..1	<a href="#">Reference(Medication)</a> as Base Medication)	substanceAdministration[med_stat]/consumable  substanceAdministration[med_stat]/consumable/manufacturedProduct	manufacturedProduct SHALL conform to the template defined in <a href="#">manufacturedProduct (Base Medication)</a> .
MedicationStatement > <b>effective[x]</b>	The interval of time during which it is being asserted that the patient was taking the medication (or was not taking, when the wasNotGiven element is true).	0..1	<a href="#">dateTime   Period</a>	substanceAdministration[med_stat]/effectiveTime	The common pattern <a href="#">time</a> SHALL be applied.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
MedicationStatement > <b>dateAsserted</b>	The date when the medication statement was asserted by the information source.	0..1	<a href="#">dateTime</a>	See: instantiation choices	<p>The common pattern <b>time</b> <b>SHALL</b> be applied.</p> <p><b>instantiation choices:</b></p> <p>Date asserted <b>SHALL</b> be instantiated as <b>substanceAdministration[med_stat]/informant/assignedEntity/time</b> when the asserter is a Practitioner.</p> <p>Date asserted <b>SHALL</b> be instantiated as <b>substanceAdministration[med_stat]/informant/relatedEntity/time</b> when the asserter is a Related Person or Patient.</p>
MedicationStatement > <b>informationSource</b>	The person or organization that provided the information about the taking of this medication. Note: Use derivedFrom when a MedicationStatement is derived from other resources, e.g Claim or MedicationRequest.	0..1	<a href="#">Reference(Related_Person)</a> as Base RelatedPerson   <a href="#">Patient</a> as Base Patient   <a href="#">Practitioner</a> as Base Practitioner	substanceAdministration[med_stat]/informant	<p>If this informant is not instantiated, the data is considered to be included via induction in patientRole.</p> <p>informant <b>SHALL</b> conform to one of the templates defined in: <a href="#">informant (Base RelatedPerson)</a> or <a href="#">informant (Base Patient)</a> or <a href="#">informant (Base Practitioner)</a>.</p>
MedicationStatement > <b>subject</b>	The person, animal or group who is/was taking the medication.	1..1	<a href="#">Reference(Patient)</a> as Patient with Mandatory Identifier	n/a	Not mapped directly for this model; this is implicit in patientRole.
MedicationStatement > <b>taken</b>	Indicator of the certainty of whether the medication was taken by the patient.	1..1	<a href="#">code</a>	See: instantiation choices	<p>This logical element may have a value of y   n   unk   na as per <a href="#">MedicationStatementTaken (required)</a></p> <p><b>instantiation choices:</b></p> <p>When the logical assertion is "y", there is no direct mapping into CDA as this is implicit in the instantiation of the substanceAdministration class.</p> <p>When the logical assertion is "n", taken <b>SHALL</b> be instantiated as <b>substanceAdministration/@negationInd="true"</b> unless status is "new" or "suspended" in which case this is implicit in the statusCode; a negationInd <b>SHALL NOT</b> be present where substanceAdministration/statusCode/@code is "new" or "suspended".</p> <p>When the logical assertion is "unk" or "na", taken <b>SHALL</b> be instantiated as <b>substanceAdministration/@nullFlavor="UNK"</b> or <b>substanceAdministration/@nullFlavor="NA"</b> respectively.</p>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
MedicationStatement > reason-NotTaken	A code indicating why the medication was not taken.	0..*	<a href="#">CodeableConcept</a>	substanceAdministration[med_stat]/entryRelationship[not_taken]	<b>SHALL</b> only be present if the logical value of taken is "n" (substanceAdministration/@negationInd="true").
				substanceAdministration[med_stat]/entryRelationship[not_taken]/@typeCode= "COMP"	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/ observation/@classCode="OBS"	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/ observation/@moodCode="EVN"	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/code	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/ code/@code="103.32024"	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/ code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/ code/@displayName	displayName <b>SHOULD</b> be "Reason for Status".
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/ observation/statusCode/@code="completed"	
				substanceAdministration[med_stat]/entryRelationship[not_taken]/observation/value	The common pattern <b>code</b> <b>SHALL</b> be applied. value/@xsi:type <b>SHALL</b> be "CD". value/originalText or value/@displayName <b>SHALL</b> be included. <a href="#">Medication Reason Not Taken (preferred)</a>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
MedicationStatement > <b>reason-Code</b>	A reason for why the medication is being/was taken.	0..*	<a href="#">CodeableConcept</a>	substanceAdministration[med_stat]/entryRelationship[reason] substanceAdministration[med_stat]/entryRelationship[reason]/@typeCode="RSON" substanceAdministration[med_stat]/entryRelationship[reason]/observation substanceAdministration[med_stat]/entryRelationship[reason]/observation/@classCode="OBS" substanceAdministration[med_stat]/entryRelationship[reason]/observation/@moodCode="EVN" substanceAdministration[med_stat]/entryRelationship[reason]/observation/code substanceAdministration[med_stat]/entryRelationship[reason]/observation/code/@code="103.10141" substanceAdministration[med_stat]/entryRelationship[reason]/observation/code/@codeSystem="1.2.36.1.2001.1001.101" substanceAdministration[med_stat]/entryRelationship[reason]/observation/code/@displayName substanceAdministration[med_stat]/entryRelationship[reason]/observation/value	NCTIS Data Components displayName <b>SHOULD</b> be "Clinical Indication". The common pattern <b>code</b> <b>SHALL</b> be applied. value/@xsi:type <b>SHALL</b> be "CD". value/originalText or value/@displayName <b>SHALL</b> be included. <a href="#">Medication Reason Taken (preferred)</a> <sup>3</sup>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
MedicationStatement > <b>note</b>	Provides extra information about the medication statement that is not conveyed by the other attributes.	0..*	<a href="#">Annotation</a>	substanceAdministration[med_stat]/entryRelationship[note] substanceAdministration[med_stat]/entryRelationship[note]/@typeCode="COMP" substanceAdministration[med_stat]/entryRelationship[note]/act substanceAdministration[med_stat]/entryRelationship[note]/act/@classCode="ACT" substanceAdministration[med_stat]/entryRelationship[note]/act/@moodCode="EVN" substanceAdministration[med_stat]/entryRelationship[note]/act/code substanceAdministration[med_stat]/entryRelationship[note]/act/code/@code="103.16044" substanceAdministration[med_stat]/entryRelationship[note]/act/code/@codeSystem="1.2.36.1.2001.1001.101" substanceAdministration[med_stat]/entryRelationship[note]/act/code/@displayName substanceAdministration[med_stat]/entryRelationship[note]/act/author substanceAdministration[med_stat]/entryRelationship[note]/act/effectiveTime substanceAdministration[med_stat]/entryRelationship[note]/act/text	
					NCTIS Data Components
					displayName <b>SHOULD</b> be "Additional Comments".
					This CDA schema element <b>SHALL</b> be interpreted as optional.  If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author.
					This CDA schema element <b>SHALL</b> be interpreted as optional.  The common pattern <b>time</b> <b>SHALL</b> be applied.  If this CDA Schema element is not instantiated, the data is considered to be included via induction in ClinicalDocument/author/time.
					text/@xsi:type <b>SHALL</b> be "ST".
MedicationStatement > <b>dosage</b>	Indicates how the medication is/was or should be taken by the patient.	1..*	<a href="#">Dosage as AU Base Dosage</a>	substanceAdministration[med_stat]/text	dosage <b>SHALL</b> at least include text or patient instructions instantiated as substanceAdministration/text.  This logical type is not enforced in CDA.  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Dosage as AU Base Dosage</a> .

<sup>1</sup>Note: The source terminology binding on status in Medicine Item Statement [\[DH2019h\]](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [MedicationStatementStatus \(HL7 FHIR\) to Medication Act Status HL7 v3](#) concept map.

<sup>2</sup>Note: The source representation of the terminology binding on medication[x] in Medicine Item Statement [\[DH2019h\]](#) is as optional slices on the [coding](#) part of the medication[x] element. In the representation of the model presented in this specification it is normalised as example bindings.

<sup>3</sup>Note: The source representation of the terminology binding on reasonCode in Medicine Item Statement [\[DH2019h\]](#) is as an optional slice on the [coding](#) part of the reasonCode element. In the representation of the model presented in this specification it is normalised as a preferred binding.

## 10.6 manufacturedProduct (Base Medication)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
Medication	Medication content use in an Australian context. Includes concepts that are specific to Australian usage.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<code>manufacturedProduct[med]</code>	The use of templateId signals the imposition of a set of template-defined constraints.
				<code>manufacturedProduct[med]/templateId</code>	
				<code>manufacturedProduct[med]/templateId/@root="1.2.36.1.2001.1001.102.101.100068"</code>	
				<code>manufacturedProduct[med]/templateId/@extension="1.0"</code>	
Medication > <b>medication-brand-name</b>	The brand medication text name for an associated medication, this may be supplied if a coded brand name is not available.	0..1	<a href="#">string</a>	<code>//entryRelationship[brand]</code>	A medication-brand-name ( <code>entryRelationship[brand]</code> ) <b>SHALL</b> be instantiated as a direct child of item ( <code>entryRelationship[item]</code> ).  For example <code>act[med_lst]/entryRelationship[item]/substanceAdministration[med_stat]/entryRelationship[brand]</code> .  Where brand name is known it is expected to form part of the originalText of the code ( <code>manufacturedMaterial/code/originalText</code> ), and optionally be in medication-brand-name ( <code>entryRelationship[brand]/act/text</code> ).
				<code>//entryRelationship[brand]/@typeCode="COMP"</code>	
				<code>//entryRelationship[brand]/act</code>	
				<code>//entryRelationship[brand]/act/@classCode="ACT"</code>	
				<code>//entryRelationship[brand]/act/@moodCode="EVN"</code>	
				<code>//entryRelationship[brand]/act/code</code>	
				<code>//entryRelationship[brand]/act/code/@code="1402141000168102"</code>	
				<code>//entryRelationship[brand]/act/code/@codeSystem="2.16.840.1.113883.6.96"</code>	SNOMED CT
				<code>//entryRelationship[brand]/act/code/@displayName</code>	displayName <b>SHOULD</b> be "Branded product name".
				<code>//entryRelationship[brand]/act/text</code>	text/@xsi:type <b>SHALL</b> be "ST".

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Medication > <b>medication-generic-name</b>	The generic medication text name for an associated medication, this may not be the same as the subject medication (prescribed, dispensed or stated) but may be used to provide an additional or equivalent drug name that is a generic medication concept.	0..1	<a href="#">string</a>	//entryRelationship[generic]  //entryRelationship[generic]/@typeCode="COMP" //entryRelationship[generic]/act //entryRelationship[generic]/act/@classCode="ACT" //entryRelationship[generic]/act/@moodCode="EVN" //entryRelationship[generic]/act/code //entryRelationship[generic]/act/code/@code="1402131000168106" //entryRelationship[generic]/act/code/@codeSystem="2.16.840.1.113883.6.96" //entryRelationship[generic]/act/code/@displayName //entryRelationship[generic]/act/text	A medication-generic-name (entryRelationship[generic]) <b>SHALL</b> be instantiated as a direct child of item (entryRelationship[item]).  For example act[med_lst]/entryRelationship[item]/substanceAdministration[med_stat]/entryRelationship[generic].
Medication > <b>code</b>	Australian coding slices are typical medicine/product concept codes.	1..1	<a href="#">CodeableConcept</a>	manufacturedProduct[med]/manufacturedMaterial  manufacturedProduct[med]/manufacturedMaterial/@determinerCode="KIND"  manufacturedProduct[med]/manufacturedMaterial/code	When sending a PSML, PBS Item codes are expected to be sent as one or more translations of the AMT code.  The common pattern <b>code</b> <b>SHALL</b> be applied.  code/originalText or code/@displayName <b>SHALL</b> be included.  <a href="#">Australian Medication (preferred)</a> <a href="#">Australian Pharmaceutical Benefits Scheme Schedule Item (example)</a> <sup>2</sup> <a href="#">MIMS Terminology (example)</a> <sup>3</sup> <a href="#">GTIN for Medicines (example)</a> <sup>4</sup>  Recommended mappings for this logical type to CDA (R2) are available: <a href="#">CodeableConcept as a Medicine Item Code</a> .
Medication > <b>status</b>	A code to indicate if the medication is in active use.	0..1	<a href="#">code</a>	n/a	Not mapped directly for this model; implicit in the status of the referencing act e.g. substanceAdministration[med_stat]/statusCode.
Medication > <b>manufacturer</b>	Manufacturer of the actual physical medicine product	0..1	<a href="#">Reference(Organization as Base Organization)</a>	manufacturedProduct[med]/manufacturerOrganization	manufacturerOrganization <b>SHALL</b> conform to the template defined in <a href="#">manufacturerOrganization (Base Organization)</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Medication > <b>form</b>	Describes the form of the item. Powder; tablets; capsule.	0..1	<a href="#">CodeableConcept</a>	manufacturedProduct[med]/manufacturedMaterial/ext:formCode	The common pattern <a href="#">code SHALL</a> be applied. ext:formCode/originalText or ext:formCode/@displayName <a href="#">SHALL</a> be included. <a href="#">Medication Form (preferred)</a> <sup>5</sup>
Medication > <b>ingredient</b>	Identifies a particular constituent of interest in the product. Can be coded with AMT.	0..*	<a href="#">BackboneElement</a>	manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient	The common pattern <a href="#">Ingredient SHALL</a> be applied.
Medication > ingredient > <b>item[x]</b>	The actual ingredient - either a substance (simple ingredient) or another medication.	1..1	<a href="#">CodeableConcept</a>   <a href="#">Reference(Subsystem as Base Substance</a>   <a href="#">Medication as Base Medication</a> )	manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:ingredientManufacturedMaterial	In CDA, item[x] is represented with ext:code regardless of the logical type.
				manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:ingredientManufacturedMaterial/ext:code	The common pattern <a href="#">code SHALL</a> be applied. ext:code/originalText or ext:code/@displayName <a href="#">SHALL</a> be included. If item[x] is a <a href="#">CodeableConcept</a> , then <a href="#">AMT Medicinal Product (preferred)</a> <sup>6</sup> If item[x] is a <a href="#">Substance</a> , then <a href="#">Substance (preferred)</a> ; see <a href="#">&lt;Ingredient&gt;</a> for guidance on including additional available attributes. If item[x] is a <a href="#">Medication</a> , then <a href="#">AMT Medicinal Product (preferred)</a> ; see <a href="#">&lt;Ingredient&gt;</a> for guidance on including additional available attributes.
Medication > ingredient > <b>isActive</b>	Indication of whether this ingredient affects the therapeutic action of the drug.	0..1	<a href="#">boolean</a>	n/a	This logical element has no mapping to CDA.
Medication > ingredient > <b>amount</b>	Specifies how many (or how much) of the items there are in this Medication. For example, 250 mg per tablet. This is expressed as a ratio where the numerator is 250mg and the denominator is 1 tablet.	0..1	<a href="#">Ratio</a>	manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:quantity	
Medication > <b>package</b>	Information that only applies to packages (not products).	0..1	<a href="#">BackboneElement</a>	n/a	This logical element has no mapping to CDA.
Medication > package > <b>batch</b>	Information about a group of medication produced or packaged from one production run.	0..1	<a href="#">BackboneElement</a>	n/a	This model restricts the maximum occurrences of batch to 1; the batch is implicit in the mapping of the child elements.
Medication > package > batch > <b>lotNumber</b>	The assigned lot number of a batch of the specified product.	0..1	<a href="#">string</a>	manufacturedProduct[med]/manufacturedMaterial/lotNumberText	
Medication > package > batch > <b>expirationDate</b>	When this specific batch of product will expire.	0..1	<a href="#">dateTime</a>	manufacturedProduct[med]/manufacturedMaterial/ext:expirationTime	The common pattern <a href="#">time SHALL</a> be applied.

<sup>1</sup>Note: The source representation of the terminology binding on medication[x] in Base Medication [\[DH2019h\]](#) is as optional slices on the [coding](#) part of the medication[x] element. In the representation of the model presented in this specification it is normalised as preferred bindings.

<sup>2</sup>Note: The source representation of the terminology binding on medication[x] in Base Medication [\[DH2019h\]](#) is as optional slices on the [coding](#) part of the medication[x] element. In the representation of the model presented in this specification it is normalised as example bindings.

<sup>3</sup>Note: The source representation of the terminology binding on medication[x] in Base Medication [DH2019h] is as optional slices on the [coding](#) part of the medication[x] element. In the representation of the model presented in this specification it is normalised as example bindings.

<sup>4</sup>Note: The source representation of the terminology binding on medication[x] in Base Medication [DH2019h] is as optional slices on the [coding](#) part of the medication[x] element. In the representation of the model presented in this specification it is normalised as example bindings.

<sup>5</sup>Note: The source representation of the terminology binding on form in Base Medication [DH2019h] is as an optional slice on the [coding](#) part of the form element. In the representation of the model presented in this specification it is normalised a preferred binding.

<sup>6</sup>Note: The source representation of the terminology binding on item[x] in Base Medication [DH2019h] is as an optional slice on the [coding](#) part of the item[x] element. In the representation of the model presented in this specification it is normalised a preferred binding.

## 10.7 observation (Assertion of No Relevant Finding)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from linking elements				Context: Comes from linking elements	
<b>Observation</b>	Statement of clinical judgement that there are no items of specific interest after a reasonable investigation.	Cardinality comes from linking element	<a href="#">DomainResource</a>	<code>observation[no_find]</code>	All instances of a performer (observation/author or observation/participant/@typeCode="AUT") SHALL conform to one of the templates defined in: <a href="#">author (Base PractitionerRole)</a> or <a href="#">participant (author Base Organization)</a> or <a href="#">author (Base RelatedPerson)</a> or <a href="#">author (Base Patient)</a> .
				<code>observation[no_find]/@classCode="OBS"</code>	
				<code>observation[no_find]/@moodCode="EVN"</code>	
				<code>observation[no_find]/templateId</code>	The use of templateId signals the imposition of a set of template-defined constraints.
				<code>observation[no_find]/templateId/@root="1.2.36.1.2001.1001.102.101.100032"</code>	
				<code>observation[no_find]/templateId/@extension="1.0"</code>	
<b>Observation &gt; status</b>	The status of the result value.	1..1	<a href="#">code</a>	<code>observation[no_find]/entryRelationship[status]</code>	
				<code>observation[no_find]/entryRelationship[status]/@typeCode="COMP"</code>	
				<code>observation[no_find]/entryRelationship[status]/observation</code>	
				<code>observation[no_find]/entryRelationship[status]/observation/@classCode="OBS"</code>	
				<code>observation[no_find]/entryRelationship[status]/observation/@moodCode="EVN"</code>	
				<code>observation[no_find]/entryRelationship[status]/observation/code</code>	
				<code>observation[no_find]/entryRelationship[status]/observation/code/@code="103.32010"</code>	
				<code>observation[no_find]/entryRelationship[status]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"</code>	NCTIS Data Components
				<code>observation[no_find]/entryRelationship[status]/observation/code/@displayName</code>	displayName SHOULD be "Observation Result Status".
				<code>observation[no_find]/entryRelationship[status]/observation/value</code>	The common pattern code SHALL be applied. value/@xsi:type SHALL be "CD". value/@value SHOULD be "final". <a href="#">ObservationStatus (required)</a>

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Observation > <b>code</b>	Describes what was observed. Sometimes this is called the observation 'name'.	1..1	<a href="#">CodeableConcept</a>	observation[no_find]/code	
				observation[no_find]/code/@code="ASSERTION"	
				observation[no_find]/code/@codeSystem="2.16.840.1.113883.5.4"	v3 Code System ActCode
				observation[no_find]/code/@displayName	displayName <b>SHOULD</b> be "Assertion".
Observation > <b>subject</b>	The patient, or group of patients, location, or device whose characteristics (direct or indirect) are described by the observation and into whose record the observation is placed.	1..1	<a href="#">Reference(Patient)</a> as Patient with Mandatory Identifier)	n/a	Not mapped directly for this model; this is implicit in patientRole.
Observation > <b>effective[x]</b>	The time or time-period the observed value is asserted as being true. For biological subjects - e.g. human patients - this is usually called the 'physiologically relevant time'. This is usually either the time of the procedure or of specimen collection, but very often the source of the date/time is not known, only the date/time itself.	0..1	<a href="#">dateTime</a>   <a href="#">Period</a>	observation[no_find]/effectiveTime	The common pattern <b>time</b> <b>SHALL</b> be applied.
Observation > <b>performer</b>	Who was responsible for asserting the observed value as 'true'.	0..*	<a href="#">Reference(Practitioner)</a> as Base Practitioner   <a href="#">Organization</a> as Base Organization   <a href="#">RelatedPerson</a> as Base RelatedPerson   <a href="#">Patient</a> as Base Patient)	See: instantiation choices	<p>If performer is not instantiated the data is considered to be included via induction in ClinicalDocument/author.</p> <p><b>instantiation choices:</b></p> <p>If performer is an <a href="#">Organization</a> then it <b>SHALL</b> be instantiated as observation[no_find]/participant. participant <b>SHALL</b> conform to the template defined in <a href="#">participant (author Base Organization)</a>.</p> <p>In CDA an author (Practitioner) is part of an author (PractitionerRole).</p> <p>If performer is a <a href="#">Practitioner</a> or <a href="#">RelatedPerson</a> or <a href="#">Patient</a> then it <b>SHALL</b> be instantiated as observation[no_find]/author. author <b>SHALL</b> conform to one of the templates defined in: <a href="#">author (Base PractitionerRole)</a> or <a href="#">author (Base RelatedPerson)</a> or <a href="#">author (Base Patient)</a>.</p>
Observation > <b>value[x]</b>	The information determined as a result of making the observation, if the information has a simple value.	1..1	<a href="#">CodeableConcept</a>	observation[no_find]/value	<p>When sending a PSML, this is expected to be 1234391000168107  No known current medications .</p> <p>The common pattern <b>code</b> <b>SHALL</b> be applied.</p> <p><b>value/@ xsi:type</b> <b>SHALL</b> be "CD".</p> <p><b>value/originalText</b> or <b>value/@ displayName</b> <b>SHALL</b> be included.</p> <p><b>value/@ nullFlavor</b> <b>SHALL NOT</b> be instantiated.</p> <p><a href="#">Assertion Of Absence value set (required)</a></p>

## 10.8 ext:coverage (Practitioner qualification)

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>CDA Header Data Elements</b>				Context: Comes from linking elements	
Practitioner > qualification	Qualifications obtained by training and certification.	Cardinality comes from linking element	<a href="#">BackboneElement</a>	ext:coverage2[prac_qual] ext:coverage2[prac_qual]/@typeCode="COVBY" ext:coverage2[prac_qual]/templateId ext:coverage2[prac_qual]/templateId/@root="1.2.36.1.2001.1001.102.101.100038" ext:coverage2[prac_qual]/templateId/@extension="1.0" ext:coverage2[prac_qual]/ext:entitlement ext:coverage2[prac_qual]/ext:entitlement/@classCode="COV" ext:coverage2[prac_qual]/ext:entitlement/@moodCode="EVN" ext:coverage2[prac_qual]/ext:entitlement/ext:participant[prac] ext:coverage2[prac_qual]/ext:entitlement/ext:participant[prac]/@typeCode="HLD" ext:coverage2[prac_qual]/ext:entitlement/ext:participant[prac]/ext:participantRole ext:coverage2[prac_qual]/ext:entitlement/ext:participant[prac]/ext:participantRole/@classCode="ASSIGNED"	The use of templateId signals the imposition of a set of template-defined constraints.  Practitioner > qualification is represented in CDA by an entitlement (qualification) held by a participant (practitioner).  This ext:id SHALL hold the same value as practitioner that this qualification is associated with (the value in this id element SHALL be present in separate participation).
Practitioner > qualification > identifier	An identifier that applies to this person's qualification in this role.	0..*	<a href="#">Identifier</a>	ext:coverage2[prac_qual]/ext:entitlement/ext:id	

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > qualification > <b>code</b>	Coded representation of the qualification.	1..1	<a href="#">CodeableConcept</a>	ext:coverage2[prac_qual]/ext:entitlement/ext:code	The common pattern <b>code</b> <b>SHALL</b> be applied.  ext:code/originalText or ext:code/@displayName <b>SHALL</b> be included.  <a href="#">v2 table 0360, Version 2.7 (example)</a>
Practitioner > qualification > <b>period</b>	Period during which the qualification is valid.	0..1	<a href="#">Period</a>	ext:coverage2[prac_qual]/ext:entitlement/ext:effectiveTime	
Practitioner > qualification > <b>issuer</b>	Organization that regulates and issues the qualification.	0..1	<a href="#">Reference(Organization)</a>	ext:coverage2[prac_qual]/ext:entitlement/ext:participant[issuer]	ext:participant[issuer]/@typeCode <b>SHALL</b> be "AUT".  ext:participant[issuer]/ext:participantRole <b>SHALL</b> be "COMPAR".



# 11 Common patterns

## 11.1 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*
- *qualifier* (CD)
- *translation* (CD)
- any combination of the above.

A *displayName* is highly recommended.

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

Where used, the *codeSystem* attribute **SHALL** contain the OID for the relevant vocabulary. Values for coding systems can be obtained from the HL7 OID registry accessible from the HL7 home web page at [www.hl7.org](http://www.hl7.org).

Where used, the *displayName* attribute **SHALL** contain a human-readable description of the code value that is provided by the code system; *displayName* is a case insensitive value except where explicitly stated otherwise by the code system. A preferred interface term for display that is not a member of the description set supplied by the code system **SHALL NOT** be used to populate the *displayName* attribute.

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

Where used, the *originalText* element **SHALL** be used to carry the full text associated with this code as selected by, typed by or displayed to the author of this statement including the contents of the *qualifier* if present.

Where used, the *qualifier* element **SHALL** carry a code from the same code system as the code; for example if the main concept code is from SNOMED CT the *qualifier* also has to be taken from SNOMED CT as the use of a different code system for a *qualifier* is not allowed. The use of the *qualifier* element is governed by the code system used and cannot be used with code systems that do not provide for qualifiers (e.g. pre-coordinated systems).

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. For guidance on coding common clinical concepts in CDA documents see [Representing Coding in CDA Documents Implementation Guidance \[NEHT2011bv\]](#).

Where a code is used from a different code system to that specified, or where the code lies outside the reference set specified, or where a code system or reference set is not specified, the code value **SHALL** be consistent with the meaning of the associated element of the Shared Medicines List model.

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

If a vocabulary is specified in this implementation guide and it is not possible to use this vocabulary, but an alternate vocabulary is in use, the *originalText* element **SHALL** be used to carry the full text as selected by, typed by or displayed to the author of this statement. The *code* element **SHALL** be used to carry the relevant information from the alternate vocabulary and the alternate vocabulary **SHALL** be registered with HL7 and allocated an appropriate OID.

If an alternate vocabulary is in use and a translation into the specified code system is available, the *originalText* element **SHALL** be used to carry the full text as selected by, typed by or displayed to the author of this statement. The *code* element **SHALL** be used to carry the relevant information from the alternate vocabulary and the alternate vocabulary **SHALL** be registered with HL7 and allocated an appropriate OID. The *translation* element **SHALL** be used to indicate the translation code from the specified vocabulary.

### Example 11.1. code

```
<!-- Specified code system in use -->
<code
  code="271807003"
  codeSystem="2.16.840.1.113883.6.96"
  codeSystemName="SNOMED CT"
  codeSystemVersion="20101130"
  displayName="Skin rash" />

<!-- Specified code system in use with a qualifier -->
<code
  code="23986001"
  codeSystem="2.16.840.1.113883.6.96"
  codeSystemName="SNOMED CT"
  displayName="Glaucoma" >
  <originalText>Glaucoma, left</originalText>
  <qualifier>
    <name
      code="272741003"
      codeSystem="2.16.840.1.3883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Laterality" />
    <value
      code="7771000"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Left"
      xsi:type="CD" />
  </qualifier>
</code>
```

```
<!-- Alternate code system in use and a translation into the specified code system is available -->
<code
  code="J45.9"
  codeSystem="2.16.840.1.113883.6.135"
  codeSystemName="icd10am"
  displayName="Asthma, unspecified">
  <originalText>Asthma</originalText>
  <translation
    code="195967001"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="Asthma"/>
</code>

<!-- Alternate code system in use and no translation into the specified code system is available -->
<code
  code="J45.9"
  codeSystem="2.16.840.1.113883.6.135"
  codeSystemName="icd10am"
  displayName="Asthma, unspecified">
  <originalText>Asthma</originalText>
</code>

<!-- No suitable code can be found or there is no code system in use -->
<code
  <originalText>Asthma</originalText>
</code>
```

## 11.2 id

The <id> element pattern is of data type II (Instance Identifier). The II data type may have:

- a null attribute (*nullFlavor*)
- a *root*
- a *root* and an *extension*
- a *root* and an *extension* and an *assigningAuthorityName*
- a *root* and an *assigningAuthorityName*
- a *root* and an *assigningAuthorityName* and a *displayable*
- a *root* and an *extension* and a *displayable*
- a *root* and an *extension* and an *assigningAuthorityName* and a *displayable*
- a *root* and a *displayable*

The root attribute is **REQUIRED** and is a unique identifier that guarantees the global uniqueness of the instance identifier. The root alone **MAY** be the entire instance identifier. The root attribute **SHALL** be a UUID or OID.

The extension attribute **MAY** be present, and is a character string as a unique identifier within the scope of the identifier root.

In the case of business or technical identifier an *assigningAuthorityName* is **RECOMMENDED**.

Identifiers appear in this implementation guide for two different reasons. The first is that the identifier has been identified as relevant to the business process or clinical workflow. These identifiers are documented in mapping tables in the Element column, e.g. Composition > identifier or Medication Statement (Prescription) > identifier, which make clear the meaning of this identifier.

In addition, the implementation makes clear that identifiers may also be found on many other parts of the CDA structure. These identifiers, often referred to as technical identifiers, are allowed to facilitate record matching across multiple versions of related documents, so that the same record can consistently be identified, in spite of variations in the information as the record passes through time or between systems. These identifiers have no meaning in the business specification. If senders provide one of these identifiers, it **SHALL** always be the same identifier in all versions of the record, and it **SHALL** be globally unique per the rules of the II data type.

### Example 11.2. id

```
<id root="2.16.840.1.113883.19" extension="123A45" />  
<ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621566684455" />
```

## 11.3 time

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

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

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

The <time> element pattern is of data type TS (Point in Time) and can also be an interval between two times (IVL\_TS), representing a period of time. Both forms can either have a nullFlavor attribute or child components following allowed patterns.

A simple timestamp (point in time) will only contain a value attribute containing the time value, expressed as a series of digits as long as required or as available.

### Example 11.3. 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 11.4. 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 11.5. Interval timestamp 1

```
<period xsi:type="IVL_TS">
  <high value="200910301030+1000" />
</period>
```

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

#### Example 11.6. Interval timestamp 2

```
<period xsi:type="IVL_TS">
  <low value="2007" />
  <high value="2009" />
</period>
```

This represents "the calendar years between 2007 and 2009". The low element **SHALL** precede the high element. As per the previous example, a discretionary xsi:type attribute has been provided to explicitly cast the pattern to "IVL\_TS".

#### Example 11.7. Width time

```
<period>
  <high value="20091017" />
  <width value="2" unit="wk" />
</period>
```

This expresses "two weeks before October 17th, 2009". A low value can be derived from this.

## 11.4 Entity Identifier

### CDA mapping

Logical element	CDA element description	CDA card	CDA schema element	CDA constraints and comments
<b>CDA Data Elements</b>				
Entity Identifier	A number or code issued for the purpose of identifying a participant within a health-care context.	Cardinality comes from linking element	//ext:asEntityIdentifier	
		1..1	//ext:asEntityIdentifier/@classCode="IDENT"	
		1..1	//ext:asEntityIdentifier/ext:id	
		1..1	//ext:asEntityIdentifier/ext:id/@root	@root <b>SHALL</b> be an OID and <b>SHALL NOT</b> be a UUID. @root <b>SHALL</b> be a globally unique object identifier (i.e. OID) that identifies the combination of geographic area, issuer and type. If no such OID exists, it <b>SHALL</b> be defined before any identifiers can be created.
		0..1	//ext:asEntityIdentifier/ext:id/@extension	If present, @extension <b>SHALL</b> be a unique identifier within the scope of the root that is populated directly from the designation.
		0..1	//ext:asEntityIdentifier/ext:id/@assigningAuthorityName	@assigningAuthorityName <b>SHOULD</b> be used and, if it is used, <b>SHALL</b> be a human-readable name for the namespace represented in the root that is populated with the issuer, or identifier type, or a concatenation of both as appropriate. This <b>SHOULD NOT</b> be used for machine readability purposes.
		0..1	//ext:asEntityIdentifier/ext:code	The common pattern <b>code</b> <b>SHALL</b> be applied.
		0..1	//ext:asEntityIdentifier/ext:assigningGeographicArea	
		1..1	//ext:asEntityIdentifier/ext:assigningGeographicArea/@classCode="PLC"	
		0..1	//ext:asEntityIdentifier/ext:assigningGeographicArea/ext:name	If present, ext:name <b>SHALL</b> be the range and extent that the identifier applies to the object with which it is associated that is populated directly from the geographic area. This <b>SHOULD NOT</b> be used for machine readability purposes.  <a href="#">Healthcare Identifier Geographic Area (preferred)</a>  This CDA schema element is expected to be populated with the display, e.g. "National Identifier".

### Example 11.8. Entity Identifier

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- person -->  
<xss:asEntityIdentifier classCode="IDENT">  
  <xss:id root="1.2.36.1.2001.1003.0.800360883357361" assigningAuthorityName="IHI" />  
  <xss:assigningGeographicArea classCode="PLC">  
    <xss:name>National Identifier</xss:name>  
  </xss:assigningGeographicArea>  
</xss:asEntityIdentifier>  
  
<xss:asEntityIdentifier classCode="IDENT">  
  <xss:id root="1.2.36.1.2001.1005.29.8003621566684455" extension="542181" assigningAuthorityName="Croydon GP Centre" />  
  <xss:code code="MP" codeSystem="2.16.840.1.113883.12.203" codeSystemName="Identifier Type (HL7)" />  
</xss:asEntityIdentifier>  
  
<!-- organisation -->  
<ext:asEntityIdentifier classCode="IDENT">  
  <ext:id assigningAuthorityName="HPI-O" root="1.2.36.1.2001.1003.0.8003621566684455" />  
  <ext:assigningGeographicArea classCode="PLC">  
    <ext:name>National Identifier</ext:name>  
  </ext:assigningGeographicArea>  
</ext:asEntityIdentifier>
```

# 11.5 Personal Relationship

## CDA mapping

Logical element	CDA element description	CDA card	CDA schema element	CDA constraints and comments
<b>CDA Data Elements</b>				
Personal Relationship	The personal relationship of a participant to a patient. A personal relationship is not to be instantiated if the participant is a practitioner.	Cardinality comes from linking element	//ext:personalRelationship	
	0..1		//ext:personalRelationship/@classCode="PRS"	
	0..1		//ext:personalRelationship/ext:id	
	1..1		//ext:personalRelationship/ext:code	The common pattern <b>code</b> SHALL be applied.
	0..1		//ext:personalRelationship/ext:statusCode	The common pattern <b>code</b> SHALL be applied. <a href="#">v3 Code System RoleStatus (required)</a>
	0..1		//ext:personalRelationship/ext:effectiveTime	The common pattern <b>time</b> SHALL be applied.
	1..1		//ext:personalRelationship/ext:asPersonalRelationship	
	0..1		//ext:personalRelationship/ext:asPersonalRelationship/@classCode="PSN"	
	0..1		//ext:personalRelationship/ext:asPersonalRelationship/@determinerCode="INSTANCE"	
	1..1		//ext:personalRelationship/ext:asPersonalRelationship/id	This CDA schema element <b>SHALL</b> hold the same value as patientRole/ <b>id</b> .
	1..1		//ext:personalRelationship/ext:asPersonalRelationship/administrativeGenderCode/@nullFlavor="NA"	Included for CDA conformance only.

### Example 11.9. Personal Relationship

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- patient -->  
<recordTarget>  
  <patientRole>  
    <!-- patient identifier-->  
    <id extension="100543" root="2.16.840.1.113883.19.1.2.3.4"/>  
  </patientRole>  
</recordTarget>  
  
<!-- author with personal relationship -->  
<author>  
  <time value="200911031647+1000"/>  
  <assignedAuthor>  
    <!-- author identifier-->  
    <id root="86d729b8-72d2-460a-a64c-489a51607450"/>  
    <assignedPerson>  
      <!-- personal relationship -->  
      <ext:personalRelationship>  
        <!--relationship-->  
        <ext:code code="SIGOTHR" codeSystem="2.16.840.1.113883.5.111" codeSystemName="v3 Code System RoleCode" displayName="significant other" />  
        <!--patient-->  
        <ext:asPersonalRelationship>  
          <!-- patient identifier-->  
          <id extension="100543" root="2.16.840.1.113883.19.1.2.3.4"/>  
          <administrativeGenderCode nullFlavor="NA" />  
        </ext:asPersonalRelationship>  
      </ext:personalRelationship>  
    </assignedPerson>  
  </assignedAuthor>  
</author>  
  
<!-- participant performer with personal relationship -->  
<participant typeCode="PRF">  
  <associatedEntity classCode="ASSIGNED">  
    <!--participant performer identifier-->  
    <id root="f3351b5c-8a6c-437c-a55c-a6c121873456"/>  
    <!-- personal relationship -->  
    <associatedPerson>  
      <ext:personalRelationship>  
        <!--relationship-->  
        <ext:code code="FAMMEMB" codeSystem="2.16.840.1.113883.5.111" codeSystemName="v3 Code System RoleCode" displayName="Family Member" />  
        <!--patient-->  
        <ext:asPersonalRelationship>  
          <!-- patient identifier-->  
          <id extension="100543" root="2.16.840.1.113883.19.1.2.3.4"/>  
          <administrativeGenderCode nullFlavor="NA" />  
        </ext:asPersonalRelationship>  
      </ext:personalRelationship>  
    </associatedPerson>  
  </associatedEntity>  
</participant>
```

## 11.6 Qualification

### CDA mapping

Logical element	CDA element description	CDA card	CDA schema element	CDA constraints and comments
<b>CDA Data Elements</b>				
Qualification	A list of professional certifications, and certificates recognising having passed a course.	Cardinality comes from linking element	<b>ext:asQualifications</b>	
		1..1	<code>ext:asQualifications/@classCode="QUAL"</code>	
		1..1	<code>ext:asQualifications/ext:code</code>	Qualifications is a text field, so the text list is captured in <code>ext:code/originalText</code> .

## 11.7 Ingredient

### CDA mapping

Logical element	CDA element description	CDA card	CDA schema element	CDA constraints and comments
CDA Data Elements				
Ingredient	An ingredient of the medicine item.	Cardinality comes from linking element	//ext:asIngredient	
		1..1	//ext:asIngredient/@classCode="INGR"	
		0..*	//ext:asIngredient/ext:id	
		0..1	//ext:asIngredient/ext:ingredientManufacturedMaterial	The substance that is the ingredient. This may be another medication.
		1..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/@classCode="MMAT"	
		1..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/@determinerCode="KIND"	
		0..*	//ext:asIngredient/ext:ingredientManufacturedMaterial/ext:id	
		0..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/ext:code	Code for the substance.
		0..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/ext:desc	Name and/or description of the substance.
		0..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/ext:expirationTime	This CDA schema element is discouraged from use.
		0..1	//ext:asIngredient/ext:ingredientManufacturedMaterial/ext:quantity	This CDA schema element <b>SHOULD NOT</b> be instantiated as the determinerCode is fixed to "KIND".
		0..1	//ext:asIngredient/ext:quantity	This CDA schema element is of type Ratio Physical Quantity / Physical Quantity (RTO_PQ_PQ).  Strength (amount) of the substance as an ingredient in the medicine item, e.g. 2% of the ingredient or 5mg of the ingredient or 10mg of the ingredient per ml or 250 mg per tablet.

### Example 11.10. Ingredient

<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->

```
<!--Medication-->
<consumable>
<manufacturedProduct>
<manufacturedMaterial nullFlavor="NA">
<!--Medication.code-->
<code code="22048011000036105"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="amoxicillin 250 mg chewable tablet">
</code>
<!--Medication.ingredient-->
<ext:asIngredient classCode="INGR">
<ext:ingredientManufacturedMaterial classCode="MMAT" determinerCode="KIND">
<!--Medication.ingredient.item[x]-->
<ext:code code="1799011000036105"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="amoxicillin"/>
</ext:ingredientManufacturedMaterial>
<!--Medication.ingredient.amount-->
<ext:quantity>
<numerator unit="mg" value="250"/>
<denominator value="1"/>
</ext:quantity>
</ext:asIngredient>
</manufacturedMaterial>
</manufacturedProduct>
</consumable>
```

## 11.8 Language Communication

### CDA mapping

Logical element	CDA element description	CDA card	CDA schema element	CDA constraints and comments
CDA Data Elements				
Language Communication	The language communication capabilities of an individual.	Cardinality comes from linking element	//ext:languageCommunication	
		1..1	//ext:languageCommunication/languageCode	This CDA schema element is of type CodedSimpleValue (CS). <a href="#">All Languages (required)</a> <a href="#">Common Languages in Australia (extensible)</a>
		0..1	//ext:languageCommunication modeCode	The common pattern code SHALL be applied.
		0..1	//ext:languageCommunication/proficiencyLevelCode	The common pattern code SHALL be applied.
		0..1	//ext:languageCommunication/preferenceInd	

### Example 11.11. Language Communication

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->
```

```
<!-- Language communication -->  
<ext:languageCommunication>  
  <languageCode code="en"/>  
  <preferenceInd value="true"/>  
</ext:languageCommunication>  
<ext:languageCommunication>  
  <languageCode code="de"/>  
  <preferenceInd value="true"/>  
</ext:languageCommunication>
```

# Appendix A. Complex data type mappings to CDA (R2)

This informative appendix provides some guidance on how complex data types referred to in the body of this specification can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

## A.1 Identifier

This informative appendix provides some guidance on how the complex data type [Identifier](#) can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

In addition to examples provided in this implementation guide some guidance on representation of common identifiers in CDA is provided by [Representation of Common Australian Identifiers in v2 and CDA \[HI2011\]](#) and [Common - Clinical Document \[DH2019a\]](#).

## CDA mapping

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
<b>Identifier</b>	A technical identifier - identifies some entity uniquely and unambiguously.	Cardinality comes from linking element	<a href="#">Element</a>	See: instantiation choices	<p>In CDA it is possible that an identifier is formed such that the system and value are both part of the value of the root attribute. In this circumstance the extension attribute <b>SHOULD NOT</b> be instantiated.</p> <p><b>instantiation choices:</b></p> <p>If the identifier is for a Patient, Practitioner, PractitionerRole, Organization, RelatedPerson or Device, then the identifier is expected to be instantiated as ext:asEntityIdentifier/@classCode="IDENT". See &lt;Entity Identifier&gt; for available attributes.</p> <p>The identifier element may be instantiated as id.</p>
<b>Identifier &gt; use</b>	The purpose of this identifier.	0..1	<a href="#">code</a>	n/a	This logical element has no mapping to CDA.
<b>Identifier &gt; type</b>	A coded type for the identifier that can be used to determine which identifier to use for a specific purpose.	0..1	<a href="#">CodeableConcept</a>	//ext:asEntityIdentifier/ext:code	<p><a href="#">Identifier Type Codes (extensible)</a></p> <p>ext:code is only available if the identifier is instantiated as ext:asEntityIdentifier/@classCode="IDENT".</p>
<b>Identifier &gt; system</b>	Establishes the namespace for the value - that is, a URL that describes a set values that are unique.	0..1	<a href="#">uri</a>	See: instantiation choices	<p><b>instantiation choices:</b></p> <p>If the identifier is for a Patient, Practitioner, PractitionerRole, Organization, RelatedPerson or Device, then the identifier system is expected to be instantiated as ext:asEntityIdentifier/ext:id/@root.</p> <p>The identifier system may be instantiated as id/@root.</p>
<b>Identifier &gt; value</b>	The portion of the identifier typically relevant to the user and which is unique within the context of the system.	0..1	<a href="#">string</a>	See: instantiation choices	<p><b>instantiation choices:</b></p> <p>If the identifier is for a Patient, Practitioner, PractitionerRole, Organization, RelatedPerson or Device, then identifier value is expected to be instantiated as ext:asEntityIdentifier/ext:id/@extension.</p> <p>The identifier value may be instantiated as id/@extension.</p>
<b>Identifier &gt; period</b>	Time period during which identifier is/was valid for use.	0..1	<a href="#">Period</a>	n/a	This logical element has no mapping to CDA.

Logical element	Logical element description	Logic-al card	Logical type	CDA schema element	CDA constraints and comments
Identifier > <b>assigner</b>	Organization that issued/manages the identifier.	0..1	<a href="#">Reference (Organ-ization)</a>	See: instantiation choices	<b>instantiation choices:</b>  If the identifier is for a Patient, Practitioner, PractitionerRole, Organization, RelatedPerson or Device, then identifier assigner is expected to be instantiated as ext:asEntityIdentifier/ext:id/@assigningAuthorityName.  The identifier assigner may be instantiated as id/@assigningAuthorityName.

## Example A.1. Identifier

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- subject -->  
<recordTarget>  
  <!-- subject (Patient) -->  
  <patientRole>  
    <patient>  
      <administrativeGenderCode></administrativeGenderCode>  
  
      <!-- Patient.identifier as an Australian IHI -->  
      <ext:asEntityIdentifier classCode="IDENT">  
        <!-- identifier.type.text=IHI,  
        identifier.value=8003600200002222,  
        identifier.system=http://ns.electronichealth.net.au/id/hi/ih/1.0 -->  
        <ext:id assigningAuthorityName="IHI" root="1.2.36.1.2001.0.8003600200002222" />  
        <ext:assigningGeographicArea classCode="PLC">  
          <ext:name>National Identifier</ext:name>  
        </ext:assigningGeographicArea>  
      </ext:asEntityIdentifier>  
  
      <!-- Patient.identifier as an Institution Medical Record-->  
      <ext:asEntityIdentifier classCode="IDENT">  
        <!-- identifier.assigner=Croydon GP Centre,  
        identifier.value=542181,  
        identifier.system=urn:oid:1.2.36.1.2001.1005.29.8003621566684455 -->  
        <ext:id root="1.2.36.1.2001.29.8003621566684455" extension="542181" assigningAuthorityName="Croydon GP Centre" />  
        <!-- Patient.identifier.type -->  
        <ext:code code="MR" codeSystem="2.16.840.1.113883.12.203" codeSystemName="Identifier Type (HL7)" />  
      </ext:asEntityIdentifier>  
  
      <!-- Patient.identifier as a Medicare Number -->  
      <ext:asEntityIdentifier classCode="IDENT">  
        <!-- identifier.system=urn:oid:1.2.36.1.5001.1.0.7,  
        identifier.value=123456789,  
        identifier.assigner=Medicare Card Number -->  
        <ext:id assigningAuthorityName="Medicare Card Number"  
          root="1.2.36.1.5001.1.0.7" extension="1234567892" />  
        <ext:code code="MO" codeSystem="2.16.840.1.113883.12.203"  
          codeSystemName="Identifier Type (HL7)" displayName="Patient's Medicare number" />  
        <!-- Identifier.period is not available in an asEntityIdentifier class -->  
      </ext:asEntityIdentifier>  
  
      <!-- Patient.identifier as a DVA Number -->  
      <ext:asEntityIdentifier classCode="IDENT">  
        <!-- identifier.system=urn:oid:2.16.840.1.113883.3.879.270091,  
        identifier.value=NBUR9080,  
        identifier.assigner=Department of Veterans' Affairs -->  
        <ext:id assigningAuthorityName="Department of Veterans' Affairs"  
          root="2.16.840.1.113883.3.879.270091" extension="NBUR9080" />  
        <ext:code code="DVG" codeSystem="2.16.840.1.113883.2.3.4.1.1.203"  
          codeSystemName="HL7V2Table0203IdentifierTypeAUExtended" displayName="DVA Gold Card Number" />  
        <!-- Identifier.period is not available in an asEntityIdentifier class -->  
      </ext:asEntityIdentifier>  
  
      <!-- Patient.identifier as a Healthcare card number -->  
      <ext:asEntityIdentifier classCode="IDENT">  
        <!-- identifier.system=urn:oid:2.16.840.1.113883.3.879.270098,
```

```
        identifier.value=307111942H,
        identifier.assigner=Centrelink customer reference number -->
<ext:id assigningAuthorityName="Centrelink customer reference number"
root="2.16.840.1.113883.3.879.270098" extension="307111942H"/>
<ext:code code="HC" codeSystem="2.16.840.1.113883.12.203"
codeSystemName="Identifier Type (HL7)" displayName="Health Card Number"/>
</ext:asEntityIdentifier>

</patient>
</patientRole>
</recordTarget>

<author>
<time value="200911031647+1000"/>
<!-- author (PractitionerRole) -->
<assignedAuthor>
<!-- PractitionerRole.id -->
<id root="86d729b8-72d2-460a-a64c-489a51607450"/>
<!-- PractitionerRole.practitioner(Practitioner) -->
<assignedPerson>
<!-- Practitioner.identifier as an Australian HPI-I -->
<ext:asEntityIdentifier classCode="IDENT">
<!-- identifier.value=8003610537409456,
identifier.system=urn:oid:1.2.36.1.2001.1003.0,
identifier.assigner=HPI-I -->
<ext:id assigningAuthorityName="HPI-I"
root="1.2.36.1.2001.1003.0.8003610537409456"/>
<ext:assigningGeographicArea classCode="PLC">
<ext:name>National Identifier</ext:name>
</ext:assigningGeographicArea>
</ext:asEntityIdentifier>
</assignedPerson>
<!-- PractitionerRole.identifier as an ABN scoped provider identifier -->
<ext:asEntityIdentifier classCode="IDENT">
<!-- identifier.value=8003610537409456,
identifier.system=urn:oid:1.2.36.1.2001.1003.0,
identifier.assigner=HPI-I -->
<ext:id assigningAuthorityName="Albion Hospital",
root="1.2.36.1.2001.1005.70.51824753556"
extension="peterwinslow44"/>
<!-- identifier.type -->
<ext:code code="EI"
codeSystem="2.16.840.1.113883.18.108"
codeSystemName="v2 Identifier Type"
displayName="Employee number"/>
</ext:asEntityIdentifier>
</assignedPerson>
</assignedAuthor>
<!--PractitionerRole.organization (Organization)-->
<representedOrganization>
<!-- Organization.name -->
<name>Albion Hospital</name>
<!--Organization.identifier as an ABN-->
<ext:asEntityIdentifier classCode="IDENT">
<!-- identifier.value=51824754455,
identifier.system=urn:oid:1.2.36,
identifier.assigner=ABN -->
<ext:id root="1.2.36.51824754455" assigningAuthorityName="ABN"/>
<!-- identifier.type -->
<ext:code code="XX"
codeSystem="2.16.840.1.113883.12.203" />
</ext:asEntityIdentifier>
</representedOrganization>
```

```
</author>

<custodian>
  <!-- custodian (Organization)-->
  <assignedCustodian>
    <representedCustodianOrganization>
      <!-- Organization.id-->
      <id root="d0455def-ff37-4ebe-97fb-52db7224b148"/>
      <!-- Organization.identifier as a Laboratory NATA Identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <!-- identifier.system.value=urn:oid:1.2.36.1.2001.1005.12,
        identifier.value=2184,
        identifier.assigner=NATA -->
        <ext:id assigningAuthorityName="NATA"
          root="1.2.36.1.2001.1005.12" extension="2184"/>
        <!-- identifier.type -->
        <ext:code code="XX" codeSystem="2.16.840.1.113883.12.203"/>
      </ext:asEntityIdentifier>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>

<!--DiagnosticReport.basedOn-->
<inFulfillmentOf typeCode="FLFS">
  <!--ProcedureRequest-->
  <order classCode="ACT" moodCode="RQO">
    <!-- ProcedureRequest.identifier
    identifier.system=urn:oid:1.2.36.1.2001.1005.52.8003621566684455, identifier.value=123451 -->
    <id extension="123451" root="1.2.36.1.2001.1005.52.8003621566684455" />
  </order>
</inFulfillmentOf>
```

## A.2 HumanName as Base HumanName

This informative appendix provides some guidance on how the constrained form of complex data type [HumanName](#) as Base HumanName published by the Australian Digital Health Agency can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>HumanName</b>	A human's name with the ability to identify parts and usage.	Cardinality comes from linking element	<a href="#">Element</a>	//name	Name <b>SHALL</b> have at least text or family or given instantiated.  In CDA a full text representation of a name is not to be included in the same instance as a structured representation with the same name parts. Either the free text representation or a name with structure (e.g. name/family or name/given) should be provided but not both.
<b>HumanName &gt; use</b>	Identifies the purpose for this name.	0..1	<a href="#">code</a>	//name/@use	<a href="#">Common Person Name Use (required)</a> <sup>1</sup>
<b>HumanName &gt; text</b>	A full text representation of the name.	0..1	<a href="#">string</a>	//name	
<b>HumanName &gt; family</b>	The part of a name that links to the genealogy. In some cultures (e.g. Eritrea) the family name of a son is the first name of his father.	0..1	<a href="#">string</a>	//name/family	
<b>HumanName &gt; given</b>	Given name.	0..*	<a href="#">string</a>	//name/given	
<b>HumanName &gt; prefix</b>	Part of the name that is acquired as a title due to academic, legal, employment or nobility status, etc. and that appears at the start of the name.	0..*	<a href="#">string</a>	//name/prefix	Prefix values can be populated as described in <a href="#">AS 4846 (2014) – Person and provider identification in healthcare [SA2014a]</a> , 4.4.2 Name Title.
<b>HumanName &gt; suffix</b>	Part of the name that is acquired as a title due to academic, legal, employment or nobility status, etc. and that appears at the end of the name.	0..*	<a href="#">string</a>	//name/suffix	Suffix values can be populated as described in <a href="#">AS 4846 (2014) – Person and provider identification in healthcare [SA2014a]</a> , 4.5.3.2 Name Suffix.
<b>HumanName &gt; period</b>	Indicates the period of time when this name was valid for the named person.	0..1	<a href="#">Period</a>	//name/validTime	

<sup>1</sup>Note: The source terminology binding on use in HumanName [\[DH2019h\]](#) and the terminology binding in the representation of the model in this specification are different. Mappings between the set of concepts are defined in [NameUse \(HL7 FHIR\) to Common Person Name Use concept map](#).

## Example A.2. HumanName

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- HumanName where use=official -->  
<name use="C">  
  <!-- HumanName.given -->  
  <given>Adam</given>  
  <!-- HumanName.given -->  
  <given>A.</given>  
  <!-- HumanName.family -->  
  <family>Everyman</family>  
</name>  
  
<!-- HumanName where use=official -->  
<name use="C">  
  <!-- HumanName.text -->  
  Adam A. Everyman  
</name>  
  
<!-- HumanName where use=usual -->  
<name use="I">  
  <!-- HumanName.given -->  
  <given>Damo</given>  
</name>  
  
<!-- HumanName where use=old -->  
<name use="DN">  
  <!-- HumanName.given -->  
  <given>Adam</given>  
  <!-- HumanName.given -->  
  <given>A.</given>  
  <!-- HumanName.family -->  
  <family>Adamson</family>  
  <!-- HumanName.period -->  
  <validTime xsi:type="IVL_TS">  
    <low value="01012001" />  
    <high value="01012012" />  
  </validTime>  
</name>
```

## A.3 Address

This informative appendix provides some guidance on how the complex data type [Address](#) can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>Address</b>	An address expressed using postal conventions (as opposed to GPS or other location definition formats). This data type may be used to convey addresses for use in delivering mail as well as for visiting locations which might not be valid for mail delivery. There are a variety of postal address formats defined around the world.	Cardinality comes from linking element	<a href="#">Element</a>	//addr	
Address > <b>use</b>	The purpose of this address.	0..1	<a href="#">code</a>	//addr/@use	<a href="#">Address Use HL7 v3 (required)</a> addr/@use may be used to carry more than one value by a space separated list of codes.
Address > <b>type</b>	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	0..1	<a href="#">code</a>	//addr/@use	<a href="#">Address Type HL7 v3 (required)</a> addr/@use may be used to carry more than one value by a space separated list of codes.
Address > <b>text</b>	A full text representation of the address.	0..1	<a href="#">string</a>	//addr	The expectation is that this is free text.
Address > <b>line</b>	This component contains the house number, apartment number, street name, street direction, P.O. Box number, delivery hints, and similar address information.	0..*	<a href="#">string</a>	//addr/streetAddressLine	
Address > <b>city</b>	The name of the city, town, village or other community or delivery center.	0..1	<a href="#">string</a>	//addr/city	
Address > <b>district</b>	The name of the administrative area (county).	0..1	<a href="#">string</a>	//addr/county	
Address > <b>state</b>	Sub-unit of a country with limited sovereignty in a federally organized country. A code may be used if codes are in common use (i.e. US 2 letter state codes).	0..1	<a href="#">string</a>	//addr/state	
Address > <b>postalCode</b>	A postal code designating a region defined by the postal service.	0..1	<a href="#">string</a>	//addr/postalCode	
Address > <b>country</b>	Country - a nation as commonly understood or generally accepted.	0..1	<a href="#">string</a>	//addr/country	<a href="#">Iso 3166 Part 1: 2 Letter Codes (preferred)</a>
Address > <b>period</b>	Time period when address was/is in use.	0..1	<a href="#">Period</a>	//addr/useablePeriod	

### Example A.3. Address

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- Address where use=work and type=postal -->  
<addr use="PST WP">  
  <!--Address.text-->  
  1050 W Wishard Blvd  
  RG  
  5th floor  
  Indianapolis, IN 46240  
  <!--Address.line-->  
  <streetAddressLine>1050 W Wishard Blvd</streetAddressLine>  
  <!--Address.line-->  
  <streetAddressLine>RG 5th floor</streetAddressLine>  
  <!--Address.city-->  
  <city>Indianapolis</city>  
  <!--Address.state-->  
  <state>IN</state>  
  <!--Address.postalCode-->  
  <postalCode>46240</postalCode>  
</addr>  
  
<!-- Address where use=home and type=physical -->  
<addr use="PHYS H">  
  <!--Address.text-->  
  1 Back Lane&#13;&#10;Holmfirth&#13;&#10;HUDDERSFIELD&#13;&#10;HD7 1HQ  
  <!--Address.line-->  
  <streetAddressLine>1 Back Lane</streetAddressLine>  
  <!--Address.city-->  
  <city>Holmfirth</city>  
  <!--Address.district-->  
  <county>HUDDERSFIELD</county>  
  <!--Address.postalCode-->  
  <postalCode>HD7 1HQ</postalCode>  
</addr>  
  
<!-- Address where use=old -->  
<addr use="TMP">  
  <!--Address.line-->  
  <streetAddressLine>Rue Lougoraïa 12, app. 10</streetAddressLine>  
  <!--Address.city-->  
  <city>Korolevo</city>  
  <!--Address.state-->  
  <state>Minsk</state>  
  <!--Address.country-->  
  <country>BELARUS</country>  
  <!--Address.period-->  
  <useablePeriod xsi:type="IVL_TS">  
    <low value="01012001" />  
    <high value="01012012" />  
  </useablePeriod>  
</addr>
```

## A.4 Address as AU Base Address

This informative appendix provides some guidance on the constrained form of complex data type [Address as AU Base Address](#) published by HL7 Australia can map to CDA (R2). The mappings provided are a set of preferred mappings for representing an Australian address and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Address	An Australian address expressed using postal conventions (as opposed to GPS or other location definition formats).	Cardinality comes from linking element	<a href="#">Element</a>	//addr	addr <b>SHALL</b> have text or one or more line (addr/streetAddressLine).
Address > <b>use</b>	The purpose of this address.	0..1	<a href="#">code</a>	//addr/@use	<a href="#">Address Use HL7 v3 (required)</a> addr/@use may be used to carry more than one value by a space separated list of codes.
Address > <b>type</b>	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	0..1	<a href="#">code</a>	//addr/@use	<a href="#">Address Type HL7 v3 (required)</a> addr/@use may be used to carry more than one value by a space separated list of codes.
Address > <b>text</b>	A full text representation of the address.	0..1	<a href="#">string</a>	//addr	The expectation is that this is free text.
Address > <b>line</b>	This component contains the house number, apartment number, street name, street direction, P.O. Box number, delivery hints, and similar address information.	0..*	<a href="#">string</a>	//addr/streetAddressLine	
Address > <b>city</b>	The name of the city, town, village or other community or delivery center.	0..1	<a href="#">string</a>	//addr/city	
Address > <b>district</b>	The name of the administrative area (county).	0..1	<a href="#">string</a>	//addr/county	
Address > <b>state</b>	Sub-unit of a country with limited sovereignty in a federally organized country. A code may be used if codes are in common use (i.e. US 2 letter state codes).	0..1	<a href="#">string</a>	//addr/state	<a href="#">Australian States and Territories (required)</a> state <b>SHALL</b> be populated with the code e.g. "NT".
Address > <b>postalCode</b>	A postal code designating a region defined by the postal service.	0..1	<a href="#">string</a>	//addr/postalCode	The maximum length of postalCode <b>SHALL</b> be 4.
Address > <b>country</b>	Fixed value if present otherwise assumed to be Australia in this context.	0..1	<a href="#">string</a>	//addr/country	country <b>SHALL</b> be "AU".
Address > <b>period</b>	Time period when address was/is in use.	0..1	<a href="#">Period</a>	//addr/useablePeriod	
Address > <b>nofixedaddress</b>	No fixed address indicator.	0..1	<a href="#">boolean</a>	n/a	Not mapped directly, if true, addr <b>SHOULD</b> be "NO FIXED ADDRESS" and addr/@use <b>SHOULD</b> be "PHYS".

#### Example A.4. Address

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- Australian Address with no fixed address in Melbourne, VIC-->  
<addr use="PHYS">  
<!--Address.text-->  
NO FIXED ADDRESS  
<!--Address.city-->  
<city>Melbourne</city>  
<!--Address.state-->  
<state>VIC</state>  
</addr>  
  
<!-- Australian Address with only text-->  
<addr use="PHYS">  
<!--Address.text-->  
Level 1, 300 George St, Brisbane, QLD 4000  
</addr>  
  
<!-- Australian Address where use=work and type=postal -->  
<addr use="PST WP">  
<!--Address.line-->  
<streetAddressLine>Northern Territory Office, Department of Addresses, GPO Box 19132110</streetAddressLine>  
<!--Address.city-->  
<city>Darwin</city>  
<!--Address.state-->  
<state>NT</state>  
<!--Address.postalCode-->  
<postalCode>0801</postalCode>  
<!--Address.country-->  
<country>AU</country>  
<!--Address.period-->  
<useablePeriod xsi:type="IVL_TS">  
<low value="200311031647+1000" />  
</useablePeriod>  
</addr>  
  
<!-- Australian Address where use=work and type=physical -->  
<addr use="PHYS WP">  
<!--Address.line-->  
<streetAddressLine>5th Floor, Northern Territory House, 223 Mitchell Street</streetAddressLine>  
<!--Address.city-->  
<city>Darwin</city>  
<!--Address.state-->  
<state>NT</state>  
<!--Address.postalCode-->  
<postalCode>0800</postalCode>  
<!--Address.country-->  
<country>AU</country>  
</addr>
```

## A.5 ContactPoint

This informative appendix provides some guidance on how the complex data type [ContactPoint](#) can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
ContactPoint	Details for all kinds of technology mediated contact points for a person or organization, including telephone, email, etc.	Cardinality comes from linking element	<a href="#">Element</a>	//telecom	If value is present, system <b>SHALL</b> be present.
ContactPoint > <b>system</b>	Telecommunications form for contact point - what communications system is required to make use of the contact.	0..1	<a href="#">code</a>	//telecom/@value	<a href="#">HL7 URLScheme (required)</a> Makes up part of the attribute: "system:value", e.g. "tel:phone number", "mailto:email address", "http:URL", etc.
ContactPoint > <b>value</b>	The actual contact point details, in a form that is meaningful to the designated communication system (i.e. phone number or email address).	0..1	<a href="#">string</a>	//telecom/@value	Makes up the part of the attribute: "system:value", e.g. "tel:phone number", "mailto:email address", "http:URL", etc.
ContactPoint > <b>use</b>	Identifies the purpose for the contact point.	0..1	<a href="#">code</a>	//telecom/@use	<a href="#">HL7 TelecommunicationAddressUse (required)</a>
ContactPoint > <b>rank</b>	Specifies a preferred order in which to use a set of contacts. Contacts are ranked with lower values coming before higher values.	0..1	<a href="#">positiveInt</a>	n/a	This logical element has no mapping to CDA.
ContactPoint > <b>period</b>	Time period when the contact point was/is in use.	0..1	<a href="#">Period</a>	//telecom/usablePeriod	

### Example A.5. ContactPoint

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- ContactPoint where system=phone, value=+1-(555)555-1212, use=home -->  
<telecom value="tel:+1-(555)555-1212" use="H">  
  <!-- ContactPoint.period -->  
  <useablePeriod xsi:type="IVL_TS">  
    <low value="01012001" />  
    <high value="01012012" />  
  </useablePeriod>  
</telecom>  
  
<!-- ContactPoint where system=phone, value=0712341234, use=home -->  
<telecom use="H" value="tel:0712341234" />  
  
<!-- ContactPoint where system=email, value=sfranklin@mail.com.au, use=work -->  
<telecom use="WP" value="mailto:sfranklin@mail.com.au" />
```

## A.6 Dosage as AU Base Dosage

This informative appendix provides some guidance on how the constrained form of complex data type [Dosage](#) as [AU Base Dosage](#) published by HL7 Australia can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
<b>Dosage</b>	Indicates how the medication is/was taken or should be taken by the patient.	Cardinality comes from linking element	<a href="#">Element</a>	See: instantiation choices	<b>instantiation choices:</b>  When a single instance of dosage is recorded the logical element has no direct mapping; it is implicit in the mapping of the child elements.  When more than one instance of dosage is recorded, each instance of dosage is recorded as a child substanceAdministration, e.g. substanceAdministration/entryRelationship[dosage]/substanceAdministration[@typeCode="SBADM", @moodCode="INT"].
<b>Dosage &gt; sequence</b>	Indicates the order in which the dosage instructions should be applied or interpreted.	0..1	<a href="#">integer</a>	//entryRelationship[dosage]	sequenceNumber <b>SHALL NOT</b> be instantiated for a single instance of dosage.
				//entryRelationship[dosage]/@typeCode="COMP"	The value of sequenceNumber <b>SHALL</b> be an ordinal number starting at "1" and increasing by "1" for each subsequent instance of dosage.
				//entryRelationship[dosage]/sequenceNumber	
<b>Dosage &gt; text</b>	Free text dosage instructions e.g. SIG.	0..1	<a href="#">string</a>	//text	
<b>Dosage &gt; additionalInstruction</b>	Supplemental instruction - e.g. 'with meals'.	0..*	<a href="#">CodeableConcept</a>	n/a	Not mapped directly for this model; included implicitly in text, or patientInstruction, or timing, asNeeded.
<b>Dosage &gt; patientInstruction</b>	Instructions in terms that are understood by the patient or consumer.	0..1	<a href="#">string</a>	//text	
<b>Dosage &gt; timing</b>	When medication should be administered.	0..1	<a href="#">Timing</a>	//effectiveTime	Recommended mappings for this logical type to CDA (R2) are available: <a href="#">Timing</a> .

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Dosage > <b>asNeeded[x]</b>	Indicates whether the Medication is only taken when needed within a specific dosing schedule (Boolean option), or it indicates the precondition for taking the Medication (CodeableConcept).	0..1	<a href="#">boolean</a>   <a href="#">CodeableConcept</a>	//precondition //precondition/@typeCode="PRCN" //precondition/criterion //precondition/criterion/code //precondition/criterion/code/@code="ASSERTION" //precondition/criterion/code/@codeSystem="2.16.840.1.113883.5.4" //precondition/criterion/value	value/@xsi:type SHALL be "CD" or "BL". <a href="#">Clinical Finding (preferred)</a>
Dosage > <b>site</b>	Body site to administer to.	0..1	<a href="#">CodeableConcept</a>	//approachSiteCode	approachSiteCode/originalText or approachSiteCode/@displayName <b>SHALL</b> be included. <a href="#">Body Site (preferred)</a>
Dosage > <b>route</b>	How drug should enter body.	0..1	<a href="#">CodeableConcept</a>	//routeCode	routeCode/originalText or routeCode/@displayName <b>SHALL</b> be included. <a href="#">Route of Administration (preferred)</a>
Dosage > <b>method</b>	Technique for administering medication.	0..1	<a href="#">CodeableConcept</a>	//ext:methodCode	ext:methodCode/originalText or ext:methodCode/@displayName <b>SHALL</b> be included. <a href="#">SNOMED CT Administration Method Codes (preferred)</a>
Dosage > <b>dose[x]</b>	Amount of medication per dose.	0..1	<a href="#">Range</a>   <a href="#">SimpleQuantity</a>	//doseQuantity	
Dosage > <b>maxDosePerPeriod</b>	Upper limit on medication per unit of time.	0..1	<a href="#">Ratio</a>	//maxDoseQuantity	
Dosage > <b>maxDosePerAdministration</b>	Upper limit on medication per administration.	0..1	<a href="#">SimpleQuantity</a>	n/a	Not directly supported in CDA however this may be represented by an administration schedule with a maxDosePerAdministration in that administration schedule represented as maxDoseQuantity with a period of a single administration.
Dosage > <b>maxDosePerLifetime</b>	Upper limit on medication per lifetime of the patient.	0..1	<a href="#">SimpleQuantity</a>	n/a	Not directly supported in CDA.  One possible way to represent this concept is to represent an observation with a code equivalent to max dose per lifetime.  One possible way to represent this concept is to represent an instance of dosage with maxDoseQuantity and effectiveTime/high/@value="PINF" thus indicating that the end of the period of administration is positive infinity.
Dosage > <b>rate[x]</b>	Amount of medication per unit of time.	0..1	<a href="#">Ratio</a>   <a href="#">Range</a>   <a href="#">SimpleQuantity</a>	//rateQuantity	

## Example A.6. Dosage

<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->

```
<entry>
  <!-- MedicationStatement - more than one instance of Dosage -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- identifier -->
    <id root="4255b903-6f90-41b8-a71c-8ac0eelebdc3"/>
    <!-- medication.as(medicationCodeableConcept) -->
    <consumable>
      <manufacturedProduct>
        <manufacturedMaterial>
          <code code="6006011000036102"
            codeSystem="1.2.36.1.2001.1004.100"
            displayName="Lasix (frusemide 40 mg) tablet: uncoated, 1 tablet">
            <originalText>Lasix (frusemide 40 mg)
              tablet</originalText>
          </code>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>

    <!-- Dosage to indicate asNeeded with a condition-->
    <entryRelationship typeCode="COMP" >
      <!-- sequence -->
      <sequenceNumber value="1"/>
      <substanceAdministration classCode="SBADM" moodCode="INT" >
        <consumable>
          <manufacturedProduct>
            <manufacturedMaterial nullFlavor="NA" />
          </manufacturedProduct>
        </consumable>
        <!-- asNeededCodeableConcept - instantiated as prn with specified condition -->
        <precondition typeCode="PRCN" >
          <criterion>
            <code code="ASSERTION"
              codeSystem="2.16.840.1.113883.5.4"/>
            <!-- joint pain -->
            <value xsi:type="CD" code="57676002"
              codeSystem="2.16.840.1.113883.6.96"
              displayName="Joint pain"/>
          </criterion>
        </precondition>
      </substanceAdministration>
    </entryRelationship>
    <!-- Dosage to indicate timing -->
    <entryRelationship typeCode="COMP" >
      <!-- sequence -->
      <sequenceNumber value="2"/>
      <substanceAdministration classCode="SBADM" moodCode="INT" >
        <!-- additionalInstruction / patientInstruction -->
        <text>Every day at 8 in the morning for 10 minutes</text>
        <!-- timing -->
        <effectiveTime xsi:type="PIVL_TS" operator="A">
          <phase>
            <low value="198701010800" inclusive="true"/>
            <width value="10" unit="min"/>
          </phase>
        </effectiveTime>
      </substanceAdministration>
    </entryRelationship>
  </substanceAdministration>
</entry>
```

```
<period value="1" unit="d"/>
</effectiveTime>
<!-- route -->
<routeCode code="C38288" codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus" displayName="Oral"/>
<!-- dose -->
<doseQuantity value="1" />
<consumable>
  <manufacturedProduct>
    <manufacturedMaterial nullFlavor="NA" />
  </manufacturedProduct>
</consumable>
</substanceAdministration>
</entryRelationship>
</substanceAdministration>
</entry>

<entry>
  <!-- MedicationStatement - single instance of Dosage -->
  <substanceAdministration classCode="SBADM" moodCode="EVN" >
    <!-- identifier -->
    <id root="ab6d45ff-fd58-4f38-8009-aelaa84a4f43"/>
    <!-- method -->
    <ext:methodCode code="421134003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Inhale" />
    <!-- route -->
    <routeCode code="ORNEB" codeSystem="2.16.840.1.113883.5.112" codeSystemName="Route Code" displayName="Inhalation, nebulization, oral"/>
    <!-- dose -->
    <doseQuantity value="1" />
    <!-- maxDosePerPeriod -->
    <maxDoseQuantity>
      <numerator value="1" />
      <denominator value="1" unit="h" />
    </maxDoseQuantity>
    <administrationUnitCode code="415215001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Puff" />
    <!-- medication.as(medicationCodeableConcept) -->
    <consumable>
      <manufacturedProduct>
        <manufacturedMaterial>
          <code code="7113011000036100" codeSystem="1.2.36.1.2001.1004.100"
            displayName="Spiriva (tiotropium (as bromide monohydrate) 18 microgram) inhalation: powder for, 1 capsule">
            <originalText>Spiriva (tiotropium bromide 18mg per inhalant)</originalText>
          </code>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
    <!-- asNeededBoolean=true - instantiated as prn with no specified condition -->
    <precondition typeCode="PRCN" >
      <criterion>
        <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />
        <value xsi:type="CD" nullFlavor="NI" />
      </criterion>
    </precondition>
  </substanceAdministration>
</entry>
```

## A.7 Timing

This informative appendix provides some guidance on how the complex data type [Timing](#) can map to CDA (R2). The mappings provided are a set of possible mappings and do not represent conformance requirements.

### CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Timing	Specifies an event that may occur multiple times. Timing schedules are used to record when things are planned, expected or requested to occur. The most common usage is in dosage instructions for medications. They are also used when planning care of various kinds, and may be used for reporting the schedule to which past regular activities were carried out.	Cardinality comes from linking element	<a href="#">Element</a>	//effectiveTime	
Timing > event	Identifies specific times when the event occurs.	Cardinality comes from linking element	<a href="#">dateTime</a>	//effectiveTime/@value	
Timing > repeat	A set of rules that describe when the event is scheduled.	0..1	<a href="#">Element</a>	//effectiveTime/@xsi:type	<p>Not mapped directly; implicit in the instantiation of the xsi:type, e.g. PIVL_TS or EIVL_TS, and the mapping of the child elements.</p> <p>If duration is present, durationUnit <b>SHALL</b> be present.</p> <p>If timeOfDay is present, when <b>SHALL NOT</b> be present.</p> <p>If period is present, periodUnit <b>SHALL</b> be present.</p> <p>duration <b>SHALL</b> be a non-negative value.</p> <p>period <b>SHALL</b> be a non-negative value.</p> <p>If periodMax is present, period <b>SHALL</b> be present.</p> <p>If offset is present, when <b>SHALL</b> be present.</p>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Timing > repeat > <b>bounds</b>	Either a duration for the length of the timing schedule, a range of possible length, or outer bounds for start and/or end limits of the timing schedule.	0..1	<a href="#">Duration</a>   <a href="#">Range</a>   <a href="#">Period</a>	See: instantiation choices	<p>effectiveTime/@xsi:type <b>SHALL</b> be "IVL_TS".</p> <p><b>instantiation choices:</b></p> <p>If bounds is a <a href="#">Duration</a> then it <b>SHALL</b> be instantiated as effective-Time/width.</p> <p>If bounds is a <a href="#">Range</a> then it is expected to be included in Dosage as text, or additionalInstruction, or patientInstruction as appropriate.</p> <p>If bounds is a <a href="#">Period</a> then it <b>SHALL</b> be instantiated as effectiveTime/period.</p>
Timing > repeat > <b>count</b>	A total count of the desired number of repetitions.	0..1	<a href="#">integer</a>	//repeatNumber/@value	count <b>SHALL</b> only be instantiated in the repeatNumber element of the Dosage substanceAdministration act where the moodCode is "INT" or "PLAN".
Timing > repeat > <b>countMax</b>	A maximum value for the count of the desired repetitions (e.g. do something 6-8 times).	0..1	<a href="#">integer</a>	//repeatNumber/high/@value	
Timing > repeat > <b>duration</b>	How long this thing happens for when it happens.	0..1	<a href="#">decimal</a>	//effectiveTime/phase/width/@value	effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".
Timing > repeat > <b>durationMax</b>	The upper limit of how long this thing happens for when it happens.	0..1	<a href="#">decimal</a>	n/a	This logical element has no mapping to CDA.
Timing > repeat > <b>durationUnit</b>	The units of time for the duration, in UCUM units.	0..1	<a href="#">code</a>	//effectiveTime/phase/width/@unit	effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".
Timing > repeat > <b>frequency</b>	The number of times to repeat the action within the specified period / period range (i.e. both period and periodMax provided).	0..1	<a href="#">integer</a>	//effectiveTime/ <b>frequency</b>	effectiveTime/@xsi:type <b>SHALL</b> be "PIVL_TS".
				//effectiveTime/frequency/ <b>numerator</b>	frequency is expressed as the numerator (with an xsi:type of "INT") and period is expressed in CDA as the denominator.
					frequency is often not included in CDA as a separate element but addressed by adjusting the values of period and periodUnit to take into account frequency.
Timing > repeat > <b>frequencyMax</b>	If present, indicates that the frequency is a range - so to repeat between [frequency] and [frequencyMax] times within the period or period range.	0..1	<a href="#">integer</a>	//effectiveTime/ <b>phase</b>	effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".
Timing > repeat > <b>period</b>	Indicates the duration of time over which repetitions are to occur; e.g. to express '3 times per day', 3 would be the frequency and '1 day' would be the period.	0..1	<a href="#">decimal</a>	See: instantiation choices	<p>effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".</p> <p><b>instantiation choices:</b></p> <p>May be represented by effectiveTime/phase or effectiveTime/period.</p>
Timing > repeat > <b>periodMax</b>	If present, indicates that the period is a range from [period] to [periodMax], allowing expressing concepts such as 'do this once every 3-5 days.	0..1	<a href="#">decimal</a>	See: instantiation choices	<p>effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".</p> <p><b>instantiation choices:</b></p> <p>May be represented by effectiveTime/phase or effectiveTime/period/high.</p>

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Timing > repeat > periodUnit	The units of time for the period in UCUM units.	0..1	<a href="#">code</a>	See: instantiation choices	effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".  <b>instantiation choices:</b>  May be represented by effectiveTime/phase/@unit or effectiveTime/period/low/@unit or effectiveTime/period/high/@unit.
Timing > repeat > dayOfWeek	If one or more days of week is provided, then the action happens only on the specified day(s).	0..*	<a href="#">code</a>	//effectiveTime/@xsi:type="PIVL_TS" //effectiveTime/@alignment="DW" //effectiveTime/phase //effectiveTime/phase/low/@value //effectiveTime/phase/low/@inclusive="true" //effectiveTime/phase/high/@value //effectiveTime/phase/high/@inclusive="false"	The value between low and high represents the day of the week by selecting a known day. For example a low/@value of 20001202 and a high/@value of 20001203 represents Saturday by setting the period to the whole of the Saturday of the 2nd of December 2000.
Timing > repeat > timeOfDay	Specified time of day for action to take place.	0..*	<a href="#">time</a>	//effectiveTime/phase //effectiveTime/phase/low //effectiveTime/phase/low/@value	effectiveTime/@xsi:type <b>SHOULD</b> be "PIVL_TS".
Timing > repeat > when	Real world events that the occurrence of the event should be tied to.	0..*	<a href="#">code</a>	//effectiveTime/event	effectiveTime/@xsi:type <b>SHALL</b> be "EIVL_TS".  This CDA schema element is of type CodedSimpleValue (CS). <a href="#">EventTiming (required)</a>
Timing > repeat > offset	The number of minutes from the event. If the event code does not indicate whether the minutes is before or after the event, then the offset is assumed to be after the event.	0..1	<a href="#">unsignedInt</a>	//effectiveTime/offset	effectiveTime/@xsi:type <b>SHALL</b> be "EIVL_TS".
Timing > code	A code for the timing schedule. Some codes such as BID are ubiquitous, but many institutions define their own additional codes. If a code is provided, the code is understood to be a complete statement of whatever is specified in the structured timing data, and either the code or the data may be used to interpret the Timing, with the exception that .repeat.bounds still applies over the code (and is not contained in the code).	0..1	<a href="#">CodeableConcept</a>	n/a	Not directly supported in CDA; implied by frequency.

### Example A.7. Timing

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- Dosage to indicate timing -->  
<entryRelationship typeCode="COMP">  
    <!-- sequence -->  
    <sequenceNumber value="2"/>  
    <substanceAdministration classCode="SBADM" moodCode="INT">  
        <!-- additionalInstruction / patientInstruction -->  
        <text>Every day at 8 in the morning for 10 minutes</text>  
        <!-- timing, 1st administered 2009-09-01 at 1:18am and to be taken every day at 8 in the morning for 10 minutes -->  
        <!-- event -->  
        <effectiveTime value="200509010118"/>  
        <!-- repeat -->  
        <effectiveTime xsi:type="PIVL_TS" operator="A">  
            <phase>  
                <!-- boundsPeriod / timeOfDay -->  
                <low value="200509020800" inclusive="true"/>  
                <!-- duration and durationUnit -->  
                <width value="10" unit="min"/>  
            </phase>  
            <!-- frequency=1, period=1 -->  
            <period value="1" unit="d"/>  
        </effectiveTime>  
        <consumable>  
            <manufacturedProduct>  
                <manufacturedMaterial nullFlavor="NA"/>  
            </manufacturedProduct>  
        </consumable>  
    </substanceAdministration>  
</entryRelationship>  
  
<entry>  
    <!-- MedicationStatement - common timing representations - this is not a meaningful example and is there to show common instantiations  
and their corresponding code -->  
    <substanceAdministration classCode="SBADM" moodCode="EVN">  
        <!--identifier-->  
        <id root="7e5cc411-c248-4d5d-b333-257f16f9136c"/>  
        <!-- common timing representations taken from https://docs.google.com/document/d/1Y0Z458o_MrR2aPnpx6Eyg06hpI88B195esjRWZ0agtY/edit -->  
        <!-- b.i.d twice a day -->  
        <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true" operator="A">  
            <!-- frequency=2, period=1, periodUnit=d -->  
            <period value="0.5" unit="d"/>  
        </effectiveTime>  
        <!-- q12h Every 12 hours -->  
        <effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"  
            operator="A">  
            <!-- frequency=1, period=12, periodUnit=h -->  
            <period value="12" unit="h"/>  
        </effectiveTime>  
        <!-- t.i.d Three times a day, at times determined by the person administering the medication-->  
        <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true"  
            operator="A">  
            <!-- frequency=3, period=1, periodUnit=d -->  
            <period value="0.3333" unit="d"/>  
        </effectiveTime>  
        <!-- q8h Every 8 hours -->
```

```
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency=1, period=8, periodUnit=h -->
  <period value="8" unit="h"/>
</effectiveTime>
<!!--qid four times daily-->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="true"
  operator="A">
  <!-- frequency=4, period=1, periodUnit=d -->
  <period value="0.25" unit="d"/>
</effectiveTime>
<!!-- q6h Every 6 hours -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency=1, period=6, periodUnit=h -->
  <period value="6" unit="h"/>
</effectiveTime>
<!!-- qd daily -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="true"
  operator="A">
  <!-- frequency=1, period=1, periodUnit=d -->
  <period value="1" unit="d"/>
</effectiveTime>
<!!-- q24h Every 24 hours -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency=1, period=24, periodUnit=h -->
  <period value="24" unit="h"/>
</effectiveTime>
<!!-- god Every other day -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency=1, period=2, periodUnit=d -->
  <period value="2" unit="d"/>
</effectiveTime>
<!!-- qm Once a month -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency=1, period=1, periodUnit=mo -->
  <period value="1" unit="m"/>
</effectiveTime>
<!!-- q4-6h Every 4 to 6 hours (preferred) -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <!-- frequency (where frequency=1)-->
  <period xsi:type="IVL_PQ">
    <!-- period and periodUnit -->
    <low value="4" unit="h" />
    <!-- periodMax and periodUnit -->
    <high value="6" unit="h" />
  </period>
</effectiveTime>
<!!-- q4-6h Every 4 to 6 hours (alternate) -->
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"
  operator="A">
  <period xsi:type="PPD_PQ" value="5" unit="h">
    <standardDeviation value="1" unit="h"/>
  </period>
</effectiveTime>
<!!-- gam In the morning -->
<effectiveTime xsi:type="EIVL_TS" operator="A">
  <!-- when using code from TimingEvent value set (2.16.840.1.113883.5.139) -->
  <event code="ACM"/>
```

```
</effectiveTime>
<!-- qam Every day at 8 in the morning for 10 minutes -->
<effectiveTime xsi:type="PIVL_TS" operator="A">
  <phase>
    <!-- boundsPeriod / timeOfDay -->
    <low value="198701010800" inclusive="true"/>
    <!-- duration and durationUnit -->
    <width value="10" unit="min"/>
  </phase>
  <period value="1" unit="d"/>
</effectiveTime>
<!-- 1 hour after meal -->
<effectiveTime xsi:type="EIVL_TS" operator="A">
  <!-- when using code from TimingEvent value set (2.16.840.1.113883.5.139) -->
  <event code="PC"/>
  <!-- offset -->
  <offset>
    <low value="1" unit="h" />
  </offset>
</effectiveTime>
<!-- before dinner -->
<effectiveTime xsi:type="EIVL_TS" operator="A">
  <!-- when using code from TimingEvent value set (2.16.840.1.113883.5.139) -->
  <event code="ACV"/>
</effectiveTime>
<!-- before lunch -->
<effectiveTime xsi:type="EIVL_TS" operator="A">
  <!-- when using code from TimingEvent value set (2.16.840.1.113883.5.139) -->
  <event code="ACD"/>
</effectiveTime>
<!-- every evening -->
<effectiveTime xsi:type="EIVL_TS" operator="A">
  <!-- when using code from TimingEvent value set (2.16.840.1.113883.5.139) -->
  <event code="ICV"/>
</effectiveTime>
<effectiveTime xsi:type="PIVL_TS" alignment="DW" operator="A">
  <!-- every Saturday -->
  <phase>
    <low value="20001202" inclusive="true"/>
    <high value="20001203" inclusive="false"/>
  </phase>
  <period value="1" unit="wk"/>
</effectiveTime>
<consumable>
  <manufacturedProduct>
    <manufacturedMaterial>
      <code nullFlavor="NA"/>
    </manufacturedMaterial>
  </manufacturedProduct>
</consumable>
</substanceAdministration>
</entry>
```

## A.8 CodeableConcept as a Medicine Item Code

This informative appendix provides some guidance on how the complex data type [CodeableConcept](#) as a medicine item code (and related elements medication-brand-name and medication-generic-name) can map to CDA (R2). The mappings provided are a set of preferred mappings and do not represent conformance requirements.

In addition to examples provided in this implementation guide some guidance on representing coding in CDA is provided by [Representing Coding in CDA Documents Implementation Guidance \[NEHT2011bv\]](#).

Where brand name is known, it will form part of the originalText of the medicine item code (e.g. manufacturedProduct/manufacturedMaterial/code/originalText), and optionally be in medication-brand-name (//entryRelationship[brand]/act/text).

It may be appropriate to send multiple codings for a medicine item code, in this circumstance the primary code may be carried in the medicine item code (code/@code) and additional coding sent as one or more translations (code/translation/@code).

When sending a medication without a coded value:

- the medicine item code should only be supplied as code/originalText (e.g. as manufacturedProduct/manufacturedMaterial/code/originalText)
- if both brand name and generic name can be sent, brand name will be sent as stated above; generic name will be sent only in medication-generic-name (//entryRelationship[generic]/act)
- if only generic name can be sent, it will form part of the originalText of the medicine item code (e.g. manufacturedProduct/manufacturedMaterial/code/originalText), and optionally be in medication-generic-name (//entryRelationship[generic]/act)
- if a name can be sent, but it cannot be determined if it is a brand or generic name, the name will form part of the originalText of the medicine item code (e.g. manufacturedProduct/manufacturedMaterial/code/originalText)
- if a name is not known but a meaningful description or formula can be sent, the description form part of the originalText of the medicine item code (e.g. manufacturedProduct/manufacturedMaterial/code/originalText)

### Example A.8. CodeableConcept as Medicine Item Code

```
<!-- These example fragments are illustrative only. They cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
  
<!-- Medication with coded brand -->  
<supply classCode="SPLY" moodCode="EVN">  
  <id root="9ff3422e-4e8c-4133-8cc9-6de74ecfac48"/>  
  <product>  
    <manufacturedProduct>  
      <manufacturedMaterial>
```

```
<code code="17311000168105" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Panadol">
  <originalText>Panadol</originalText>
</code>
</manufacturedMaterial>
</manufacturedProduct>
</product>
<!-- medication-brand-name-->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Branded product name"/>
    <text>Panadol</text>
  </act>
</entryRelationship>
</supply>

<!-- Medication with mutliple codings -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <consumable>
    <manufacturedProduct>
      <manufacturedMaterial>
        <code code="28236011000036109" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="amoxicillin 250 mg capsule, 20">
          <translation code="1884E" codeSystem="1.2.36.1.2001.1004.200.10009" codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item" displayName="amoxicillin 250 mg capsule, 20"/>
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
</substanceAdministration>

<!-- Medication without a coded value -->
<supply classCode="SPLY" moodCode="RQO">
  <product>
    <manufacturedProduct>
      <manufacturedMaterial>
        <code>
          <originalText>RIVAROXABAN</originalText>
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
  </product>
</supply>

<!-- Medication with both brand name and generic name and no coded value -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <id root="67425d8f-7929-4a10-9acc-c06981e38d6a"/>
  <consumable>
    <manufacturedProduct>
      <manufacturedMaterial>
        <code>
          <originalText>Valepam</originalText>
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
  <!-- medication-brand-name-->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Branded product name"/>
    <text>Valepam</text>
  </act>
</entryRelationship>
<!-- medication-generic-name-->
<entryRelationship typeCode="COMP">
```

```
<act classCode="ACT" moodCode="EVN">
  <code code="1402131000168106" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Generic product name"/>
  <text>Diazepam</text>
</act>
</entryRelationship>
</substanceAdministration>

<!-- Medication with generic name and no coded value -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <consumable>
    <manufacturedProduct>
      <manufacturedMaterial>
        <code>
          <originalText>Diazepam</originalText>
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
  <!-- medication-generic-name-->
  <entryRelationship typeCode="COMP">
    <act classCode="ACT" moodCode="EVN">
      <code code="1402131000168106" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Generic product name"/>
      <text>Diazepam</text>
    </act>
  </entryRelationship>
</substanceAdministration>
```



## Appendix B. Examples

This informative appendix provides some examples that conform to the conformance requirements specified within this implementation guide.

DRAFT

# B.1 Shared Medicines List example 1

This informative appendix provides an example instance that conforms to the requirements of this implementation guide.

## Example B.1. Pharmacist Shared Medicines List example 1

<!-- This example is illustrative only. This fragment cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->

```

<ClinicalDocument classCode="DOCLIN" moodCode="EVN" xmlns="urn:hl7-org:v3"
  xmlns:ex="urn:hl7-org/v3-example"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
>
<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
  <!-- ClinicalDocument templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100033" extension="1.0"/>
  <!-- ClinicalDocument (Shared Medicines List Authored by Practitioner) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100065" extension="1.0"/>
  <!-- CDA Rendering Specification templateId-->
  <templateId root="1.2.36.1.2001.1001.100.149" extension="1.0"/>
  <id root="cbc73f0e-90a3-11e9-bc42-526af7764f64"/>
  <!-- Composition type-->
  <code code="56445-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Medication summary"/>
  <!-- Composition title-->
  <title>Pharmacist Shared Medicines List</title>
  <effectiveTime value="201812111330+1000"/>
  <confidentialityCode nullFlavor="NA"/>
  <languageCode code="en-AU"/>
  <!-- Composition status-->
  <ext:completionCode code="F" codeSystem="1.2.36.1.2001.1001.101.104.20104"
    codeSystemName="NCTIS Document Status Values" displayName="Final"/>
  <!-- Composition subject -->
  <recordTarget typeCode="RCT">
    <!-- recordTarget (Patient with Mandatory Identifier) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100004" extension="1.0"/>
    <patientRole classCode="PAT">
      <id root="430fa8e6-eaba-4629-bf2f-ac16d7c5e082"/>
      <patient>
        <!-- Patient name -->
        <name>
          <given>Mac</given>
          <family>PRIEST</family>
        </name>
        <!-- Patient gender -->
        <administrativeGenderCode code="male" codeSystem="2.16.840.1.113883.4.642.1.2"
          codeSystemName="AdministrativeGender" displayName="Male"/>
        <!-- Patient birthDate-->
        <birthTime value="19890309"/>
        <!-- Patient indigenous-status -->
        <ethnicGroupCode code="4" codeSystem="1.2.36.1.2001.1004.200.10012"
          codeSystemName="Australian Indigenous Status"
          displayName="Neither Aboriginal nor Torres Strait Islander origin"/>
        <!-- Patient identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
          <ext:id root="1.2.36.1.2001.1003.0.8003608333563104"
            assigningAuthorityName="IHI"/>
          <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
          </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
      </patient>
    </patientRole>
  </recordTarget>
  <!-- Composition composition-author-role / Composition author -->
  <author>
    <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
    <!-- Composition date -->
    <time value="201812111330+1000"/>
    <assignedAuthor>
      <id root="01f1aee7-a212-4f3d-bb97-b26e7a476559"/>
      <!-- PractitionerRole code -->
      <code code="251513" codeSystem="2.16.840.1.113883.13.62"
        codeSystemName="Australian and New Zealand Standard Classification of Occupations"
        displayName="Retail Pharmacist">
        <originalText>Pharmacist</originalText>
      </code>
      <!-- PractitionerRole telecom-->
      <telecom use="WB" value="mailto:zsin@gmail.com"/>
      <!-- PractitionerRole practitioner -->
      <assignedPerson>
        <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
        <!-- Practitioner name -->
        <name>
          <prefix>Mr.</prefix>
          <given>Zane</given>
          <family>Sinclair</family>
        </name>
      </assignedPerson>
    </assignedAuthor>
  </author>

```

```
</name>
<!-- PractitionerRole identifier / Practitioner identifier -->
<ext:asEntityIdentifier classCode="IDENT">
  <ext:id root="1.2.36.1.2001.1003.0.8003611566708354"
    assigningAuthorityName="HPI-I"/>
  <ext:assigningGeographicArea classCode="PLC">
    <ext:name>National Identifier</ext:name>
  </ext:assigningGeographicArea>
</ext:asEntityIdentifier>
<!--Practitioner qualification-->
<ext:asQualifications classCode="QUAL">
  <ext:code>
    <originalText>Bachelor of Pharmacy </originalText>
  </ext:code>
</ext:asQualifications>
</assignedPerson>
<!-- PractitionerRole organization -->
<representedOrganization>
  <!-- representedOrganization (Base Organization) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100039" extension="1.0"/>
  <id root="0c267071-8a7b-4cba-a3cc-9b571cc09ab3"/>
  <!-- Organization name -->
  <name>Test Org - Retail Pharmacy</name>
  <!-- Organization address -->
  <addr use="WP">
    <streetAddressLine>570 Whatcha St</streetAddressLine>
    <city>GLEBE</city>
    <state>NSW</state>
    <postalCode>2037</postalCode>
    <country>AU</country>
  </addr>
  <!-- Organization type-->
  <standardIndustryClassCode code="4271" codeSystem="1.2.36.1.2001.1005.47"
    codeSystemName="1292.0 - ANZSIC - Australian and New Zealand Standard Industrial Classification"
    displayName="Retail Pharmacy"/>
  <!-- Organization identifier -->
  <ext:asEntityIdentifier classCode="IDENT">
    <ext:id assigningAuthorityName="HPI-O"
      root="1.2.36.1.2001.1003.0.8003629900033370"/>
    <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
  </ext:asEntityIdentifier>
</representedOrganization>
</assignedAuthor>
</author>
<!-- Composition custodian -->
<custodian>
  <!-- custodian (Organization with Mandatory Identifier) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100002" extension="1.0"/>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="0c267071-8a7b-4cba-a3cc-9b571cc09ab3"/>
      <!-- Organization name -->
      <name>Test Org - Retail Pharmacy</name>
      <!-- Organization address -->
      <addr use="WP">
        <streetAddressLine>570 Whatcha St</streetAddressLine>
        <city>GLEBE</city>
        <state>NSW</state>
        <postalCode>2037</postalCode>
        <country>AU</country>
      </addr>
      <!-- Organization identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O"
          root="1.2.36.1.2001.1003.0.8003629900033370"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
<!-- Composition attester (Legal Attester) -->
<legalAuthenticator>
  <templateId root="1.2.36.1.2001.1001.102.101.100012" extension="1.0"/>
  <time value="201812111330+1000"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id root="01f1aae7-a212-4f3d-bb97-b26e7a476559"/>
    <assignedPerson>
      <!-- Practitioner name -->
      <name>
        <prefix>Mr.</prefix>
        <given>Zane</given>
        <family>Sinclair</family>
      </name>
      <!-- Practitioner identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id root="1.2.36.1.2001.1003.0.8003611566708354"
          assigningAuthorityName="HPI-I"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>
```

```
<!-- Patient generalPractitioner -->
<participant typeCode="PART">
  <!-- participant (generalPractitioner Base Organization) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100036" extension="1.0"/>
  <functionCode code="PCP"/>
  <associatedEntity classCode="PROV">
    <id root="fdb10052-30e9-4425-b771-8b8a81ae7107"/>
    <!--Organization type -->
    <code code="288565001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
      displayName="Medical centre"/>
    <scopingOrganization>
      <!-- Organization name -->
      <name>Test Medical Centre</name>
    </scopingOrganization>
  </associatedEntity>
</participant>
<!-- Composition encounter-->
<componentOf>
  <encompassingEncounter>
    <!-- encompassingEncounter (Summary of an Encounter for an Event) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100064" extension="1.0"/>
    <id root="a2201099-367c-46a1-a611-e7c143a25a92"/>
    <!-- Encounter period-->
    <effectiveTime xsi:type="IVL_TS">
      <low value="201812111000+1000"/>
      <high value="201812111330+1000"/>
    </effectiveTime>
  </encompassingEncounter>
</componentOf>
<component>
  <structuredBody>
    <component>
      <!-- Composition section -->
      <section>
        <!-- section (Medicines List) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100077" extension="1.0"/>
        <id root="23d67386-2098-437a-94ff-b45c7b402d4b"/>
        <!-- section code -->
        <code code="10160-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
          displayName="History of Medication use Narrative"/>
        <!-- section title -->
        <title>Medicines List</title>
        <!-- section text -->
        <text mediaType="text/x-hl7-text+xml" ID="ML1">
          <table>
            <caption>Current medicines</caption>
            <thead>
              <tr>
                <th>Medicine</th>
                <th>Brand name</th>
                <th>Direction</th>
                <th>Medicine purpose</th>
                <th>Medicine status</th>
                <th>Expected end date</th>
                <th>Special instructions</th>
                <th>Medicine Image</th>
                <th>Physical Description</th>
              </tr>
            </thead>
            <tbody>
              <tr ID="medicationstatement-ferro-grad-c">
                <td></td>
                <td>Ferro-Grad C</td>
                <td>Take one tablet daily</td>
                <td>Iron Supplement</td>
                <td>Unchanged</td>
                <td></td>
                <td></td>
                <td></td>
                <td></td>
              </tr>
              <tr ID="medicationstatement-amoxicillin-875mg">
                <td>Amoxicillin 875 mg + clavulanic acid 125 mg tablet</td>
                <td>Augmentin Duo Forte</td>
                <td>Take one tablet twice a day</td>
                <td>To treat chest infection</td>
                <td>New</td>
                <td>20/01/2019</td>
                <td></td>
                <td></td>
                <td></td>
              </tr>
              <tr ID="medicationstatement-metformin-500mg">
                <td>Metformin 500mg tablet</td>
                <td>Sandoz</td>
                <td>Take one tablet twice a day</td>
                <td>Reduce blood sugar</td>
                <td>Dose increased from 250mg to 500mg</td>
                <td></td>
                <td></td>
                <td></td>
                <td>White and round with 227 imprinted</td>
              </tr>
              <tr ID="medicationstatement-multi-vitamins">
                <td>Multi-vitamins</td>
                <td></td>
                <td>Take one tablet daily</td>
                <td></td>
                <td></td>
                <td></td>
                <td></td>
                <td></td>
                <td></td>
              </tr>
            </tbody>
          </table>
        </text>
      </section>
    </component>
  </structuredBody>
</component>
```

```
<td/>
<td/>
<td/>
<td/>
</tr>
<tr ID="medicationstatement-paracetamol-665mg">
<td>Paracetamol 665 mg tablet</td>
<td>Panadol Osteo</td>
<td>Take two tablets every 6 to 8 hours when required</td>
<td>Osteoarthritis, pain relief</td>
<td/>
<td/>
<td>No more than 6 tablets in 24 hours</td>
<td/>
<td/>
</tr>
</tbody>
</table>
<table>
<caption>Ceased medicines</caption>
<thead>
<tr>
<th>Medicine</th>
<th>Reason for ceasing medicine</th>
<th>Ceased date</th>
</tr>
</thead>
<tbody>
<tr ID="medicationstatement-paracetamol-500mg">
<td></td>
<td>Paracetamol 500mg tablet</td>
<td>Stopped; duplicated medicine</td>
<td>Dec 2018</td>
</tr>
<tr ID="medicationstatement-ibuprofen">
<td>Ibuprofen</td>
<td>Allergic Reaction</td>
<td/>
</tr>
</tbody>
</table>
<p>Packed medicines: No</p>
<p>Please review this list with your pharmacist on or soon after  
02/Apr/2019. Community pharmacy medicine review</p>
</text>
<!-- section entry -->
<entry typeCode="COMP">
<act classCode="ACT" moodCode="EVN">
<!-- act (List of Medicine Items with Change Information Authored by Practitioner) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100067" extension="1.0"/>
<id root="27e20cfe-2684-4612-a05e-a4d2d75c25cd"/>
<!-- List code-->
<code code="10160-0" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
displayName="History of Medication use Narrative"/>
<text><reference value="#M11"/></text>
<!-- List status -->
<statusCode code="active"/>
<!-- List date -->
<effectiveTime value="201812111330+1000"/>
<!-- List author-role / List source -->
<author>
<!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
<templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
<!-- List date -->
<time value="201812111330+1000"/>
<assignedAuthor>
<id root="0f1aaeef-a212-4f3d-bb97-b26e7a476559"/>
<!-- PractitionerRole code -->
<code code="251513" codeSystem="2.16.840.1.113883.13.62"
codeSystemName="Australian and New Zealand Standard Classification of Occupations"
displayName="Retail Pharmacist"
<originalText>Pharmacist</originalText>
</code>
<!--PractitionerRole telecom-->
<telecom use="WB" value="mailto:zsin@gmail.com"/>
<!-- PractitionerRole practitioner -->
<assignedPerson>
<!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100040"
extension="1.0"/>
<!-- Practitioner name -->
<name>
<prefix>Mr.</prefix>
<given>Zane</given>
<family>Sinclair</family>
</name>
<!-- PractitionerRole identifier / Practitioner identifier -->
<ext:asEntityIdentifier classCode="IDENT">
<ext:id root="1.2.36.1.2001.1003.0.8003611566708354"
assigningAuthorityName="HPI-I"/>
<ext:assigningGeographicArea classCode="PLC">
<ext:name>National Identifier</ext:name>
</ext:assigningGeographicArea>
</ext:asEntityIdentifier>
<!--Practitioner qualification-->
<ext:asQualifications classCode="QUAL">
<ext:code>
<originalText>Bachelor of Pharmacy </originalText>
```

```
        </ext:code>
        </ext:asQualifications>
    </assignedPerson>
<!-- PractitionerRole organization -->
<representedOrganization>
    <!-- representedOrganization (Base Organization) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100039"
        extension="1.0"/>
    <id root="0c267071-8a7b-4cba-a3cc-9b571cc09ab3"/>
    <!-- Organization name -->
    <name>Test Org - Retail Pharmacy</name>
    <!-- Organization address -->
    <addr use="WP">
        <streetAddressLine>570 Whatcha St</streetAddressLine>
        <city>GLEBBE</city>
        <state>NSW</state>
        <postalCode>2037</postalCode>
        <country>AU</country>
    </addr>
    <!-- Organization type-->
    <standardIndustryClassCode code="4271"
        codeSystem="1.2.36.1.2001.1005.47"
        codeSystemName="1292.0 - ANZIC - Australian and New Zealand Standard Industrial Classification"
        displayName="Retail Pharmacy"/>
    <!-- Organization identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O"
            root="1.2.36.1.2001.1003.0.8003629900033370"/>
        <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
    </representedOrganization>
</assignedAuthor>
</author>
<!-- List note -->
<entryRelationship typeCode="COMP">
    <act classCode="INFRM" moodCode="EVN">
        <id root="leff70fc-9c71-45b8-aab8-2a9c4alfaf6e"/>
        <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101"
            codeSystemName="NCTIS Data Components"
            displayName="Additional Comments"/>
        <text xsi:type="ST">Packed Medicines: No; Please review this
            list with your pharmacist on or soon after
            02/Apr/2019.</text>
        <author>
            <time value="201812111330+1000"/>
            <assignedAuthor>
                <id root="01flaee7-a212-4f3d-bb97-b26e7a476559"/>
                <!-- PractitionerRole code -->
                <code code="251513" codeSystem="2.16.840.1.113883.13.62"
                    codeSystemName="Australian and New Zealand Standard Classification of Occupations"
                    displayName="Retail Pharmacist">
                    <originalText>Pharmacist</originalText>
                </code>
            </assignedAuthor>
        </author>
    </act>
</entryRelationship>
<!-- List encounter-->
<entryRelationship typeCode="COMP">
    <encounter classCode="ENC" moodCode="EVN">
        <!-- encounter (Summary of an Encounter for an Event) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100062"
            extension="1.0"/>
        <id root="a2201099-367c-46a1-a611-e7c143a25a92"/>
        <!--Encounter status-->
        <statusCode code="completed"/>
        <!--Encounter period-->
        <effectiveTime xsi:type="IVL_TS">
            <low value="201812111000+1000"/>
            <high value="201812111330+1000"/>
        </effectiveTime>
        <!--Encounter type-->
        <entryRelationship typeCode="COMP">
            <observation classCode="OBS" moodCode="EVN">
                <code code="103.17018"
                    codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components"
                    displayName="Category"/>
                <value xsi:type="CD" code="1348961000168104"
                    codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT"
                    displayName="Community pharmacy medicines review">
                    <originalText>Community pharmacy medicine
                    review</originalText>
                </value>
            </observation>
        </entryRelationship>
    </encounter>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <id root="0bla1969-134e-46d7-84ad-c61fada43a63"/>
    </substanceAdministration>
</entryRelationship>
```

```
<!-- MedicationStatement dosage text-->
<text>
    <reference value="#medicationstatement-ferro-grad-c" />
</text>
<!-- MedicationStatement status -->
<statusCode code="active" />
<!--MedicationStatement dosage timing-->
<effectiveTime xsi:type="PIVL_TS">
    <!-- timing repeat frequency=1, timing repeat period=1, timing repeat periodUnit=d-->
    <period value="1" unit="d"/>
</effectiveTime>
<!-- MedicationStatement dosage dose -->
<doseQuantity value="1" />
<!-- MedicationStatement medication[x] -->
<consumable typeCode="CSM">
    <manufacturedProduct classCode="MANU">
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068"
            extension="1.0" />
        <id root="c5171380-e169-4465-925e-dd0c46f6c9e4" />
        <manufacturedMaterial determinerCode="KIND">
            <!-- Medication code -->
            <code code="53373011000036103" 
                codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT"
                displayName="Ferro-Grad C">
                <originalText>Ferro-Grad C</originalText>
            </code>
            <!-- Medication form -->
            <ext:formCode code="154011000036109" 
                codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT" displayName="tablet" />
        </manufacturedMaterial>
    </manufacturedProduct>
</consumable>
<!-- MedicationStatement reasonCode -->
<entryRelationship typeCode="RSON" >
    <observation classCode="OBS" moodCode="EVN">
        <id root="bb1d6c85-42cc-4754-b86a-72b5163b2b95" />
        <code code="103.10141" 
            codeSystem="1.2.36.1.2001.1001.101"
            codeSystemName="NCTIS Data Components"
            displayName="Clinical Indication" />
        <value xsi:type="CD" 
            originalText="Iron supplement" />
    </observation>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true" >
    <observation classCode="OBS" moodCode="EVN">
        <id root="ddfa1314-d687-4953-8404-b38fd4f0c4d0" />
        <code code="288533004" 
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT"
            displayName="Change values" />
        <value xsi:type="CD" code="nochange" 
            codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
            codeSystemName="MedicineItemChange"
            displayName="Unchanged" />
    </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP" >
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0" />
        <id root="ed6d657e-8a44-4f29-b40d-ed3821c9cd0a" />
        <!-- MedicationStatement dosage -->
        <text>
            <reference value="#medicationstatement-amoxicillin-875mg" />
        </text>
        <!-- MedicationStatement status -->
        <statusCode code="active" />
        <!--MedicationStatement effective[x] -->
        <effectiveTime xsi:type="IVL_TS" operator="A">
            <high value="20190120" />
        </effectiveTime>
        <!--MedicationStatement dosage timing-->
        <effectiveTime xsi:type="PIVL_TS">
            <!-- timing repeat frequency=2, timing repeat period=1, timing repeat periodUnit=d-->
            <period value="12" unit="h" />
        </effectiveTime>
        <!-- MedicationStatement dosage dose -->
        <doseQuantity value="1" />
        <!-- MedicationStatement medication[x] -->
        <consumable typeCode="CSM">
            <manufacturedProduct classCode="MANU">
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0" />
                <id root="78548cc2-88a8-4571-b691-c5e865ffa895" />
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code code="28152011000036108" />
```

```
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="amoxicillin 875 mg + clavulanic acid 125 mg tablet, 10"
<originalText>Amoxicillin 875 mg + clavulanic acid
125 mg tablet, Augmentin Duo Forte</originalText>
<translation code="5006L"
codeSystem="1.2.36.1.2001.1004.200.10009"
codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item"
displayName="amoxicillin 875 mg + clavulanic acid 125 mg tablet, 10"
/>
</code>
</manufacturedMaterial>
</manufacturedProduct>
</consumable>
<!-- Medication medication-brand-name -->
<entryRelationship typeCode="COMP">
<act classCode="ACT" moodCode="EVN">
<id root="346ca17d-9b3a-40be-9bc9-c3e645fb0bf9"/>
<code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT" displayName="Branded product name"/>
<text>Augmentin Duo Forte</text>
</act>
</entryRelationship>
<!-- MedicationStatement reasonCode -->
<entryRelationship typeCode="RSON">
<observation classCode="OBS" moodCode="EVN">
<id root="ec99aab9-53da-448a-b2b5-6afd464181de"/>
<code code="103.10141"
codeSystem="1.2.36.1.2001.1001.101"
codeSystemName="INCTIS Data Components"
displayName="Clinical Indication"/>
<value xsi:type="CD">
<originalText>Chest infection</originalText>
</value>
</observation>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
<observation classCode="OBS" moodCode="EVN">
<id root="1ef533a8-878a-4383-b70f-0da61cd785cf"/>
<code code="288533004"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="Change values"/>
<!-- List entry change-description -->
<text>To treat chest infection</text>
<value xsi:type="CD" code="new"
codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
codeSystemName="MedicineItemChange"
displayName="New"/>
</observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
<!-- MedicationStatement taken="y" -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
<!-- substanceAdministration (Medicine Item Statement) templateId -->
<templateId root="1.2.36.1.2001.1001.101.100066"
extension="1.0"/>
<id root="217584d0-6c18-4007-b1ec-690c92b188db"/>
<!-- MedicationStatement dosage -->
<text>
<reference value="#medicationstatement-metformin-500mg"/>
</text>
<!-- MedicationStatement status -->
<statusCode code="active"/>
<!-- MedicationStatement dosage timing-->
<effectiveTime xsi:type="PIVL_TS">
<!-- timing repeat frequency=2, timing repeat period=1, timing repeat periodUnit=d-->
<period value="12" unit="h"/>
</effectiveTime>
<!-- MedicationStatement dosage dose -->
<doseQuantity value="1"/>
<!-- MedicationStatement medication[x] -->
<consumable typeCode="CSM">
<manufacturedProduct classCode="MANU">
<!-- manufacturedProduct (Base Medication) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100068"
extension="1.0"/>
<id root="b1914fb8-61be-47dc-84b2-4cf376f69002"/>
<manufacturedMaterial determinerCode="KIND">
<!-- Medication code -->
<code code="23358011000036102"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="metformin hydrochloride 500 mg tablet">
<originalText>Metformin 500mg tablet,
Sandoz</originalText>
<translation code="2430X"
codeSystem="1.2.36.1.2001.1004.200.10009"
codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item"
displayName="metformin hydrochloride 500 mg tablet, 100"
/>
</code>
</manufacturedMaterial>
</manufacturedProduct>
</consumable>
```

```
<!-- Medication medication-brand-name -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <id root="26e0fd6-e226-4b40-8fd3-bd0c0f51889f"/>
    <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" displayName="Branded product name"/>
    <text>Sandoz</text>
  </act>
</entryRelationship>
<!-- MedicationStatement reasonCode -->
<entryRelationship typeCode="RSON">
  <observation classCode="OBS" moodCode="EVN">
    <id root="85b7ec11-da45-4b0a-af9e-edb271577f01"/>
    <code code="103.10141"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Clinical Indication"/>
    <value xsi:type="CD">
      <originalText>Reduce blood sugar</originalText>
    </value>
  </observation>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
  <observation classCode="OBS" moodCode="EVN">
    <id root="a75edb7e-d0be-46ab-b496-36ec580380c0"/>
    <code code="288533004"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Change values"/>
    <text>Dose increased from 250mg to 500mg</text>
    <value xsi:type="CD" code="amended"
      codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
      codeSystemName="MedicineItemChange"
      displayName="Amended"/>
  </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- substanceAdministration (Medicine Item Statement) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100066"
      extension="1.0"/>
    <id root="07c6bad3-926c-458b-b434-79246cb45fda"/>
    <!-- MedicationStatement dosage -->
    <text>
      <reference value="#medicationstatement-multi-vitamins"/>
    </text>
    <!-- MedicationStatement status -->
    <statusCode code="active"/>
    <!-- MedicationStatement dosage timing-->
    <effectiveTime xsi:type="PIVL_TS">
      <!-- timing repeat frequency=1, timing repeat period=1, timing repeat periodUnit=d-->
      <period value="1" unit="d"/>
    </effectiveTime>
    <!-- MedicationStatement dosage dose -->
    <doseQuantity value="1"/>
    <!-- MedicationStatement medication[x] -->
    <consumable typeCode="CSM">
      <manufacturedProduct classCode="MANU">
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068"
          extension="1.0"/>
        <id root="e9bfa7ef-573c-46bb-90d3-12a3b2f6c05e"/>
        <manufacturedMaterial determinerCode="KIND">
          <!-- Medication code -->
          <code>
            <originalText>Multi-vitamins</originalText>
          </code>
          <!-- Medication form -->
          <ext:formCode code="154011000036109"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT" displayName="tablet"/>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
    <!-- List entry flag -->
    <entryRelationship typeCode="SUBJ" inversionInd="true">
      <observation classCode="OBS" moodCode="EVN">
        <id root="92dd8e7c-f402-4ef5-b033-10f602be14c1"/>
        <code code="288533004"
          codeSystem="2.16.840.1.113883.6.96"
          codeSystemName="SNOMED CT"
          displayName="Change values"/>
        <value xsi:type="CD" code="nochange"
          codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
          codeSystemName="MedicineItemChange"
          displayName="Unchanged"/>
      </observation>
    </entryRelationship>
  </substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
```

```
<!-- substanceAdministration (Medicine Item Statement) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100066"
  extension="1.0"/>
<id root="fca75696-c85f-4664-9712-8be2f9adade6"/>
<!-- MedicationStatement dosage -->
<text>
  <reference value="#medicationstatement-paracetamol-665mg"/>
</text>
<!-- MedicationStatement status -->
<statusCode code="active"/>
<!-- MedicationStatement dosage timing -->
<effectiveTime xsi:type="PIVL_TS" operator="A">
  <!-- timing repeat frequency=1, timing repeat period=6, timing repeat periodUnit=h, timing repeat periodMax=8-->
  <period xsi:type="IVL_PQ">
    <low value="6" unit="h"/>
    <high value="8" unit="h"/>
  </period>
</effectiveTime>
<!-- MedicationStatement dosage dose -->
<doseQuantity value="2"/>
<!-- MedicationStatement dosage maxDosePerPeriod -->
<maxDoseQuantity>
  <!-- maxDosePerPeriod numerator=6; maxDosePerPeriod denominator unit=h and value=24-->
  <numerator unit="6"/>
  <denominator unit="h" value="24"/>
</maxDoseQuantity>
<!-- MedicationStatement medication[x] -->
<consumable typeCode="CSM">
  <manufacturedProduct classCode="MANU">
    <!-- manufacturedProduct (Base Medication) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100068"
      extension="1.0"/>
    <id root="ecfa16da-a430-44ca-ae24-79f692384bc8"/>
    <manufacturedMaterial determinerCode="KIND">
      <!-- Medication code -->
      <code code="22075011000036103"
        codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT"
        displayName="paracetamol 665 mg modified release tablet">
        <originalText>Paracetamol 665mg tablet; Panadol Osteo</originalText>
        <translation code="8814X"
          codeSystem="1.2.36.1.2001.1004.200.10009"
          codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item"
          displayName="paracetamol 665 mg modified release tablet, 96"
        />
      </code>
      <!-- Medication ingredient -->
      <ext:asIngredient classCode="INGR">
        <!-- Medication ingredient item -->
        <ext:ingredientManufacturedMaterial
          classCode="MMAT" determinerCode="KIND">
          <ext:code code="90332006"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT"
            displayName="Paracetamol-containing product"/>
          </ext:ingredientManufacturedMaterial>
        <!-- Medication ingredient amount -->
        <ext:quantity>
          <numerator unit="mg" value="665"/>
          <denominator value="1"/>
        </ext:quantity>
      </ext:asIngredient>
      <!-- Medication form -->
      <ext:formCode code="261011000036101"
        codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT"
        displayName="modified release tablet"/>
    </manufacturedMaterial>
  </manufacturedProduct>
</consumable>
<!-- Medication medication-generic-name -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <id root="2ddbef9e-5268-4a96-9f4d-c4545683b380"/>
    <code code="1402131000168106" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Generic product name"/>
    <text>Paracetamol 665mg tablet</text>
  </act>
</entryRelationship>
<!-- Medication medication-brand-name -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <id root="8e538a16-0d07-41aa-8d30-9dd064b76003"/>
    <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" displayName="Branded product name"/>
    <text>Panadol Osteo</text>
  </act>
</entryRelationship>
<!-- MedicationStatement reasonCode -->
<entryRelationship typeCode="RSON">
  <observation classCode="OBS" moodCode="EVN">
    <id root="39c066c4-fba4-490e-aae1-a0f823e2aaaa"/>
    <code code="103.10141"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Clinical Indication"/>
    <value xsi:type="CD">
```

```
<originalText>Osteoarthritis, pain
relief</originalText>
</value>
</observation>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
<observation classCode="OBS" moodCode="EVN">
<id root="91ab74ac-eb52-4bc3-8f10-37efc7fe0741"/>
<code code="288533004"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="Change values"/>
<value xsi:type="CD" code="nochange"
codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
codeSystemName="MedicineItemChange"
displayName="Unchanged"/>
</observation>
</entryRelationship>
<!-- MedicationStatement dosage asNeeded -->
<precondition typeCode="PRCN">
<criterion>
<code code="ASSERTION"
codeSystem="2.16.840.1.113883.5.4"/>
<value xsi:type="BL" value="true"/>
</criterion>
</precondition>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
<!-- MedicationStatement taken="y" -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
<!-- substanceAdministration (Medicine Item Statement) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100066"
extension="1.0"/>
<id root="f9a3d6e1-6de2-4e35-88ef-531940e2929a"/>
<!-- MedicationStatement dosage -->
<text>
<reference value="#medicationstatement-paracetamol-500mg"/>
</text>
<!-- MedicationStatement status -->
<statusCode code="aborted"/>
<!--MedicationStatement effective[x] -->
<effectiveTime xsi:type="IVL_TS">
<high value="201812"/>
</effectiveTime>
<!-- MedicationStatement medication[x] -->
<consumable typeCode="CSM">
<manufacturedProduct classCode="MANU">
<!-- manufacturedProduct (Base Medication) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100068"
extension="1.0"/>
<id root="3c086c5e-5218-4035-82b9-a856f6f49e61"/>
<manufacturedMaterial determinerCode="KIND">
<!-- Medication code -->
<code code="23628011000036109"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="Paracetamol 500 mg tablet">
<originalText>Paracetamol 500 mg
tablet</originalText>
</code>
</manufacturedMaterial>
</manufacturedProduct>
</consumable>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
<observation classCode="OBS" moodCode="EVN">
<id root="8a4cfbc3-5f08-4fc0-8661-b55b3e0e2e6f"/>
<code code="288533004"
codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"
displayName="Change values"/>
<!-- List entry change-description -->
<text>Duplicated medicine</text>
<value xsi:type="CD" code="ceased"
codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
codeSystemName="MedicineItemChange"
displayName="Ceased"/>
</observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
<!-- MedicationStatement taken="y" -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
<!-- substanceAdministration (Medicine Item Statement) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100066"
extension="1.0"/>
<id root="0b6f1a8a-fe8c-4746-9ec8-3a4a2bbeb61a"/>
<!-- MedicationStatement dosage -->
<text>
<reference value="#medicationstatement-ibuprofen"/>
</text>
<!-- MedicationStatement status -->
<statusCode code="aborted"/>
<!-- MedicationStatement medication[x] -->
```

```

<consumable typeCode="CSM">
    <manufacturedProduct classCode="MANU">
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068" extension="1.0"/>
        <id root="6be58051-819d-49cd-be37-c0d964d3d416"/>
        <manufacturedMaterial determinerCode="KIND">
            <!-- Medication code -->
            <code code="21885011000036105" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Ibuprofen">
                <originalText>Ibuprofen</originalText>
                <translation code="3192B" codeSystem="1.2.36.1.2001.1004.200.10009" codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item" displayName="IBUPROFEN"/>
            </code>
        </manufacturedMaterial>
    </manufacturedProduct>
</consumable>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
        <id root="b75442a1-b13d-4306-878c-2e733e836bd0"/>
        <code code="288533004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Change values"/>
        <!-- List entry change-description -->
        <text>Allergic reaction</text>
        <value xsi:type="CD" code="ceased" codeSystem="2.16.840.1.113883.2.3.4.1.2.6" codeSystemName="MedicineItemChange" displayName="Ceased"/>
    </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
</act>
</entry>
</section>
</component>
<!-- Composition section (Allergies) -->
<component>
    <section>
        <!-- section (Allergies) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100069" extension="1.0"/>
        <id root="e5616571-74e8-4986-a958-4e51261091cd"/>
        <!-- section code-->
        <code code="48765-2" codeSystem="2.16.840.1.113883.6.1" displayName="Allergies & or adverse reactions"/>
        <!-- section title-->
        <title>Allergies</title>
        <!-- section text-->
        <text mediaType="text/x-hl7-text+xml">
            <table>
                <caption>Allergies</caption>
                <thead>
                    <tr>
                        <th>Substance/Agent</th>
                        <th>Reaction Type</th>
                        <th>Reaction</th>
                        <th>Reaction Onset Date</th>
                    </tr>
                </thead>
                <tbody>
                    <tr>
                        <td>ibuprofen</td>
                        <td>Allergic reaction</td>
                        <td>Anaphylaxis</td>
                        <td>October 2016</td>
                    </tr>
                </tbody>
            </table>
        </text>
        <!--section entry -->
        <entry typeCode="COMP">
            <observation classCode="OBS" moodCode="EVN">
                <!-- observation (Summary Statement of Allergy or Intolerance) templateId-->
                <templateId root="1.2.36.1.2001.1001.102.101.100014" extension="1.0"/>
                <id root="134649c9-53c9-41fe-984c-2b3123646800"/>
                <code code="allergy" codeSystem="2.16.840.1.113883.4.642.1.122" codeSystemName="AllergyIntoleranceType" displayName="Allergy"/>
                <!-- AllergyIntolerance onset[x]-->
                <effectiveTime>
                    <low value="201610"/>
                </effectiveTime>
                <!--AllergyIntolerance code-->
                <value xsi:type="CD" code="21885011000036105" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Ibuprofen">
                    <originalText>ibuprofen</originalText>
                </value>
                <!-- AllergyIntolerance clinicalStatus -->
                <entryRelationship typeCode="COMP">
                    <observation classCode="OBS" moodCode="EVN">
                        <id root="80b36cc2-b70b-4351-a542-b65958c3f20f"/>
                        <code code="103.32013" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components">

```

```
        displayName="Clinical Status"/>
    <value xsi:type="CD" code="active"
        codeSystem="2.16.840.1.113883.4.642.1.118"
        codeSystemName="AllergyIntoleranceClinicalStatus"
        displayName="Active"/>
  </observation>
</entryRelationship>

<entryRelationship typeCode="COMP">
  <observation classCode="OBS" moodCode="EVN">
    <id root="ce0c2a55-be02-4f9d-b3be-95c4abb1caf3"/>
    <code code="103.32012" codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components"
        displayName="Verification Status"/>
    <value xsi:type="CD" code="unconfirmed"
        codeSystem="2.16.840.1.113883.4.642.1.116"
        codeSystemName="AllergyIntoleranceVerificationStatus"
        displayName="Unconfirmed"/>
  </observation>
</entryRelationship>

<entryRelationship typeCode="COMP">
  <observation classCode="OBS" moodCode="EVN">
    <id root="75a6e6d8-7d66-472f-97af-5fd6c64258c9"/>
    <code code="102.16474" codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components"
        displayName="Reaction Event"/>
  <!-- AllergyIntolerance reaction substance-->
  <participant typeCode="CAGNT">
    <participantRole classCode="ADMM">
      <id root="c0a73810-08ad-418e-a559-1897ecfe60b6"/>
      <playingEntity classCode="ENT">
        <code code="21885011000036105"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT" displayName="Ibuprofen">
          <originalText>ibuprofen</originalText>
        </code>
      </playingEntity>
    </participantRole>
  </participant>
  <!-- AllergyIntolerance reaction manifestation -->
  <entryRelationship typeCode="MFST" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <id root="05424437-4ae8-4542-9b7c-672f036980bf"/>
      <code code="39579001"
          codeSystem="2.16.840.1.113883.6.96"
          codeSystemName="SNOMED CT" displayName="Anaphylaxis">
        <originalText>Anaphylaxis</originalText>
      </code>
    </observation>
  </entryRelationship>
</observation>
</entryRelationship>
</observation>
</entryRelationship>
</observation>
</entry>
</section>
</component>
</structuredBody>
</component>
</ClinicalDocument>
```

## B.2 Shared Medicines List example 2

This informative appendix provides an example instance that conforms to the requirements of this implementation guide.

### Example B.2. Home Medicines Review Report for Mr. Lenny Matterson

```
<!-- This example is illustrative only. This fragment cannot be treated as clinically valid.
While every effort has been taken to ensure that the examples are consistent with the message specification, where
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->

<ClinicalDocument xmlns="urn:hl7-org:v3"
  xmlns:ex="urn:hl7-org/v3-example"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
    <!-- ClinicalDocument templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100033" extension="1.0"/>
    <!-- ClinicalDocument (Shared Medicines List Authored by Practitioner) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100065" extension="1.0"/>
    <!--CDA Rendering Specification templateId-->
    <templateId root="1.2.36.1.2001.1001.100.149" extension="1.0"/>
    <id root="ae22a1le-bca4-11e9-9cb5-2a2ae2dbcce4"/>
    <!-- Composition type-->
    <code code="56445-0" codeSystem="2.16.840.1.113883.6.1" displayName="Medication summary"/>
    <!-- Composition title-->
    <title>Home Medicines Review Report for Mr. Lenny Matterson</title>
    <effectiveTime value="20190205"/>
    <confidentialityCode nullFlavor="NA"/>
    <languageCode code="en-AU"/>
    <setId root="41699a72-e0b1-4300-9d4a-aac3149feffc"/>
    <versionNumber value="2"/>
    <!-- Composition status-->
    <ext:completionCode code="F" codeSystem="1.2.36.1.2001.1001.101.104.20104" displayName="Final"/>
    <!-- Composition subject -->
    <recordTarget>
      <!-- recordTarget (Patient with Mandatory Identifier) templateId-->
      <templateId root="1.2.36.1.2001.1001.102.101.100004" extension="1.0"/>
      <patientRole>
        <id root="c0afb854-3c7f-4f26-98ba-9c6fbcd6777"/>
        <!-- Patient telecom -->
        <telecom use="MC" value="tel:0491 570 006"/>
        <!-- Patient telecom -->
        <telecom use="H" value="tel:(08) 5550 1234"/>
        <patient>
          <!-- Patient name -->
          <name>
            <prefix>Mr.</prefix>
            <given>Lenny</given>
            <family>MATTERSON</family>
          </name>
          <!-- Patient gender -->
          <administrativeGenderCode code="male" codeSystem="2.16.840.1.113883.4.642.1.2"
            displayName="Male"/>
          <!--Patient birthDate & patient-birthTime -->
          <birthTime value="19550206061700+1000"/>
          <!-- Patient indigenous-status -->
          <ethnicGroupCode code="1" codeSystem="1.2.36.1.2001.1004.200.10012"
            displayName="Aboriginal but not Torres Strait Islander origin"/>
          <!-- Patient identifier -->
          <ext:asEntityIdentifier classCode="IDENT">
            <ext:id assigningAuthorityName="IHI"
              root="1.2.36.1.2001.1003.0.8003608166895854"/>
            <ext:assigningGeographicArea classCode="PLC">
              <ext:name>National Identifier</ext:name>
            </ext:assigningGeographicArea>
          </ext:asEntityIdentifier>
          <!-- Patient identifier -->
          <ext:asEntityIdentifier classCode="IDENT">
            <ext:id assigningAuthorityName="Medicare Card Number" root="1.2.36.1.5001.1.0.7"
              extension="5950890021"/>
            <ext:code code="MC" codeSystem="2.16.840.1.113883.12.203"
              displayName="Patient's Medicare number"/>
          </ext:asEntityIdentifier>
          <!-- Patient communication language-->
          <languageCommunication>
            <languageCode code="pjt"/>
          </languageCommunication>
        </patient>
      </patientRole>
    </recordTarget>
    <!-- Composition composition-author-role and Composition author -->
    <author>
      <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
      <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
      <!-- Composition date -->
      <time value="20190205"/>
      <assignedAuthor>
        <id root="cc61a87e-c467-4aa9-9f6a-ea4f8a1d5d16"/>
        <!-- PractitionerRole code -->
        <code code="251513" codeSystem="2.16.840.1.113883.13.62" displayName="Retail Pharmacist"/>
        <!-- Practitioner address -->
        <addr use="WP">50034 Queen St, Coburg, VIC 3058</addr>
    
```

```
<!-- Practitioner telecom -->
<telecom use="WP" value="fax:0370102020"/>
<!-- PractitionerRole practitioner -->
<assignedPerson>
  <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
  <!-- Practitioner name -->
  <name use="L">
    <prefix>Mr.</prefix>
    <given>Ned</given>
    <family>DEACON</family>
  </name>
  <!-- PractitionerRole identifier / Practitioner identifier -->
  <ext:asEntityIdentifier classCode="IDENT">
    <ext:id root="1.2.36.1.2001.1003.0.8003616566708106"
      assigningAuthorityName="HPI-I"/>
    <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
  </ext:asEntityIdentifier>
  <!-- PractitionerRole identifier -->
  <ext:asEntityIdentifier classCode="IDENT">
    <ext:id root="1.2.36.174030967.0.2" extension="5544887B"
      assigningAuthorityName="Medicare Provider Number"/>
    <ext:code code="PRN" codeSystem="2.16.840.1.113883.12.203"/>
    <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
  </ext:asEntityIdentifier>
  </assignedPerson>
</assignedAuthor>
</author>
<!-- Composition custodian -->
<custodian>
  <!-- custodian (Organization with Mandatory Identifier) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100002" extension="1.0"/>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="728b84ca-9b80-4999-ac54-95973dce08ad"/>
      <!-- Organization.name -->
      <name>Big Pharmacy</name>
      <!-- Organization identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O"
          root="1.2.36.1.2001.1003.0.800362656699734"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
<!-- Composition attester (Legal Attester) -->
<legalAuthenticator>
  <templateId root="1.2.36.1.2001.1001.102.101.100012" extension="1.0"/>
  <time value="20190205"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id root="cc61a87e-c467-4aa9-9f6a-ea4f8ald5d16"/>
    <assignedPerson>
      <!-- Practitioner name -->
      <name use="L">
        <prefix>Mr.</prefix>
        <given>Ned</given>
        <family>DEACON</family>
      </name>
      <!-- Practitioner identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id root="1.2.36.1.2001.1003.0.8003616566708106"
          assigningAuthorityName="HPI-I"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>
<!-- Composition encounter-->
<componentOf>
  <encompassingEncounter>
    <!-- encompassingEncounter (Summary of an Encounter for an Event) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100064" extension="1.0"/>
    <id root="8b0c25e2-7098-486a-89d5-38b6e8dd4e95"/>
    <!-- Encounter class -->
    <code code="HIE" codeSystem="2.16.840.1.113883.5.4" displayName="home health"/>
    <!--Encounter period -->
    <effectiveTime xsi:type="IVL_TS">
      <low value="20190205100000+1000"/>
      <high value="20190205111500+1000"/>
    </effectiveTime>
  </encompassingEncounter>
</componentOf>
<component>
  <structuredBody>
    <component>
      <!-- Composition section -->
      <section>
        <!-- section (Medicines List) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100077" extension="1.0"/>
      </section>
    </component>
  </structuredBody>
</component>
```

```
<id root="5a0ac820-2507-4f72-b164-ac3d4bc353fb"/>
<!-- section code -->
<code code="101.32009" codeSystem="1.2.36.1.2001.1001.101"
      displayName="Current Medicines"/>
<!-- section title -->
<title>Current Medicines</title>
<!-- section text -->
<text mediaType="text/x-hl7-text+xml">
    <table border="1">
        <caption>Home Medicines Review</caption>
        <thead>
            <tr>
                <th>Date of Interview</th>
                <th/>
                <th>General Assessment</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>5 Feb 2019 10:00AM - 5 Feb 2019 11:15AM</td>
                <td>Home medicines review</td>
                <td>Patient has his medications packed into blister packs via ABC pharmacy. He finds them easy to use and they promote good adherence to his regime. His Bluecare nurse, Nurse B, was present for the interview. Of the medication listed on the referral, he is not currently taking Aldara 5% cream and Chloramphenicol ointment. In addition to the medication listed on the referral, he is also taking coQ10 150mg tab - 1 nocte. He reports occasional dizziness if he changes position quickly, and does report falling outside in the garden; he wears a falls alarm buzzer. He reports that he generally only experiences chest pain when he becomes stressed (doesn't like paperwork). His blood pressure at the time of the interview was 158 / 76.</td>
            </tr>
        </tbody>
    </table>
    <table border="1">
        <caption>Current Medicines</caption>
        <thead>
            <tr>
                <th>Medicine</th>
                <th>Directions</th>
                <th>Medicine purpose</th>
                <th>Medicine status</th>
                <th>Status Reason/Comment</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <td>Amiodarone 200mg tab</td>
                <td>1 in the morning</td>
                <td/>
                <td>Unchanged</td>
                <td/>
            </tr>
            <tr>
                <td>Bisoprolol 2.5mg tab</td>
                <td>1/2 tablet in the morning</td>
                <td/>
                <td>Unchanged</td>
                <td/>
            </tr>
            <tr>
                <td>CoQ10 150mg tab</td>
                <td>1 at night</td>
                <td/>
                <td>New</td>
                <td>In pack - new finding of Atrial fibrillation</td>
            </tr>
        </tbody>
    </table>
    <paragraph>Packed medicines: Yes</paragraph>
</text>
<!-- section entry -->
<entry>
    <act classCode="ACT" moodCode="EVN">
        <!-- act (List of Medicine Items with Change Information Authored by Practitioner) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100067" extension="1.0"/>
        <!-- List code-->
        <code code="101.32009" codeSystem="1.2.36.1.2001.1001.101"
              displayName="Current Medicines"/>
        <!-- List status -->
        <statusCode code="active"/>
        <!-- List date -->
        <effectiveTime value="20190205"/>
        <!-- List author-role / List source -->
        <author>
            <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
            <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
            <time value="20190205"/>
            <assignedAuthor>
                <id root="cc61a87e-c467-4aa9-9f6a-ea4f8ald5d16"/>
                <!-- PractitionerRole code -->
                <code code="251513" codeSystem="2.16.840.1.113883.13.62"
                      displayName="Retail Pharmacist"/>
                <!-- Practitioner address -->
                <addr use="WP">50034 Queen St, Coburg, VIC 3058</addr>
                <!-- Practitioner telecom -->
```

```
<telecom use="WP" value="fax:0370102020" />
<!-- PractitionerRole practitioner -->
<assignedPerson>
  <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100040"
    extension="1.0" />
  <!-- Practitioner name -->
  <name use="L">
    <prefix>Mr.</prefix>
    <given>Ned</given>
    <family>DEACON</family>
  </name>
  <!-- PractitionerRole identifier / Practitioner identifier -->
  <ext:asEntityIdentifier classCode="IDENT">
    <ext:id root="1.2.36.1.2001.1003.0.8003616566708106"
      assigningAuthorityName="HPI-I" />
    <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
  </ext:asEntityIdentifier>
  <!-- PractitionerRole identifier -->
  <ext:asEntityIdentifier classCode="IDENT">
    <ext:id root="1.2.36.1.174030967.0.2" extension="5544887B"
      assigningAuthorityName="Medicare Provider Number" />
    <ext:code code="PRN"
      codeSystem="2.16.840.1.113883.12.203" />
    <ext:assigningGeographicArea classCode="PLC">
      <ext:name>National Identifier</ext:name>
    </ext:assigningGeographicArea>
  </ext:asEntityIdentifier>
  </assignedPerson>
</assignedAuthor>
</author>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- substanceAdministration (Medicine Item Statement) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100066"
      extension="1.0" />
    <id root="41f2a705-b51c-41a7-a573-529457ead1d7" />
    <!-- MedicationStatement dosage -->
    <text>Amiodarone 200mg tab; 1 in the morning</text>
    <!-- MedicationStatement status -->
    <statusCode code="active" />
    <!-- MedicationStatement medication[x] -->
    <consumable>
      <manufacturedProduct>
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068"
          extension="1.0" />
        <manufacturedMaterial determinerCode="KIND">
          <!-- Medication code -->
          <code>
            <originalText>Amiodarone 200mg tab</originalText>
          </code>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
    <!-- List entry flag -->
    <observation classCode="OBS" moodCode="EVN">
      <code code="288533004"
        codeSystem="2.16.840.1.113883.6.96"
        displayName="Change values" />
      <value xsi:type="CD" code="nochange"
        codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
        displayName="Unchanged" />
    </observation>
  </entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- substanceAdministration (Medicine Item Statement) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100066"
      extension="1.0" />
    <id root="8ec35b86-7a65-4721-8698-6abd4745f4c2" />
    <!-- MedicationStatement dosage -->
    <text>Bisoprolol 2.5mg tab; 1/2 tablet in the morning</text>
    <!-- MedicationStatement status -->
    <statusCode code="active" />
    <!-- MedicationStatement medication[x] -->
    <consumable>
      <manufacturedProduct>
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068"
          extension="1.0" />
        <manufacturedMaterial determinerCode="KIND">
          <!-- Medication code -->
          <code code="23281011000036106"
            codeSystem="2.16.840.1.113883.6.96"
            displayName="bisoprolol fumarate 2.5 mg tablet" />
          <originalText>Bisoprolol 2.5mg tab</originalText>
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
```

```
</consumable>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
        <code code="288533004"
            codeSystem="2.16.840.1.113883.6.96"
            displayName="Change values"/>
        <value xsi:type="CD" code="nochange"
            codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
            displayName="Unchanged"/>
    </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <id root="222ac944-5bc8-4205-9d71-eb3a69817ebb"/>
        <!-- MedicationStatement dosage -->
        <text>CoQ10 150mg tab; 1 at night; New; In pack - new finding of
            Atrial fibrillation</text>
        <!-- MedicationStatement status -->
        <statusCode code="active"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0"/>
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code code="920941011000036100"
                        codeSystem="2.16.840.1.113883.6.96"
                        displayName="CoQ10 (Blackmores)">
                        <originalText>CoQ10 150mg tab</originalText>
                    </code>
                </manufacturedMaterial>
            </manufacturedProduct>
        </consumable>
        <!-- List entry flag -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
            <observation classCode="OBS" moodCode="EVN">
                <code code="288533004"
                    codeSystem="2.16.840.1.113883.6.96"
                    displayName="Change values"/>
                <!-- List entry change-description -->
                <text>New finding of Atrial fibrillation</text>
                <value xsi:type="CD" code="new"
                    codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
                    displayName="New"/>
            </observation>
        </entryRelationship>
    </substanceAdministration>
</entryRelationship>
<!-- List note -->
<entryRelationship typeCode="COMP">
    <act classCode="INFRM" moodCode="EVN">
        <code code="103.16044" codeSystem="1.2.36.1.2001.1001.101"
            displayName="Additional Comments"/>
        <text xsi:type="ST">Packed medicines: Yes</text>
    </act>
</entryRelationship>
<!-- List encounter -->
<entryRelationship typeCode="COMP">
    <encounter classCode="ENC" moodCode="EVN">
        <!-- encounter (Summary of an Encounter for an Event) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100062"
            extension="1.0"/>
        <id root="8b0c25e2-7098-486a-89d5-38b6e8dd4e95"/>
        <!-- Encounter class-->
        <code code="HH" codeSystem="2.16.840.1.113883.5.4"
            displayName="home health"/>
        <!-- Encounter encounter-description -->
        <text>Patient has his medications packed into blister packs via
            ABC pharmacy. He finds them easy to use and they promote
            good adherence to his regime. His Bluecare nurse, Nurse B,
            was present for the interview. Of the medication listed on
            the referral, he is not currently taking Aldara 5% cream and
            Chloramphenicol ointment. In addition to the medication
            listed on the referral, he is also taking coQ10 150mg tab -
            1 nocte. He reports occasional dizziness if he changes
            position quickly, and does report falling outside in the
            garden; he wears a falls alarm buzzer. He reports that he
            generally only experiences chest pain when he becomes
            stressed (doesn't like paperwork). His blood pressure at the
            time of the interview was 158 /76.</text>
        <!--Encounter status-->
        <statusCode code="completed"/>
        <!--Encounter period-->
        <effectiveTime xsi:type="IVL_TS">
            <low value="20190205100000+1000"/>
            <high value="20190205111500+1000"/>
        </effectiveTime>
        <!--Encounter type-->
        <entryRelationship typeCode="COMP">
```

```
<observation classCode="OBS" moodCode="EVN">
    <code code="103.17018"
        codeSystem="1.2.36.1.2001.1001.101"
        displayName="Category"/>
    <value xs:type="CD" code="1348931000168107"
        codeSystem="2.16.840.1.113883.6.96"
        displayName="Home medicines review">
        <originalText>Home medicines review</originalText>
    </value>
</observation>
</entryRelationship>
</encounter>
</entryRelationship>
</act>
</entry>
</section>
</component>
<component>
    <!-- Composition section -->
    <section>
        <!-- section (Medicines List) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100077" extension="1.0"/>
        <id root="0b7fbad6-c5a0-42c6-bd66-8a983ed69a2a"/>
        <!-- section code -->
        <code code="101.32027" codeSystem="1.2.36.1.2001.1001.101"
            displayName="Ceased Medicines"/>
        <!-- section title -->
        <title>Ceased medicines</title>
        <!-- section text -->
        <text mediaType="text/x-hl7-text+xml">
            <table border="1">
                <caption>Ceased medicines</caption>
                <thead>
                    <tr>
                        <th>Ceased medicine</th>
                        <th>Reason for ceasing</th>
                    </tr>
                </thead>
                <tbody>
                    <tr>
                        <td>Aldara 5% cream (apply as required)</td>
                        <td>Completed 8-week course</td>
                    </tr>
                    <tr>
                        <td>Chloramphenicol 1% eye ointment (apply as required)</td>
                        <td>Stopped due to burning sensation in the eye.</td>
                    </tr>
                </tbody>
            </table>
        </text>
        <!-- section entry -->
        <entry>
            <act classCode="ACT" moodCode="EVN">
                <!-- act (List of Medicine Items with Change Information Authored by Practitioner) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100067" extension="1.0"/>
                <!-- List code -->
                <code code="101.32027" codeSystem="1.2.36.1.2001.1001.101"
                    displayName="Ceased Medicines"/>
                <!--List status -->
                <statusCode code="active"/>
                <!-- List date -->
                <effectiveTime value="20190205"/>
                <!-- List author-role / List source -->
                <author>
                    <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
                    <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
                    <!-- List date -->
                    <time value="20190205"/>
                    <assignedAuthor>
                        <!-- PractitionerRole code -->
                        <code code="251513" codeSystem="2.16.840.1.113883.13.62"
                            displayName="Retail Pharmacist"/>
                        <!-- Practitioner address -->
                        <addr use="WP">50034 Queen St, Coburg, VIC 3058</addr>
                        <!-- Practitioner telecom -->
                        <telecom use="WP" value="fax:0370102020"/>
                        <!-- PractitionerRole practitioner -->
                        <assignedPerson>
                            <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
                            <templateId root="1.2.36.1.2001.1001.102.101.100040"
                                extension="1.0"/>
                            <!-- Practitioner name -->
                            <name use="L">
                                <prefix>Mr.</prefix>
                                <given>Ned</given>
                                <family>DEACON</family>
                            </name>
                            <!-- PractitionerRole identifier / Practitioner identifier -->
                            <ext:asEntityIdentifier classCode="IDENT">
                                <ext:id root="1.2.36.1.2001.1003.0.8003616566708106"
                                    assigningAuthorityName="HPI-I"/>
                                <ext:assigningGeographicArea classCode="PLC">
                                    <ext:name>National Identifier</ext:name>
                                </ext:assigningGeographicArea>
                            </ext:asEntityIdentifier>
                            <!-- PractitionerRole identifier -->
                            <ext:asEntityIdentifier classCode="IDENT">
                                <ext:id root="1.2.36.174030967.0.2" extension="5544887B">

```

```
        assigningAuthorityName="Medicare Provider Number" />
<ext:code code="PRN">
    codeSystem="2.16.840.1.113883.12.203"/>
<ext:assigningGeographicArea classCode="PLC">
    <ext:name>National Identifier</ext:name>
</ext:assigningGeographicArea>
</ext:asEntityIdentifier>
</assignedPerson>
</assignedAuthor>
</author>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <id root="dcde2dd2-a577-4bca-8951-727666c9bcaa"/>
        <!-- MedicationStatement dosage -->
        <text>Aldara 5% cream; apply as required; Completed 8-week
            course</text>
        <!-- MedicationStatement status -->
        <statusCode code="completed"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0"/>
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code code="119411000036106"
                        codeSystem="2.16.840.1.113883.6.96"
                        displayName="Aldara 5% cream">
                        <originalText>Aldara 5% cream</originalText>
                    </code>
                </manufacturedMaterial>
            </manufacturedProduct>
        </consumable>
        <!-- List entry flag -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
            <observation classCode="OBS" moodCode="EVN">
                <code code="288533004"
                    codeSystem="2.16.840.1.113883.6.96"
                    displayName="Change values"/>
                <!-- List entry change-description-->
                <text>Completed 8-week course</text>
                <value code="ceased"
                    codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
                    displayName="Ceased" xsi:type="CD"/>
            </observation>
        </entryRelationship>
    </substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <id root="0039beb1-b916-4a7c-bd48-c9a196887b8e"/>
        <!-- MedicationStatement dosage -->
        <text>Chloramphenicol 1% eye ointment; apply as required;
            Stopped due to burning sensation in the eye</text>
        <!-- MedicationStatement status -->
        <statusCode code="completed"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0"/>
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code code="22717011000036101"
                        codeSystem="2.16.840.1.113883.6.96"
                        displayName="chloramphenicol 1% eye ointment">
                        <originalText>Chloramphenicol 1% eye
                            ointment</originalText>
                    </code>
                </manufacturedMaterial>
            </manufacturedProduct>
        </consumable>
        <!-- List entry flag -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
            <observation classCode="OBS" moodCode="EVN">
                <code code="288533004"
                    codeSystem="2.16.840.1.113883.6.96"
                    displayName="Change values"/>
                <!-- List entry change-description -->
                <text>Stopped due to burning sensation in the
                    eye.</text>
                <value code="ceased"
                    codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
                    displayName="Ceased" xsi:type="CD"/>
            </observation>
        </entryRelationship>
    </substanceAdministration>
```

```
        </entryRelationship>
    </act>
</entry>
<section>
</component>
</structuredBody>
</component>
</ClinicalDocument>
```

DRAFT

## B.3 Shared Medicines List example 3

This informative appendix provides an example instance that conforms to the requirements of this implementation guide.

### Example B.3. Pharmacist Shared Medicines List example 3

<!-- This example is illustrative only. This fragment cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->

```
<ClinicalDocument classCode="DOCLIN" moodCode="EVN" xmlns="urn:hl7-org:v3"
  xmlns:ex="urn:hl7-org/v3-example"
  xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
>
<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
  <!-- ClinicalDocument templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100033" extension="1.0"/>
  <!--ClinicalDocument (Shared Medicines List Authored by Practitioner) templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100065" extension="1.0"/>
  <!--CDA Rendering Specification templateId-->
  <templateId root="1.2.36.1.2001.1001.100.226" extension="1.0"/>
  <id root="a25c2e86-62ee-49b5-9c3e-7daf545a2dfd"/>
  <!-- Composition type-->
  <code code="56445-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Medication summary"/>
  <!-- Composition title-->
  <title>Shared Medicines List</title>
  <effectiveTime value="20190812"/>
  <confidentialityCode nullFlavor="NA"/>
  <languageCode code="en-AU"/>
  <setid root="2bd59445-4773-4a75-bee8-c84a67f1e5cd"/>
  <versionNumber value="1"/>
  <!-- Composition status-->
  <ext:completionCode code="F" codeSystem="1.2.36.1.2001.1001.101.104.20104"
    codeSystemName="NCTIS Document Status Values" displayName="Final"/>
  <!-- Composition subject -->
  <recordTarget>
    <!-- recordTarget (Patient with Mandatory Identifier) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100004" extension="1.0"/>
    <patientRole>
      <id root="c7445b1a-a31f-4626-9681-dc6d97481d8e"/>
      <patient>
        <!-- Patient name -->
        <name use="L">
          <prefix>Mrs</prefix>
          <given>Bonny</given>
          <family>Goodwin</family>
        </name>
        <!-- Patient gender -->
        <administrativeGenderCode code="female" codeSystem="2.16.840.1.113883.4.642.1.2"
          codeSystemName="AdministrativeGender" displayName="Female"/>
        <!-- Patient maritalStatus-->
        <maritalStatusCode code="M" codeSystem="2.16.840.1.113883.5.2"
          codeSystemName="v3 Code System MaritalStatus" displayName="Married">
          <originalText>Married</originalText>
        </maritalStatusCode>
        <!-- Patient identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
          <ext:id assigningAuthorityName="IHI"
            root="1.2.36.1.2001.1003.0.8003608000228445"/>
          <ext:assigningGeographicArea classCode="PLC">
            <ext:name>National Identifier</ext:name>
          </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
        <!-- Patient identifier -->
        <ext:asEntityIdentifier classCode="IDENT">
          <ext:id assigningAuthorityName="Medicare Card Number" root="1.2.36.1.5001.1.0.7"
            extension="3951032981"/>
          <ext:code code="MC" codeSystem="2.16.840.1.113883.12.203"
            codeSystemName="Identifier Type (HL7)"
            displayName="Patient's Medicare number"/>
        </ext:asEntityIdentifier>
      </patient>
    </patientRole>
  </recordTarget>
  <!-- Composition composition-author-role and Composition author -->
  <author>
    <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
    <!-- Composition date -->
    <time value="20190812"/>
    <assignedAuthor>
      <id root="cd1f53e1-c922-446b-9ef6-ee43740b653e"/>
      <!-- PractitionerRole code -->
      <code code="46255001" codeSystem="2.16.840.1.113883.6.96" displayName="Pharmacist"/>
      <!-- PractitionerRole practitioner -->
      <assignedPerson>
        <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
        <!-- PractitionerRole identifier / Practitioner identifier -->
```

```
<ext:asEntityIdentifier classCode="IDENT">
  <ext:id root="1.2.36.1.2001.1003.0.8003619900041630"
    assigningAuthorityName="HPI-I"/>
  <ext:assigningGeographicArea classCode="PLC">
    <ext:name>National Identifier</ext:name>
  </ext:assigningGeographicArea>
</ext:asEntityIdentifier>
</assignedPerson>
</assignedAuthor>
</author>
<!-- Composition custodian -->
<custodian>
  <!-- custodian (Organization with Mandatory Identifier) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100002" extension="1.0"/>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="0c267071-8a7b-4cba-a3cc-9b571cc09ab3"/>
      <!-- Organization name -->
      <name>Test Hospital</name>
      <!-- Organization telecom -->
      <telecom use="WP" value="tel:(03) 7010 3248"/>
      <!-- Organization identifier -->
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id assigningAuthorityName="HPI-O"
          root="1.2.36.1.2001.1003.0.8003623233366573"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
<!-- Composition attester (Legal Attester) -->
<legalAuthenticator>
  <templateId root="1.2.36.1.2001.1001.102.101.100012" extension="1.0"/>
  <time value="20190902100015+1000"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <id root="cd3f53e1-c922-446b-9ef6-ee43740b653e"/>
    <assignedPerson>
      <ext:asEntityIdentifier classCode="IDENT">
        <ext:id root="1.2.36.1.2001.1003.0.8003619900041630"
          assigningAuthorityName="HPI-I"/>
        <ext:assigningGeographicArea classCode="PLC">
          <ext:name>National Identifier</ext:name>
        </ext:assigningGeographicArea>
      </ext:asEntityIdentifier>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>
<!-- Patient generalPractitioner -->
<participant typeCode="PART">
  <!-- participant (generalPractitioner Base Practitioner) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100037" extension="1.0"/>
  <functionCode code="PCP"/>
  <associatedEntity classCode="PROV">
    <id root="1467c67b-8ael-4c83-8b36-fde8667bec94"/>
    <associatedPerson>
      <!-- Practitioner name -->
      <name>Dr. G. Practitioner</name>
    </associatedPerson>
  </associatedEntity>
</participant>
</participant>
<!-- Composition encounter-->
<componentOf>
  <encompassingEncounter>
    <!-- encompassingEncounter (Summary of an Encounter for an Event) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100064" extension="1.0"/>
    <id root="7c67f842-la80-4463-8953-a954373ca7cb"/>
    <!-- Encounter period-->
    <effectiveTime xsi:type="IVL_TS">
      <low value="20190812090000+1000"/>
      <high value="20190812103000+1000"/>
    </effectiveTime>
  </encompassingEncounter>
</componentOf>
<!-- component -->
<structuredBody>
  <!-- Composition section -->
  <component>
    <section>
      <!-- section (Allergies) templateId-->
      <templateId root="1.2.36.1.2001.1001.102.101.100069" extension="1.0"/>
      <!-- section code-->
      <code code="48765-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
        displayName="Allergies &or adverse reactions"/>
      <!-- section title-->
      <title>Allergies and Intolerances</title>
      <!-- section text-->
      <text mediaType="text/x-hl7-text+xml">
        <paragraph>No known allergies</paragraph>
      </text>
      <!--section entry -->
      <entry typeCode="DRIV">
        <observation classCode="OBS" moodCode="EVN">
          <!-- observation (Summary Statement of Allergy or Intolerance) templateId-->
          <templateId root="1.2.36.1.2001.1001.102.101.100014" extension="1.0"/>
        </observation>
      </entry>
    </section>
  </component>
</structuredBody>
```

```
<code code="102.05517" codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Adverse Reaction"/>
<!--AllergyIntolerance code-->
<value xsi:type="CD" code="716186003"
      codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
      displayName="No known allergy">
    <originalText>No known allergies</originalText>
</value>
<!-- AllergyIntolerance clinicalStatus -->
<entryRelationship typeCode="COMP">
  <observation classCode="OBS" moodCode="EVN">
    <code code="103.32013" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Clinical Status"/>
    <value code="active" codeSystem="2.16.840.1.113883.4.642.1.118"
          codeSystemName="AllergyIntoleranceClinicalStatus"
          displayName="Active" xsi:type="CD"/>
  </observation>
</entryRelationship>
<!-- AllergyIntolerance verificationStatus -->
<entryRelationship typeCode="COMP">
  <observation classCode="OBS" moodCode="EVN">
    <code code="103.32012" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Verification Status"/>
    <value code="unconfirmed"
          codeSystem="2.16.840.1.113883.4.642.1.116"
          codeSystemName="AllergyIntoleranceVerificationStatus"
          displayName="Unconfirmed" xsi:type="CD"/>
  </observation>
</entryRelationship>
</observation>
</entry>
</section>
</component>
<component>
  <!-- Composition section -->
  <section>
    <!-- section (Medicines List) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100077" extension="1.0"/>
    <!-- section code -->
    <code code="101.32009" codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components" displayName="Current Medicines"/>
    <!-- section title -->
    <title>Current Medicines</title>
    <!-- section text -->
    <text mediaType="text/x-hl7-text+xml">
      <paragraph>Medicines review: 10:30AM 12-08-2019</paragraph>
      <table border="1">
        <caption>Current Medicines</caption>
        <thead>
          <tr>
            <th>Medicine</th>
            <th>Medicine brand name</th>
            <th>Directions</th>
            <th>Purpose</th>
            <th>Status</th>
            <th>Status reason</th>
          </tr>
        </thead>
        <tbody>
          <tr ID="med1reference">
            <td></td>
            <td>Tritace</td>
            <td>Take one tablet in the morning daily.</td>
            <td>To reduce high blood pressure; treat heart failure after a
                heart attack; prevent progression of kidney failure; reduce
                the risk of heart attack, stroke and stenting</td>
            <td>Unchanged</td>
            <td></td>
          </tr>
          <tr ID="med2reference">
            <td>docusate sodium 50 mg + sennoside B 8 mg tablet</td>
            <td>Co-Senna</td>
            <td>Take two tablets twice a day.</td>
            <td>Laxative for constipation, works by softening the stools and
                also assists by stimulating the gut to achieve bowel
                movements.</td>
            <td>New</td>
            <td>Laxative for constipation.</td>
          </tr>
          <tr ID="med3reference">
            <td>Oxycodone</td>
            <td>Endone</td>
            <td>Take one to two tablets every four hours when required.</td>
            <td>For relief of moderate to severe pain.</td>
            <td>Amended</td>
            <td>Dose increased</td>
          </tr>
        </tbody>
      </table>
    </text>
    <!-- section entry -->
    <entry typeCode="DRIV">
      <act classCode="ACT" moodCode="EVN">
        <!-- act (List of Medicine Items with Change Information Authored by Practitioner) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100067" extension="1.0"/>
        <!-- List code -->
    </entry>
  </section>
</component>
```

```
<code code="101.32009" codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Current Medicines"/>
<!-- List status -->
<statusCode code="active"/>
<!-- List date -->
<effectiveTime value="20190812"/>
<!-- List author-role / List source -->
<author>
  <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
  <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
  <!-- List date -->
  <time value="20190812"/>
  <assignedAuthor>
    <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
    <!-- PractitionerRole identifier / Practitioner identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
      <ext:id root="1.2.36.1.2001.1003.0.8003619900041630"
        assigningAuthorityName="HPI-I"/>
      <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
  </assignedAuthor>
  <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
  <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
  <!-- PractitionerRole practitioner -->
  <assignedPerson>
    <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>
    <!-- PractitionerRole identifier / Practitioner identifier -->
    <ext:asEntityIdentifier classCode="IDENT">
      <ext:id root="1.2.36.1.2001.1003.0.8003619900041630"
        assigningAuthorityName="HPI-I"/>
      <ext:assigningGeographicArea classCode="PLC">
        <ext:name>National Identifier</ext:name>
      </ext:assigningGeographicArea>
    </ext:asEntityIdentifier>
  </assignedPerson>
  <!-- assignedAuthor -->
</author>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- substanceAdministration (Medicine Item Statement) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100066" extension="1.0"/>
    <!-- MedicationStatement dosage -->
    <text>
      <reference value="#med1reference"/>
    </text>
    <!-- MedicationStatement status -->
    <statusCode code="active"/>
    <!-- MedicationStatement medication[x] -->
    <consumable>
      <manufacturedProduct>
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068" extension="1.0"/>
        <manufacturedMaterial determinerCode="KIND">
          <code>
            <originalText>Tritace</originalText>
          </code>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
    <!-- Medication medication-brand-name -->
    <entryRelationship typeCode="COMP">
      <act classCode="ACT" moodCode="EVN">
        <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Branded product name"/>
        <text>Tritace</text>
      </act>
    </entryRelationship>
    <!-- MedicationStatement reasonCode -->
    <entryRelationship typeCode="RSON">
      <observation classCode="OBS" moodCode="EVN">
        <code code="103.10141" codeSystem="1.2.36.1.2001.1001.101" codeSystemName="NCTIS Data Components" displayName="Clinical Indication" />
        <value xsi:type="CD">
          <originalText>To reduce high blood pressure; treat heart failure after a heart attack; prevent progression of kidney failure; reduce the risk of heart attack, stroke and stenting</originalText>
        </value>
      </observation>
    </entryRelationship>
    <!-- List entry flag -->
    <entryRelationship typeCode="SUBJ" inversionInd="true">
      <observation classCode="OBS" moodCode="EVN">
        <code code="288533004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Change values" />
        <value code="nochange" codeSystem="2.16.840.1.113883.2.3.4.1.2.6" codeSystemName="MedicineItemChange" displayName="Unchanged" xsi:type="CD" />
      </observation>
    </entryRelationship>
  </substanceAdministration>
</entryRelationship>
<!-- List entry item -->
```

```
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <!-- MedicationStatement dosage -->
        <text>
            <reference value="#med2reference"/>
        </text>
        <!-- MedicationStatement status -->
        <statusCode code="active"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0"/>
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code code="33690011000036100"
                        codeSystem="2.16.840.1.113883.6.96"
                        codeSystemName="SNOMED CT"
                        displayName="docusate sodium 50 mg + sennoside B 8 mg tablet">
                        <originalText>docusate sodium 50 mg + sennoside B
                            8 mg tablet</originalText>
                    </code>
                </manufacturedMaterial>
            </manufacturedProduct>
        </consumable>
        <!-- Medication medication-brand-name -->
        <entryRelationship typeCode="COMP">
            <act classCode="ACT" moodCode="EVN">
                <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT" displayName="Branded product name"/>
                <text>Co-Senna</text>
            </act>
        </entryRelationship>
        <!-- Medication medication-generic-name -->
        <entryRelationship typeCode="COMP">
            <act classCode="ACT" moodCode="EVN">
                <code code="1402131000168106" codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT"
                    displayName="Generic product name"/>
                <text>docusate sodium 50 mg + sennoside B 8 mg
                    tablet</text>
            </act>
        </entryRelationship>
        <!-- MedicationStatement reasonCode -->
        <entryRelationship typeCode="RSON">
            <observation classCode="OBS" moodCode="EVN">
                <code code="103.10141"
                    codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components"
                    displayName="Clinical Indication"/>
                <value xsi:type="CD" code="14760008"
                    codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT"
                    displayName="Constipation">
                    <originalText>Laxative for constipation, works by
                        softening the stools and also assists by
                        stimulating the gut to achieve bowel
                        movements.</originalText>
                </value>
            </observation>
        </entryRelationship>
        <!-- List entry flag -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
            <observation classCode="OBS" moodCode="EVN">
                <code code="288533004"
                    codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT"
                    displayName="Change values"/>
                <!--List entry change-description -->
                <text>Laxative for constipation.</text>
                <value code="new"
                    codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
                    codeSystemName="MedicineItemChange"
                    displayName="New" xsi:type="CD"/>
            </observation>
        </entryRelationship>
    </substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <!-- MedicationStatement dosage -->
        <text>
            <reference value="#med3reference"/>
        </text>
        <!-- MedicationStatement status -->
        <statusCode code="active"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
```

```
<!-- manufacturedProduct (Base Medication) templateId -->
<templateId root="1.2.36.1.2001.1001.102.101.100068"
  extension="1.0"/>
<manufacturedMaterial determinerCode="KIND">
  <!-- Medication code -->
  <code code="5195K"
    codeSystem="1.2.36.1.2001.1004.200.10009"
    codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item"
    displayName="oxycodone hydrochloride 5 mg tablet, 20">
    <originalText>Endone Oxycodone</originalText>
    <translation code="2622B"
      codeSystem="1.2.36.1.2001.1004.200.10009"
      codeSystemName="Australian Pharmaceutical Benefits Scheme Schedule Item"
      displayName="OXYCODONE" />
  </code>
  </manufacturedMaterial>
</manufacturedProduct>
</consumable>
<!-- Medication medication-brand-name -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <code code="1402141000168102" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" displayName="Branded product name"/>
    <text>Endone</text>
  </act>
</entryRelationship>
<!-- Medication medication-generic-name -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <code code="1402131000168106" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Generic product name"/>
    <text>Oxycodone</text>
  </act>
</entryRelationship>
<!-- MedicationStatement reasonCode -->
<entryRelationship typeCode="RSON">
  <observation classCode="OBS" moodCode="EVN">
    <code code="103.10141"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Clinical Indication"/>
    <value xsi:type="CD" code="428346000"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Pain relief by medication">
      <originalText>For relief of moderate to severe
        pain</originalText>
    </value>
  </observation>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
  <observation classCode="OBS" moodCode="EVN">
    <code code="288533004"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Change values"/>
    <!-- List entry change-description -->
    <text>Dose increased</text>
    <value code="amended"
      codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
      codeSystemName="MedicineItemChange"
      displayName="Amended" xsi:type="CD" />
  </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List encounter-->
<entryRelationship typeCode="COMP">
  <encounter classCode="ENC" moodCode="EVN">
    <!-- encounter (Summary of an Encounter for an Event) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100062"
      extension="1.0"/>
    <id root="7c67f842-1a80-4463-8953-a954373ca7cb" />
    <!--Encounter status-->
    <statusCode code="completed"/>
    <!--Encounter period-->
    <effectiveTime xsi:type="IVL_TS">
      <low value="20190812090000+1000" />
      <high value="20190812103000+1000" />
    </effectiveTime>
    <!-- Encounter type -->
    <entryRelationship typeCode="COMP">
      <observation classCode="OBS" moodCode="EVN">
        <code code="103.17018"
          codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Category"/>
        <value xsi:type="CD" code="182836005"
          codeSystem="2.16.840.1.113883.6.96"
          codeSystemName="SNOMED CT"
          displayName="Review of medication">
          <originalText>Medicines review</originalText>
        </value>
      </observation>
    </entryRelationship>
  </encounter>
</entryRelationship>
```

```
</act>
</entry>
</section>
</component>
</structuredBody>
</component>
</ClinicalDocument>
```

DRAFT

## B.4 Shared Medicines List example 4

This informative appendix provides an example instance that conforms to the requirements of this implementation guide.

### Example B.4. Ceased Medicines List

```
<!-- This example is illustrative only. This fragment cannot be treated as clinically valid.  
While every effort has been taken to ensure that the examples are consistent with the message specification, where  
there are conflicts with the written message specification or schema, the specification or schema will take precedence. -->  
<clinicalDocument xmlns="urn:hl7-org:v3"  
    xmlns:xes="urn:hl7-org/v3-example"  
    xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"  
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
    >  
    <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>  
    <!-- ClinicalDocument templateId -->  
    <templateId root="1.2.36.1.2001.1001.102.101.100033" extension="1.0"/>  
    <!--ClinicalDocument (Shared Medicines List Authored by Practitioner) templateId -->  
    <templateId root="1.2.36.1.2001.1001.102.101.100065" extension="1.0"/>  
    <!--CDA Rendering Specification templateId-->  
    <templateId root="1.2.36.1.2001.1001.100.149" extension="1.0"/>  
    <id root="2.25.22689776786320758428768491731646875697"/>  
    <!-- Composition type-->  
    <code code="56445-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"  
        displayName="Medication summary"/>  
    <!-- Composition title-->  
    <title>Ceased medicines list</title>  
    <effectiveTime value="20190902100015+1000"/>  
    <confidentialityCode nullFlavor="NA"/>  
    <languageCode code="en"/>  
    <setId root="7ba2ddcd-9af0-4396-82cb-0ad19cbb9b32"/>  
    <versionNumber value="1"/>  
    <!-- Composition status-->  
    <ext:completionCode code="I" codeSystem="1.2.36.1.2001.1001.101.104.20104"  
        codeSystemName="NCTIS Document Status Values" displayName="Interim"/>  
    <!-- Composition subject -->  
    <recordTarget  
        <!-- recordTarget (Patient with Mandatory Identifier) templateId-->  
        <templateId root="1.2.36.1.2001.1001.102.101.100004" extension="1.0"/>  
        <patientRole  
            <id root="be81d9f-144b-4064-9bbe-3ae2a142170e"/>  
            <!--Patient address-->  
            <addr  
                <streetAddressLine>1 Caboolture Street</streetAddressLine>  
                <city>Caboolture</city>  
                <state>QLD</state>  
                <postalCode>4510</postalCode>  
                <country>AU</country>  
            </addr>  
            <patient>  
                <!-- Patient name -->  
                <name>Bert Gainey</name>  
                <!-- Required CDA Schema element when a sending system is sending a Patient without a gender element -->  
                <administrativeGenderCode nullFlavor="NI"/>  
                <!-- Patient identifier -->  
                <ext:asEntityIdentifier classCode="IDENT">  
                    <ext:id root="1.2.36.1.2001.1005.29.8003621566684455" extension="542181"  
                        assigningAuthorityName="Croydon GP Centre"/>  
                    <ext:code code="MR" codeSystem="2.16.840.1.113883.12.203"  
                        codeSystemName="Identifier Type (HL7)"/>  
                </ext:asEntityIdentifier>  
            </patient>  
        </patientRole>  
    </recordTarget>  
    <!-- Composition composition-author-role and Composition author -->  
    <author>  
        <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->  
        <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>  
        <!-- Composition date -->  
        <time value="20190902100015+1000"/>  
        <assignedAuthor>  
            <id root="5ae15755-07d5-42b7-ab7d-266d64391fd2"/>  
            <!-- PractitionerRole code -->  
            <code>  
                <originalText>General Practitioner</originalText>  
            </code>  
            <!-- PractitionerRole practitioner -->  
            <assignedPerson>  
                <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->  
                <templateId root="1.2.36.1.2001.1001.102.101.100040" extension="1.0"/>  
                <!-- Practitioner name -->  
                <name>  
                    <given>North</given>  
                    <family>Black</family>  
                    <suffix>M.D.</suffix>  
                </name>  
                <!-- PractitionerRole identifier / Practitioner identifier -->  
                <ext:asEntityIdentifier classCode="IDENT">  
                    <ext:id root="1.2.36.1.2001.1005.70.51824994455" extension="north27"  
                        assigningAuthorityName="Ascot Vale Family Medical Centre"/>  
                    <ext:code code="EI" codeSystem="2.16.840.1.113883.12.203"/>  
                </ext:asEntityIdentifier>  
            </assignedPerson>  
        </author>  
    <!-- Ceased Medicines List -->
```

```
</assignedPerson>
</assignedAuthor>
</author>
<!-- Composition custodian -->
<custodian>
    <!-- custodian (Organization with Mandatory Identifier) templateId-->
    <templateId root="1.2.36.1.2001.1001.102.101.100002" extension="1.0"/>
    <assignedCustodian>
        <representedCustodianOrganization>
            <id root="28733845-6b31-41c6-b43a-b8fc708375da"/>
            <!-- Organization name-->
            <name>Ascot Vale Family Medical Centre</name>
            <!-- Organization identifier -->
            <ext:asEntityIdentifier classCode="IDENT">
                <ext:id assigningAuthorityName="ABN" root="1.2.36.51824994455"/>
                <ext:code code="XX" codeSystem="2.16.840.1.113883.12.203"/>
                <ext:assigningGeographicArea classCode="PLC">
                    <ext:name>National Identifier</ext:name>
                </ext:assigningGeographicArea>
            </ext:asEntityIdentifier>
        </representedCustodianOrganization>
    </assignedCustodian>
</custodian>
<!-- Composition attester (Legal Attester) -->
<legalAuthenticator>
    <templateId root="1.2.36.1.2001.1001.102.101.100012" extension="1.0"/>
    <time value="20190902100015+1000"/>
    <signatureCode code="S"/>
    <assignedEntity>
        <id root="5ae15755-07d5-42b7-ab7d-266d64391fd2"/>
        <assignedPerson>
            <!-- PractitionerRole identifier / Practitioner identifier -->
            <ext:asEntityIdentifier classCode="IDENT">
                <ext:id root="1.2.36.1.2001.1005.70.51824994455" extension="north27"
                    assigningAuthorityName="Ascot Vale Family Medical Centre"/>
                <ext:code code="EI" codeSystem="2.16.840.1.113883.12.203"/>
            </ext:asEntityIdentifier>
        </assignedPerson>
    </assignedEntity>
</legalAuthenticator>
<component>
    <structuredBody>
        <component>
            <!-- Composition section -->
            <section>
                <!-- section (Medicines List) templateId-->
                <templateId root="1.2.36.1.2001.1001.102.101.100077" extension="1.0"/>
                <!-- section code -->
                <code code="101.32027" codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components" displayName="Ceased Medicines"/>
                <!-- section title -->
                <title>Ceased Medicines</title>
                <!-- section text -->
                <text mediaType="text/x-hl7-text+xml">
                    <table border="1">
                        <thead>
                            <tr>
                                <th>Medicine name</th>
                                <th>Other names</th>
                                <th>Number to take/Directions</th>
                                <th>Purpose</th>
                                <th>Special instructions</th>
                            </tr>
                        </thead>
                        <tbody>
                            <tr>
                                <td>RAMIPRIL(TAB) 2.5 mg</td>
                                <td>Tritace</td>
                                <td>Take one in the morning</td>
                                <td>To reduce high blood pressure; treat heart failure after a
                                    heart attack; prevent progression of kidney failure; reduce
                                    the risk of heart attack; stroke and stenting</td>
                                <td>If you feel light-headed, dizzy or faint, get up slowly when
                                    getting out of bed. Make sure you drink enough water during
                                    excercise and hot weather when you are taking this medicine,
                                    especially if you sweat a lot. If you have excessive
                                    vomitting and or diarrhoea while taking this medicine tell
                                    your doctor. May cause headache or unusual taste. Do not take
                                    potassium supplements while you are taking this medicine
                                    unless your doctor tells you to. If you develop signs of
                                    swelling of the lips or tongue, a dry cough or a rash see
                                    your doctor.</td>
                            </tr>
                            <tr>
                                <td>ATORVASTATIN(TAB) 80 mg</td>
                                <td>Lipitor</td>
                                <td>Take 1 in the evening</td>
                                <td>To lower cholesterol levels in the blood</td>
                                <td>Seek medical advice promptly if your urine is dark (brown)
                                    or if you have any unexplained muscle pain, tenderness or
                                    weakness. Grapefruit juice should be avoided as it may
                                    increase the amount of this medicine in your bloodstream and
                                    could increase the chances of side effects occurring.</td>
                            </tr>
                            <tr>
                                <td>DOCUSATE SENNA(TAB) 50 mg</td>
                                <td/>
                                <td>Take two tablets in the morning and in the evening</td>
                                <td>Laxative for constipation, works by softening the stools and

```

```
        also assists by stimulating the gut to achieve bowel
        movements.</td>
    <td>Take with a glass of fluid. May take 2-3 days for maximum
        effect. Do not take with laxatives containing liquid
        paraffin. Abdominal discomfort, nausea and rash may
        occur.</td>
</tr>
</tbody>
</table>
<!-- section entry -->
<entry>
<act classCode="ACT" moodCode="EVN">
    <!-- act (List of Medicine Items with Change Information Authored by Practitioner) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100067" extension="1.0"/>
    <!-- List code -->
    <code code="101.32027" codeSystem="1.2.36.1.2001.1001.101"
        codeSystemName="NCTIS Data Components"
        displayName="Ceased Medicines"/>
    <!-- List status -->
    <statusCode code="active"/>
    <!-- List date -->
    <effectiveTime value="20190902100015+1000"/>
    <!-- List author-role / List source -->
    <author>
        <!-- author (PractitionerRole with Practitioner with Mandatory Identifier) templateId-->
        <templateId root="1.2.36.1.2001.1001.102.101.100006" extension="1.0"/>
        <!-- List date -->
        <time value="20190902100015+1000"/>
        <assignedAuthor>
            <!-- PractitionerRole code -->
            <code>
                <originalText>General Practitioner</originalText>
            </code>
            <!-- PractitionerRole practitioner -->
            <assignedPerson>
                <!-- assignedPerson (Practitioner with Mandatory Identifier) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100040"
                    extension="1.0"/>
                <!-- Practitioner name -->
                <name>
                    <given>North</given>
                    <family>Black</family>
                    <suffix>M.D.</suffix>
                </name>
                <!-- PractitionerRole identifier / Practitioner identifier -->
                <ext:asEntityIdentifier classCode="IDENT">
                    <ext:id root="1.2.36.1.2001.1005.70.51824994455"
                        extension="north27"
                        assigningAuthorityName="Ascot Vale Family Medical Centre"/>
                    <ext:code code="EI"
                        codeSystem="2.16.840.1.113883.12.203"/>
                </ext:asEntityIdentifier>
                </assignedPerson>
            </assignedAuthor>
        </author>
        <!-- List entry item -->
        <entryRelationship typeCode="COMP">
            <!-- MedicationStatement taken="y" -->
            <substanceAdministration classCode="SBADM" moodCode="EVN">
                <!-- substanceAdministration (Medicine Item Statement) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100066"
                    extension="1.0"/>
                <!-- MedicationStatement dosage -->
                <text>RAMIPRIL(TAB) 2.5 mg; Tritace; Take one in the morning; To
                    reduce high blood pressure; treat heart failure after a
                    heart attack; prevent progression of kidney failure; reduce
                    the risk of heart attack; stroke and stenting; If you feel
                    light-headed, dizzy or faint, get up slowly when getting our
                    of bed. Make sure you drink enough water during excercise
                    and hot weather when you are taking this medicine,
                    especially if you sweat a lot. If you have excessive
                    vomiting and or diarrhoea while taking this medicine tell
                    your doctor. May cause headache or unusual taste. Do not take
                    potassium supplements while you are taking this medicine
                    unless your doctor tells you to. If you develop signs of
                    swelling of the lips or tongue, a dry cough or a rash see
                    your doctor.</text>
                <!-- MedicationStatement status -->
                <statusCode code="completed"/>
                <!-- MedicationStatement medication[x] -->
                <consumable>
                    <manufacturedProduct>
                        <!-- manufacturedProduct (Base Medication) templateId -->
                        <templateId root="1.2.36.1.2001.1001.102.101.100068"
                            extension="1.0"/>
                        <manufacturedMaterial determinerCode="KIND">
                            <!-- Medication code -->
                            <code>
                                <originalText>RAMIPRIL(TAB) 2.5 mg,
                                    Tritace</originalText>
                            </code>
                        </manufacturedMaterial>
                    </manufacturedProduct>
                </consumable>
                <!-- MedicationStatement reasonCode -->
                <entryRelationship typeCode="RSON">
                    <observation classCode="OBS" moodCode="EVN">
```

```
<code code="103.10141"
      codeSystem="1.2.36.1.2001.1001.101"
      codeSystemName="NCTIS Data Components"
      displayName="Clinical Indication"/>
<value xsi:type="CD">
  <originalText>To reduce elevated blood pressure; for
  the prevention of angina; to treat or prevent
  heart attack; for the treatment of heart failure;
  to prevent migraines</originalText>
</value>
</observation>
</entryRelationship>
<!-- MedicationStatement note -->
<entryRelationship typeCode="COMP">
  <act classCode="ACT" moodCode="EVN">
    <code code="103.16044"
          codeSystem="1.2.36.1.2001.1001.101"
          codeSystemName="NCTIS Data Components"
          displayName="Additional Comments"/>
    <text xsi:type="ST">If you feel light-headed, dizzy or
    faint, get up slowly when getting out of bed. Make
    sure you drink enough water during exercise and hot
    weather when you are taking this medicine,
    especially if you sweat a lot. If you have excessive
    vomiting and/or diarrhoea while taking this medicine
    tell your doctor. May cause headache or unusual
    taste. Do not take potassium supplements while you
    are taking this medicine unless your doctor tells
    you to. If you develop signs of swelling of the lips
    or tongue, a dry cough or a rash see your
    doctor.</text>
  </act>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
  <observation classCode="OBS" moodCode="EVN">
    <code code="288533004"
          codeSystem="2.16.840.1.113883.6.96"
          codeSystemName="SNOMED CT"
          displayName="Change values"/>
    <value code="nochange"
          codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
          codeSystemName="MedicineItemChange"
          displayName="Unchanged" xsi:type="CD"/>
  </observation>
</entryRelationship>
</substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
  <!-- MedicationStatement taken="y" -->
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <!-- substanceAdministration (Medicine Item Statement) templateId -->
    <templateId root="1.2.36.1.2001.1001.102.101.100066"
      extension="1.0"/>
    <!-- MedicationStatement dosage -->
    <text>ATORVASTATIN(TAB) 80 mg; Lipitor; Take 1 in the evening;
    To lower cholesterol levels in the blood; Seek medical advice
    promptly if your urine is dark (brown) or if you have any
    unexplained muscle pain, tenderness or weakness. Grapefruit
    juice should be avoided as it may increase the amount of
    this medicine in your bloodstream and could increase the
    chances of side effects occurring.</text>
    <!-- MedicationStatement status -->
    <statusCode code="completed"/>
    <!-- MedicationStatement medication[x] -->
    <consumable>
      <manufacturedProduct>
        <!-- manufacturedProduct (Base Medication) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100068"
          extension="1.0"/>
        <manufacturedMaterial determinerCode="KIND">
          <!-- Medication code -->
          <code>
            <originalText>ATORVASTATIN(TAB) 80 mg,
            Lipitor</originalText>
          </code>
        </manufacturedMaterial>
      </manufacturedProduct>
    </consumable>
    <!-- MedicationStatement reasonCode -->
    <entryRelationship typeCode="RSON">
      <observation classCode="OBS" moodCode="EVN">
        <code code="103.10141"
              codeSystem="1.2.36.1.2001.1001.101"
              codeSystemName="NCTIS Data Components"
              displayName="Clinical Indication"/>
        <value xsi:type="CD">
          <originalText>To lower cholesterol levels in the
          blood</originalText>
        </value>
      </observation>
    </entryRelationship>
    <!-- MedicationStatement note -->
    <entryRelationship typeCode="COMP">
      <act classCode="ACT" moodCode="EVN">
        <code code="103.16044"
              codeSystem="1.2.36.1.2001.1001.101"
              codeSystemName="NCTIS Data Components"
```

```
        displayName="Additional Comments"/>
    <text xsi:type="ST">Seek medical advice promptly if your
urine is dark (brown) or if you have any unexplained
muscle pain, tenderness or weakness. Grapefruit
juice should be avoided as it may increase the
amount of this medicine in your bloodstream and
could increase the chances of side effects
occurring.</text>
</act>
</entryRelationship>
<!-- List entry flag -->
<entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
        <code code="288533004"
            codeSystem="2.16.840.1.113883.6.96"
            codeSystemName="SNOMED CT"
            displayName="Change values"/>
        <value xsi:type="CD" code="ceased"
            codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
            codeSystemName="MedicineItemChange"
            displayName="Ceased"/>
    </observation>
    </entryRelationship>
    </substanceAdministration>
</entryRelationship>
<!-- List entry item -->
<entryRelationship typeCode="COMP">
    <!-- MedicationStatement taken="y" -->
    <substanceAdministration classCode="SBADM" moodCode="EVN">
        <!-- substanceAdministration (Medicine Item Statement) templateId -->
        <templateId root="1.2.36.1.2001.1001.102.101.100066"
            extension="1.0"/>
        <!-- MedicationStatement dosage -->
        <text>DOCUSATE SENNA(TAB) 50 mg; Take two tablets in the morning
and in the evening; Laxative for constipation, works by
softening the stools and also assists by stimulating the gut
to achieve bowel movements.; Take with a glass of fluid. May
take 2-3 days for maximum effect. Do not take with laxatives
containing liquid paraffin. Abdominal discomfort, nausea and
rash may occur.</text>
        <!-- MedicationStatement status -->
        <statusCode code="completed"/>
        <!-- MedicationStatement medication[x] -->
        <consumable>
            <manufacturedProduct>
                <!-- manufacturedProduct (Base Medication) templateId -->
                <templateId root="1.2.36.1.2001.1001.102.101.100068"
                    extension="1.0"/>
                <manufacturedMaterial determinerCode="KIND">
                    <!-- Medication code -->
                    <code>
                        <originalText>DOCUSATE SENNA(TAB) 50
mg</originalText>
                    </code>
                </manufacturedMaterial>
            </manufacturedProduct>
        </consumable>
        <!-- MedicationStatement reasonCode -->
        <entryRelationship typeCode="RSON">
            <observation classCode="OBS" moodCode="EVN">
                <code code="103.10141"
                    codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components"
                    displayName="Clinical Indication"/>
                <value xsi:type="CD">
                    <originalText>Laxative for constipation, works by
softening the stools and also assists by
stimulating the gut to achieve bowel
movements.</originalText>
                </value>
            </observation>
        </entryRelationship>
        <!-- MedicationStatement note -->
        <entryRelationship typeCode="ACT">
            <act classCode="ACT" moodCode="EVN">
                <code code="103.16044"
                    codeSystem="1.2.36.1.2001.1001.101"
                    codeSystemName="NCTIS Data Components"
                    displayName="Additional Comments"/>
                <text xsi:type="ST">Take with a glass of fluid. May take
2-3 days for maximum effect. Do not take with
laxatives containing liquid paraffin. Abdominal
discomfort, nausea and rash may.</text>
            </act>
        </entryRelationship>
        <!-- List entry flag -->
        <entryRelationship typeCode="SUBJ" inversionInd="true">
            <observation classCode="OBS" moodCode="EVN">
                <code code="288533004"
                    codeSystem="2.16.840.1.113883.6.96"
                    codeSystemName="SNOMED CT"/>
                <value code="ceased" codeSystemName="MedicineItemChange"
                    codeSystem="2.16.840.1.113883.2.3.4.1.2.6"
                    displayName="Ceased" xsi:type="CD"/>
            </observation>
        </entryRelationship>
        </substanceAdministration>
    </entryRelationship>

```

```
</act>
</entry>
</section>
</component>
</structuredBody>
</component>
</ClinicalDocument>
```

DRAFT

# Appendix C. Mapping from requirements

The Shared Medicines List implementation guide is intended to support multiple usage scenarios; some templates described within this implementation guide are reused across usage scenarios and other implementation guides.

This informative appendix provides a mapping from the requirements of each end-product clinical specification to a logical element (profiled FHIR resource) and its corresponding mapping to a CDA schema element (in a CDA template). At the time of publication of this implementation guide the only end-product clinical specification supported is Pharmacist Shared Medicines List (PSML).

The mapping from requirements tables in this appendix demonstrates the logical decomposition of each requirement to the lowest possible element in the applicable logical model and CDA template.

## Legend for mapping from requirements

Requirement	Req No.	Logical element	CDA schema element	Additional notes
The heading text of the requirement as taken from the requirements specification.	The requirement number as taken from the requirement specification.	<p>Either the name of the lowest element in a profiled FHIR resource that addresses the requirement or 'n/a' where the requirement has been deemed not applicable.</p> <p>If the lowest possible decomposition is to the resource then only the resource name (e.g. Patient) is present. If the lowest possible decomposition is to one or more child elements of a FHIR resource then a '&gt;' notation is used to indicate the hierarchical relationship.</p> <p>For example Patient &gt; communication &gt; language indicates the requirement maps to the language element, that is a child of the communication element, in the Patient FHIR resource.</p> <p>Where a requirement is addressed by multiple elements, the elements are presented in order of appearance in the profiled FHIR resource.</p>	<p>Either the path to the lowest level CDA schema element in a template that addresses the requirement or 'n/a' where the requirement has been deemed not applicable to a CDA template.</p> <p>The syntax for this is similar to XPath and starts as the root element ClinicalDocument e.g. ClinicalDocument/recordTarget or ClinicalDocument/recordTarget/patientRole/patient/name.</p> <p>See <a href="#">???</a> for further information on path notation.</p> <p>Where an element is addressed by multiple CDA schema element paths, each path is presented.</p>	<p>Additional notes are provided where a gap between a requirement, or parts of a requirement, and the profiles is identified.</p> <p>Where a requirement is fully addressed by the mapped elements then no entry in this column is expected.</p>

## C.1 Mapping from PSML business requirements

The table below provides mapping from the requirements in [Pharmacist Shared Medicines List Business Requirements \[DH2019m\]](#) to the corresponding supported element in the Shared Medicines List (SML) model as shown, and their corresponding CDA schema element(s) path from the root CDA schema element ClinicalDocument.

See [C.1 Legend for mapping from requirements](#) for information on the columns used to present the mapping content.

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Pharmacist shared medicines list	027948	Composition	ClinicalDocument[sml]	
		Composition > composition-author-role	ClinicalDocument[sml]/author	
Components in the PSML document	028321	n/a	ClinicalDocument/id	This requirement states a PSML document will contain the organisation the pharmacist is representing at the time of document authoring. The CDA template has this as optional.
		n/a	ClinicalDocument/versionNumber	
		Composition	ClinicalDocument[sml]	
		Composition > identifier	ClinicalDocument[sml]/setId	
		Composition > composition-author-role	ClinicalDocument[sml]/author	This requirement states if a PSML document contains a primary healthcare provider then the name of that primary healthcare provider's organisation is mandatory.
		Composition > subject	ClinicalDocument[sml]/recordTarget	
		Composition > date	ClinicalDocument[sml]/author/time	
		Composition > section(Allergies)	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section	
		Composition > section(Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	
		PractitionerRole > organization	ClinicalDocument[sml]/author/assignedAuthor/representedOrganization	The CDA template supports inclusion of a primary care provider as a practitioner or as an organisation - direct support is not provided in FHIR or the CDA template for a primary care provider practitioner with included organisational information. The CDA template for a primary care provider organisation allows a name or identifier - it does not mandate name.
		Patient > generalPractitioner	ClinicalDocument[sml]/participant/gen_prac	
Document conformance levels	028315	Composition	ClinicalDocument[sml]	One possible way a sending system could provide a practitioner with organisation name is to instantiate a practitioner (participant[gen_prac_prac]/associated Entity/associatedPerson) and also provide the organisation's name (participant[gen_prac_prac]/associated Entity/scopingEntity/name) as a local extension.
		Composition > section(Allergies)	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section	
		Composition > section(Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	The CDA templates enforce a Level 3B document.
Point-to-point transmission	027954	Composition	ClinicalDocument[sml]	
HPI-I relaxed template package	028394	Practitioner > identifier	ClinicalDocument[sml]/author/prac_rol/assignedAuthor/assignedPerson/prac/ext:asEntityIdentifier	

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Compatible with Prescription and Dispense Record	028323	MedicationStatement	ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration	
		Medication	ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct	
Prompt to upload recent PSML	028325	n/a	n/a	This requirement is a producing system behavioural requirement.
Medicines information presentation	028359	Composition > section(Allergies)	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section	This requirement includes a rendering requirement on sequence of information. This part of the requirement is not applicable for the CDA template
		Composition > section(Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	
Allergies and Adverse Reactions section	028355	Composition > section(Allergies) > text	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/text	This requirement includes a rendering requirement on sequence of information. This part of the requirement is not applicable for the CDA template.
Allergies and Adverse Reactions header	028360	Composition > section(Allergies) > text	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/text	This requirement includes a rendering requirement on sequence of information. This part of the requirement is not applicable for the CDA template.
No known allergies or adverse reactions	028411	n/a	n/a	This requirement includes a rendering requirement in the absence of recorded allergy information. This part of the requirement is not applicable for the CDA template.  Alternatively the CDA template caters for recording that a patient does not have an allergy or category of allergies in AllergyIntolerance.code.
Current Medicines section	028361	Composition > section(Medicines List) > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	This requirement includes a rendering requirement. This part of the requirement is not applicable for the CDA template.
Current Medicines header	028362	Composition > section(Medicines List) > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	This requirement includes a rendering requirement. This part of the requirement is not applicable for the CDA template.
Ceased Medicines section	028363	Composition > section(Medicines List) > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	This requirement includes a rendering requirement on sequence of information. This part of the requirement is not applicable for the CDA template.
Ceased Medicines header	028364	Composition > section(Medicines List) > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	This requirement includes a rendering requirement. This part of the requirement is not applicable for the CDA template.
Suppressing Ceased Medicines section	028358	Composition > section(Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	This requirement states a ceased medicines section with no recorded ceased medicines will not be rendered.  The CDA template allows inclusion of a ceased medicines list section as a list of one or more medicine items or an empty section (i.e. emptyReason) - it does not mandate section entry.  This requirement is best enforced in a conformance profile.
		List > entry > item	ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration	

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Suppressing codes and medicine identifiers	028625	n/a	n/a	This requirement is a system behavioural requirement.  This requirement is satisfied by typical producing and consuming system behaviour. Only the originalText or displayName associated with a code is expected to be included in the narrative and rendered.
Completeness of PSML document	028324	n/a	n/a	This requirement is a producing system behavioural requirement.
Identifier for document author	028317	Practitioner > identifier	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/ext:asEntityIdentifier	
No Address for the consumer	028319	Patient > address	ClinicalDocument[sml]/recordTarget[pat]/patientRole/addr ClinicalDocument[sml]/informationRecipient[pat]/intendedRecipient/addr ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/substanceAdministration[med_stat]/informant[pat]/assignedEntity/addr ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/observation[no_find]/author[pat]/assignedAuthor/addr	This requirement states a PSML document, when uploaded to the My Health Record, will not contain any address for the consumer within the document.  Patient CDA templates in this implementation guide allow the optional inclusion of address to support point-to-point transmission. Implementation guidance is included in the CDA template to direct implementers to not send address when sending to the My Health Record.  This requirement is best enforced in a conformance profile.
No Electronic Communication Detail for the consumer	028320	Patient > telecom	ClinicalDocument[sml]/recordTarget[pat]/patientRole/telecom ClinicalDocument[sml]/informationRecipient[pat]/intendedRecipient/telecom ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/substanceAdministration[med_stat]/informant[pat]/assignedEntity/telecom ClinicalDocument[sml]/component/structuredBody/component[meds]/section[med]/entry[meds]/observation[no_find]/author[pat]/assignedAuthor/telecom	This requirement states a PSML document, when uploaded to the My Health Record, will not contain any types of electronic communication contact detail for the consumer within the document.  Patient CDA templates in this implementation guide allow the optional inclusion of telecom to support point-to-point transmission. Implementation guidance is included in the CDA template to direct implementers to not send telecom when sending to the My Health Record.  This requirement is best enforced in a conformance profile.
Attribute for Healthcare Setting	028349	Encounter > type PractitionerRole > code Organization > type	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[enc]/encounter/entryRelationship[type]/observation/value ClinicalDocument[sml]/author/assignedAuthor/code ClinicalDocument[sml]/author/assignedAuthor/representedOrganization/standardIndustryClassCode	This requirement states a PSML document will include the healthcare setting in which the document was authored.  The CDA templates allow for an authoring role or organisation type (e.g. "Community Pharmacy" or "Hospital Pharmacy") and an encounter type (e.g. "Home Medicines Review") - they do not mandate any of these elements.  These parts of the requirement are best enforced in a conformance profile.

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Attribute for Dose Administration Aid medicines present	028413	n/a	n/a	<p>Not directly supported in a FHIR model or CDA template.</p> <p>This requirement states a PSML document may include a statement or an indicator that a medicines list includes medicine items packed in a dose administration aid (DAA).</p> <p>A request has been submitted to HL7 AU to consider this requirement on the national level, see <a href="https://git-hub.com/hl7au/au-fhir-base/issues/320">https://git-hub.com/hl7au/au-fhir-base/issues/320</a>.</p> <p>See <a href="#">Known issues</a> for further information on this issue and possible workarounds.</p>
Additional Comment	028348	Composition > section(Medicines List) > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	
		List > note	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship(note)/act/text	
Attribute for Ceased Date	028352	MedicationStatement > effective[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/effectiveTime	
Attribute for Substance/ Agent of allergy and adverse reaction	028330	AllergyIntolerance > code	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/observation/value	
		AllergyIntolerance > reaction > substance	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/observation/entryRelationship[react]/observation/participant[agent]/participantRole/playingEntity/code	
Attribute for Reaction Type	028331	AllergyIntolerance > type	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/observation/code	This requirement as stated is satisfied however it is noted that the concept of 'reaction type' is not supported - TBD - SOMEONE GET ME A DEF OF REACTION TYPE AND WHY ITS NOT THIS
Attribute for Reaction	028410	AllergyIntolerance > reaction > manifestation	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/observation/entryRelationship[react]/observation/entryRelationship[mfst]/observation/code	
Attribute for Reaction Onset Date	023064	AllergyIntolerance > onset[x]	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/observation/effectiveTime/low/@value	
Attribute for Medicine Identifier	028329	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/code	
Attribute for Active Ingredient	028333	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > ingredient > item[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:code	
No Latin words or abbreviations of Active Ingredient	028390	n/a	n/a	This requirement is a producing system behavioural requirement.

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Attribute for Brand Name	028335	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > medication-brand-name	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/entryRelationship[brand]/act/text	
Active Ingredient or Brand Name	028412	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	<p>This requirement states each medicine item will have either the active ingredient(s) or a brand name, or both.</p> <p>The CDA template allows a brand name and active ingredient(s) - it does not mandate the presence of either.</p> <p>These parts of the requirement are best enforced in a conformance profile.</p>
		Medication > medication-brand-name	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/entryRelationship[brand]/act/text	
		Medication > ingredient > item[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:ingredientManufacturedMaterial/ext:code	
Attribute for Strength	028392	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > ingredient > amount	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:ingredientManufacturedMaterial/ext:quantity	
Attribute for Dose Form	028391	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > form	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/ext:formCode	
Attribute for Route	028399	MedicationStatement > dosage > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > patientInstruction	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > route	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/routeCode	
Attribute for Direction	028336	MedicationStatement > dosage	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/text	
No Latin words or abbreviations for Direction	028337	n/a	n/a	This requirement is a producing system behavioural requirement.
Attribute for Medicine Purpose	028338	MedicationStatement > reasonCode	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_1st]/entryRelationship[item]/substanceAdministration/entryRelationship[reason]/observation/value	

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Terminology for Medicine Purpose	028339	MedicationStatement > reasonCode	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[reas-on]/observation/value	
Attribute for Expected End Date	028343	MedicationStatement > effective[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/effectiveTime	
Attribute for Special Instruction	028345	MedicationStatement > note	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRela-tionship[note]/act/text	
		MedicationStatement > dosage	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
Attribute for Medicine Image	028346	n/a	n/a	<p>Support for medicine image attribute has been removed from the Medication model in the first normative release of FHIR. For this reason the use of medication image is strongly discouraged in the HL7 AU content based on a prior FHIR release (STU3) and unsupported by this implementation guide.</p> <p>Where a sending system can include a medicine image, it is expected to be sent in the narrative for the Medicines List section.</p>
Image sizes	028406	n/a	n/a	This requirement is a producing system behavioural require-ment.
Attribute for Physical Descriptions	028347	n/a	n/a	<p>Not directly supported in FHIR or CDA schema element.</p> <p>One possible way a sending system can include a physical description of the medicine item is to include such descrip-tion in section text.</p>
Attribute for reason for ceasing medicine	028351	List > entry > change-description	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/ob-servation/text	
Attribute for Medicine Status	028342	List > entry > change-description	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/ob-servation/text	
		List > entry > flag	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/ob-servation/value	
Withheld Medicine	028620	List > entry > change-description	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/ob-servation/text	
Withheld Medicine Ordering	028626	n/a	n/a	This requirement is a system behavioural requirement.

Requirement	Req No.	Logical element	CDA schema element	Additional notes
Ceased medicines	028623	MedicationStatement	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration	<p>This requirement states a ceased medicine item has the same atomic data requirements (as a current medicine item) but different rendering requirements limiting the displayed information to medicine item description, reason for ceasing, and date of ceasing.</p> <p>These parts of the requirement are producing system behavioural requirements.</p>

## C.2 Mapping from PSML information requirements

The table below provides mapping from the requirements in *Pharmacist Shared Medicines List Information Requirements [DH2019n]* to the corresponding supported element in the Shared Medicines List (SML) model as shown, and their corresponding CDA schema element(s) path from the root CDA schema element ClinicalDocument.

See [C.1 Legend for mapping from requirements](#) for information on the columns used to present the mapping content.

Requirement	Req No.	Element	CDA schema element	Additional notes
Individual's address (optional)	028640	Patient > address	ClinicalDocument[sml]/recordTarget[pat]/patientRole/addr	
Individual's electronic communication details (optional)	024042	Patient > telecom	ClinicalDocument[sml]/recordTarget[pat]/patientRole/telecom	
Individual (subject of care)	027984	Patient	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient	
Individual healthcare identifier (mandatory)	022082	Patient > identifier	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/ext:asEntityIdentifier	<p>This requirement states a PSML document shall contain the individual's IHI.</p> <p>The CDA template mandates an identifier but does not force that identifier to be an IHI. Implementation guidance is included in the CDA template to direct implementers to instantiate an IHI when sending to the My Health Record.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Individual's title (optional)	022081	Patient > name > text	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name	
		Patient > name > prefix	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name/prefix	
Individual's given name (optional)	023056	Patient > name > text	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name	
		Patient > name > given	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name/given	
Individual's family name (mandatory)	023058	Patient > name > text	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name	<p>This requirement states a PSML document shall contain the individual's family name.</p> <p>The CDA template allows for a family name - it does not mandate the inclusion of a name or that a name if provided includes family name.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Individual's name suffix (optional)	023059	Patient > name > family	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name/family	
Individual's name suffix (optional)	023059	Patient > name > text	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name	
		Patient > name > suffix	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/name/suffix	
Individual's gender (mandatory)	027983	Patient > gender	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/administrativeGenderCode	<p>This requirement states a PSML document shall contain the individual's gender.</p> <p>The CDA template supports gender as an optional element by allowing the use of @nullFlavor="NI". Implementation guidance is included in the CDA template to direct implementers to include gender when sending to the My Health Record.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>

Requirement	Req No.	Element	CDA schema element	Additional notes
Individual's sex (optional)	028570	n/a	n/a	<p>Not directly supported in a FHIR model or CDA template.</p> <p>This implementation guide only supports including a patient's gender as part of a patient's demographics for identification purposes in line with the Australian Government recommendations in <a href="#">Australian Government Guidelines on the Recognition of Sex and Gender</a>.</p> <p>Work is underway with HL7 AU to define a nationally agreed model for the capture of biological sex as a clinically relevant observation, see <a href="https://github.com/hl7au/au-fhir-base/issues/321">https://github.com/hl7au/au-fhir-base/issues/321</a>.</p>
Individual's date of birth (mandatory)	023060	Patient > birthDate	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/birthTime	<p>This requirement states a PSML document shall contain the individual's date of birth.</p> <p>The CDA template supports date of birth as an optional element.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Date of birth accuracy indicator (optional)	024026 027005	Patient > birthDate > date-accuracy-indicator	ClinicalDocument[sml]/component/structuredBody/component[admin_obs]/section/entry[dob_acc]/observation/value	
Indigenous status (mandatory)	024033	Patient > indigenous-status	ClinicalDocument[sml]/recordTarget[pat]/patientRole/patient/ethnicGroupCode	<p>This requirement states a PSML document shall contain the individual's indigenous status.</p> <p>The CDA template supports indigenous status as an optional element. Implementation guidance is included in the CDA template to direct implementers to include indigenous status when sending to the My Health Record.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Document author (mandatory)	027985	n/a PractitionerRole	ClinicalDocument/author ClinicalDocument[sml]/author[prac_rol]	
Healthcare provider organisation name (mandatory)	023070	Organization > name	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/representedOrganization/name	<p>This requirement states a PSML document shall contain the name of the organisation that the author is representing.</p> <p>The CDA template allows for an organisation name - it does not mandate the inclusion of the organisation or that an organisation if provided includes the name.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Healthcare provider individual's workplace address (optional)	024891	Practitioner > address	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/addr	<p>This requirement states a PSML document shall contain the author's workplace address.</p> <p>The CDA template supports address as an optional element.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Healthcare provider individual's workplace electronic communication details (optional)	024036	Practitioner > telecom	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/telecom	

Requirement	Req No.	Element	CDA schema element	Additional notes
Healthcare provider professional role (mandatory)	024040	PractitionerRole > code	ClinicalDocument[sml]/author[prac_rol]/code	This requirement states a PSML document shall contain the author's professional role though it may be supplied as an absent value.  The CDA template supports role as an optional element.  This part of the requirement is best enforced in a conformance profile.
Healthcare Provider Identifier-Individual (optional)	024601	Practitioner > identifier	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/ext:asEntity-Identifier	
Healthcare Provider Identifier-Organization (optional)	024602	Organization > identifier	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/representedOrganization/ext:asEntity-Identifier	
Healthcare provider's title (optional)	023061	Practitioner > name > text	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name	
		Practitioner > name > prefix	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name/prefix	
Healthcare provider given name (optional)	023062	Practitioner > name > text	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name	
		Practitioner > name > given	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name/given	
Healthcare provider family name (mandatory)	023064	Practitioner > name > text	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name	This requirement states a PSML document shall contain the author's family name.  The CDA template allows for a family name - it does not mandate the inclusion of a name or that a name if provided includes family name.  This part of the requirement is best enforced in a conformance profile.
		Practitioner > name > family	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name/family	
Healthcare provider name suffix (optional)	023065	Practitioner > name > text	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name	
		Practitioner > name > suffix	ClinicalDocument[sml]/author[prac_rol]/assignedAuthor/assignedPerson[prac]/name/suffix	
Primary healthcare provider (optional)	028028	Patient > generalPractitioner	ClinicalDocument[sml]/participant[gen_prac]	This requirement states a PSML document will have at most one primary care provider.  The CDA template allows for multiple primary care providers.  This part of the requirement is best enforced in a conformance profile.
Healthcare Provider Identifier-Individual (optional)	024601	Practitioner > identifier	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/ext:asEntityIdentifier	
Healthcare Provider Identifier-Organization (optional)	024602	Organization > identifier	ClinicalDocument[sml]/participant[gen_prac_org]/associatedEntity/scopingOrganization/ext:asEntityIdentifier	
Healthcare provider's title (optional)	023061	Practitioner > name > text	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name	
		Practitioner > name > prefix	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name/prefix	
Healthcare provider given name (optional)	023062	Practitioner > name > text	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name	
		Practitioner > name > given	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name/given	
Healthcare provider family name (optional)	028638	Practitioner > name > text	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name	
		Practitioner > name > family	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name/family	

Requirement	Req No.	Element	CDA schema element	Additional notes
Healthcare provider name suffix (optional)	023065	Practitioner > name > text	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name	
		Practitioner > name > suffix	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/associatedPerson/name/suffix	
Healthcare provider organisation name (mandatory)	023070	Organization > name	ClinicalDocument[sml]/participant[gen_prac_org]/associatedEntity/scopingOrganization/name	<p>This requirement states a PSML document shall contain the primary care provider's organisation name.</p> <p>The CDA template supports inclusion of a primary care provider as a practitioner or as an organisation - direct support is not provided in FHIR or the CDA template for a primary care provider practitioner with included organisational information. The CDA template for a primary care provider organisation allows a name or identifier - it does not mandate name.</p> <p>One possible way a sending system could provide a practitioner with organisation name is to instantiate a practitioner (participant[gen_prac_prac]/associated Entity/associatedPerson) and also provide the organisation's name (participant[gen_prac_prac]/associated Entity/scopingEntity/name) as a local extension.</p> <p>These parts of the requirement are best enforced in a conformance profile.</p>
Healthcare provider individual's workplace address (optional)	024035	Practitioner > address	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/addr	
Healthcare provider individual's workplace electronic communication details (optional)	024036	Practitioner > telecom	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/telecom	
Healthcare provider professional role (mandatory)	024040	n/a	ClinicalDocument[sml]/participant[gen_prac_prac]/associatedEntity/code	<p>This requirement states a PSML document shall contain the primary care provider's professional role though it may be supplied as an absent value.</p>
		Organization > type	ClinicalDocument[sml]/participant[gen_prac_org]/associatedEntity/code	<p>The CDA templates support role as an optional element.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
Healthcare setting (mandatory)	028435	Encounter > type	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[enc]/encounter/entryRelationship[type]/observation/value	<p>This requirement states a PSML document shall the healthcare setting in which the document was authored.</p> <p>The CDA template allows for an encounter type - it does not mandate the inclusion of encounter or that an encounter if provided includes a type. Implementation guidance is included in the CDA template to direct implementers to include encounter with type when sending a PSML.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
				<p>This requirement specifies a set of allowed values for healthcare setting.</p>
	028534			<p>The CDA template allows these and other values - it does not constrain the element to only those values relevant to a PSML. Implementation guidance is included in the CDA template to direct implementers that the preferred constrained value set is to be used when sending a PSML.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>

Requirement	Req No.	Element	CDA schema element	Additional notes
Additional comments (optional)	028403	section > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/text	
		List > note	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act/entryRelationship[note]/act/text	
Dose Administration Aid medicines present (mandatory)	028441	n/a	n/a	<p>Not directly supported in a FHIR model or CDA template.</p> <p>This requirement mandates the inclusion of a statement or an indicator that a medicines list document includes medicine items packed in a dose administration aid (DAA).</p> <p>A request has been submitted to HL7 AU to consider this requirement on the national level, see <a href="https://github.com/hl7au/au-fhir-base/issues/320">https://github.com/hl7au/au-fhir-base/issues/320</a>.</p> <p>See Known issues for further information on this issue and possible workarounds.</p>
Allergy and Adverse Reaction (optional)	028631	Composition > section (Allergies)	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section	
		AllergyIntolerance	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation	
	028673	AllergyIntolerance > code	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/value	
Substance/Agent (optional)	028436	AllergyIntolerance > code	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/value	
		AllergyIntolerance > reaction > sub-stance	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/entryRelationship[react]/observation/participant[agent]/participantRole/playingEn-tity/code	
Reaction type (optional)	028437	AllergyIntolerance > type	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/code	This requirement as stated is satisfied however it is noted that the concept of 'reaction type' is not supported - TBD - SOMEONE GET ME A DEF OF REACTION TYPE AND WHY ITS NOT THIS
Reaction (optional)	028438	AllergyIntolerance > reaction > manifest-ation	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/entryRelationship[react]/observation/entryRelationship[mfst]/observation/code	
Reaction Onset Date (optional)	028439	AllergyIntolerance > onset[x]	ClinicalDocument[sml]/component/structuredBody/component[allergy]/section/entry[adv]/ob-servation/effectiveTime/low/@value	
Medicine Item (mandatory)	028632	Composition > section (Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	<p>This requirement states a PSML document shall contain one or more medicine items.</p> <p>The CDA template mandates the inclusion of a medications list section but it allows for that section to be empty, or be a statement that the patient has no known current medications, or be a list of one or more medicine items.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
		List > entry	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]	
		List > entry > item	ClinicalDocument[sml]/component/structuredBody/component[meds]/sec-tion/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration	

Requirement	Req No.	Element	CDA schema element	Additional notes
Medicine identifier (mandatory)	028633	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/code	<p>This requirement specifies a set of allowed terminologies.</p> <p>The CDA template allows these and other terminologies. Implementation guidance is included in the CDA template to direct implementers to the preferred terminology.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
	028634			
Active Ingredient (optional)	028014	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > ingredient	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient	
Brand name (optional)	028442	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > medication-brand-name	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[brand]/act/text	
Medication strength (optional)	028442	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > ingredient > amount	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/ext:asIngredient/ext:ingredientManufacturedMaterial/ext:quantity	
Dose form (optional)	028026	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/code	
		Medication > form	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/manufacturedProduct[med]/manufacturedMaterial/ext:formCode	
Route (optional)	028443	MedicationStatement > dosage > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > patientInstruction	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > route	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/routeCode	
Direction (mandatory)	028021	MedicationStatement > dosage	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	This requirement includes a producing system behavioural requirement on completeness of direction text.

Requirement	Req No.	Element	CDA schema element	Additional notes
Dose per administration (optional)	028670	MedicationStatement > dosage > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > dose[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/doseQuantity	
Frequency of administration (optional)	028668	MedicationStatement > dosage > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > timing	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/effectiveTime	
Timing of administration (optional)	028669	MedicationStatement > dosage > text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
		MedicationStatement > dosage > as-Needed[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/precondition/criterion/value	
		MedicationStatement > dosage > timing	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/effectiveTime	
Medicine purpose (optional)	028016	MedicationStatement > reasonCode	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[reason]/observation/value	
Expected end date (optional)	028445	MedicationStatement > effective[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/effectiveTime	
Special instructions (optional)	028446	MedicationStatement > note	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[note]/act/text	
		MedicationStatement > dosage> text	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/text	
Medicine image (optional)	028018	n/a	n/a	Support for medicine image attribute has been removed from the Medication model in the first normative release of FHIR. For this reason the use of medication image is strongly discouraged in the HL7 AU content based on a prior FHIR release (STU3) and unsupported by this implementation guide.  One possible way a sending system can include a medicine image is to include the image in section text.
	028535	n/a	n/a	This requirement is a producing system behavioural requirement.
Physical description (optional)	028020	n/a	n/a	Not directly supported in FHIR and the CDA template.  One possible way a sending system can include a physical description of the medicine item is to include such description in section text.

Requirement	Req No.	Element	CDA schema element	Additional notes
Medicine status (optional)	028017	List > entry > flag	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/observation/value	This requirement states a PSML document may contain a status for each medicine item.
		MedicationStatement > status	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/statusCode	The CDA template enforces a mandatory status for each medicine item.
	028027	List > entry > change-description	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/observation/text	This requirement specifies a set of allowed values for medicine status.
		List > entry > flag	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/observation/value	The CDA template supports an equivalent set of values as well as additional values - it does not constrain the element to only those values relevant to a PSML. Implementation guidance is included in the CDA template to direct implementers that the preferred constrained value set is to be used when sending a PSML. This part of the requirement is best enforced in a conformance profile.
	028636	List > entry > flag	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/observation/value	This requirement specifies that a ceased medicine shall have a medicine status of ceased.
		MedicationStatement > status	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/statusCode	The CDA template does not enforce a direct relationship between these two status concepts. This part of the requirement is best enforced in a conformance profile.
Ceased medicine (optional)	028674	Composition > section (Medicines List)	ClinicalDocument[sml]/component/structuredBody/component[meds]/section	
		List > entry > item	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code	
		MedicationStatement	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration	
Medicine identifier (mandatory)	028633	Medication > code	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/consumable/manufacturedProduct[med]/manufacturedMaterial/code	
	028634			
Reason for ceasing medicine (optional)	028447	List > entry > change-description	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/entryRelationship[flag]/observation/text	
Ceased date (optional)	028629	MedicationStatement > effective[x]	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act[med_lst]/entryRelationship[item]/substanceAdministration/effectiveTime	
Ceased medicine status (mandatory)	028636	MedicationStatement > status	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[item]/substanceAdministration/statusCode	
Extensions not permitted (mandatory)	028637	n/a	n/a	Not directly supported in FHIR and the CDA template. This requirement is a producing system behavioural requirement.

Requirement	Req No.	Element	CDA schema element	Additional notes
Document version number (mandatory)	023068	n/a	ClinicalDocument/setId	<p>This requirement states a PSML document shall contain the document version number.</p> <p>The CDA template allows for versioning - it does not mandate inclusion of a version number.</p> <p>This part of the requirement is best enforced in a conformance profile.</p>
		ClinicalDocument/versionNumber		
Document instance identifier (mandatory)	023067	n/a	ClinicalDocument/id	
Date and time of document creation (mandatory)	024025	n/a	ClinicalDocument/effectiveTime	
Document type (mandatory)	024027	Composition > type	ClinicalDocument[sml]/code	
Document sub-type (mandatory)	028671	Composition > title	ClinicalDocument[sml]/title	<p>This requirement states a PSML document shall be sub-typed with the value "Pharmacist Shared Medicines List".</p> <p>The CDA template supports multiple usage scenarios - this value is not enforced.</p> <p>This requirement is best enforced in a conformance profile.</p>
		Encounter > type	ClinicalDocument[sml]/component/structuredBody/component[meds]/section/entry[meds]/act/entryRelationship[enc]/encounter/entryRelationship[type]/observation/value	
		PractitionerRole > code	ClinicalDocument[sml]/author/assignedAuthor/code	
		Organization > type	ClinicalDocument[sml]/author/assignedAuthor/representedOrganization/standardIndustryClassCode	
	028672	Composition > title	ClinicalDocument[sml]/title	



# References

- [DH2017o] Australian Digital Health Agency, 21 December 2017, *Clinical Documents Common Conformance Profile*, Version 1.7.  
<https://developer.digitalhealth.gov.au/resources-and-documentation/clinical-documents/ep-2563-2017-dh-2481-2017>
- [DH2019a] Australian Digital Health Agency, 28 February 2019, *Common - Clinical Document*, Version 1.5.2.  
<https://developer.digitalhealth.gov.au/specifications/clinical-documents/ep-2807-2019>
- [DH2019h] Australian Digital Health Agency, Continuous Integration Build, *Shared Medicines List FHIR Implementation Guide*, Version 1.0.0 (Draft).  
<https://github.com/AuDigitalHealth/ci-fhir-stu3/tree/master/output/SharedMedicinesList/full-ig.zip>
- [DH2019m] Australian Digital Health Agency, Not yet published, *Pharmacist Shared Medicines List Business Requirements*, Version 2.0.
- [DH2019n] Australian Digital Health Agency, Not yet published, *Pharmacist Shared Medicines List Information Requirements*, Version 2.0.
- [HI2011] Health Intersections, 2011, *Representation of Common Australian Identifiers in v2 and CDA*, accessed 28 November 2011.  
<http://www.healthintersections.com.au/?p=721>
- [HL7AUF3B2] HL7 Australia, 17 October 2019, *Australian Base Implementation Guide (AU Base 1.1)*, v1.1.0.  
<http://hl7.org.au/fhir/base/aubase1.1/>
- [HL7CDAR2] Health Level Seven, Inc., January 2010, *HL7 Clinical Document Architecture*, Release 2.  
[http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=7](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=7)
- [HL7FHIR3] Health Level Seven, Inc., 19 April 2017, *FHIR Release 3 (STU)*.  
<http://hl7.org/fhir/STU3/index.html>
- [HL7RIM] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard – Reference Information Model*.  
[http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=77](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=77)
- [HL7V3] Health Level Seven, Inc., January 2010, *HL7 Version 3 Standard*.  
[http://www.hl7.org/implement/standards/product\\_brief.cfm?product\\_id=186](http://www.hl7.org/implement/standards/product_brief.cfm?product_id=186)
- [HL7V3DT] Health Level Seven, Inc., January 2010, *HL7 V3 RIM, Data types and Vocabulary*.  
<http://www.hl7.org/memonly/downloads/v3edition.cfm>
- [IHTS2010] International Health Terminology Standards Development Organisation, January 2010, *SNOMED CT*, accessed 15 March 2010.  
<http://www.ihtsdo.org/snomed-ct>
- [INFO2009] Canada Health Infoway, *CDA Validation Tools: infoway\_release\_2\_2X\_18.zip*.  
<http://www.hl7.org/memonly/downloads/v3edition.cfm>
- [NEHT2011bv] National E-Health Transition Authority, 10 October 2011, *Representing Coding in CDA Documents Implementation Guidance*, Version 1.0.  
<https://developer.digitalhealth.gov.au/resources-and-documentation/clinical-documents/ep-1094-2011-nehta-1097-2011>
- [NEHT2012s] National E-Health Transition Authority, 07 March 2012, *CDA Rendering Specification*, Version 1.0.  
<https://developer.digitalhealth.gov.au/resources-and-documentation/clinical-documents/ep-1094-2011-nehta-1199-2012>
- [RFC2119] Network Working Group, 1997, *Key Words for Use in RFCs to Indicate Requirement Levels*, accessed 05 March 2019.  
<https://tools.ietf.org/html/rfc2119>
- [RING2009] Ringholm, 2009, *CDA Examples*, accessed 15 March 2010.  
[http://www.ringholm.de/download/CDA\\_R2\\_examples.zip](http://www.ringholm.de/download/CDA_R2_examples.zip)

- [SA2014a] Standards Australia, 2014, *AS 4846 (2014) – Person and provider identification in healthcare.*  
<http://infostore.saiglobal.com/store/details.aspx?ProductID=1753860>
- [UCUM] The Unified Code for Units of Measure, 2009, *The Unified Code for Units of Measure*, accessed 01 November 2012.  
<http://unitsofmeasure.org/trac/>

DRAFT