

Prescription and Dispense Lists CDA Implementation Guide

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1 Introduction

This implementation guide is an *HL7 Clinical Document Architecture* [*HL7CDAR2*] specification to represent a prescription or dispense list. A prescription or dispense list is a document for a patient that is a list of prescriptions (Prescription List), or a list of dispense records (Dispense List), or a list of prescriptions and dispense records (Prescription and Dispense List).

1.1 Document purpose and scope

The primary aim of this implementation guide is to take implementers step by step through mapping each element of a prescription or dispense list model (*Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*) to a corresponding CDA schema element. The resulting CDA document can be used for the electronic exchange of prescription or dispense list information between healthcare providers.

Whilst this implementation guide is defined to support a practitioner authored list of medicines, at the time of publication of this implementation guide it is expected that implementations will be of a PSML 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]*.

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

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 1.1.1) [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, an end-product clinical specification package.

An Agency end-product clinical 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 a statement of constraints and custom extensions on *HL7 Clinical Document Architecture* [HL7CDAR2]
- FHIR implementation guide 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
- · release notes

Clinical 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 HL7 CDA and, where necessary, custom extensions to the HL7 CDA, for the purposes of fulfilling the requirements for Australian implementations of prescription or dispense lists. These constraints are defined as a set of templates.

For implementers interested in Prescription List, the starting point for the CDA templates is ClinicalDocument (Prescription and or Dispense List), which references the additional templates necessary to assert conformance for this implementation guide.

For implementers interested in Dispense List, the starting point for the CDA templates is ClinicalDocument (Prescription and or Dispense List), which references the additional templates necessary to assert conformance for this implementation guide.

For implementers interested in Prescription and Dispense List, the starting point for the CDA templates is ClinicalDocument (Prescription and or Dispense List), which references the additional templates necessary to assert conformance for this implementation guide.

Chapters that may be of primary interest are organised as follow:

- 3 *Conformance* defines the conformance requirements applicable to a clinical document instance claiming conformance to a ClinicalDocument template defined in this implementation guide or any derived conformance profile.
- 4 Prescription List hierarchy hierarchical overview of the model for this document-level usage scenario.
- 5 Dispense List hierarchy hierarchical overview of the model for this document-level usage scenario.
- 6 Prescription and Dispense List hierarchy hierarchical overview of the model for this document-level usage scenario.
- 7 CDA Header templates contains the CDA Header templates that apply across all of the supported usage scenarios in this implementation guide.
- 8 Document CDA templates defines the ClinicalDocument template for each logical model of a document-level usage scenario, e.g. Prescription and or Dispense List, in this implementation guide.
- 9 Section CDA templates defines the section templates referenced by a ClinicalDocument template in this implementation guide.
- 10 Participation CDA templates defines the templates for individuals and organisations, called participations, referenced by other templates in this implementation guide.
- 11 Entity CDA templates defines the templates for entities referenced by a participation template in this implementation guide.
- 12 Act CDA templates defines the templates for entry-level classes, called acts, referenced by other templates in this implementation guide.
- Appendix B, Examples provides examples demonstrating a document-level usage model and that conform to the CDA templates defined in 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 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 *HL7 Clinical Document Architecture [HL7CDAR2]* 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
Prescription and Dispense Lists CDA implementation guide roadmap	The objective of this specification is to provide guidance on the implementation in HL7 CDA Release 2 of prescription and dispense lists (defined in HL7 FHIR).
	The current guide is intended to cover implementation in HL7 CDA Release 2 of models defined in FHIR Release 3 (STU) (<i>Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]</i>) however the current draft CDA implementation guide has only partial coverage (as documented in other known issues).
	Further work to complete the mappings is not expected to occur on the FHIR Release 3 (STU) set of models. If the models transition to a FHIR Release 4 representation in collaboration with HL7 Australia then this CDA implementation guide will continue development.
Prescription and Dispense Lists FHIR implementation guide	The prescription and dispense lists models (defined in HL7 FHIR (<i>Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]</i>)) are incomplete. Further work is not expected in FHIR Release 3 (STU).
	This FHIR implementation guide may transition to FHIR Release 4, in collaboration with HL7 Australia.
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.
PractitionerRole > healthcareService	PractitionerRole > healthcareService is not currently mapped into CDA. Future releases of this implementation guide are expected to include a CDA template for the concept of a <u>HealthcareService</u> .
Device > udi	Device > udi is not currently mapped into CDA. Future releases of this implementation guide are expected to include mappings for this concept.
Device > status	Device > status is not currently mapped into CDA. Future releases of this implementation guide are expected to include mappings for this concept.
Device > safety	Device > safety is not currently mapped into CDA. Future releases of this implementation guide may include mappings for this concept.
Provenance	Provenance is basically not mapped into CDA. The template act (Provenance for the Generation of a List) is more placeholder than mappings.

Reference	Description
Provenance > policy	Provenance > policy is not currently mapped into CDA. Future releases of this implementation guide may include mappings for this concept.
Resolving URLs to Agency logical models (FHIR profiles) – not available	Direct links to the Agency logical models (published as FHIR profiles) referenced throughout this implementation guide are not available. It is intended that logical models, e.g. "Patient with Mandatory Identifier", will be published at a resolvable address. Future releases of this implementation guide are expected to hyperlink all references to logical models. At this time the Agency logical models are only available via the <i>Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]</i> .
Appendix C. Examples	This chapter is a placeholder - examples are yet to be done.

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 standards [HL7V3].

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 narrative conformance requirements.

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

- HL7 Clinical Document Architecture [HL7CDAR2]
- HL7 Version 3 Standard [HL7V3]
- 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 implementation guide 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 prescription list, or a dispense list, or a prescription and dispense 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 Base conformance requirements.

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2.3 Conformance conventions

This implementation guide specifies the CDA templates for implementing a prescription or dispense list. A CDA template is a set of constraints, and where necessary, custom extensions to *HL7 Clinical Document Architecture [HL7CDAR2]*, expressed using conformance conventions as defined in this implementation guide.

CDA templates are presented in a CDA mapping table (see Mapping presentation and structure) and indicated by the presence of a templateId (see Template identifiers).

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2.3.1 Template identifiers

Template identifiers (templateId) are unique to each CDA template. When valued in an instance, the template identifier signals the assertion of conformance to a set of template-defined constraints. The root value of this element (e.g. @root="1.2.36.1.2001.1001.1001.1002.226") provides a unique identifier for the template in question.

The following example demonstrates assertion of conformance to two CDA templates. This use of templateId indicates that the CDA instance not only conforms to the CDA specification, but in addition, conforms to two templates.

Example 2.1. Use of templated to assert conformance to two CDA templates

2.3.2 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 [HL7CDAR2] 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.

The template context in this implementation guide is that of an open template unless otherwise stated. A closed template is indicated by the presence of the following constraint:

This template SHALL be a closed template

For example if 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

Example 2.2. CDA mapping fragment - Interpreting an open template for logical elements

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments	
CDA Header Data Elements				Context: /		
Composition	A clinical document written by the nominated provider, which contains key pieces of information about an individual's health status and is useful to a wide range of providers in assessing individuals and delivering care.	0*	Composition	ClinicalDocument	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 01. In addition to the template defined in this mapping table, ClinicalDocument SHALL conform to the template defined in ClinicalDocument.	
				ClinicalDocument/templateId	The use of templateId signals the imposition of a set of	
				ClinicalDocument/templateId/@root="1.2.36.1.2001.1001.102.101.100020"	template-defined constraints.	
Composition > section (Event	Summary information concerning the event.	11	BackboneElement	ClinicalDocument/component/structuredBody/component[event]		
Overview)				ClinicalDocument/component/structuredBody/component[event]/section	section SHALL conform to the template defined in section (Event Overview).	
Composition > section (Allergies)	Information about allergies or intolerances identified or re-	01	<u>BackboneElement</u>	ClinicalDocument/component/structuredBody/component[allergy]		
	ported during this encounter. This may include statements that a patient does not have an allergy or category of allergies.			ClinicalDocument/component/structuredBody/component[allergy]/section	section SHALL conform to the template defined in section (Allergies).	

The above template fragment states that each instance of the logical element Composition is represented as a ClinicalDocument that:

- explicitly requires an instance of templateId with a root that conforms to the fixed value constraint and an instance of extension that conforms to the fixed value constraint. Other attributes of templateId, e.g. assigningAuthorityName, are implicitly allowed.
- implicitly allows any other child attributes or elements of ClinicalDocument including other instances of templateId.
- explicitly requires exactly one component with an instance of section that conforms to section (Event Overview) [templateId: 1.2.36.1.2001.1001.102.101.100059]. Other component elements or attributes are implicitly allowed.
- explicitly allows at most one component with an instance of section that conforms to section (Allergies) [templateId: 1.2.36.1.2001.1001.102.101.100069]. Other component elements or attributes are implicitly allowed.
- implicitly allows one or more instances of a component with a section that does not conform to either section (Event Overview) [templateld: 1.2.36.1.2001.1001.102.101.100059] or section (Allergies) [templated: 1.2.36.1.2001.1001.102.101.100069].

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2.3.3 Fixed value constraint

A fixed value constraint is used to bind the value of an element or attribute to the exact string as presented between the quote marks (i.e. "FIXED_VALUE"). This type of constraint is frequently used in a template to cast an element to a particular data type, or bind an element of type Coded Simple (CS) to a single code, or fix an attribute of a primitive type to a value.

A fixed value constraint in the "CDA schema element" column of a CDA mapping table will use XPath like notation, for example:

/ClinicalDocument/confidentialityCode/@nullFlavor="N/A"

The use of "=" is to be interpreted as SHALL. The above example specifies a conformance requirement that the nullFlavor attribute SHALL be instantiated as "N/A".

A fixed value constraint in the "CDA constraints and comments" column of a CDA mapping table will make use of Conformance verbs, for example:

displayName SHOULD be "Closing the Gap Copayment Eligibility Indicator"

2.3.4 XPath like notation

This implementation guide uses an XML Path Language (XPath) like notation to identify the CDA schema element(s) to which conformance requirements are applied.

This notation provides a mechanism that will be familiar to developers for identifying parts of an XML document. XPath syntax selects nodes from an XML document using a path containing the context of the node(s). The path is constructed from node names and attribute names (prefixed by a "@") and catenated with a "/" symbol. In addition an [index] is used to differentiate similar mappings e.g. participant[location] and participant[author].

The syntax is: {/name{[index]}}n

Where:

- {} indicates optional
- {}n means a section that may repeat
- [index] differentiates two similar mappings and indicates that a pattern 'like this' is to be applied (see Interpreting cardinality in a CDA mapping table for logical elements)

An index after the name, such as component [admin_obs] or entry[close_gap] implies that there are expected to be two or more different component elements and entry elements instantiated in the ClinicalDocument instance. The indexes differentiate which CDA schema element is referenced in the path.

The value attribute of the value element from the below example could be referred to with the path /ClinicalDocument/component/structuredBody/component[admin_obs]/section/entry[close_gap]/observation/value/@value.

Example 2.3. XPath like notation

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The corresponding entries in the CDA schema element column of a CDA mapping table for /ClinicalDocument/component/structuredBody/component[admin_obs]/section/entry[close_gap]/observation/value could be expressed using the XPath like notation as in the template fragment below.

Example 2.4. CDA mapping fragment - XPath like notation

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments	
CDA Header Data Elements				Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section		
Patient > closing-the-gap-registration	Indication for eligibility for the Closing the Gap program.	01	<u>boolean</u>	entry[close_gap]	The containing component[admin_obs]/section SHALL conform to the template defined in component (Administrative Observations).	
				entry[close_gap]/observation		
				entry[close_gap]/observation/@classCode="OBS"		
				entry[close_gap]/observation/@moodCode="EVN"		
				entry[close_gap]/observation/code		
				entry[close_gap]/observation/code/@code="103.32011"		
				entry[close_gap]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components	
				entry[close_gap]/observation/code/@displayName	displayName SHOULD be "Closing the Gap Copayment Eligibility Indicator".	
				entry[close_gap]/observation/value	closing-the-gap-registration is "true" if eligible for Closing the Gap co- payment.	
					value/@xsi:type SHALL be "BL".	

2.3.5 Terminology binding

Vocabulary is specified in this implementation guide as:

- Fixed value constraint if only one permissible value is allowed, or
- Binding to a value set if more than one permissible value is allowed, e.g. Medication Act Status HL7 v3 (required)

Where used in this implementation guide, binding strengths are hyperlinked to their normative definition. An excerpt is provided in the below table for ease of use, where there are conflicts the target normative definition in FHIR Release 3 (STU) [HL7FHIR3] applies.

Binding strength	Description
required	To be conformant, codes in this element SHALL be from the specified value set.
extensible	To be conformant, codes in this element SHALL be from the specified value set if any of the codes within the value set can apply to the concept being communicated.
preferred	Instances are encouraged to draw from the specified codes for interoperability purposes but are not required to do so to be considered conformant.
example	Instances are not expected or even encouraged to draw from the specified value set. The value set merely provides examples of the types of concepts intended to be included.

Terminology binding notation

A value set binding will be specified in the "CDA 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). For example:

Encounter Act Status HL7 v3 (required)

In simple terms the above required binding indicates that the CDA schema element SHALL be valued with one of the codes from that value set. However valuing of an element in CDA is always in the context of the data type and the code system specification (e.g. case sensitive or version required).

Example of interpreting a required terminology binding on an element of type Coded Simple Value (CS)

A Coded Simple Value data type, or CS is defined in the HL7 V3 Data types standards [HL7V3]. It is the simplest form of coded data and consists only of a code, other attributes are prohibited. The code system and code system version are fixed by the context in which CS value occurs. Common instances typed as CS include statusCode, @classCode, @moodCode, and @nullFlavor which have HL7-defined value sets.

For example, Encounter Act Status HL7 v3 (required), applied to a encounter/statusCode element is to be interpreted as:

- statusCode/@code SHALL be present and SHALL contain a code from Encounter Act Status HL7 v3
- statusCode/@nullFlavor SHALL NOT be present as no meaningful value can be supplied
- no other attributes can be supplied as encounter/statusCode is of type Coded Simple (CS) which prohibits additional attributes

Example 2.5. Interpreting required value set binding

<statusCode code="active" />

Example of interpreting a required terminology binding on an element of type Concept Descriptor (CD)

A Concept Descriptor data type, or CD, is defined in the HL7 V3 Data types standards [HL7V3]. It is a reference to a concept defined in a code system. Common instances typed as CD include code, and value when typed to CD.

For example, Encounter Act Status HL7 v3 (required) applied to an observation/code is to be interpreted as:

- code/@code SHALL be present and SHALL contain a code from Encounter Act Status HL7 v3
- code/@codeSystem="2.16.840.1.113883.5.14" **SHALL** be present
- code/@nullFlavor **SHALL NOT** be present as no meaningful value can be supplied
- $\bullet \verb| code/@displayName| \textbf{SHOULD}| be present and \verb| SHOULD| contain the display| associated with the selected code from the value set \\$
- code/@codeSystemName SHOULD be present and SHOULD contain the display associated with the code system as it is registered with a registration authority such as HL7
- code/@originalText SHOULD be present and SHALL carry the full text associated with this code as selected by, typed by, or displayed to the author
- code/@qualifier **SHALL NOT** be present as the example code system does not define qualifier values

• code/@translation MAY be present if an alternative terminology is in use in the sending system and a translation is available

Example 2.6. Interpreting required value set binding

```
<code code="active" codeSystem="2.16.840.1.113883.5.14" />
<!-- or -->
<code code="active" codeSystem="2.16.840.1.113883.5.14"</pre>
codeSystemName="v3.ActStatus" displayName="active"/>
<!-- or -->
<code code="active" codeSystem="2.16.840.1.113883.5.14"</pre>
codeSystemName="v3.ActStatus" displayName="active">
  <originalText>Active</originalText>
</code>
```

2.3.6 Conformance verbs

Where used in this implementation guide, 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 verb	Interpretation
SHALL	An absolute requirement.
	Where SHALL appears in any conformance constraint it indicates a mandatory requirement.
	Where SHALL 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.
SHOULD	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.
	Where SHOULD 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 SHOULD 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.
	Implementers must support an optional requirement.
MAY	A requirement that can be included or omitted as the author decides with no implications.
	Where MAY 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.
	Implementers must support an optional requirement.
SHALL NOT	An absolute prohibition.
	Where SHALL NOT appears in any conformance constraint it indicates a mandatory prohibition requirement.

Conformance verb	Interpretation
SHOULD NOT	A requirement that is considered best practice or recommendation 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 SHOULD NOT 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 SHOULD NOT is applied to the occurrences of an item 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.

2.3.7 Cardinality notation

The cardinality range specifies the allowable occurrences 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
00	zero (explicitly prohibited)
01	zero or one
11	exactly one
0*	zero or more
1*	at least one
2*	at least two
1p	at least one and not more than p
2p	at least two and not more than p

2.3.8 Interpreting cardinality in a CDA mapping table for logical elements

A CDA mapping table for logical elements will include a logical cardinality range for each logical element and a series of CDA schema elements that when instantiated are considered to be the CDA representation of that logical element.

In order to instantiate a logical element all CDA schema elements mapped to that logical element are to be instantiated unless a constraint is present in the mapping table to indicate otherwise. This means that while the first CDA schema element in a series has a comparative relationship to the logical cardinality, the effect on the additional CDA schema elements in a series is always that their minimum occurrence is to be interpreted as 1.

The logical cardinality is applied to the first mapped CDA schema element in a series in the following manner:

- The most strict minimum occurrence between the logical cardinality or the CDA schema cardinality is applied.
 - o If a logical element has a minimum cardinality of 1 and the mapped CDA schema element has a minimum cardinality of 0 then the most strict cardinality of 1 applies to that CDA schema element.
- A CDA schema element with an [index] (see XPath like notation), e.g. representedOrganization/name[business], has the maximum occurrence of the logical element applied as a pattern 'like this'.
 - o For example, if the logical cardinality of Organization > name is 0..1 and that logical element is mapped to representedOrganization/name[business]="TestOrg" (CDA schema cardinality of 0..*), then a maximum of one instance of representedOrganization/name that has a value of "TestOrg" may be present. Other instances of representedOrganization/name that do not meet the pattern of "TestOrg" may be present.
- A CDA schema element with no [index] (see XPath like notation), e.g. representedOrganization/name, has the most strict maximum occurrence between the logical cardinality or the CDA schema cardinality applied.
 - o For example, if the logical cardinality of Organization > name is 0..1 and that logical element is mapped to representedOrganization/name (CDA schema cardinality of 0..*), then the most strict cardinality of 1 applies to that CDA schema element.

Example 2.7. CDA mapping fragment - Interpreting cardinality in a CDA mapping table for logical elements

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	A set of allergies or intolerances that have been categorised as		<u>BackboneElement</u>	section	section/@nullFlavor SHALL NOT be present.	
	critical.	comes from linking ele- ment		section/templateId		
				section/templateId/@root="1.2.36.1.2001.1001.102.101.100092"		

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
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.	11	string	section/title	
i i	A code identifying the kind of content contained within the section. This must be consistent with the section title.	11	CodeableConcept	section/code	
				section/code/@code="48765-2"	
				section/code/@codeSystem="2.16.840.1.113883.6.1"	LOINC
				section/code/@displayName	displayName SHOULD be "Allergies ∨ 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.	11	Narrative	section/text	
section > entry	A reference to the actual resource from which the narrative in the section is derived.	1*	Reference()	section/entry[adv]	observation SHALL conform to the template defined in obser-
				section/entry[adv]/observation	vation (Critical Allergy or Intolerance).

The above template fragment states that each instance of the logical element section is represented as a section with:

- section attributes that are not nullFlavor (e.g. classCode) are allowed as defined in the CDA schema as long as conformance to Base conformance requirements is maintained.
- One templateId with a root="1.2.36.1.2001.1001.102.101.100092". Additional instances of templateId are allowed.
- Exactly one title.
- $\bullet \ \ \text{Exactly one code with a code="48765-2" and a codeSystem="2.16.840.1.113883.6.1" and a displayName.}\\$
- At least one entry[adv]/observation that conforms to the template observation (Summary Statement of Allergy or Intolerance) [templateId: 1.2.36.1.2001.1001.102.101.100093]. Additional instances of entry that do not contain an observation are allowed.
- Additional section elements (e.g. author) are allowed as defined in the CDA schema as long as conformance to Base conformance requirements is maintained.

Example 2.8. Interpreting cardinality in a CDA mapping table for logical elements

```
<templateId root="1.2.36.1.2001.1001.102.101.100092"/>
               <code code="48765-2" codeSystem="2.16.840.1.113883.6.1" displayName="Allergies & amp;or adverse reactions"/>
              <title>Critical Allergies and Adverse Reactions</title>
               <text mediaType="text/x-hl7-text+xml">Allergy to Latex (CRITICAL)</text>
              <!--section entry -->
               <entry typeCode="DRIV">
                 <observation classCode="OBS" moodCode="EVN">
                    <templateId root="1.2.36.1.2001.1001.102.101.100093"/>
                 </observation>
              </entry>
            </section>
         </component>
</ClinicalDocument>
```

2.4 Mapping presentation and structure

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 Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]) 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 are necessary for supporting the usage scenarios in a CDA implementation.

CDA templates mapping logical elements are roughly grouped by HL7 Reference Information Model (RIM) class within a templates chapter, e.g. 10 Participation 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 logical model that the template corresponds to, e.g. recordTarget (My Health Record Patient) defines the CDA template of the recordTarget CDA schema element to represent the logical model My Health Record Patient.

2.4.1 Legend - CDA mapping table for logical elements

A CDA mapping table for logical elements aims to take implementers step by step through mapping each element of the logical 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.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA conformance level, e.g. CDA Head	er, CDA Body Level 3 Data Elements	Context: The root context that is applied as a prefix to the CDA schema element paths in the mapping rows below			
The logical hierarchical path in the logical model expressed using names of the elements in the logical model. If there is a name in round brackets after the path, this is the label for that element or resource. The text in bold (the last in the path) is the subject for this row in the convention <parent (label)="">> <child (label)="">, e.g. Composition > section (Allergies)</child></parent>	The description of the element in the logical model.	The cardinality of the logical element in the logical model (see Cardinality notation). 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 A logical cardinality is applied to the mapped CDA schema elements as described in Interpreting cardinality in a CDA mapping table for logical elements: The most strict minimum occurrence between the logical cardinality or the CDA schema defined cardinality is applied. The most strict maximum occurrence applies to CDA schema elements without an [index]. The maximum occurrence of the logical cardinality applies as a pattern 'like this' to CDA schema elements with an [index].	The type of the logical element (hyper-linked to the definition of the [HL7FHIR3] type) in the logical model. This may be expressed as a type that is further constrained by a model in the convention <model name="">, e.g. Patient with Mandatory Identifier.</model>	The CDA schema element(s) in the CDA template that when instantiated are considered to be the CDA representation of that logical element; expressed using an XPath like notation, e.g.: participant[location]/associatedEntity/code The path always starts from the context as defined in the grey header row above each group of mapping rows. The last CDA schema element in the path is presented in bold to aid the reader. Typically a logical model element will map to multiple CDA schema elements. In order to instantiate the logical element in CDA, the minimum cardinality of the mapped CDA schema elements should be understood to be 1 unless an associated constraint is present to indicate a different cardinality (see Interpreting cardinality in a CDA mapping table for logical elements).	Additional information or guidance on implementing the logical element in CDA to support usage scenarios, e.g. When sending to the My Health Record, an IHI is expected. Constraints on the CDA schema elements, identified by use of Conformance verbs, e.g. code/original-Text or code/@displayName SHALL be included. Terminology binding, e.g. Address Type HL7 v3 (required).

2.4.2 Legend - CDA mapping table for CDA schema elements

A CDA mapping table for CDA schema elements will define conformance requirements that are not sourced from a logical model and that apply cross all of the supported usage scenarios. The following section describes in more detail the fields used to present the mapping content in this implementation guide.

CDA mapping

CDA schema element	CDA element description	CDA card	CDA constraints and comments	
CDA conformance level, e.g. CDA Header, CDA Body Level 3 Data Elements		Context: The root context that is applied as a prefix to the CDA schema element paths in the mapping rows below		
The CDA schema element(s) in the CDA template using an XPath like notation, e.g.: ClinicalDocument/versionNumber/@value The path always starts from the context as defined in the grey header row above each group of mapping rows. The last CDA schema element in the path is presented in bold to aid the reader.	The description of the CDA schema element definitions, sourced from HL7 Clinical Document Architecture, Release 2 [HL7CDAR2].	The cardinality of the CDA schema element in the template (see Cardinality notation). The root element of a template may express an inherited cardinality from the parent element in a parent template by stating: Cardinality comes from linking element	Additional information or guidance on the use of the CDA schema element to support usage scenarios, e.g. The use of templateld signals the imposition of a set of template-defined constraints. Constraints on the CDA schema elements, identified by use of Conformance verbs, e.g. code/originalText or code/@displayName SHALL be included. Terminology binding, e.g. Address Type HL7 v3 (required).	

3 Conformance

Conformance claims are typically made against the templates in this implementation guide and additional conformance profiles documented elsewhere such as *Prescription List - Point-to-Point Conformance Profile* [DH2019q].

3.1 Base conformance requirements

Any document that claims conformance to a ClinicalDocument template defined in this implementation guide or any derived conformance profile **SHALL** meet these base requirements:

- It **SHALL** be a valid HL7 CDA instance. In particular:
 - o 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 conform to the CDA templates it claims conformance to.
- It **SHALL** be valid against the additional conformance requirements that are established in this implementation guide (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:
 - o SHALL NOT qualify or negate content described by this implementation guide
 - SHALL be clinically safe for receivers of the document to ignore the non-narrative additions when interpreting the existing content.

A system that consumes CDA documents that claim conformance to a ClinicalDocument template defined in this implementation guide or any derived conformance profile **SHALL** be able to:

- correctly process conformant instance documents, including correctly understanding all the information in the header and it MAY but is not required to, reject non-conformant documents.
- correctly render the document for end-users when appropriate (see Clinical Document Architecture Release 2) but is not required to process any or all of the structured data entries in the CDA document.

3.2 Conformance profile conformance requirements

Conformance profiles of this implementation guide **MAY** make additional rules that override templates in this implementation guide in regard to:

- Allowing the use of alternative value sets in place of the value sets this is limited to not overriding the rules of the terminology binding strength.
 - For example, a <u>required</u> value set may be overridden by a value set whose values are a subset of those of the <u>required</u> binding.
- Restricting the data type of a CDA schema element or attribute.
- Restricting the allowed values of a CDA schema element or attribute.
- Restricting the cardinality of a CDA schema element or attribute.
- Providing more specific or additional mappings to CDA schema elements or attributes.
- Providing refined usage scenarios, definitions, and implementation guidance.

A conformance profile cannot break the rules established in this implementation guide.

3.3 CDA narrative conformance requirements

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 an *HL7 Clinical Document Architecture [HL7CDAR2]* requirement that all clinical information **SHALL** be marked up in CDA narratives.

It is an *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. Clinically relevant 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 [NEHT2012s].
- The narrative contents **SHALL** completely and accurately represent the clinical information encoded in the section. Clinical content **SHALL NOT** be omitted from the narrative.
 - o 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.
 - In accordance with the requirement to represent section contents in that section, the narrative of the content for a section **SHALL** be contained in that section or, if appropriate, the narrative of an ancestor section.
- 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.



4 Prescription List hierarchy

Prescription and or Dispense List is defined as:

A list of prescriptions, and or, dispense records for a patient. *Prescription and Dispense Lists FHIR Implementation Guide* [DH2020k]

The table below provides a hierarchical view of the Prescription and or Dispense List model (when sent as a Prescription List) as a tree structure in a hierarchical table; it is not intended to represent how the data contents are represented in a CDA document.

Composition (Prescription and or Dispense List), published as a set of FHIR profiles, can be found in the *Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*.

Logical element Logical card				Logical card	Logical type	CDA template
Composition (Prescription and or Dispense List)					Prescription and or Dispense List	ClinicalDocument (Prescription and or Dispense List)
	compositi	on-author-r	role	01	Reference(PractitionerRole with Practitioner with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)
	identifier			01	<u>Identifier</u>	
	status			11	<u>code</u>	
	type			11	CodeableConcept	
	subject			11	Reference(Patient with Mandatory Identifier)	recordTarget (Patient with Mandatory Identifier)
	date			11	<u>dateTime</u>	
	author		11	Reference(Practitioner with Mandatory Identifier Device with Mandatory Identifier Patient with Mandatory Identifier RelatedPerson with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Device with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier)	
	title			11	string	
	attester (Legal Attester)		01	BackboneElement	legalAuthenticator	
		mode		11	<u>code</u>	
		time		11	<u>dateTime</u>	
		party		11	Reference(Practitioner with Mandatory Identifier)	
	custodian			11	Reference(Organization with Mandatory Identifier)	custodian (Organization with Mandatory Identifier)
	section (P	rescription	List)	11	BackboneElement	section (Prescription List)
		title		11	string	
		code		11	CodeableConcept	
		text		11	<u>Narrative</u>	
	entry author-role		01	Reference(List of Prescription and or Dispense Records)	act (List of Prescription and or Dispense Records)	
			01	Reference(PractitionerRole with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)	
			author-related-person	01	Reference(RelatedPerson with Mandatory Identifier)	author (RelatedPerson with Mandatory Identifier)
	status		11	<u>code</u>		
			code	11	CodeableConcept	
			subject	11	Reference(Patient with Mandatory Identifier)	
			date	01	<u>dateTime</u>	

Logical 6	element			Logical card	Logical type	CDA template
		source		01	Reference(Practitioner with Mandatory Identifier Patient with Mandatory Identifier Device with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (Device with Mandatory Identifier)
		note		0*	Annotation	
		entry		1*	<u>BackboneElement</u>	
			item	11	Reference(MedicationStatement MedicationRequest MedicationDispense)	
		emptyRea	ason	01	CodeableConcept	
	entry			01	Reference(Provenance for the Generation of a List)	act (Provenance for the Generation of a List)
		target		1*	Reference(Any)	
		period		01	Period	
		recorded		11	instant	
		policy		0*	<u>uri</u>	
		activity		1*	Coding	
		agent (As	sembling Device)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Device)	author (Device with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Device Base Organization)	
		agent (Au	thoring Entity)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Practitioner Base RelatedPerson Base Patient Base Organization)	author (PractitionerRole with Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier) participant (author Organization with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Organization)	
		entity		0*	Reference(BackboneElement)	
			role	01	code	
			what[x]	01	Reference(Any)	
			agent	01	???	
	emptyRe	ason		01	CodeableConcept	



Note

The column "Logical element" contains the name of that element in the logical model.

The column "Logical card" contains the logical cardinality of that element in the logical model.

The column "Logical type" contains the type of the logical element (hyper-linked to the definition of the [HL7FHIR3] type) in the logical model.

The column "CDA template" contains the title of the corresponding CDA template for that logical element (hyper-linked to CDA mapping table for that template). The convention for the CDA template title is <CDA schema element> (<model name> where the template is not defined in 7 CDA Header templates).

5 Dispense List hierarchy

Prescription and or Dispense List is defined as:

A list of prescriptions, and or, dispense records for a patient. *Prescription and Dispense Lists FHIR Implementation Guide* [DH2020k]

The table below provides a hierarchical view of the Prescription and or Dispense List model (when sent as a Dispense List) as a tree structure in a hierarchical table; it is not intended to represent how the data contents are represented in a CDA document.

Composition (Prescription and or Dispense List), published as a set of FHIR profiles, can be found in the *Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*.

Logical element Logical card				_	Logical type	CDA template
Composition (Prescription and or Dispense List)					Prescription and or Dispense List	ClinicalDocument (Prescription and or Dispense List)
	compositi	on-author-r	ole	01	Reference(PractitionerRole with Practitioner with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)
	identifier			01	<u>Identifier</u>	
	status			11	<u>code</u>	
	type			11	CodeableConcept	
	subject			11	Reference(Patient with Mandatory Identifier)	recordTarget (Patient with Mandatory Identifier)
	date			11	<u>dateTime</u>	
	author			11	Reference(Practitioner with Mandatory Identifier Device with Mandatory Identifier Patient with Mandatory Identifier RelatedPerson with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Device with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier)
	title attester (Legal Attester)		11	string		
			01	BackboneElement	legalAuthenticator	
		mode		11	<u>code</u>	
		time		11	<u>dateTime</u>	
		party		11	Reference(Practitioner with Mandatory Identifier)	
	custodian			11	Reference(Organization with Mandatory Identifier)	custodian (Organization with Mandatory Identifier)
	section (D	ispense List)	11	BackboneElement	section (Dispense List)
		title		11	string	
		code		11	CodeableConcept	
		text		11	<u>Narrative</u>	
		entry		01	Reference(List of Prescription and or Dispense Records)	act (List of Prescription and or Dispense Records)
	author-role		01	Reference(PractitionerRole with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)	
			author-related-person	01	Reference(RelatedPerson with Mandatory Identifier)	author (RelatedPerson with Mandatory Identifier)
	status		11	<u>code</u>		
			code	11	CodeableConcept	
			subject	11	Reference(Patient with Mandatory Identifier)	
			date	01	<u>dateTime</u>	

Logical 6	element			Logical card	Logical type	CDA template
		source		01	Reference(Practitioner with Mandatory Identifier Patient with Mandatory Identifier Device with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (Device with Mandatory Identifier)
		note		0*	Annotation	
		entry		1*	<u>BackboneElement</u>	
			item	11	Reference(MedicationStatement MedicationRequest MedicationDispense)	
		emptyRea	ason	01	CodeableConcept	
	entry			01	Reference(Provenance for the Generation of a List)	act (Provenance for the Generation of a List)
		target		1*	Reference(Any)	
		period		01	Period	
		recorded		11	instant	
		policy		0*	<u>uri</u>	
		activity		1*	Coding	
		agent (As	sembling Device)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Device)	author (Device with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Device Base Organization)	
		agent (Au	thoring Entity)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Practitioner Base RelatedPerson Base Patient Base Organization)	author (PractitionerRole with Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier) participant (author Organization with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Organization)	
		entity		0*	Reference(BackboneElement)	
			role	01	code	
			what[x]	01	Reference(Any)	
			agent	01	???	
	emptyRe	ason		01	CodeableConcept	



Note

The column "Logical element" contains the name of that element in the logical model.

The column "Logical card" contains the logical cardinality of that element in the logical model.

The column "Logical type" contains the type of the logical element (hyper-linked to the definition of the [HL7FHIR3] type) in the logical model.

The column "CDA template" contains the title of the corresponding CDA template for that logical element (hyper-linked to CDA mapping table for that template). The convention for the CDA template title is <CDA schema element> (<model name> where the template is not defined in 7 CDA Header templates).

6 Prescription and Dispense List hierarchy

Prescription and or Dispense List is defined as:

A list of prescriptions, and or, dispense records for a patient. *Prescription and Dispense Lists FHIR Implementation Guide* [DH2020k]

The table below provides a hierarchical view of the Prescription and or Dispense List model (when sent as a Prescription and Dispense List) as a tree structure in a hierarchical table; it is not intended to represent how the data contents are represented in a CDA document.

Composition (Prescription and or Dispense List), published as a set of FHIR profiles, can be found in the *Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*.

Logical element Logical card				Logical card	Logical type	CDA template
Compo	sition (Presc	ription and	or Dispense List)		Prescription and or Dispense List	ClinicalDocument (Prescription and or Dispense List)
	compositi	on-author-r	ole	01	Reference(PractitionerRole with Practitioner with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)
	identifier			01	<u>Identifier</u>	
	status			11	code	
	type			11	CodeableConcept	<u> </u>
	subject			11	Reference(Patient with Mandatory Identifier)	recordTarget (Patient with Mandatory Identifier)
	date			11	<u>dateTime</u>	
	author		11	Reference(Practitioner with Mandatory Identifier Device with Mandatory Identifier Patient with Mandatory Identifier RelatedPerson with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Device with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier)	
			11	string		
	attester (L	egal Atteste	er)	01	<u>BackboneElement</u>	legalAuthenticator
		mode		11	<u>code</u>	
		time		11	<u>dateTime</u>	
		party		11	Reference(Practitioner with Mandatory Identifier)	
	custodian			11	Reference(Organization with Mandatory Identifier)	custodian (Organization with Mandatory Identifier)
	section (P	rescription	and Dispense List)	11	BackboneElement	section (Prescription and Dispense List)
		title		11	string	
		code	_	11	CodeableConcept	
		text		11	<u>Narrative</u>	
		entry		01	Reference(List of Prescription and or Dispense Records)	act (List of Prescription and or Dispense Records)
	author-role		01	Reference(PractitionerRole with Mandatory Identifier)	author (PractitionerRole with Practitioner with Mandatory Identifier)	
			author-related-person	01	Reference(RelatedPerson with Mandatory Identifier)	author (RelatedPerson with Mandatory Identifier)
	status		11	<u>code</u>		
			code	11	CodeableConcept	
			subject	11	Reference(Patient with Mandatory Identifier)	
			date	01	<u>dateTime</u>	

Logical 6	element			Logical card	Logical type	CDA template
		source		01	Reference(Practitioner with Mandatory Identifier Patient with Mandatory Identifier Device with Mandatory Identifier)	assignedPerson (Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (Device with Mandatory Identifier)
		note		0*	Annotation	
		entry		1*	<u>BackboneElement</u>	
			item	11	Reference(MedicationStatement MedicationRequest MedicationDispense)	
		emptyRea	ason	01	CodeableConcept	
	entry			01	Reference(Provenance for the Generation of a List)	act (Provenance for the Generation of a List)
		target		1*	Reference(Any)	
		period		01	Period	
		recorded		11	instant	
		policy		0*	<u>uri</u>	
		activity		1*	Coding	
		agent (As	sembling Device)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Device)	author (Device with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Device Base Organization)	
		agent (Au	thoring Entity)	01	Reference(BackboneElement)	
			role	11	CodeableConcept	
			who[x]	01	Reference(Base Practitioner Base RelatedPerson Base Patient Base Organization)	author (PractitionerRole with Practitioner with Mandatory Identifier) author (Patient with Mandatory Identifier) author (RelatedPerson with Mandatory Identifier) participant (author Organization with Mandatory Identifier)
			onBehalfOf[x]	01	Reference(Base RelatedPerson Base Organization)	
		entity		0*	Reference(BackboneElement)	
			role	01	code	
			what[x]	01	Reference(Any)	
			agent	01	???	
	emptyRe	ason		01	CodeableConcept	



Note

The column "Logical element" contains the name of that element in the logical model.

The column "Logical card" contains the logical cardinality of that element in the logical model.

The column "Logical type" contains the type of the logical element (hyper-linked to the definition of the [HL7FHIR3] type) in the logical model.

The column "CDA template" contains the title of the corresponding CDA template for that logical element (hyper-linked to CDA mapping table for that template). The convention for the CDA template title is <CDA schema element> (<model name> where the template is not defined in 7 CDA Header templates).

7 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 Prescription and or Dispense List model.

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

7.1 ClinicalDocument

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

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.</clinicaldocument>	11	This template SHALL be a closed template. All attributes of the ClinicalDocument element defined by the Australian Digital Health Agency CDA schema SHALL be allowed. All instances of a time value SHALL include hours, minutes and a time zone. The CDA document SHALL 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.
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 SHALL be allowed.
ClinicalDocument/ typeId	A technology-neutral explicit reference to the CDA Release 2 specification.	11	
ClinicalDocument/typeId/@extension="POCD_HD000040"		11	The unique identifier for the CDA Release 2 Hierarchical Description.
ClinicalDocument/typeId/@root="2.16.840.1.113883.1.3"		11	The OID for HL7 Registered models.

CDA schema element	CDA element description	CDA card	CDA constraints and comments
ClinicalDocument/templateId	A templateld signals the imposition of a set of template-defined constraints. The value provides a unique identifier for the templates in question.	1*	All attributes of the templateId element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.
			Exactly one template identifier SHALL indicate the constraints defined in this mapping table and have @root="1.2.36.1.2001.1001.102.101.100033".
			Exactly one template identifier SHALL indicate the constraints defined in the CDA Rendering Specification [NEHT2012s] and have @root="1.2.36.1.2001.100.149".
			In addition to the template identifiers above, a template identifier is expected for the clinical document model as per ClinicalDocument (Prescription and or Dispense List)). Additional template identifiers may be required by other specifications.
			Systems are not required to recognise any other template identifiers than the clinical document model templateld in order to understand the document as a [type] but these identifiers may influence how the document must be handled.
ClinicalDocument/id	Represents the unique instance identifier of a clinical document.	11	All attributes of the id element defined by the Australian Digital Health Agency CDA schema SHALL be allowed with the exception that @nullFlavor SHALL NOT be present.
			id/@root SHALL be present and it SHALL be a UUID or an OID.
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.	11	All attributes of the effectiveTime element defined by the Australian Digital Health Agency CDA schema SHALL be allowed with the exception that @nullFlavor SHALL NOT be present.
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.	11	
ClinicalDocument/setId	Represents an identifier that is common across all document revisions.	01	All attributes of the setId element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.
ClinicalDocument/versionNumber	An integer value used to version successive replacement documents.	01	
Clinical Document/version Number/@value		11	
ClinicalDocument/ext:completionCode	The lifecycle status of a document.	11	All attributes of the completionCode element defined by the Australian Digital Health Agency CDA schema SHALL be allowed with the exception that @nullFlavor SHALL NOT be present.
			Australian Healthcare Clinical Document Architecture Document Lifecycle Status (required)
ClinicalDocument/recordTarget	Represents the medical record that this document belongs to.	11	All attributes and elements of the recordTarget element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.
ClinicalDocument/author	Represents the humans and/or machines that authored the document.	11	All attributes and elements of the author element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.
ClinicalDocument/dataEnterer	Represents the participant who has transformed a dictated note into text.	01	All attributes and elements of the dataEnterer element defined by the Australian Digital Health Agency CDA schema SHALL 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 SHALL 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.	11	All attributes and elements of the custodian element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.

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CDA schema element	CDA element description	CDA card	CDA constraints and comments
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 SHALL be allowed.
ClinicalDocument/legalAuthenticator	Represents a participant who has legally authenticated the document.	01	All attributes and elements of the legalAuthenticator element defined by the Australian Digital Health Agency CDA schema SHALL 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 SHALL 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 SHALL 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 SHALL 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 SHALL 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 SHALL 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 SHALL be allowed.
ClinicalDocument/componentOf	Relates the current document to the encounter. The current document is a documentation of events that occurred during the encounter.	01	All attributes and elements of the componentOf element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.
ClinicalDocument/component	Relates the associated document body as a component of the document.	11	All attributes and elements of the component element defined by the Australian Digital Health Agency CDA schema SHALL be allowed.

7.2 legalAuthenticator

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

CDA schema element	A schema element CDA element description		CDA constraints and comments
CDA Header Data Elements	Context: /ClinicalDocument/		
legalAuthenticator/templateId	The use of templateId signals the imposition of a set of template-defined con-	11	
legalAuthenticator/templateId/@root="1.2.36.1.2001.1001.102.101.100012"	straints.	11	
legalAuthenticator/time/@value	Indicates the time of authentication.	11	
legalAuthenticator/signatureCode/@code="S"	Indicates that the signature has been affixed and is on file.	11	
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).	11	
legalAuthenticator/assignedEntity/id	A unique identifier for the player entity in this role.	11	id/@root SHALL be present and it SHALL be a UUID or an OID.
legalAuthenticator/assignedEntity/code	The specific kind of role.	01	
legalAuthenticator/assignedEntity/addr	A postal address for the entity (assignedPerson) while in the role (assignedEntity).	0*	
legalAuthenticator/assignedEntity/ telecom	A telecommunication address for the entity (assignedPerson) while in the role (assignedEntity).	0*	
legalAuthenticator/assignedEntity/assignedPerson	The entity playing the role (assignedEntity) is a person.	11	
legalAuthenticator/assignedEntity/assignedPerson/name	A non-unique textual identifier or moniker for the entity (assignedPerson).	0*	
legal Authenticator/assigned Entity/assigned Person/ext: as Entity I dentifier	The entity identifier of the person.	0*	The common pattern Entity Identifier SHALL be applied.
legalAuthenticator/assignedEntity/representedOrganization	The entity scoping the role (assignedEntity).	01	
legalAuthenticator/assignedEntity/representedOrganization/name	$\label{lem:anon-unique} A \text{non-unique textual identifier or moniker for the entity (represented Organization)}.$	0*	
legalAuthenticator/assignedEntity/representedOrganization/ext:asEntityIdentifier	A unique identifier for the scoping entity (represented organization) in this role (assignedEntity).	0*	The common pattern Entity Identifier SHALL be applied.

7.3 component (Administrative Observations)

This template is referenced by recordTarget (Patient with Mandatory Identifier), and ???.

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

CDA schema element	CDA element description	CDA card	CDA constraints and comments
Conformance level comes from linking elements		Context: /Clinica	alDocument/component/structuredBody/
component[admin_obs]	The models contain 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	Cardinality comes from linking element	ClinicalDocument SHALL contain at most one Administrative Observation section. The Administrative Observations section SHALL NOT be populated if there are no entries or text to go in it.
component[admin_obs]/section	other participant.	11	
component[admin_obs]/section/templateId	Administrative Observations is a CDA section that is created to hold these elements in preference to creating extensions for them.	11	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"	·	11	
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	01	id/@root SHALL be present and it SHALL be a UUID or an OID.
component[admin_obs]/section/ code	is instantiated as part of that observation (e.g. observation/participant/participantRole).	11	
component[admin_obs]/section/code/@code="102.16080"	cipality participanticoley.	11	
component[admin_obs]/section/code/@codeSystem="1.2.36.1.2001.1001.101"		11	NCTIS Data Components
component[admin_obs]/section/code/@displayName		01	displayName SHOULD be "Administrative Observations".
component[admin_obs]/section/title="Administrative Observations"		01	
component[admin_obs]/section/text		01	

8 Document CDA templates

This chapter defines each of the document-level usage scenario models, e.g. Composition (Prescription and or Dispense List), as a ClinicalDocument template.

8.1 ClinicalDocument (Prescription and or Dispense List)

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

- A clinical information system (CIS) sends or receives a
 - o prescription list document with the My Health Record system
 - o dispense record list document with the My Health Record system
 - o prescription and dispense record list document with the My Health Record system
- A contracted service provider (CSP) sends or receives a
- o prescription list document with the My Health Record system
- o dispense record list document with the My Health Record system
- o prescription and dispense record list document with the My Health Record system
- A CIS sends or receives a
- o prescription list document with another CIS or CSP
- o dispense record list document with another CIS or CSP
- o prescription and dispense record list document with another CIS or CSP
- A CSP sends or receives a
- o prescription list document with a CIS or another CSP
- o dispense record list document with a CIS or another CSP

- o prescription and dispense record list document with a CIS or another CSP
- A registered portal or registered repository receives a
- o prescription list document
- o dispense record list document
- o prescription and dispense record list document

An expected usage scenario, further scoping the above overarching scenarios is a Prescription and Dispense View (PDV) exchanged with the My Health Record system.

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Composition	A list of prescriptions, and or, dispense records for a patient.	0*	Composition	ClinicalDocument/templateId	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 01. In addition to the template defined in this mapping table, ClinicalDocument SHALL conform to the template defined in ClinicalDocument. This composition SHALL contain one and only section (ClinicalDocument/component/structuredBody/component/section) that conforms to section (Dispense List), or section (Prescription List), or section (Prescription and Dispense List). The use of templateId signals the imposition of a set of
				· •	template-defined constraints.
Composition > composition-author-role	A practitioner role that authored this composition. This is not to be confused with who typed in the information.	01	Reference(Practition- erRole with Practi- tioner with Mandat- ory Identifier)	ClinicalDocument/templateId/@root="1.2.36.1.2001.1001.102.101.100065" ClinicalDocument/author	author SHALL conform to the template defined in author (PractitionerRole with Practitioner with Mandatory Identifier).
Composition > identifier	Logical identifier for the composition, assigned when created. This identifier stays constant as the composition is changed over time.	01	<u>Identifier</u>	ClinicalDocument/setId	

Logical element	Logical element description	Logic-	Logical type	CDA schema element	CDA constraints and comments
		al card			
Composition > status	The workflow/clinical status of this composition. The status is a marker for the clinical standing of the document.	11	<u>code</u>	ClinicalDocument/ext:completionCode	Australian Healthcare Clinical Document Architecture Document Lifecycle Status (required) ¹
Composition > type	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.	11	CodeableConcept	ClinicalDocument/code	Prescription and Dispense List Type (required)
Composition > subject	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).	11	Reference(Patient with Mandatory Identifier)	ClinicalDocument/recordTarget	recordTarget SHALL conform to one of the templates defined in: recordTarget (Patient with Mandatory Identifier).
Composition > date	The composition editing time, when the composition was last logically changed by the author.	11	<u>dateTime</u>	ClinicalDocument/author/time	
Composition > author	Identifies who is responsible for the information in the composition, not necessarily who typed it in.	11	Reference(Practitioner with Mandatory Identifier Device with Mandatory Identifier Patient with Mandatory Identifier Related-Person with Mandatory Identifier)	ClinicalDocument/author	In CDA an author (Practitioner) assignedPerson (Practitioner with Mandatory Identifier) is part of composition-authorrole (PractitionerRole) author (PractitionerRole with Practitioner with Mandatory Identifier). When the list is a prescription and dispense view it is expected that the author will be a Device (the My Health Record system). author SHALL conform to one of the templates defined in: author (PractitionerRole with Practitioner with Mandatory Identifier) or author (Device with Mandatory Identifier) or author (Patient with Mandatory Identifier) or author (RelatedPerson with Mandatory Identifier).
Composition > title	Official human-readable label for the composition.	11	string	ClinicalDocument/ title	
Composition > attester (Legal Attester)	A participant who has attested to the accuracy of the composition/document.	01	BackboneElement	ClinicalDocument/legalAuthenticator	When the list is a prescription and dispense view this element is not expected to be sent. legalAuthenticator SHALL conform to the template defined in legalAuthenticator.
Composition > attester (Legal Attester) > mode	The type of attestation the authenticator offers.	11	<u>code</u>	n/a	Not mapped separately, the logical mode of "legal" is implicit in legalAuthenticator.
Composition > attester (Legal Attester) > time	When the composition was attested by the party.	11	<u>dateTime</u>	ClinicalDocument/legalAuthenticator/time/@value	
Composition > attester (Legal Attester) > party	Who attested the composition in the specified way.	11	Reference(Practition- er with Mandatory Identifier)	ClinicalDocument/legalAuthenticator/assignedEntity	The practitioner SHALL have an identifier (legalAuthenticator/assignedEntity/assignedPerson/ext:asEntityIdentifier).

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Composition > custodian	Identifies the organization or group who is responsible for ongoing maintenance of and access to the composition/document information.	11	Reference(Organization with Mandatory Identifier)	ClinicalDocument/ custodian	When the list is a prescription and dispense view it is expected that the custodian will be the My Health Record system operator. custodian SHALL conform to the template defined in custodian (Organization with Mandatory Identifier).
Composition > section (Dispense List)	A list of dispense records for a patient.	01	<u>BackboneElement</u>	ClinicalDocument/component/structuredBody/component[dl]	
				ClinicalDocument/component/structuredBody/component[dl]/section	section SHALL conform to the template defined in section (Dispense List) and have the same code (section/code/@code) as this document (ClinicalDocument/code/@code).
Composition > section (Prescription	A list of prescriptions for a patient.	01	BackboneElement	ClinicalDocument/component/structuredBody/component[pl]	
List)				ClinicalDocument/component/structuredBody/component[pl]/section	section SHALL conform to the template defined in section (Prescription List) and have the same code (section/code/@code) as this document (ClinicalDocument/code/@code).
Composition > section (Prescription	A list of prescriptions and dispense records for a patient.	01	BackboneElement	ClinicalDocument/component/structuredBody/component[pdl]	
and Dispense List)				ClinicalDocument/component/structuredBody/component[pdl]/section	section SHALL conform to the template defined in section (Prescription and Dispense List) and have the same code (section/code/@code) as this document (ClinicalDocument/code/@code).

This value set differs from the value set bound to status in the Agency logical model (see *Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*) to support the existing CDA implementation environment. The concept map CompositionStatus (HL7 FHIR) to Australian Healthcare Clinical Document Architecture Document Lifecycle Status provides a mapping between the two value sets.

9 Section CDA templates

This chapter defines the section templates referenced by a ClinicalDocument template for a document-level model in 8 Document CDA templates.

9.1 section (Dispense List)

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
CDA Body Level 3 Data Elements				Context: Comes from linking elements	
section	A list of dispense records for a patient.	Cardinal- ity comes from linking element	BackboneElement	section	This section SHALL contain: • an entry (section/entry[dl]) that conforms to act (List of Prescription and or Dispense Records) or an emptyReason (section/entry[dl_empty_rsn]) This section SHALL NOT contain: • both an entry (section/entry[dl]) and an emptyReason (section/entry[dl_empty_rsn]) • more than one entry (section/entry[pdl]) that conforms to act (List of Prescription and or Dispense Records)
				section/templateId	The use of templateld signals the imposition of a set of
				section/templateId/@root="1.2.36.1.2001.1001.102.101.100074"	template-defined constraints.
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.	11	string	section/ title	

Logical element	Logical element description	Logic- al	Logical type	CDA schema element	CDA constraints and comments
		card			
section > code	A code identifying the kind of content contained within the	11	CodeableConcept	section/code	
	section. This must be consistent with the section title.			section/code/@code="100.32014"	
				section/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				section/code/@displayName	displayName SHOULD be "Dispense List".
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.	11	<u>Narrative</u>	section/ text	
section > entry	A reference to the actual resource from which the narrative in the section is derived.	02	Reference(List of Prescription and or Dispense Records Provenance for the Generation of a List)	section/entry[di]	If a list is generated from a filter or search query then both a list entry and a provenance entry are expected. A section entry SHALL be instantiated as an: • act (section/entry[dl]/act) conforming to act (List of Prescription and or Dispense Records) with the same code (section/entry[dl]/act/code/@code) as this section (section/code/@code), or • observation (section/entry[dl]/observation) conforming to act (Provenance for the Generation of a List)
section > emptyReason	If the section is empty, why the list is empty. An empty	01	CodeableConcept	section/entry[dl_empty_rsn]	
	section typically has some text explaining the empty reason.			section/entry[dl_empty_rsn]/observation	
				section/entry[dl_empty_rsn]/observation/@classCode="OBS"	
				section/entry[dl_empty_rsn]/observation/@moodCode="EVN"	
				section/entry[dl_empty_rsn]/observation/code	
				section/entry[dl_empty_rsn]/observation/code/@code="ASSERTION"	
				section/entry[dl_empty_rsn]/observation/code/@codeSystem= "2.16.840.1.113883.5.4"	v3 Code System ActCode
				section/entry[dl_empty_rsn]/observation/code/@displayName	displayName SHOULD be "Assertion".
				section/entry[dl_empty_rsn]/observation/value	value/@xsi:type SHALL be "CD".
					value/originalText or value/@displayName SHALL be included.
					Non-Clinical Empty Reason (required)

9.2 section (Prescription List)

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
CDA Body Level 3 Data Elemer	nts		_	Context: Comes from linking elements	
section	A list of prescriptions for a patient.	Cardinal- ity comes from linking element	BackboneElement	section/templateId section/templateId/@root="1.2.36.1.2001.1001.102.101.100073"	This section SHALL contain: • an entry (section/entry[pl]) that conforms to act (List of Prescription and or Dispense Records) or an emptyReason (section/entry[pl_empty_rsn]) This section SHALL NOT contain: • both an entry (section/entry[pl]) and an emptyReason (section/entry[pl_empty_rsn]) • more than one entry (section/entry[pl]) that conforms to act (List of Prescription and or Dispense Records) The use of templateld signals the imposition of a set of template-defined constraints.
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.	11	string	section/title	
section > code	A code identifying the kind of content contained within the	11	CodeableConcept	section/code	
	section. This must be consistent with the section title.			section/code/@code="57828-6"	
				section/code/@codeSystem="2.16.840.1.113883.6.1"	LOINC
				section/code/@displayName	displayName SHOULD be "Prescription list".
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.	11	<u>Narrative</u>	section/text	

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
section > entry	A reference to the actual resource from which the narrative in the section is derived.	02	Reference(List of Prescription and or Dispense Records Provenance for the Generation of a List)	section/entry[pl]	If a list is generated from a filter or search query then both a list entry and a provenance entry are expected. A section entry SHALL be instantiated as an: • act (section/entry[pl]/act) conforming to act (List of Prescription and or Dispense Records) with the same code (section/entry[pl]/act/code/@code) as this section (section/code/@code), or • observation (section/entry[pl]/observation) conforming to act (Provenance for the Generation of a List)
section > emptyReason	If the section is empty, why the list is empty. An empty	01	CodeableConcept	section/entry[pl_empty_rsn]	
	section typically has some text explaining the empty reason.			section/entry[pl_empty_rsn]/observation	
				section/entry[pl_empty_rsn]/observation/@classCode="OBS"	
				section/entry[pl_empty_rsn]/observation/@moodCode="EVN"	
				section/entry[pl_empty_rsn]/observation/code	
				section/entry[pl_empty_rsn]/observation/code/@code="ASSERTION"	
				section/entry[pl_empty_rsn]/observation/code/@codeSystem= "2.16.840.1.113883.5.4"	v3 Code System ActCode
				section/entry[pl_empty_rsn]/observation/code/@displayName	displayName SHOULD be "Assertion".
			section/entry[pl_empty_rsn]/observation/value	value/@xsi:type SHALL be "CD".	
				value/originalText or value/@displayName SHALL be included.	
					Non-Clinical Empty Reason (required)

9.3 section (Prescription and Dispense List)

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
CDA Body Level 3 Data Element	s			Context: Comes from linking elements	
section	A list of prescriptions and dispense records for a patient.	Cardinal- ity comes from linking element	BackboneElement	section/templateId section/templateId/@root="1.2.36.1.2001.1001.102.101.100072"	This section SHALL contain: • an entry (section/entry[pdl]) that conforms to act (List of Prescription and or Dispense Records) or an emptyReason (section/entry[pdl_empty_rsn]) This section SHALL NOT contain: • both an entry (section/entry[pdl]) and an emptyReason (section/entry[pdl_empty_rsn]) • more than one entry (section/entry[pdl]) that conforms to act (List of Prescription and or Dispense Records) The use of templateId signals the imposition of a set of template-defined constraints.
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.	11	string	section/title	
section > code	A code identifying the kind of content contained within the	11	CodeableConcept	section/ code	
	section. This must be consistent with the section title.			section/code/@code="100.32015"	
				section/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				section/code/@displayName	displayName SHOULD be "Prescription and Dispense List".
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.	11	<u>Narrative</u>	section/text	

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
section > entry	A reference to the actual resource from which the narrative in the section is derived.	02	Reference(List of Prescription and or Dispense Records Provenance for the Generation of a List)	section/entry[pdl]	If a list is generated from a filter or search query, including a prescription and dispense view, then both a list entry and a provenance entry are expected. A section entry SHALL be instantiated as an: • act (section/entry[pdl]/act) conforming to act (List of Prescription and or Dispense Records) with the same code (section/entry[pdl]/act/code/@code) as this section (section/code/@code), or • observation (section/entry[pdl]/observation) conforming to act (Provenance for the Generation of a List)
section > emptyReason	If the section is empty, why the list is empty. An empty	01	CodeableConcept	section/entry[pdl_empty_rsn]	
	section typically has some text explaining the empty reason.			section/entry[pdl_empty_rsn]/observation	
				section/entry[pdl_empty_rsn]/observation/@classCode="OBS"	
				section/entry[pdl_empty_rsn]/observation/@moodCode="EVN"	
				section/entry[pdl_empty_rsn]/observation/code	
				section/entry[pdl_empty_rsn]/observation/code/@code="ASSERTION"	
				section/entry[pdl_empty_rsn]/observation/code/@codeSystem= "2.16.840.1.113883.5.4"	v3 Code System ActCode
				section/entry[pdl_empty_rsn]/observation/code/@displayName	displayName SHOULD be "Assertion".
				section/entry[pdl_empty_rsn]/observation/value	value/@xsi:type SHALL be "CD".
				value/originalText or value/@displayName SHALL be included.	
					Non-Clinical Empty Reason (required)

10 Participation CDA templates

This chapter defines the participation templates referenced other templates such as those in 9 Section CDA templates and 8 Document CDA templates.

10.1 recordTarget (Patient with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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	Cardinal-	<u>Patient</u>	recordTarget	
	an individual receiving care or other health-related services.	ity comes from link-		recordTarget/templateId	The use of templateld signals the imposition of a set of
		ing ele- ment		recordTarget/templateId/@root="1.2.36.1.2001.1001.102.101.100004"	template-defined constraints.
		ment		recordTarget/patientRole	
				recordTarget/patientRole/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
				recordTarget/patientRole/patient	
Patient > birthPlace	The registered place of birth of the patient. A sytem may	01	Address	recordTarget/patientRole/patient/birthplace	
	use the address.text if they don't store the birthPlace address in discrete elements.			recordTarget/patientRole/patient/birthplace/place	
				recordTarget/patientRole/patient/birthplace/place/addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Patient > indigenous-status	National Health Data Dictionary (NHDD) based indigenous status for a patient.	01	Coding	recordTarget/patientRole/patient/ethnicGroupCode	Australian Indigenous Status (required)

Logical element	Logical element description	Logical	Logical type	CDA schema element	CDA constraints and comments	
Logical cicilicit	Logical cicincia acsemption	card	Logical type	CDA Schema cichient	CDA constraints and comments	
CDA Header Data Elements				Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/section/		
Patient > closing-the-gap-registration	Indication for eligibility for the Closing the Gap program.	01	boolean	entry[close_gap]	The containing component[admin_obs]/section SHALL conform to the template defined in component (Administrative Observations).	
				entry[close_gap]/ observation		
				entry[close_gap]/observation/@classCode="OBS"		
				entry[close_gap]/observation/@moodCode="EVN"		
				entry[close_gap]/observation/code		
				entry[close_gap]/observation/code/@code="103.32011"		
				entry[close_gap]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components	
				entry[close_gap]/observation/code/@displayName	displayName SHOULD be "Closing the Gap Copayment Eligibility Indicator".	
				entry[close_gap]/observation/value	closing-the-gap-registration is "true" if eligible for Closing the Gap co-payment.	
					value/@xsi:type SHALL be "BL".	
Patient > patient-mothersMaid- enName	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	01	string	entry[mothers_name]	The containing component[admin_obs]/section SHALL conform to the template defined in component (Administrative Observations).	
				entry[mothers_name]/observation		
				entry[mothers_name]/observation/@classCode="OBS"		
				entry[mothers_name]/observation/@moodCode="EVN"		
				entry[mothers_name]/observation/code		
				entry[mothers_name]/observation/code/@code="103.10245"		
				entry[mothers_name]/observation/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components	
				entry[mothers_name]/observation/code/@displayName	displayName SHOULD be "Mother's Original Family Name".	
				entry[mothers_name]/observation/value	value/@xsi:type SHALL be "ST".	
CDA Header Data Elements				Context: /ClinicalDocument/		
Patient > identifier	An identifier for this patient.	1*	<u>Identifier</u>	recordTarget/patientRole/patient/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied.	
					Recommended mappings for this logical type to CDA (R2) are available: Identifier.	
Patient > active	Whether this patient record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.	
Patient > name	A name associated with the individual.	0*	Base HumanName	recordTarget/patientRole/patient/ name	The model Base HumanName is not applied to name.	
					Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.	

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Logical element	Logical element description	Logical	Logical type	CDA schema element	CDA constraints and comments
		card			
Patient > telecom	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0*	ContactPoint	recordTarget/patientRole/telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Patient > gender	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	01	code	recordTarget/patientRole/patient/administrativeGenderCode	In the Australian Digital Health Agency CDA schema the minimum occurrence of administrativeGenderCode is 1.
	poscs.				Although administrativeGenderCode is required, a sending system may send a patient without gender by instantiating administrativeGenderCode/@nullFlavor="NI". No other nullFlavor value SHALL be allowed.
					AdministrativeGender (required) ¹
Patient > birthDate	The date of birth for the individual.	01	<u>date</u>	recordTarget/patientRole/patient/birthTime	
CDA Header Data Elements				Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/se	ction/
Patient > birthDate > date-accur- acy-indicator	General date accuracy indicator coding.	01	Coding	entry[dob_acc]	The containing component[admin_obs]/section SHALL conform to the template defined in component (Administrative Observations).
				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 SHOULD be "Date of Birth Accuracy Indicator".
				entry[dob_acc]/observation/value	value/@xsi:type SHALL be "CD".
					Date Accuracy Indicator (required)
CDA Header Data Elements				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.	01	dateTime	n/a	Not mapped separately, encompassed in patientRole/patient/birthTime.
Patient > deceased[x]	Indicates if the individual is deceased or not. Deceased date	01	boolean dateTime	recordTarget/patientRole/patient/ext:deceasedInd	Only one of ext:deceasedInd or ext:deceasedTime SHOULD
	accuracy indicator is optional.			recordTarget/patientRole/patient/ext:deceasedTime	be instantiated.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments	
CDA Header Data Elements				Context: /ClinicalDocument/component/structuredBody/component[admin_obs]/	/section/	
Patient > deceased[x] > date-ac- curacy-indicator	General date accuracy indicator coding.	01	Coding	entry[dod_acc]	The containing component[admin_obs]/section SHALL conform to the template defined in component (Administrative Observations).	
				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"	NCTIS Data Components	
				entry[dod_acc]/observation/code/@displayName	displayName $\bf SHOULD$ be "Date of Death Accuracy Indicator".	
				entry[dod_acc]/observation/ value	value/@xsi:type SHALL be "CD".	
					<u>Date Accuracy Indicator (required)</u>	
CDA Header Data Elements				Context: /ClinicalDocument/		
Patient > address	Addresses for the individual.	0*	Address	recordTarget/patientRole/ addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.	
Patient > maritalStatus	This field contains a patient's most recent marital (civil) status.	01	CodeableConcept	recordTarget/patientRole/patient/maritalStatusCode	maritalStatusCode/originalText or maritalStatusCode/@dis- playName SHALL be included.	
					Marital Status Codes (extensible)	
Patient > multipleBirth[x]	Indicates whether the patient is part of a multiple (bool) or	01	boolean integer	recordTarget/patientRole/patient/ext:multipleBirthInd	Only one of ext:multipleBirthInd or ext:multiple-	
	indicates the actual birth order (integer).			recordTarget/patientRole/patient/ext:multipleBirthOrderNumber	BirthOrderNumber SHOULD be instantiated.	
Patient > contact	A contact party (e.g. guardian, partner, friend) for the pa-	0*	BackboneElement	participant[pat_contact]	In CDA, a patient's contact is represented by a participant.	
	tient.				participant SHALL conform to the template defined in participant (Patient contact).	
Patient > communication	Languages which may be used to communicate with the patient about his or her health.	0*	BackboneElement	recordTarget/patientRole/patient/languageCommunication		
Patient > communication > language	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.	11	CodeableConcept	recordTarget/patientRole/patient/languageCommunication/languageCode	This CDA schema element is of type CodedSimpleValue (CS). Common Languages in Australia (extensible)	
Patient > communication > pre- ferred	Indicates whether or not the patient prefers this language (over other languages he masters up a certain level).	01	<u>boolean</u>	recordTarget/patientRole/patient/languageCommunication/ preferenceInd		

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Patient > generalPractitioner	Patient's nominated care provider.	0*	Reference(Base Organization Base Practitioner)	participant[gen_prac]	participant SHALL conform to one of the templates defined in: participant (generalPractitioner Base Organization) or participant (generalPractitioner Base Practitioner).
Patient > managingOrganization	Organization that is the custodian of the patient record.	01	Reference(Base Organization)	recordTarget/patientRole/providerOrganization	providerOrganization SHALL conform to the template defined in providerOrganization (Base Organization).

¹This hyperlink resolves to the FHIR Release 4 description due to a technical defect in the FHIR STU3 description of this code system for OID-based systems.

10.2 participant (Patient contact)

This template is referenced by recordTarget (Patient with Mandatory Identifier), and ???.

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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 > contact	A contact party (e.g. guardian, partner, friend) for the patient.	Cardinal- ity comes from link- ing ele- ment	comes om link- g ele-	participant[pat_contact]	The patient's contact SHALL have at least:	
				participant[pat_contact]/@typeCode="IND"	name (participant[pat_contact]/associatedEntity/associatedPerson/name), or	
				telecom (participant[pat_contact]/associatedEntity/tele- com), or		
					address (participant[pat_contact]/associatedEntity/ad- dr), or	
				organization (participant[pat_contact]/associatedEntity/scopingOrganization)		
			participant[pat_contact]/templateId	The use of templateld signals the imposition of a set of		
				participant[pat_contact]/templateId/@root="1.2.36.1.2001.1001.102.101.100056"	template-defined constraints.	
				participant[pat_contact]/associatedEntity		
				participant[pat_contact]/associatedEntity/@classCode="CON"		
				participant[pat_contact]/associatedEntity/id	id/@root SHALL be present and it SHALL be a UUID or an OID.	
Patient > contact > relationship	The nature of the relationship between the patient and the contact person.	0*	CodeableConcept	participant[pat_contact]/associatedEntity/associatedPerson/ext:personalRelationship	The common pattern Personal Relationship SHALL be applied.	
				participant[pat_contact]/associatedEntity/associatedPerson/ext:personalRelationship/ext:code	ext:code/originalText or ext:code/@displayName SHALL be included.	
					Contact Relationship Type (extensible)	
Patient > contact > name	A name associated with the contact person.	01	Base HumanName	participant[pat_contact]/associatedEntity/associatedPerson/name	The model Base HumanName is not applied to name.	
					Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.	

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Patient > contact > telecom	A contact detail for the person, e.g. a telephone number or an email address.	0*	ContactPoint	participant[pat_contact]/associatedEntity/ telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Patient > contact > address	Address for the contact person.	01	<u>Address</u>	participant[pat_contact]/associatedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Patient > contact > gender	Administrative Gender - the gender that the contact person is considered to have for administration and record keeping purposes.	01	code	participant[pat_contact]/associatedEntity/ associatedPerson/ext:administrativeGenderCode	AdministrativeGender (required) ¹
Patient > contact > organization	Organization on behalf of which the contact is acting or for which the contact is working.	01	Reference(Base Organization)	participant[pat_contact]/associatedEntity/scopingOrganization	scopingOrganization SHALL conform to the template defined in scopingOrganization (Base Organization).
Patient > contact > period	The period during which this contact person or organization is valid to be contacted relating to this patient.	01	Period	n/a	This logical element has no mapping to CDA.

¹This hyperlink resolves to the FHIR Release 4 description due to a technical defect in the FHIR STU3 description of this code system for OID-based systems.

10.3 participant (Organization contact)

This template is referenced by participant (general Practitioner Base Organization), custodian (Organization with Mandatory Identifier), provider Organization (Base Organization), represented Organization (Base Organization), scoping Organization (Base Organization), and whole Organization (Base Organization).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments	
CDA Header Data Elements				Context: /ClinicalDocument/		
Organization > contact	Contact for the organization for a certain purpose.	Cardinality comes from link- ing ele- ment	Organization	participant[org_contact]		
				participant[org_contact]/@typeCode="IND"		
				participant[org_contact]/templateId	The use of templateld signals the imposition of a set of template-	
				participant[org_contact]/templateId/@root="1.2.36.1.2001.1001.102.101.100035"	defined constraints.	
				participant[org_contact]/associatedEntity		
				participant[org_contact]/associatedEntity/@classCode="CON"		
				participant[org_contact]/associatedEntity/scopingOrganization		
				participant[org_contact]/associatedEntity/scopingOrganization/id	Organization > contact is represented in CDA by a participant that is scoped by the Organization for which they are a contact.	
					This id SHALL hold the same value as the organization this is a contact for (the value in this id element SHALL be present in a separate participation).	
					id/@root SHALL be present and it SHALL be a UUID or an OID.	
Organization > contact > purpose	Indicates a purpose for which the con-	01	CodeableConcept	participant[org_contact]/associatedEntity/code	code/originalText or code/@displayName SHALL be included.	
	tact can be reached.				Contact entity type (extensible) ¹	
Organization > contact > name	A name associated with the contact.	01	Base HumanName	participant[org_contact]/associatedEntity/associatedPerson		
				participant[org_contact]/associatedEntity/associatedPerson/name	The model Base HumanName is not applied to name.	
					Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.	
Organization > contact > telecom	A contact detail (e.g. a telephone number or an email address) by which the party may be contacted.	0*	ContactPoint	participant[org_contact]/associatedEntity/telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.	

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > contact > address	Visiting or postal addresses for the contact.	01	Address	participant[org_contact]/associatedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.

¹This value set differs from the value set bound to contact purpose in the Agency logical model (see *Prescription and Dispense Lists FHIR Implementation Guide [DH2020k]*) due to pre-adoption of FHIR Release 4 terminology.

10.4 participant (generalPractitioner Base Organization)

This template is referenced by recordTarget (Patient with Mandatory Identifier).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments	
CDA Header Data Elements				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.	A formally or informally recognized grouping of people or	Cardinal-	<u>Organization</u>	participant[gen_prac]	Organization SHALL have at least:	
			participant[gen_prac]/@typeCode="PART"	identifier (participant[gen_prac]/associatedEntity/scopingOrganization/ext:asEntityIdentifier), or name (participant[gen_prac]/associatedEntity/scopingOrganization/name)		
				participant[gen_prac]/templateId	The use of templateld signals the imposition of a set of	
				participant[gen_prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100036"	template-defined constraints.	
				participant[gen_prac]/functionCode/@code="PCP"		
				participant[gen_prac]/associatedEntity		
				participant[gen_prac]/associatedEntity/@classCode="PROV"		
				participant[gen_prac]/associatedEntity/id	id/@root SHALL be present and it SHALL be a UUID or an OID.	
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	Identifier	participant[gen_prac]/associatedEntity/scopingOrganization/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied.	
					Recommended mappings for this logical type to CDA (R2) are available: Identifier.	
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.	
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	participant[gen_prac]/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 01. code/originalText or code/@displayName SHALL be included.	
					OrganizationType (example)	

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Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Organization > name	A name associated with the organization.	01	string	participant[gen_prac]/associatedEntity/scopingOrganization/name[org_name]	In CDA name and alias are represented by scopingOrganization/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	participant[gen_prac]/associatedEntity/scopingOrganization/name[alias]	In CDA name and alias are represented by scopingOrganization/name.
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	participant[gen_prac]/associatedEntity/ telecom	telecom/@use Organization Telecom Use HL7 V3 (required) ¹ . Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	Address	participant[gen_prac]/associatedEntity/ addr	addr/@use Organization Address Use HL7 V3 (required) ² . Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms a part.	01	Reference(Base Or-	participant[gen_prac]/associatedEntity/scopingOrganization/asOrganizationPartOf	wholeOrganization SHALL conform to the template defined
			ganization)	participant[gen_prac]/associatedEntity/scopingOrganization/ asOrganizationPartOf/wholeOrganization	in wholeOrganization (Base Organization).
Organization > contact	Contact for the organization for a certain purpose.	0*	BackboneElement	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

10.5 participant (generalPractitioner Base Practitioner)

This template is referenced by recordTarget (Patient with Mandatory Identifier).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments		
CDA Header Data Elements				Context: /ClinicalDocument/			
Practitioner	A person who is directly or indirectly in-	Cardinal-	<u>Practitioner</u>	participant[gen_prac]	Practitioner SHALL have at least:		
	volved in the provisioning of healthcare.	ity comes from link- ing ele- ment		participant[gen_prac]/@typeCode="PART"	identifier (participant[gen_prac]/associatedEntity/associated- Person/ext:asEntityIdentifier), or name (participant[gen_prac]/associatedEntity/associatedPerson/name)		
				participant[gen_prac]/templateId	The use of templateId signals the imposition of a set of template-		
				participant[gen_prac]/templateId/@root="1.2.36.1.2001.1001.102.101.100037"	defined constraints.		
			participant[gen_prac]/functionCode/@code="PCP"				
				participant[gen_prac]/associatedEntity			
				participant[gen_prac]/associatedEntity/@classCode="PROV"			
				participant[gen_prac]/associatedEntity/id	id/@root SHALL be present and it SHALL be a UUID or an OID.		
				participant[gen_prac]/associatedEntity/code	The cardinality of code SHALL be interpreted as 01.		
					Australian and New Zealand Standard Classification of Occupations (preferred)		
Practitioner > identifier	An identifier that applies to this person in this role.	0*	Identifier	participant[gen_prac]/associatedEntity/associatedPerson/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.		
Practitioner > active	Whether this practitioner's record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.		
Practitioner > name	The name(s) associated with the practitioner.	0*	Base HumanName	participant[gen_prac]/associatedEntity/associatedPerson/ name	The model Base HumanName is not applied to name. Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.		

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Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > telecom	A contact detail for the practitioner, e.g. a telephone number or an email address.	0*	ContactPoint	participant[gen_prac]/associatedEntity/telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Practitioner > address	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*	Address	participant[gen_prac]/associatedEntity/addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Practitioner > gender	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	01	code	n/a	This logical element has no mapping to CDA.
Practitioner > birthDate	The date of birth for the practitioner.	01	<u>date</u>	n/a	This logical element has no mapping to CDA.
Practitioner > qualification	Qualifications obtained by training and certification.	0*	BackboneElement	See: instantiation choices	It is possible that the qualification may be able to be captured as a complex structure or as a text list. instantiation choices: If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as ext:asQualifications/@classCode="QUAL". The common pattern Qualification SHALL be applied. If more information can be captured than a narrative list then qualification is expected to be instantiated as ClinicalDocument/component/structuredBody/component[admin_obs]/section/ext:coverage2[prac_qual] and SHALL conform to the template defined in ext:coverage2 (Practitioner qualification).
Practitioner > communication	A language the practitioner is able to use in patient communication.	0*	CodeableConcept	participant[gen_prac]/associatedEntity/associatedPerson/ext:languageCommunication	The common pattern Language Communication SHALL be applied

10.6 author (Patient with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List), act (List of Prescription and or Dispense Records), and act (Provenance for the Generation of a List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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 link- ing ele- ment	Patient	author	Patient SHALL have at least: • name (author/assignedAuthor/assignedPerson/name), or • identifier (author/assignedAuthor/assignedPerson/ext:asEntityIdentifier)
				author/templateId	The use of templateld signals the imposition of a set of
				author/templateId/@root="1.2.36.1.2001.1001.102.101.100003"	template-defined constraints.
				author/assignedAuthor	
				author/assignedAuthor/id	author (patient) is represented in CDA by an author with the same id as the patient that is the subject of this document. This id SHALL hold the same value as patientRole/id.
				author/assignedAuthor/ code	
				author/assignedAuthor/code/@code="ONESELF"	
				author/assignedAuthor/code/@codeSystem="2.16.840.1.113883.5.111"	v3 Code System RoleCode
				author/assignedAuthor/assignedPerson	
Patient > birthPlace	The registered place of birth of the patient. A sytem may use the address.text if they don't store the birth-Place address in discrete elements.	01	Address	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.	01	Coding	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.	01	<u>boolean</u>	n/a	Not mapped directly for this participant; this is implicit in entry[close_gap]/observation/value.

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Logical element	Logical element description	Logical	Logical type	CDA schema element	CDA constraints and comments
		card			
Patient > patient-mothersMaiden- Name	Mother's maiden (unmarried) name, commonly collected to help verify patient identity.	01	string	n/a	Not mapped directly for this participant; this is implicit in entry[mothers_name]/observation/value.
Patient > identifier	An identifier for this patient.	1*	Identifier	author/assignedAuthor/assignedPerson/ext:asEntityIdentifier	When sending to the My Health Record, an IHI is expected.
					The common pattern Entity Identifier SHALL be applied.
					Recommended mappings for the complex data type to CDA (R2): Identifier.
Patient > active	Whether this patient record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Patient > name	A name associated with the individual.	0*	Base HumanName	author/assignedAuthor/assignedPerson/name	The model Base HumanName is not applied to name.
					Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.
Patient > telecom	A contact detail (e.g. a telephone number or an email address) by which the individual may be contacted.	0*	ContactPoint	author/assignedAuthor/telecom	When sending to the My Health Record, telecom is not expected to be sent.
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Patient > gender	Administrative Gender - the gender that the patient is considered to have for administration and record keeping purposes.	01	code	author/assignedAuthor/assignedPerson/ext:administrativeGenderCode	AdministrativeGender (required) ¹
Patient > birthDate	The date of birth for the individual.	01	date	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/birthTime.
Patient > deceased[x]	Indicates if the individual is deceased or not. Deceased date accuracy indicator is optional.	01	boolean dateTime	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:deceasedTime or patientRole/patient/ext:deceasedInd.
Patient > address	Addresses for the individual.	0*	Address	author/assignedAuthor/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: Address AU Base Address.
Patient > maritalStatus	This field contains a patient's most recent marital (civil) status.	01	<u>CodeableConcept</u>	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/maritalStatusCode.
Patient > multipleBirth[x]	Indicates whether the patient is part of a multiple (bool) or indicates the actual birth order (integer).	01	boolean integer	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/ext:multipleBirthInd or patientRole/patient/multipleBirthOrderNumber.
Patient > contact	A contact party (e.g. guardian, partner, friend) for the patient.	0*	BackboneElement	n/a	This logical element has no mapping to CDA.
Patient > communication	Languages which may be used to communicate with the patient about his or her health.	0*	BackboneElement	n/a	Not mapped directly for this participant; this is implicit in patientRole/patient/languageCommunication.
Patient > generalPractitioner	Patient's nominated care provider.	0*	Reference(Base Organ- ization Base Practi- tioner)	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 that is the custodian of the patient record.	01	Reference(Base Organization)	n/a	This logical element has no mapping to CDA.

¹This hyperlink resolves to the FHIR Release 4 description due to a technical defect in the FHIR STU3 description of this code system for OID-based systems.

10.7 author (RelatedPerson with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List), act (List of Prescription and or Dispense Records), and act (Provenance for the Generation of a List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from I	inking elements			Context: Comes from linking elements	
RelatedPerson	Information about a person that is involved in the care for	Cardinal-	RelatedPerson	author	
	a patient, but who is not the target of healthcare, nor has a formal responsibility in the care process.	ity comes		author/templateId	The use of templateld signals the imposition of a set of
		from linking		author/templateId/@root="1.2.36.1.2001.1001.102.101.100030"	template-defined constraints.
		ele-		author/assignedAuthor	
		ments		author/assignedAuthor/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
				author/assignedAuthor/code	
				author/assignedAuthor/code/@code="AGNT"	
				author/assignedAuthor/code/@codeSystem="2.16.840.1.113883.5.110"	v3 Code System RoleClass
				author/assignedAuthor/assignedPerson	
RelatedPerson > identifier	Identifier for a person within a particular scope.	1*	<u>Identifier</u>	author/assignedAuthor/assignedPerson/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied.
					Recommended mappings for this logical type to CDA (R2) are available: Identifier.
RelatedPerson > active	Whether this related person record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
RelatedPerson > patient	The patient this person is related to.	11	Reference(Base Patient)	n/a	Not mapped directly for this participant; this is implicit in patientRole.
RelatedPerson > relationship	RelatedPerson > relationship The nature of the relationship between a patient and the related person. 01	01	CodeableConcept	author/assignedAuthor/assignedPerson/ext:personalRelationship	The common pattern Personal Relationship SHALL be applied.
				author/assignedAuthor/assignedPerson/ext:personalRelationship/ext:code	ext:code/originalText or ext:code/@displayName SHALL be included.
					Related Person Relationship Type (extensible)

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Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
RelatedPerson > name	A name associated with the person.	0*	Base HumanName	author/assignedAuthor/assignedPerson/ name	The model Base HumanName is not applied to name.
					Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.
RelatedPerson > telecom	A contact detail for the person, e.g. a telephone number or an email address.	0*	ContactPoint	author/assignedAuthor/telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
RelatedPerson > gender	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	01	code	author/assignedAuthor/assignedPerson/ext:administrativeGenderCode	AdministrativeGender (required) ¹
RelatedPerson > birthDate	The date on which the related person was born.	01	<u>date</u>	author/assignedAuthor/assignedPerson/ext:birthTime	
RelatedPerson > address	Address where the related person can be contacted or visited.	0*	<u>Address</u>	author/assignedAuthor/addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
RelatedPerson > period	The period of time that this relationship is considered to be valid. If there are no dates defined, then the interval is unknown.	01	<u>Period</u>	n/a	Not mapped separately, implicit in ext:personalRelation- ship/ext:effectiveTime.

¹This hyperlink resolves to the FHIR Release 4 description due to a technical defect in the FHIR STU3 description of this code system for OID-based systems.

10.8 author (PractitionerRole with Practitioner with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List), act (List of Prescription and or Dispense Records), and act (Provenance for the Generation of a List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from l	inking elements			Context: Comes from linking elements	
PractitionerRole	A specific set of Roles/Locations/specialties/services that a	Cardinality	<u>PractitionerRole</u>	author	
	practitioner may perform at an organization for a period of time.	comes from link-		author/templateId	The use of templateld signals the imposition of a set of template-
		ing ele- ment		author/templateId/@root="1.2.36.1.2001.1001.102.101.100006"	defined constraints.
		mene		author/assignedAuthor	
				author/assignedAuthor/ id	id/@root SHALL be present and it SHALL be a UUID or an OID.
PractitionerRole > identifier	Business identifiers for practitioner in a role.	0*	<u>Identifier</u>	author/assignedAuthor/assignedPerson/ ext:asEntityIdentifier	In CDA the identifier for both PractitionerRole and Practitioner for an author participation are included in assignedPerson/ext:asEntity-Identifier. When sending to the My Health Record, an HPI-I is expected. The cardinality of ext:asEntityIdentifier SHALL be interpreted as 1*. The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
PractitionerRole > active	Whether this practitioner's record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
PractitionerRole > period	The period during which the person is authorized to act as a practitioner in these role(s) for the organization.	01	Period	n/a	This logical element has no mapping to CDA.
PractitionerRole > practitioner	Practitioner that is able to provide the defined services for the organation.	11	Reference(Practition- er with Mandatory Identifier)	author/assignedAuthor/assignedPerson	assignedPerson SHALL conform to the template defined in assigned- Person (Practitioner with Mandatory Identifier).
PractitionerRole > organization	The organization where the Practitioner performs the roles associated.	01	Reference(Base Organization)	author/assignedAuthor/representedOrganization	representedOrganization SHALL conform to the template defined in representedOrganization (Base Organization).

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
PractitionerRole > code	Roles which this practitioner is authorized to perform for the organization.	0*	CodeableConcept	author/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 01.
					A code equivalent to the provider's professional role, e.g. 159011008 Community pharmacist is expected.
					code/originalText or code/@displayName SHALL be included.
					Australian and New Zealand Standard Classification of Occupations (preferred) or Practitioner Role (preferred) ¹
PractitionerRole > specialty	Specific specialty of the practitioner.	0*	<u>CodeableConcept</u>	n/a	This logical element has no mapping to CDA.
PractitionerRole > location	The location(s) at which this practitioner provides care.	0*	Reference(Location)	n/a	This logical element has no mapping to CDA.
PractitionerRole > healthcareSer- vice	The list of healthcare services that this worker provides for this role's Organization/Location(s).	0*	Reference(Health- careService)	n/a	Not currently mapped to CDA. See Known issues.
PractitionerRole > telecom	Contact details that are specific to the role/location/service.	0*	ContactPoint	author/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: ContactPoint.
PractitionerRole > availableTime	A collection of times that the Service Site is available.	0*	<u>BackboneElement</u>	n/a	This logical element has no mapping to CDA.
PractitionerRole > notAvailable	The HealthcareService is not available during this period of time due to the provided reason.	0*	<u>BackboneElement</u>	n/a	This logical element has no mapping to CDA.
PractitionerRole > availabilityExceptions	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.	01	string	n/a	This logical element has no mapping to CDA.

¹Note: The source representation of this terminology binding on code in PractitionerRole with Practitioner with Mandatory Identifier [DH2020k] is as an optional slice on the <u>coding</u> part of the code element. In the representation of the model presented in this specification it is normalised as a set of preferred bindings.

10.9 author (Device with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List), act (List of Prescription and or Dispense Records), and act (Provenance for the Generation of a List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from	n linking elements			Context: Comes from linking elements	
Device	This resource identifies an instance or a type of a manufac-	Cardinal-	<u>Device</u>	author	
	tured item that is used in the provision of healthcare without being substantially changed through that activity. The device	ity comes		author/templateId	The use of templateld signals the imposition of a set of
	may be a medical or non-medical device.	from linking		author/templateId/@root="1.2.36.1.2001.1001.102.101.100001"	template-defined constraints.
		element		author/assignedAuthor	
				author/assignedAuthor/id	Optional CDA element.
					id/@root SHALL be present and it SHALL be a UUID or an OID.
				author/assignedAuthor/assignedAuthoringDevice	
Device > identifier	An identifier for this patient.	1*	<u>Identifier</u>	author/assignedAuthor/assignedAuthoringDevice/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied.
					Recommended mappings for the complex data type to CDA (R2): Identifier.
Device > udi	Unique device identifier (UDI) assigned to device label or package.	01	<u>BackboneElement</u>	n/a	Not currently mapped to CDA. See Known issues.
Device > status	Status of the Device availability.	01	<u>code</u>	n/a	Not currently mapped to CDA. See Known issues.
Device > type	Code or identifier to identify a kind of device.	01	CodeableConcept	author/assignedAuthor/code	FHIR Device Typest (extensible)
Device > lotNumber	Lot number assigned by the manufacturer.	01	string	n/a	This logical element has no mapping to CDA.
Device > manufacturer	A name of the manufacturer.	01	string	n/a	Not mapped directly for this participant; may be included as part of assignedAuthor/assignedAuthoringDevice/manufacturerModelName.
Device > manufactureDate	The date and time when the device was manufactured.	01	<u>dateTime</u>	n/a	This logical element has no mapping to CDA.
Device > expirationDate	The date and time beyond which this device is no longer valid or should not be used (if applicable).	01	<u>dateTime</u>	author/assignedAuthor/assignedAuthoringDevice/asMaintainedEntity/ effectiveTime/@high	

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Device > model	The 'model' is an identifier assigned by the manufacturer to identify the product by its type. This number is shared by the all devices sold as the same type.	01	string	author/assignedAuthor/assignedAuthoringDevice/manufacturerModelName	
Device > version	The version of the device, if the device has multiple releases under the same model, or if the device is software or carries firmware.	01	string	author/assignedAuthor/assignedAuthoringDevice/softwareName	
Device > patient	Patient information, If the device is affixed to a person.	01	Reference(Patient as Base Patient)	n/a	Not mapped directly for this participant; this is implicit in recordTarget/patientRole/patient.
Device > owner	An organization that is responsible for the provision and ongoing maintenance of the device.	01	Reference(Organization as Base Organization)	author/assignedAuthor/assignedAuthoringDevice/asMaintainedEntity/maintainingPerson/ext:asEmployment/ext:employerOrganization	
Device > contact	Contact details for an organization or a particular human that is responsible for the device.	0*	ContactPoint	author/assignedAuthor/assignedAuthoringDevice/asMaintainedEntity/maintainingPerson/ext:asEmployment/ext:employerOrganization/asOrganizationPartOf/wholeOrganization/telecom	Recommended mappings for the complex data type to CDA (R2): ContactPoint.
Device > location	The place where the device can be found.	01	Reference(Location)	author/assignedAuthor/addr	
Device > url	A network address on which the device may be contacted directly.	01	<u>uri</u>	author/assignedAuthor/telecom	
Device > note	Descriptive information, usage information or implantation information that is not captured in an existing element.	0*	Annotation	n/a	This logical element has no mapping to CDA.
Device > safety	Provides additional safety characteristics about a medical device. For example devices containing latex.	0*	CodeableConcept	n/a	Not currently mapped to CDA. See Known issues.

10.10 participant (author Organization with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List), act (List of Prescription and or Dispense Records), and act (Provenance for the Generation of a List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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	Cardinality	<u>Organization</u>	participant[aut]	Organization SHALL have at least:
	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.	from link- ing ele- ment		participant[aut]/@typeCode="AUT"	identifier (participant[aut]/participantRole/scopingEntity/ext:asEntityIdentifier), or name (participant[aut]/participantRole/scopingEntity/ext:name)
				participant[aut]/templateId	The use of templated signals the imposition of a set of template-defined constraints.
				participant[aut]/templateId/@root="1.2.36.1.2001.1001.102.101.100088"	
				participant[aut]/participantRole	If participantRole/@classCode is present, it SHALL be "ASSIGNED".
				participant[aut]/participantRole/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
				participant[aut]/participantRole/scopingEntity	
				participant[aut]/participantRole/scopingEntity/@classCode="ORG"	
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	Identifier	participant[aut]/participantRole/scopingEntity/ext:asEntityIdentifier	When sending to the My Health Record, an HPI-O is expected. The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	boolean	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	participant[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 01. code/originalText or code/@displayName SHALL be included. OrganizationType (example)
Organization > name	A name associated with the organization.	01	string	participant[aut]/participantRole/scopingEntity/ext:name[org_name]	In CDA name and alias are represented by scopingEntity/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	participant[aut]/participantRole/scopingEntity/ext:name[alias]	In CDA name and alias are represented by scopingEntity/name.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	participant[aut]/participantRole/ telecom	telecom/@use Organization Telecom Use HL7 V3 (required) ¹ .
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	Address	participant[aut]/participantRole/addr	addr/@use Organization Address Use HL7 V3 (required) ² .
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms	01	Reference(Base	participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf	Organization partOf SHALL have at least:
	a part.		Organization)	participant[aut]/participantRole/scopingEntity/ ext:asOrganizationPartOf/ext:wholeEntity	 an identifier (ext:asOrganizationPartOf/ext:wholeEntity/ext:asEntityIdentifier), or
					a name (ext:asOrganizationPartOf/ext:wholeEntity/ext:name)
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:id	id/@root SHALL be present and it SHALL be a UUID or an OID.
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:code	In this template the cardinality of ext:wholeEntity/ext:code SHALL be interpreted as 01.
					ext:code/originalText or ext:code/displayName SHALL be included.
					OrganizationType (example)
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:name	In this template the cardinality of ext:wholeEntity/ext:name SHALL be interpreted as 0*.
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:telecom	In this template the cardinality of ext:whole Entity/ext:telecom $\bf SHALL$ be interpreted as 0*.
					ext:telecom/@use Organization Telecom Use HL7 V3 (required) ³ .
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:addr	In this template the cardinality of ext:wholeEntity/ext:addr SHALL be interpreted as 0*.
					ext:addr/@use Organization Address Use HL7 V3 (required) ⁴ .
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
				participant[aut]/participantRole/scopingEntity/ext:asOrganizationPartOf/ext:wholeEntity/ext:asEntityIdentifier	In this template the cardinality of ext:wholeEntity/ext:asEntityIdentifier SHALL be interpreted as 0*.
					The common pattern Entity Identifier SHALL be applied.
					Recommended mappings for this logical type to CDA (R2) are available: Identifier.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA Header Data Element	CDA Header Data Elements			Context: /ClinicalDocument/	
Organization > contact	Contact for the organization for a certain purpose.	0*	<u>BackboneElement</u>	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

¹This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

³This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

⁴This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

10.11 custodian (Organization with Mandatory Identifier)

This template is referenced by ClinicalDocument (Prescription and or Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from	linking elements			Context: /ClinicalDocument/	
Organization	A formally or informally recognized grouping of people or	Cardinal-	Organization	custodian	
	organizations formed for the purpose of achieving some form of collective action. Includes companies, institutions,	ity comes		custodian/ templateId	The use of templateId signals the imposition of a set of
	corporations, departments, community groups, healthcare practice groups, etc.	from linking		custodian/templateId/@root="1.2.36.1.2001.1001.102.101.100002"	template-defined constraints.
	practice groups, etc.	element		custodian/assignedCustodian	
				custodian/assignedCustodian/representedCustodianOrganization	
				custodian/assignedCustodian/representedCustodianOrganization/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	1*	<u>Identifier</u>	custodian/assignedCustodian/ representedCustodianOrganization/ext:asEntityIdentifier	When sending to the My Health Record, an HPI-O is expected.
					The common pattern Entity Identifier SHALL be applied.
					Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	n/a	This logical element has no mapping to CDA.
Organization > name	A name associated with the organization.	01	string	custodian/assignedCustodian/representedCustodianOrganization/name	
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	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
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	custodian/assignedCustodian/representedCustodianOrganization/ telecom	In CDA the maximum occurrences of representedCustodian-Organization/telecom is 1. Although the model indicates that telecom is 0*, in a CDA implementation this is limited to 01. telecom/@use Organization Telecom Use HL7 V3 (required) ¹ . Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	Address	custodian/assignedCustodian/representedCustodianOrganization/ addr	addr/@use Organization Address Use HL7 V3 (required) ² . In CDA the maximum occurrences of representedCustodian-Organization/addr is 1. Although the model indicates that address is 0*, in a CDA implementation this is limited to 01. Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms a part.	01	Reference(Base Organization)	n/a	This logical element has no mapping to CDA.
Organization > contact	Contact for the organization for a certain purpose.	0*	BackboneElement	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

¹This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

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11 Entity CDA templates

This chapter contains the entity templates referenced by a participation template in 10 Participation CDA templates.

11.1 providerOrganization (Base Organization)

This template is referenced by recordTarget (Patient with Mandatory Identifier), and ???.

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
CDA Header Data Elements				Context: /ClinicalDocument/recordTarget/patientRole/	
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.	Cardinal- ity comes from linking element	Organization	providerOrganization	Organization SHALL have at least: • identifier (providerOrganization/ext:asEntityIdentifier), or • name (providerOrganization/name)
				providerOrganization/templateId	The use of templateld signals the imposition of a set of
				providerOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100034"	template-defined constraints.
				providerOrganization/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	<u>Identifier</u>	providerOrganization/ ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	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	
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	providerOrganization/ 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 01. standardIndustryClassCode/originalText or standardIndustry-ClassCode/@displayName SHALL be included.	
					OrganizationType (example)	
Organization > name	A name associated with the organization.	01	string	providerOrganization/name[org_name]	In CDA name and alias are represented by providerOrganization/name.	
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	providerOrganization/name[alias]	In CDA name and alias are represented by providerOrganization/name.	
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	providerOrganization/ telecom	telecom/@use <u>Organization Telecom Use HL7 V3</u> (<u>required</u>) ¹ . Recommended mappings for this logical type to CDA (R2) are available: <u>ContactPoint</u> .	
Organization > address	An address for the organization.	0*	<u>Address</u>	providerOrganization/ addr	addr/@use Organization Address Use HL7 V3 (required) ² .	
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.	
Organization > partOf	The organization of which this organization forms a part.	01	Reference(Base Or-	providerOrganization/asOrganizationPartOf	wholeOrganization SHALL conform to the template defined	
			ganization)	providerOrganization/asOrganizationPartOf/wholeOrganization	in wholeOrganization (Base Organization).	
CDA Header Data Elements	CDA Header Data Elements			Context: /ClinicalDocument/		
Organization > contact	Contact for the organization for a certain purpose.	0*	BackboneElement	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).	

This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

11.2 representedOrganization (Base Organization)

This template is referenced by author (PractitionerRole with Practitioner with Mandatory Identifier), and ???.

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes fr	om 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.	Cardinal- ity comes from link- ing ele- ment	Organization	representedOrganization	Organization SHALL have at least: • name (representedOrganization/name), or • identifier (representedOrganization/ext:asEntityIdentifier)	
				representedOrganization/templateId	The use of templateId signals the imposition of a set of tem-
				representedOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100039"	plate-defined constraints.
				representedOrganization/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	<u>Identifier</u>	representedOrganization/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	represented Organization / standard Industry Class Code	In CDA the maximum occurrences of representedOrganization/standardIndustryClassCode is 1. Although the model indicates that code is 0*, in a CDA implementation this is limited to 01. standardIndustryClassCode/originalText or standardIndustryClassCode/@displayName SHALL be included. OrganizationType (example)
Organization > name	A name associated with the organization.	01	string	representedOrganization/name[org_name]	In CDA name and alias are represented by representedOrganization/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	representedOrganization/name[alias]	In CDA name and alias are represented by representedOrganization/name.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	representedOrganization/telecom	telecom/@use Organization Telecom Use HL7 V3 (required).
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	Address	representedOrganization/addr	addr/@use Organization Address Use HL7 V3 (required) ¹ .
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms a part.	01	Reference(Base Or-	representedOrganization/asOrganizationPartOf	wholeOrganization SHALL conform to the template defined
			ganization)	representedOrganization/asOrganizationPartOf/wholeOrganization	in wholeOrganization (Base Organization).
CDA Header Data Elements				Context: /ClinicalDocument/	
Organization > contact	Contact for the organization for a certain purpose.	0*	BackboneElement	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

¹This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

11.3 assignedPerson (Practitioner with Mandatory Identifier)

This template is referenced by author (PractitionerRole with Practitioner with Mandatory Identifier).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes fro	m linking elements			Context: Comes from linking elements	
Practitioner	A person who is directly or indirectly involved in the provi-	Cardinal-	<u>Practitioner</u>	assignedPerson	
	sioning of healthcare.	ity comes		assignedPerson/templateId	The use of templateId signals the imposition of a set of
		from linking element		assignedPerson/templateId/@root="1.2.36.1.2001.1001.102.101.100040"	template-defined constraints.
Practitioner > identifier	An identifier that applies to this person in this role.	1*	Identifier	assignedPerson/ext:asEntityIdentifier	When sending to the My Health Record, an HPI-I is expected. The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Practitioner > active	Whether this practitioner's record is in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Practitioner > name	The name(s) associated with the practitioner.	0*	Base HumanName	assignedPerson/ name	The model Base HumanName is not applied to name. Recommended mappings for this logical type to CDA (R2) are available: Base HumanName.
Practitioner > telecom	A contact detail for the practitioner, e.g. a telephone number or an email address.	0*	ContactPoint	telecom	Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Practitioner > address	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*	Address	addr	Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Practitioner > gender	Administrative Gender - the gender that the person is considered to have for administration and record keeping purposes.	01	<u>code</u>	n/a	This logical element has no mapping to CDA.
Practitioner > birthDate	The date of birth for the practitioner.	01	<u>date</u>	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
Practitioner > qualification	Qualifications obtained by training and certification.	0*	BackboneElement	See: instantiation choices	It is possible that the qualification may be able to be captured as a complex structure or as a text list. instantiation choices: If the qualification or list of qualifications is the result of capturing a text field then qualification is expected to be instantiated as assignedPerson/ext:asQualifications/@classCode="QUAL". The common pattern Qualification SHALL be applied. If more information can be captured than a narrative list then qualification is expected to be instantiated as ext:coverage2[prac_qual] and SHALL conform to the template defined in ext:coverage2 (Practitioner qualification): • qualification for a Practitioner SHALL be instantiated in the same section e.g. qualification for an AllergyIntolerance recorder is expected to be instantiated as Clinical-Document/component/structuredBody/component[allergy]/section/ext:coverage2[prac_qual], or • qualification for a CDA Header Practitioner (e.g. Clinical-Document author) SHALL be instantiated as Clinical-Document for a CDA Header Practitioner (e.g. Clinical-Document author) SHALL be instantiated as Clinical-Document/component/structuredBody/component[admin_obs]/section/ext:coverage2[prac_qual]
Practitioner > communication	A language the practitioner is able to use in patient communication.	0*	CodeableConcept	assignedPerson/ext:languageCommunication	The common pattern Language Communication SHALL be applied.

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11.4 wholeOrganization (Base Organization)

This template is referenced by participant (general Practitioner Base Organization), provider Organization (Base Organization), represented Organization (Base Organization), scoping Organization (Base Organization), and whole Organization (Base Organization).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes from li	nking 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 link- ing ele- ment	Organization	wholeOrganization	Organization SHALL have at least: name (wholeOrganization/name), or identifier (wholeOrganization/ext:asEntityIdentifier)
				wholeOrganization/templateId	The use of templateld signals the imposition of a set of template-
				wholeOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100087"	defined constraints.
				wholeOrganization/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	Identifier	wholeOrganization/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	wholeOrganization/standardIndustryClassCode	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 01. standardIndustryClassCode/originalText or standardIndustryClassCode/@displayName SHALL be included. OrganizationType (example)
Organization > name	A name associated with the organization.	01	string	wholeOrganization/name[org_name]	In CDA name and alias are represented by wholeOrganization/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	wholeOrganization/name[alias]	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 > telecom	A contact detail for the organization.	0*	ContactPoint	wholeOrganization/telecom	telecom/@use Organization Telecom Use HL7 V3 (required) ¹ .
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	<u>Address</u>	wholeOrganization/addr	addr/@use Organization Address Use HL7 V3 (required) ² .
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms	01	Reference(Base Or-	wholeOrganization/asOrganizationPartOf	wholeOrganization/asOrganizationPartOf/wholeOrganization SHALL
	a part.	ganization)	wholeOrganization/asOrganizationPartOf/wholeOrganization	conform to the template defined in wholeOrganization (Base Organization).	
CDA Header Data Elements				Context: /ClinicalDocument/	
Organization > contact	Contact for the organization for a certain purpose.	0*	<u>BackboneElement</u>	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

¹This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

11.5 scopingOrganization (Base Organization)

This template is referenced by participant (Patient contact).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Conformance level comes fro	om linking elements			Context: Comes from linking elements	
organizat of collect ations, do	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.	Cardinal- ity comes from link- ing ele- ment	Organization	scopingOrganization	Organization SHALL have at least: • name (scopingOrganization/name), or • identifier (scopingOrganization/ext:asEntityIdentifier)
				scopingOrganization/templateId	The use of templateld signals the imposition of a set of tem-
				scopingOrganization/templateId/@root="1.2.36.1.2001.1001.102.101.100089"	plate-defined constraints.
				scopingOrganization/id	id/@root SHALL be present and it SHALL be a UUID or an OID.
Organization > identifier	Identifier for the organization that is used to identify the organization across multiple disparate systems.	0*	<u>Identifier</u>	scopingOrganization/ext:asEntityIdentifier	The common pattern Entity Identifier SHALL be applied. Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Organization > active	Whether the organization's record is still in active use.	01	<u>boolean</u>	n/a	This logical element has no mapping to CDA.
Organization > type	The kind(s) of organization that this is.	0*	CodeableConcept	scopingOrganization/standardIndustryClassCode	In CDA the maximum occurrences of scopingOrganization/standardIndustryClassCode is 1. Although the model indicates that code is 0*, in a CDA implementation this is limited to 01. standardIndustryClassCode/originalText or standardIndustry-ClassCode/@displayName SHALL be included. OrganizationType (example)
Organization > name	A name associated with the organization.	01	string	scopingOrganization/name[org_name]	In CDA name and alias are represented by scopingOrganization/name.
Organization > alias	A list of alternate names that the organization is known as, or was known as in the past.	0*	string	scopingOrganization/name[alias]	In CDA name and alias are represented by scopingOrganization/name.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Organization > telecom	A contact detail for the organization.	0*	ContactPoint	scopingOrganization/ telecom	telecom/@use Organization Telecom Use HL7 V3 (required) ¹ .
					Recommended mappings for this logical type to CDA (R2) are available: ContactPoint.
Organization > address	An address for the organization.	0*	Address	scopingOrganization/ addr	addr/@use Organization Address Use HL7 V3 (required) ² .
					Recommended mappings for this logical type to CDA (R2) are available: Address AU Base Address.
Organization > partOf	The organization of which this organization forms a part.	01	Reference(Base Or-	scopingOrganization/asOrganizationPartOf	wholeOrganization SHALL conform to the template defined
			ganization)	scopingOrganization/asOrganizationPartOf/wholeOrganization	in wholeOrganization (Base Organization).
CDA Header Data Elements				Context: /ClinicalDocument/	
Organization > contact	Contact for the organization for a certain purpose.	0*	<u>BackboneElement</u>	participant[org_contact]	participant[org_contact] SHALL conform to the template defined in participant (Organization contact).

¹This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

²This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

12 Act CDA templates

This chapter contains the entry-level templates, called acts (machine readable structured content), referenced by other templates such as those in 9 Section CDA templates.

12.1 act (List of Prescription and or Dispense Records)

This template is referenced by section (Dispense List), section (Prescription List), and section (Prescription and Dispense List).

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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	
	A set of information summarized from a list of other resources.	11	<u>List</u>	act	If this list is a Dispense List (code/@code="100.32014") then only entries of type MedicationDispense (entryRelationship[item]/supply) SHALL be allowed. If this list is a Prescription List (code/@code="57828-6") then only entries of type MedicationRequest (entryRelationship[item]/substanceAdministration) SHALL be allowed.
				act/@classCode="ACT"	
				act/@moodCode="EVN"	
				act/templateId	The use of templateId signals the imposition of a set of template-
				act/templateId/@root="1.2.36.1.2001.1001.102.101.100076"	defined constraints.
				act/ id	
List > author-role	Identifies the practitioner role responsible for the information in the resource (aka author), not necessarily who typed it in.	01	Reference(Practition- erRole with Mandat- ory Identifier)	act/author	author SHALL conform to the template defined in author (PractitionerRole with Practitioner with Mandatory Identifier).
List > author-related-person	The entity (related person) 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.	01	Reference(Related- Person with Mandat- ory Identifier)	act/author	author SHALL conform to the template defined in author (Related-Person with Mandatory Identifier).

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
List > status	Indicates the current state of this list.	11	code	act/statusCode	
				act/statusCode/@code="active"	The logical status of "current" is mapped to "active" in CDA.
List > title	A label for the list assigned by the author.	01	string	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 > code	This code defines the purpose of the list - why it was created.	11	CodeableConcept	act/code	code/originalText or code/@displayName SHALL be included. Prescription and Dispense List Type (required)
List > subject	The common subject (or patient) of the resources that are in the list, if there is one.	11	Reference(Patient with Mandatory Identifier)	n/a	Not mapped directly for this model; this is implicit in patientRole.
List > date	The date that the list was prepared.	11	<u>dateTime</u>	act/effectiveTime	This effectiveTime will hold the same value as ClinicalDocument/author/time.
List > source	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.	01	Reference(Related- Person with Mandat- ory Identifier Pa- tient with Mandatory Identifier Practition- er with Mandatory Identifier Device with Mandatory Identifier)	act/author	If source is not instantiated, the data is considered to be included via induction in ClinicalDocument/author. When the list is a prescription and dispense view it is expected that the source will be a Device (the My Health Record system). author SHALL conform to the template defined in author (Related-Person with Mandatory Identifier) or author (Patient with Mandatory Identifier) or author (Device with Mandatory Identifier).

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*	Annotation	act/entryRelationship[note]	
				act/entryRelationship[note]/@typeCode="COMP"	
				act/entryRelationship[note]/act	
				act/entryRelationship[note]/act/@classCode="INFRM"	
				act/entryRelationship[note]/act/@moodCode="EVN"	
				act/entryRelationship[note]/act/ code	
				act/entryRelationship[note]/act/code/@code="103.16044"	
				act/entryRelationship[note]/act/code/@codeSystem="1.2.36.1.2001.1001.101"	NCTIS Data Components
				act/entryRelationship[note]/act/code/@displayName	displayName SHOULD be "Additional Comments".
				act/entryRelationship[note]/act/ author	If this author is not instantiated, the data is considered to be included via induction in ClinicalDocument/author.
					In CDA the cardinality of entryRelationship[note]/act/author is 0*. In this template the cardinality of author SHALL be limited to 01.
				act/entryRelationship[note]/act/effectiveTime	If this effectiveTime is not instantiated, the data is considered to be included via induction in ClinicalDocument/author/time.
					In CDA the cardinality of entryRelationship[note]/act/effective- Time is 0*. In this template the cardinality of effectiveTime SHALL be limited to 01.
				act/entryRelationship[note]/act/ text	text/@xsi:type SHALL be "ST".
List > entry	List of medicine type entries	1*	<u>BackboneElement</u>	act/entryRelationship[item]	
				act/entryRelationship[item]/@typeCode="COMP"	
List > entry > item	A reference to the actual resource from which data	11	Reference(Medica-	act/entryRelationship[item]	instantiation choices:
	was derived.		tionStatement MedicationRequest MedicationDis-	See: instantiation choices	If entry is a <u>MedicationStatement</u> then it SHALL be instantiated as entryRelationship[item]/substanceAdministration.
			pense)		If entry is a <u>MedicationRequest</u> then it SHALL be instantiated as entryRelationship[item]/substanceAdministration.
					If entry is a <u>MedicationDispense</u> then it SHALL be instantiated as entryRelationship[item]/supply.
List > emptyReason	If the list is empty, why the list is empty.	01	CodeableConcept	act/@nullFlavor	Empty Reason HL7 v3 NullFlavor (required)
					The nullFlavor attribute is used to represent the reason a list is empty of clinical content.

12.2 act (Provenance for the Generation of a List)

This template is referenced by section (Dispense List), section (Prescription List), and section (Prescription and Dispense List).

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	
Provenance	A set of information summarized from a list of other resources.	Cardinality comes from linking ele- ments	<u>Provenance</u>	act	When the created list is a prescription and dispense view it is expected that only one instance of agent (the assembling device e.g. My Health Record system) is provided. One and only one agent acting as author (act/author) SHALL be provided.
				act/@classCode="CACT"	
				act/@moodCode="EVN"	
				act/templateId	The use of templated signals the imposition of a set of template-
				act/templateId/@root="TBD"	defined constraints.
Provenance > target	The Reference(s) that were generated or updated by the	1*	Reference(Any)	act/entryRelationship[target]	
	activity described in this resource. A provenance can point to more than one target if multiple resources were created/up-			act/entryRelationship[target]/@typeCode="SUBJ"	
	dated by the same activity.			act/entryRelationship[target]/act	
				act/entryRelationship[target]/act@classCode="ACT"	
				act/entryRelationship[target]/act@moodCode="EVN"	
				act/entryRelationship[target]/act/id	This id SHALL hold the same value as one List (act/id).
Provenance > period	The period during which the activity occurred.	01	<u>Period</u>	act/effectiveTime	If a list has been generated from a time-based query or time-based filter it is expected that filtering dates are captured in this provenance period with the earliest filtering date provided in the period start (effectiveTime/low/@value) and the latest filtering date provided in the period end (effectiveTime/low/@high). effectiveTime/@xsi:type SHALL be "IVL_TS".
Provenance > recorded	The instant of time at which the activity was recorded.	11	instant	act/entryRelationship[target]/act/effectiveTime	
Provenance > policy	Policy or plan the activity was defined by. Typically, a single activity may have multiple applicable policy documents, such as patient consent, guarantor funding, etc.	0*	<u>uri</u>	n/a	Not currently mapped to CDA. See Known issues.

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Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Provenance > activity	An activity is something that occurs over a period of time and	01	Coding	act/code	
	acts upon or with entities; it may include consuming, processing, transforming, modifying, relocating, using, or gener-			act/code/@code="CREATE"	originalText SHOULD be "generate list".
	ating entities.			act/code/@codeSystem="2.16.840.1.113883.5.1123"	v3 Code System DataOperation
				act/code/@displayName	displayName SHOULD be "create".
Provenance > agent (Authoring Entity)	An actor taking a role in an activity for which it can be assigned some degree of responsibility for the activity taking place.	01	BackboneElement	act/entryRelationship[target]/act	An agent (Authoring Entity) SHALL be instantiated as an: • author conforming to one of the templates defined in: author (PractitionerRole with Practitioner with Mandatory Identifier) or author (Patient with Mandatory Identifier) or author (RelatedPerson with Mandatory Identifier) or participant (author Organization with Mandatory Identifier), or • participant/@typeCode="AUT" conforming to participant (author Organization with Mandatory Identifier), or
Provenance > agent (Authoring Entity) > role	The function of the agent with respect to the activity. The security role enabling the agent with respect to the activity.	11	CodeableConcept	n/a	Not mapped separately; implicit in author.
Provenance > agent (Authoring Entity) > who[x]	The individual, device or organization that participated in the event.	11	Reference(Base Practitioner Base Related- Person Base Patient Base Organization)	tbd	
Provenance > agent (Authoring Entity) > onBehalfOf[x]	The individual, device, or organization for whom the change was made.	01	Reference(Base RelatedPerson Base Device Base Organization)	tbd	
Provenance > agent (Assembling Device)	An actor taking a role in an activity for which it can be assigned some degree of responsibility for the activity taking place.	01	BackboneElement	act/entryRelationship[target]/act/author	author SHALL conform to the template defined in author (Device with Mandatory Identifier).
Provenance > agent (Assembling Device) > role	The function of the agent with respect to the activity. The security role enabling the agent with respect to the activity.	11	CodeableConcept	n/a	Not mapped separately; implicit in author.
Provenance > agent (Assembling Device) > who[x]	The individual, device or organization that participated in the event.	11	Reference(Base Device)	entryRelationship[target]/act/author/assignedAuthoringDevice	
Provenance > agent (Assembling Device) > onBehalfOf[x]	The individual, device, or organization for whom the change was made.	01	Reference(Base Re- latedPerson Base Device Base Organiz- ation)	tbd	

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Provenance > entity	An entity used in this activity.	0*	BackboneElement	tbd	When creating a list as a filtered view of an existing list (e.g. filtering to only current medicines), the source list can be identified
Provenance > entity > role	How the entity was used during the activity.	11	<u>code</u>		using this entity element with an entity role of 'source' and en-
Provenance > entity > what[x]	Identity of the Entity used. May be a logical or physical uri and maybe absolute or relative.	11	Reference(Any)		tity.whatReference pointing to that source list resource.
Provenance > entity > agent	The entity is attributed to an agent to express the agent's responsibility for that entity, possibly along with other agents. This description can be understood as shorthand for saying that the agent was responsible for the activity which generated the entity.	0*	see An actor taking a role in an activity for which it can be as- signed some degree of responsibility for the activity taking place.		

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12.3 ext:coverage2 (Practitioner qualification)

This template is referenced by participant (generalPractitioner Base Practitioner), ???, and assignedPerson (Practitioner with Mandatory Identifier), ???.

See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
CDA Header Data Elements				Context: Comes from linking elements	
Practitioner > qualification	Qualifications obtained by training and	Cardinality	<u>BackboneElement</u>	ext:coverage2[prac_qual]	
	certification.	comes from link-		ext:coverage2[prac_qual]/@typeCode="COVBY"	
		ing ele- ment		ext:coverage2[prac_qual]/templateId	The use of templateld signals the imposition of a set of
		lilelit		ext:coverage2[prac_qual]/templateId/@root="1.2.36.1.2001.1001.102.101.100038"	template-defined constraints.
				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"	
				ext:coverage2[prac_qual]/ext:entitlement/ext:participant[prac]/ext:participantRole/ext:id	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*	<u>Identifier</u>	ext:coverage2[prac_qual]/ext:entitlement/ext:id	Recommended mappings for this logical type to CDA (R2) are available: Identifier.
Practitioner > qualification > code	Coded representation of the qualification.	11	CodeableConcept	ext:coverage2[prac_qual]/ext:entitlement/ext:code	ext:code/originalText or ext:code/@displayName SHALL be included.
					v2 table 0360, Version 2.7 (example)
Practitioner > qualification > period	Period during which the qualification is valid.	01	<u>Period</u>	ext:coverage2[prac_qual]/ext:entitlement/ext:effectiveTime	

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Practitioner > qualification > issuer	Organization that regulates and issues the	01	Reference(Organiza-	ext:coverage2[prac_qual]/ext:entitlement/ext:participant[issuer]	
	qualification.			ext:coverage2[prac_qual]/ext:entitlement/ext:participant[issuer]/@typeCode="AUT"	
				ext:coverage2[prac_qual]/ext:entitlement/ext:participant[issuer]/ext:participantRole	
			ext:coverage2[prac_qual]/ext:entitlement/ext:participant[issuer]/ ext:participantRole/@classCode="COMPAR"		

13 Common patterns

This chapter contains conformance requirements on CDA schema elements. These conformance rules apply across multiple templates, forming 'common patterns'.

13.1 Entity Identifier

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

Common pattern	CDA schema element	CDA element description	CDA card	CDA constraints and comments		
Entity Identifier	ext:asEntityIdentifier	A number or code issued for the purpose of identifying a participant within a healthcare	Cardinality comes from linking element			
	ext:asEntityIdentifier/@classCode="IDENT"	context.	11			
	ext:asEntityIdentifier/ ext:id		11			
	ext:asEntityIdentifier/ext:id/@root		11	root SHALL be an OID and SHALL NOT be a UUID.		
ext:asEntityIdentifier/ext:id/@extension ext:asEntityIdentifier/ext:id/@assigningAuthorityName		01				
		01	A 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 is used for human-readable, not machine processing, purposes.			
				assigningAuthorityName SHOULD be instantiated.		
	ext:asEntityIdentifier/ext:code		01			
	ext:asEntityIdentifier/ext:assigningGeographicArea		01			
	ext:asEntityIdentifier/ext:assigningGeographicArea/@classCode="PLC"		11			
	ext:asEntityIdentifier/ext:assigningGeographicArea/ext:name				01	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 is used for human-readable, not machine processing, purposes.
				ext:name SHOULD be instantiated.		
				Healthcare Identifier Geographic Area (preferred)		
				This CDA schema element is expected to be populated with the display, e.g. "National Identifier".		

Example 13.1. Entity Identifier - Australian IHI

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

Example 13.2. Entity Identifier - Local Medical Record Number

```
<!-- Local Medical Record Number -->
<xs:asEntityIdentifier classCode="IDENT">
<xs:id root="1.2.36.1.2001.1005.29.8003621566684455" extension="542181" assigningAuthorityName="Croydon GP Centre" />
  <xs:code code="MR" codeSystem="2.16.840.1.113883.12.203" codeSystemName="Identifier Type (HL7)" />
</xs:asEntityIdentifier>
```

Example 13.3. Entity Identifier - Australian HPI-I

```
<!-- Australian HPI-I -->
<xs:asEntityIdentifier classCode="IDENT">
<xs:id assigningAuthorityName="HPI-I" root="1.2.36.1.2001.1003.0.8003610537409456"/>
<xs:assigningGeographicArea classCode="PLC">
 <xs:name>National Identifier</xs:name>
</xs:assigningGeographicArea>
</xs:asEntityIdentifier>
```

Example 13.4. Entity Identifier - Australian HPI-O

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

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13.2 Personal Relationship

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

Common pattern	CDA schema element	CDA element description	CDA card	CDA constraints and comments
Personal Relationship	cipant to		Cardinality comes from link- ing element	
	ext:personalRelationship/@classCode="PRS"	ticipant is a practitioner.	01	
	ext:personalRelationship/ ext:id		01	
	ext:personalRelationship/ext:code		11	
	ext:personalRelationship/ext:statusCode		01	v3 Code System RoleStatus (required)
	ext:personalRelationship/ext:effectiveTime		01	
	ext:personalRelationship/ext:asPersonalRelationship		11	
	ext:personalRelationship/ext:asPersonalRelationship/@classCode="PSN"		01	
	ext:personalRelationship/ext:asPersonalRelationship/@determinerCode="INSTANCE"		01	
	ext:personalRelationship/ext:asPersonalRelationship/id		11	This id SHALL hold the same value as patientRole/id.
	ext:personalRelationship/ext:asPersonalRelationship/administrativeGenderCode/@nullFlavor="NA"		11	Included for CDA conformance only.

Example 13.5. Personal Relationship - author related person

```
<!-- recordTarget (Patient) -->
<recordTarget>
  <patientRole>
     <!-- patient identifier-->
     <id extension="100543" root="2.16.840.1.113883.19.1.2.3.4"/>
  </patientRole>
</recordTarget>
<!-- author (RelatedPerson) -->
<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>
```

Example 13.6. Personal Relationship - performer related person

```
<!-- recordTarget (Patient) -->
<recordTarget>
   <patientRole>
     <!-- patient identifier-->
     <id extension="100543" root="2.16.840.1.113883.19.1.2.3.4"/>
  </patientRole>
</recordTarget>
<!-- participant performer (RelatedPerson) -->
<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" />
```

THIS SPECIFICATION IS UNTESTED AND IS NOT SUITABLE FOR IMPLEMENTATION.

13.3 Qualification

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

Common pattern	CDA schema element	CDA element description	CDA card	CDA constraints and comments
Qualification	ext:asQualifications	A list of professional certifications, and certificates recognising having passed a course.	Cardinality comes from linking element	
	ext:asQualifications/@classCode="QUAL"		11	
	ext:asQualifications/ext:code		11	Qualifications is a text field, so the text list is captured in ext:code/originalText.

Example 13.7. Qualification - Bachelor of Pharmacy

```
<!-- Qualification - Bachelor of Pharmacy -->
<ext:asQualifications classCode="QUAL">
<ext:code>
  <originalText>Bachelor of Pharmacy</originalText>
  </ext:code>
</ext:asQualifications>
```

Example 13.8. Qualification - List of qualifications

```
<!-- Qualification -->
<ext:asQualifications classCode="QUAL">
<ext:code>
<originalText>Doctor of Medicine, Fellowship of the Australian College of Rural and Remote Medicine (FACRRM)</originalText>
</ext:code>
</ext:asQualifications>
```

13.4 Ingredient

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

Common pattern	CDA schema element	CDA element description	CDA card	CDA constraints and comments
Ingredient	ext:asIngredient	An ingredient of the medicine item.	Cardinality comes from linking ele- ment	
	ext:asIngredient/@classCode="INGR"		11	
	ext:asIngredient/ ext:id		0*	
	ext:asIngredient/ext:ingredientManufacturedMaterial		01	The substance that is the ingredient. This may be another medication.
	ext:asIngredient/ext:ingredientManufacturedMaterial/@classCode="MMAT"		11	
	ext:asIngredient/ext:ingredientManufacturedMaterial/@determinerCode="KIND"		11	
	ext:asIngredient/ext:ingredientManufacturedMaterial/ext:id		0*	
	ext:asIngredient/ext:ingredientManufacturedMaterial/ext:code		01	Code for the substance.
	ext:asIngredient/ext:ingredientManufacturedMaterial/ext:desc		01	Name and/or description of the substance.
	ext:asIngredient/ext:ingredientManufacturedMaterial/ext:expirationTime		01	ext:expirationTime is discouraged from use.
	ext:asIngredient/ext:ingredientManufacturedMaterial/ext:quantity		01	ext:quantity SHOULD NOT be instantiated as the determinerCode is fixed to "KIND".
	ext:asIngredient/ext:quantity		01	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.

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Example 13.9. Ingredient - Medication active ingredient with amount

```
<!--Medication-->
<consumable>
 <manufacturedProduct>
 <manufacturedMaterial>
  <!--Medication.code-->
   <code code="22048011000036105"</pre>
   codeSystem="2.16.840.1.113883.6.96"
   codeSystemName="SNOMED CT"
   displayName="amoxicillin 250 mg chewable tablet">
   <!--Medication.ingredient-->
   <ext:asIngredient classCode="INGR">
   <ext:ingredientManufacturedMaterial classCode="MMAT" determinerCode="KIND">
    <!--Medication.ingredient.item[x]-->
    <ext:code code="21415011000036100"
     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>
```

13.5 Language Communication

See Legend - CDA mapping table for CDA schema elements for an explanation of mapping table presentation.

CDA mapping

Common pattern	CDA schema element	CDA element description	CDA card	CDA constraints and comments
Language Communication	ext:languageCommunication	A language communication capability of an individual.	Cardinality comes from linking ele- ment	
	ext:languageCommunication/languageCode		11	This CDA schema element is of type CodedSimpleValue (CS).
				All Languages (required)
				Common Languages in Australia (extensible)
	ext:languageCommunication/modeCode		01	v3 Code System LanguageAbilityMode (preferred)
	ext:languageCommunication/proficiencyLevelCode		01	v3 Code System LanguageAbilityProficiency (preferred)
	ext:languageCommunication/preferenceInd		01	This CDA schema element is of type Boolean (BL).

Example 13.10. Language Communication - English is preferred

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

Example 13.11. Language Communication - Pitjantjatjara is preferred

```
<!-- Language Communication -->
<ext:languageCommunication>
<languageCode code="pjt"/>
</ext:languageCommunication>
```

Example 13.12. Language Communication - German is spoken

```
<!-- Language Communication -->
<ext:languageCommunication>
<languageCode code="de"/>
</ext:languageCommunication>
```

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

This informative appendix provides some guidance on how *FHIR Release 3 (STU)* [HL7FHIR3] complex data types referred to in the body of this specification can map to CDA (R2). The material provided are recommendations and do not represent conformance requirements.

A.1 Identifier

This informative appendix provides some guidance on how the complex data type <u>Identifier</u> can map to CDA (R2). In addition to material 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]*.

The mapping table below provides a set of preferred mappings to the InstanceIdentifier (II) data type [HL7V3] and the Entity Identifier (EntityIdentifier) type defined in the Australian Digital Health Agency CDA schema, and do not represent conformance requirements. See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Identifier	A technical identifier - identifies some entity uniquely and unambiguously.	Cardinal- ity comes from link- ing ele- ment	Element	See: instantiation choices	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 SHOULD NOT be instantiated. instantiation choices: 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 <entity identifier=""> for available attributes. The identifier element may be instantiated as id.</entity>
Identifier > use	The purpose of this identifier.	01	<u>code</u>	n/a	This logical element has no mapping to CDA.
Identifier > type	A coded type for the identifier that can be used to determine which identifier to use for a specific purpose.	01	CodeableConcept	//ext:asEntityIdentifier/ext:code	ext:code is only available if the identifier is instantiated as ext:asEntityIdentifier/@classCode="IDENT". ext:code/originalText or ext:code/@displayName SHALL be included. Identifier Type Codes (extensible)
Identifier > system	Establishes the namespace for the value - that is, a URL that describes a set values that are unique.	01	uri	See: instantiation choices	instantiation choices: If the identifier is for a If the identifier is for a Patient, Practitioner, PractitionerRole, Organization, RelatedPerson, or Device, then the identifier system is expected to be instantiated as ext:asEntity-Identifier/ext:id/@root. The identifier system may be instantiated as id/@root.
Identifier > value	The portion of the identifier typically relevant to the user and which is unique within the context of the system.	01	string	See: instantiation choices	instantiation choices: If the identifier is for a 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. The identifier value may be instantiated as id/@extension.

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Logical element	Logical element description	Logic- al card	Logical type	CDA schema element	CDA constraints and comments
Identifier > period	Time period during which identifier is/was valid for use.	01	<u>Period</u>	n/a	This logical element has no mapping to CDA.
Identifier > assigner	Organization that issued/manages the identifier.	01	Reference (Organization)	See: instantiation choices	instantiation choices: If the identifier is for a <u>Patient, Practitioner, PractitionerRole, Organization, RelatedPerson</u> , or <u>Device</u> , 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 - Patient identifiers

```
<!-- subject -->
<recordTarget>
   <!-- subject (Patient) -->
   <patientRole>
       <patient>
           <!-- 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/ihi/1.0 -->
                <ext:id assigningAuthorityName="IHI" root="1.2.36.1.2001.1003.0.8003600200002222" />
               <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=Croyden GP Centre,
               identifier.value=542181,
               identifier.system=urn:oid:1.2.36.1.2001.1005.29.8003621566684455 -->
             <ext:id root="1.2.36.1.2001.1005.29.8003621566684455" 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=Medciare Card Number -->
             <ext:id assigningAuthorityName="Medicare Card Number"
             root="1.2.36.1.5001.1.0.7" extension="1234567892"/>
             <ext:code code="MC" codeSystem="2.16.840.1.113883.12.203"</pre>
             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"</pre>
             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"</pre>
             root="2.16.840.1.113883.3.879.270098" extension="307111942H"/>
            <ext:code code="HC" codeSystem="2.16.840.1.113883.12.203"</pre>
             codeSystemName="Identifier Type (HL7)" displayName="Health Card Number"/>
            </ext:asEntityIdentifier>
       </patient>
   </patientRole>
</recordTarget>
```

Example A.2. PractitionerRole identifiers

```
<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"</pre>
               root="1.2.36.1.2001.1003.0.8003610537409456"/>
            <ext:assigningGeographicArea classCode="PLC">
               <ext:name>National Identifier</ext:name>
            </ext:assigningGeographicArea>
        </ext:asEntityIdentifier>
        <!-- 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",
```

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```
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.svstem=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>
```

Example A.3. Identifier - Organization identifier

```
<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"</pre>
                   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>
```

Example A.4. Identifier - ProcedureRequest identifier

```
<!--DiagnosticReport.basedOn-->
<inFulfillmentOf typeCode="FLFS">
```

Australian Digital Health Agency

```
<!--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 Base HumanName

This informative appendix provides some guidance on how the constrained form of complex data type <u>HumanName</u> as Base HumanName published by the Australian Digital Health Agency can map to CDA (R2).

The mapping table below provides a set of preferred mappings to the PersonName (PN) data type [HL7V3] for representing an Australian address and do not represent conformance requirements. See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
HumanName	A human's name with the ability to identify parts and usage.	Cardinality comes from linking ele- ment	Element	//name	name SHALL have at least text (name with full text representation) or family (name/family) or given (name/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.
HumanName > use	Identifies the purpose for this name.	01	<u>code</u>	//name/@use	Common Person Name Use (required) ¹
HumanName > text	A full text representation of the name.	01	string	//name	
HumanName > family	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.	01	string	//name/ family	
HumanName > given	Given name.	0*	string	//name/given	
HumanName > prefix	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*	string	//name/prefix	A prefix value can be populated as described in AS 4846 (2014) – Person and provider identification in healthcare [SA2014a], 4.4.2 Name Title.
HumanName > suffix	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*	string	//name/suffix	A suffix value can be populated as described in AS 4846 (2014) – Person and provider identification in healthcare [SA2014a], 4.5.3.2 Name Suffix.
HumanName > period	Indicates the period of time when this name was valid for the named person.	01	<u>Period</u>	//name/validTime	

¹ This value set differs from the value set bound to use in HumanName due to constraints on @use in the HL7 CDA Schema. The concept map NameUse (HL7 FHIR) to Common Person Name Use provides a mapping between the two value sets.

Example A.5. Base HumanName - name use, given names, family name

```
<!-- HumanName where use=official -->
<name use="C">
   <!-- HumanName.given -->
   <given>Adam</given>
   <!-- HumanName.given -->
   <given>A.</given>
   <!-- HumanName.family -->
   <family>Everyman</family>
```

Example A.6. Base HumanName - unstructured name

```
<!-- HumanName where use=official -->
<name use="C">
   <!-- HumanName.text -->
   Adam A. Everyman
</name>
```

Example A.7. Base HumanName - given name only

```
<!-- HumanName where use=usual -->
<name>
   <!-- HumanName.given -->
   <given>Damo</given>
</name>
```

Example A.8. Base HumanName - structured name with period

```
<!-- 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" />
```

THIS SPECIFICATION IS UNTESTED AND IS NOT SUITABLE FOR IMPLEMENTATION.

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A.3 Address

This informative appendix provides some guidance on how the complex data type Address can map to CDA (R2).

The mapping table below provides a set of preferred mappings to the PostalAddress (AD) data type [HL7V3] and do not represent conformance requirements. See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

CDA mapping

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Address	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 ele- ment	Element	//addr	
Address > use	The purpose of this address.	01	code	//addr/@use	addr/@use can carry more than one value by a space separated list of codes. Address Use HL7 v3 (required) ¹
Address > type	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	01	code	//addr/@use	addr/@use can carry more than one value by a space separated list of codes. Address Type HL7 v3 (required) ²
Address > text	A full text representation of the address.	01	string	//addr	The expectation is that this is free text.
Address > line	This component contains the house number, apartment number, street name, street direction, P.O. Box number, delivery hints, and similar address information.	0*	string	//addr/streetAddressLine	
Address > city	The name of the city, town, village or other community or delivery center.	01	string	//addr/ city	
Address > district	The name of the administrative area (county).	01	string	//addr/county	
Address > state	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).	01	string	//addr/state	
Address > postalCode	A postal code designating a region defined by the postal service.	01	string	//addr/ postalCode	
Address > country	Country - a nation as commonly understood or generally accepted.	01	string	//addr/country	Iso 3166 Part 1: 2 Letter Codes (preferred)
Address > period	Time period when address was/is in use.	01	<u>Period</u>	//addr/useablePeriod	

¹This value set differs from the value set bound to use in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

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²This value set differs from the value set bound to type in Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressType provides a mapping between the two value sets.

Examples

Example A.9. Address - structured work and postal address

```
<!-- Address where use=work and type=postal -->
<addr use="PST WP">
   <!--Address.text-->
   1050 W Wishard Blvd
   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>
```

Example A.10. Address - structured home and physical address

Example A.11. Address - temporary international address

```
<!-- 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">
       <le><low value="01012001" />
       <high value="01012012" />
   </useablePeriod>
</addr>
```

A.4 AU Base Address

This informative appendix provides some guidance on how the constrained form of complex data type Address as AU Base Address published by HL7 Australia can map to CDA (R2).

The mapping table below provides a set of preferred mappings to the PostalAddress (AD) data type [HL7V3] for representing an Australian address and do not represent conformance requirements. See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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 ele- ment	Element	//addr	addr SHALL have text or one or more line (addr/streetAddressLine).
Address > no-fixed-address	No fixed address indicator.	01	boolean	n/a	Not mapped directly; if 01 is "true", addr SHOULD be "NO FIXED ADDRESS" and addr/@use SHOULD be "PHYS".
Address > use	The purpose of this address.	01	code	//addr/@use	addr/@use can carry more than one value by a space separated list of codes. Address Use HL7 v3 (required) ¹
Address > type	Distinguishes between physical addresses (those you can visit) and mailing addresses (e.g. PO Boxes and care-of addresses). Most addresses are both.	01	code	//addr/@use	addr/@use can carry more than one value by a space separated list of codes. Address Type HL7 v3 (required) ²
Address > text	A full text representation of the address.	01	string	//addr	The expectation is that this is free text.
Address > line	This component contains the house number, apartment number, street name, street direction, P.O. Box number, delivery hints, and similar address information.	0*	string	//addr/streetAddressLine	
Address > city	The name of the city, town, village or other community or delivery center.	01	string	//addr/ city	
Address > district	The name of the administrative area (county).	01	string	//addr/county	
Address > state	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).	01	string	//addr/state	state SHALL be populated with the code e.g. "NT". <u>Australian States and Territories</u> (required)
Address > postalCode	A postal code designating a region defined by the postal service.	01	string	//addr/postalCode	The maximum length of postalCode SHALL be 4.

Logical element	Logical element description	Logical card	Logical type	CDA schema element	CDA constraints and comments
Address > country	Fixed value if present otherwise assumed to be Australia in this context.	01	string	//addr/country	country SHALL be "AU".
Address > period	Time period when address was/is in use.	01	Period	//addr/useablePeriod	

¹This value set differs from the value set bound to use in AU Base Address due to constraints on @use in the HL7 CDA schema. The concept map v3 map for AddressUse provides a mapping between the two value sets.

Example A.12. AU Base Address - no fixed address in Melbourne, VIC

```
<!-- 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>
```

Example A.13. AU Base Address - unstructured address

```
<!-- Australian Address with only text-->
<addr use="PHYS">
<!--Address.text-->
Level 1, 300 George St, Brisbane, QLD 4000
</addr>
```

Example A.14. AU Base Address - structured postal address with period

²This value set differs from the value set bound to type in <u>AU Base Address</u> due to constraints on @use in the HL7 CDA schema. The concept map <u>v3 map for AddressType</u> provides a mapping between the two value sets.

```
<country>AU</country>
<!--Address.period-->
<useablePeriod xsi:type="IVL_TS">
<low value="200311031647+1000" />
</useablePeriod>
</addr>
```

Example A.15. AU Base Address - structured physical address

A.5 ContactPoint

This informative appendix provides some guidance on how the complex data type ContactPoint can map to CDA (R2).

The mapping table below provides a set of preferred mappings to the TelecommunicationAddress (TEL) data type [HL7V3] and do not represent conformance requirements. See Legend - CDA mapping table for logical elements for an explanation of mapping table presentation.

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 ele- ment	Element	//telecom	In CDA, ContactPoint value and system are represented as parts of telecom/@value. If ContactPoint value is present, ContactPoint system SHALL be present.
ContactPoint > system	Telecommunications form for contact point - what communications system is required to make use of the contact.	01	code	//telecom/@value	Makes up part of the attribute: "system:value", e.g. "tel:phone number", "mailto:email address", "http:URL", etc. HL7 URLScheme (required)
ContactPoint > value	The actual contact point details, in a form that is meaningful to the designated communication system (i.e. phone number or email address).	01	string	//telecom/@value	Makes up the part of the attribute: "system:value", e.g. "tel:phone number", "mailto:email address", "http:URL", etc.
ContactPoint > use	Identifies the purpose for the contact point.	01	code	//telecom/@use	HL7 TelecommunicationAddressUse (required) ¹
ContactPoint > rank	Specifies a preferred order in which to use a set of contacts. Contacts are ranked with lower values coming before higher values.	01	positiveInt	n/a	This logical element has no mapping to CDA.
ContactPoint > period	Time period when the contact point was/is in use.	01	<u>Period</u>	//telecom/usablePeriod	

¹This value set differs from the value set bound to use in ContactPoint due to constraints on @use in the HL7 CDA Schema. The concept map v3 map for ContactPointUse provides a mapping between the two value sets.

Examples

Example A.16. ContactPoint - home telephone with period

```
<!-- ContactPoint where system=phone, value=+1-(03)5550-1212, use=home -->
<telecom value="tel:+1-(03)5550-1212" use="H">
     <!-- ContactPoint.period -->
```

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Example A.17. ContactPoint - home telephone

```
<!-- ContactPoint where system=phone, value=0755501234, use=home --> <telecom use="H" value="tel:0755501234" />
```

Example A.18. ContactPoint - work email

```
<!-- ContactPoint where system=email, value=sfranklin@amail.example.com, use=work -->
<telecom use="WP" value="mailto:sfranklin@amail.com.au" />
```

Appendix B. Examples

This 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 examples that conform to the CDA templates defined in this implementation guide to support implementation by demonstrating one or more supported usage scenarios.

Example	Context	Usage Scenario(s)
Prescription List	P2P (Point-to-Point)	Prescription List
Dispense List	P2P (Point-to-Point)	Dispense List
Prescription and Dispense List	My Health Record system	Prescription and Dispense List

A corresponding set of FHIR Release 3 (STU) examples, conforming to the FHIR profiles used as logical models for this CDA implementation guide, are available in the *Prescription and Dispense Lists FHIR Implementation Guide* [DH2020k].

B.1 Prescription List

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

Example B.1. Prescription 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. -->

<pre
```

B.2 Dispense List

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

Example B.2. Dispense List example 2

```
<!-- 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="DOCCLIN" moodCode="EVN" xmlns="urn:h17-org:v3"
    xmlns:ex="urn:h17-org/v3-example"
    xmlns:ext="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="urn:h17-org:v3 ../../library/schema_au_published/CDA-AU-V1_0.xsd">
    <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
    <!-- Put content here -->

</ClinicalDocument>
```

B.3 Prescription and Dispense List

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

Example B.3. Prescription and Dispense 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="DOCCLIN" 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"/>
    <!-- Put content here -->

</ClinicalDocument>
```

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