

CDAR2_IG_PHARM_TEMPLATES_R1_D3_2022SEP



HL7 CDA® R2 Implementation Guide:
Pharmacy Templates.
Release 1 STU Release 2

September 2022

HL7 STU Ballot

Sponsored by:
Pharmacy Work Group

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1 Introduction

This Implementation Guide provides CDA R2 templates for *Medication Order* and *Medication Statement*, *Medication Dispense* and *Medication Administration* that can be used by HL7 standards developers and external projects to develop models for pharmacy related content. The implementation guide is intended to provide consistency of pharmacy related models across all uses regardless of the method of transport by **creating a library of Universal (UV) Pharmacy Templates that can be used by other Work Groups to derive constrained versions.**

1.1 Purpose

1.1.1 Background

Historically multiple HL7 Work Groups have developed specifications for pharmacy related content and as a result, there is inconsistency in how medication related content is represented in HL7 V2, V3, CDA and FHIR. The Pharmacy Work Group often receives questions as to how to model pharmacy related content but in some cases, the use case cannot be met with the existing models.

This Implementation Guide provides a CDA R2 library of pharmacy templates that can be used by HL7 Work Groups or external projects to derive constrained versions of models for pharmacy related content.

1.2 Scope

This Pharmacy Templates Implementation Guide defines common pharmacy artifacts (order, dispense, administration and statement) in CDA R2 format. The scope of the Implementation Guide is limited to *Medication Order* and *Medication Statement*, *Medication Dispense* and *Medication Administration*. The content was developed by aligning and harmonizing the existing specifications for Consolidated CDA (C-CDA Release 2.1^[1]).

1.3 Ballot Status of the Document

The Implementation Guide was balloted as Standard for Trial Use (STU) and then goes to Normative.

1.4 Audience

- Clinical and Public Health laboratories
- Immunization Registries
- Pharmaceutical Vendors
- EHR/PHR vendors
- Clinical Decision Support Systems
- HIS Vendors
- Emergency Services Providers
- Healthcare Institutions
- Pharmacists

- Physicians and other Clinicians

1.5 Relationships with other projects and guides

- Consolidated CDA (C-CDA)
- HL7 Version 3 Pharmacy Models
- HL7 FHIR® Pharmacy Resources
- International Patient Summary (IPS), where all pharmacy related templates are specialisations of the corresponding templates defined in this guide

2 Principles and background

The Pharmacy Work Group has a set of rich set of existing models that were used as the basis for the implementation guide including HL7 V3 models and FHIR resources.

This implementation guide was created by the Pharmacy Work Group using the following approach:

- Review of Consolidated CDA (C-CDA^[1]) to identify templates that include pharmacy related content
- Compare C-CDA templates to existing Pharmacy HL7 V3 models and Pharmacy FHIR resources to identify differences and gaps
- Create universal templates to that can be constrained for use for new templates.

For the Medication Model reflected in template 2.16.840.1.113883.10.21.4.11 UV Medication Information (detail), the CommonMessageElementType CMETR_Medication Universal” (COCT_MT230100UV02), Release 2 (as published in HL7 V3 2017, V2.0.2 Dec 2010, derived from Common Product Model) was used to construct the CDA extension elements (see also "Extensions" used in this guide in the appendix).

The template rules are formalized using the computable format defined by the HL7 Templates Standard: Specification and Use of Reusable Information Constraint Templates, Release 1^[2] in order to facilitate also the automatic generation of consistent testing and validation capabilities.

3 Technical Background

3.1 What is a CDA

CDA R2 is "... a document markup standard that specifies the structure and semantics of *clinical documents* for the purpose of exchange" [CDA R2, Section 1.1]. Clinical documents, according to CDA, have the following characteristics:

- Persistence
- Stewardship
- Potential for authentication
- Context
- Wholeness
- Human readability

CDA defines a header for classification and management and a document body that carries the clinical record. While the header metadata are prescriptive and designed for consistency across all instances, the body is highly generic, leaving the designation of semantic requirements to implementation.

3.2 Templated CDA

CDA R2 can be constrained by mechanisms defined in the "Refinement and Localization" section of the HL7 Version 3 Interoperability Standards. The mechanism most commonly used to constrain CDA is referred to as "templated CDA". This specification created a set of artifacts containing modular CDA templates (and associated value sets) for the purpose of the International Patient Summary, and the templates can be reused across any number of CDA document types.

There are different kinds of templates that might be created. Among them, the most common ones are:

- **CDA Document Level Templates** constrain fields in the Clinical Document Architecture (CDA) header, and define containment relationships to CDA sections.

For example, a History-and-Physical document-level template might require that the patient's name be present, and that the document contain a Physical Exam section.

- **CDA Header Level Templates** constrain fields for parts of the CDA header, like the patient (record target), the author, participations or the service event.

- **CDA Section Level Templates** constrain fields in the CDA section, and define containment relationships to CDA entries.

For example, a Physical-exam section-level template might require that the section/code be fixed to a particular LOINC code, and that the section contain a Systolic Blood Pressure observation.

- **CDA Entry Level Templates** constrain the CDA clinical statement model in accordance with real world observations and acts.

For example, a Systolic-blood-pressure entry-level template defines how the CDA Observation class is constrained (how to populate observation/code, how to populate observation/value, etc.) to represent the notion of a systolic blood pressure.

3.3 Open and Closed Templates

Open templates permit anything to be done in the underlying standard that is not explicitly prohibited. This allows templates to be built up over time that extend and go beyond the original use cases for which they were originally designed.

Closed templates only permit what has been defined in the template, and do not permit anything beyond that. There are good reasons to use closed templates, sometimes having to do with local policy. For example, in communicating information from a healthcare provider to an insurance company, some information may need to be omitted to ensure patient privacy laws are followed. Most templates developed for CDA are of the open sort.

3.4 Template versioning

Template versioning is needed to enable template designs to evolve over time.

Template versioning enables template designers to control and shape the conformance statements that make up a template's design over time tailoring the design to fit the template's intended purpose.

Each template version is associated with a particular template. The template—as a whole—has a mandatory globally unique, non-semantic, identifier. The identifier serves as the identifier of the original intent of the template and as the identifier of the set of versions that represent the template over time.

Template versions have a mandatory timestamp (date and optional time), called the “effective date”. The date can be seen as the point in time when the template version “came into being”, i.e. was recognized as existent by the governance group. Use of the template prior to this date would be considered an invalid use of the template.

For further information on Templates, Template Versions and related topics refer to the HL7 Templates Standard^[2].

3.5 Identifiers for Templates and Value Sets

This specification specifies CDA **Entry Level Templates** only. They can be re-used in any appropriate context, such as an Entry of a *medication* section.

Two "root" Entry Templates are provided as entry points for the four described use cases:

- UV Medication Order (2.16.840.1.113883.10.21.4.1)
- UV Medication Statement (2.16.840.1.113883.10.21.4.7)
- UV Medication Administration (2.16.840.1.113883.10.21.4.13)
- UV Medication Dispense (2.16.840.1.113883.10.21.4.15)

These templates use other Entry Level Templates that are all listed in a subsequent section of this document.

This specification uses the following OIDs for the artifacts that are registered at the HL7 OID registry.

- The root OID for templates is 2.16.840.1.113883.10.21
 - Entry Level templates are summarized under 2.16.840.1.113883.10.21.4, e.g. 2.16.840.1.113883.10.21.4.5 *UV Substitution Permission*
 - “other” assistance templates are summarized under 2.16.840.1.113883.10.21.9, e.g. 2.16.840.1.113883.10.22.9.1 *UV Use Period*
- The root OID for Value Sets is 2.16.840.1.113883.11

The sub branches for templates follow the recommendations of HL7 International and ISO 13582^[3].


3.6 Namespace Identifier

The CDA extensions for Pharmacy defined by the Pharmacy Workgroup are handled under the XML namespace identifier

URN : HL7-ORG : PHARM and typically use the namespace prefix `PHARM :`.

3.7 How to read this document

All artifacts (templates, value sets etc.) listed with the status  *Draft* or  *Pending* are subject to ballot comments.

Artifacts with other status information, especially  *Final* or *Active* are not (directly) part of the ballot and some artifacts actually even come from external sources (reference artifacts indicated by the symbol

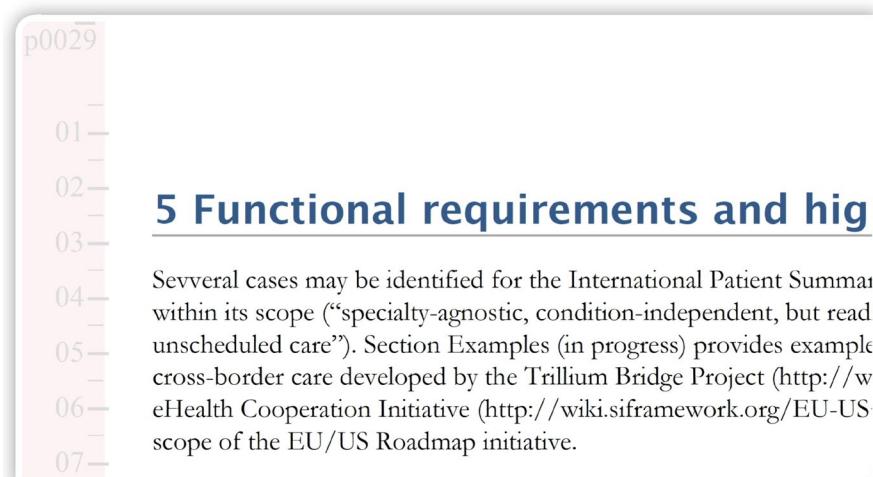
 ref

). These reference artifacts are also not subject to the ballot, as they might be balloted elsewhere already.

The PDF version contains a ruler on the left side of the pages. A ruler has the page number on top of it and allows locating a line at the page by simply specifying the number at the scale tick. This is more precise and allows also commenting on graphics and pictures.

For example if you have a comment on page 29 because of a typo (see figure), you simply specify the error with its location p0029-04.

Of course you can also refer by classical chapter and section numbers. The use of the ruler has the ballot team's preference, though.



[Figure 1] To locate a typo on page 29 as a ballot comment, simply specify the location p0029-04.

3.8 Reading Publication Artifacts

A reading guide is available that explains the formalisms used to express the publication artifacts, i.e. template meta data and template design. For convenience the guide is included in the appendix.

4 Functional requirements and high-level use cases

The following use cases are relevant to the pharmacy domain for both community and institutional settings:

- Prescribing a medication (aka Prescription or Order or Request)
- Dispensing a medication
- Recording the administration of a medication
- Recording the use of a medication (in the past, current or future)

The following definitions are relevant to this Implementation Guide:

- *Prescribing* is an activity that can be performed by a variety of healthcare professionals and involves a variety of orderable items (see glossary entry). For the purposes of the following Implementation Guide, prescribing is defined as the act of authorizing the usage of a medication in various settings for example, inpatient, community, and long term care. This could include initiating a new medication order or making all kinds of modifications to existing orders.
- *Dispensing* is the provision of a medication or other material to a caregiver in fulfillment of a prescription or medication order. It supplies the materials needed to perform the prescribed actions by those who will perform them. Examples of dispensing include eyeglasses, contact lenses and medications.

For the purposes of the following ballot material, dispensing is defined as supplying a medication in fulfillment of a prescription or medication order. While dispensing is usually performed by a pharmacist, other health care providers such as nurses or physicians may also dispense.

- *Administration* is an activity undertaken to give medication to the patient. In the community, this process is usually not recorded, since the majority occurs in the patient's home; only administrations undertaken by a healthcare professional, such as vaccination, tend to be formally documented. Administration of medication in the institutional setting is usually recorded on a dose-by-dose basis, and may be messaged on that basis, or a summary of all the administrations occurring during an inpatient stay may be described.
- *Medication Statement* is an activity that can be performed by a variety of healthcare professionals, or the patient, or non-healthcare professionals. Examples of recording medication statements include taking a patient's medication history, recording reported use of medications where the source of the patient information is from a third party and not the patient e.g. a family member when the patient is unable to communicate their medication history.

5 Templates

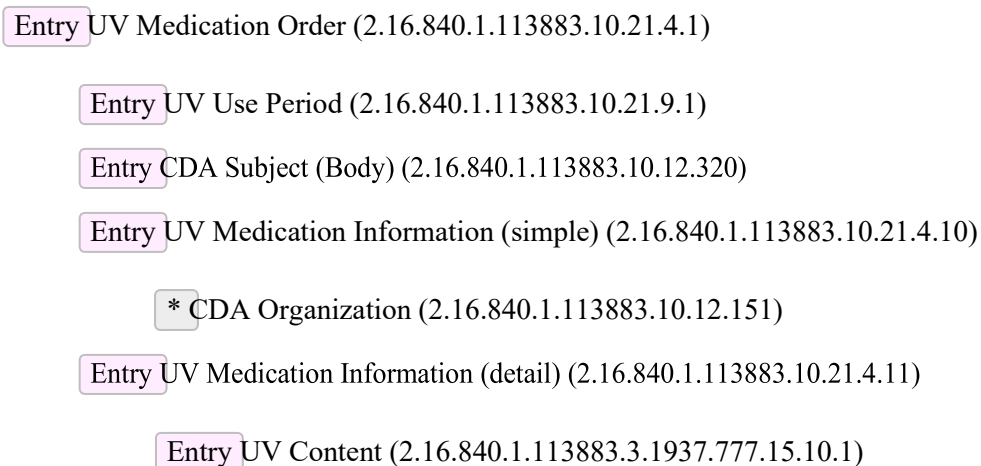
5.1 Use Case Entry Level Templates

As mentioned before, this specification defines two "root" Entry Level Templates, one for each of the covered use cases. All entry templates are used in the context of a CDA section.

5.1.1 UV Medication Order

The following graph gives an overview of the high-level template components of this template, followed by the actual definition.

Note: If you need to include multiple ordered medications as part of a single order, you can include multiple CDA entries under one CDA section. CDA Section definitions are not part of this guide.



Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient(2.16.840.1.113883.3.1937.777.15.10.2)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry UV Subordinate Substance Administration (2.16.840.1.113883.10.21.4.6)

Entry UV Dispense Request (2.16.840.1.113883.10.21.4.2)

Entry CDA Subject (Body) (2.16.840.1.113883.10.12.320)

Entry CDA ManufacturedProduct (2.16.840.1.113883.10.12.312)

Entry CDA LabeledDrug (2.16.840.1.113883.10.12.310)

Entry CDA Material (2.16.840.1.113883.10.12.311)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Performer (Body) (2.16.840.1.113883.10.12.323)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry Indication (V2) (2.16.840.1.113883.10.20.22.4.19)

Entry UV ClinicalStatement Observation (2.16.840.1.113883.10.21.4.3)

Entry CDA Subject (Body) (2.16.840.1.113883.10.12.320)

Entry CDA Specimen (2.16.840.1.113883.10.12.322)

Entry CDA Performer (Body) (2.16.840.1.113883.10.12.323)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Informant (Body) (2.16.840.1.113883.10.12.319)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA RelatedEntity (2.16.840.1.113883.10.12.316)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Reference (2.16.840.1.113883.10.12.324)

Entry CDA ExternalAct (2.16.840.1.113883.10.12.325)

Entry CDA ExternalObservation (2.16.840.1.113883.10.12.326)

Entry CDA ExternalProcedure (2.16.840.1.113883.10.12.327)

Entry CDA ExternalDocument (2.16.840.1.113883.10.12.328)

Entry CDA Precondition (2.16.840.1.113883.10.12.329)

Entry UV Substitution Permission (2.16.840.1.113883.10.21.4.5)

Entry UV ClinicalStatement Encounter (2.16.840.1.113883.10.21.4.4)

Entry UV Comment Activity (2.16.840.1.113883.10.21.4.12)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)


* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)


















* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Precondition (2.16.840.1.113883.10.12.329)

The boxes reflect the CDA Template Types. Symbols: * denotes templates with more than one classification, @ indicates a recursion in the definition

Id	2.16.840.1.113883.10.21.4.1
Status	 Draft
Name	UVSubstanceadministrationrequest

Effective Date	2021-08-04 17:03:38 Other versions this id: <ul style="list-style-type: none"> <input type="radio"/> UVSubstanceadministrationrequest as of 2015-10-07
Version Label	2021
Display Name	UV Medication Order

Description	Universal Medication Order (Substance Administration Request)			
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.1			
Label	MedicationOrder			
Classification	CDA Entry Level Template			
Open/Closed	Open (other than defined elements are allowed)			
Uses	Uses 14 templates			
	Uses	as	Name	Version
	2.16.840.1.113883.10.21.9.1	Include	 UV Use Period	DYNAMIC
	2.16.840.1.113883.10.12.320	Containment	 CDA Subject (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.10	Containment	 UV Medication Information (simple) (2021)	DYNAMIC
	2.16.840.1.113883.10.21.4.11	Containment	 UV Medication Information (detail) (2021)	DYNAMIC
	2.16.840.1.113883.10.12.318	Containment	 CDA Author (Body)	DYNAMIC
	2.16.840.1.113883.10.12.321	Containment	 CDA Participant (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.6	Containment	 UV Subordinate Substance Administration	DYNAMIC
	2.16.840.1.113883.10.21.4.2	Containment	 UV Dispense Request	DYNAMIC
	2.16.840.1.113883.10.20.22.4.19	Containment	 Indication (V2) (2.1)	DYNAMIC
	2.16.840.1.113883.10.21.4.3	Containment	 UV ClinicalStatement Observation	DYNAMIC
	2.16.840.1.113883.10.21.4.5	Containment	 UV Substitution Permission	DYNAMIC
	2.16.840.1.113883.10.21.4.4	Containment	 UV ClinicalStatement Encounter	DYNAMIC
	2.16.840.1.113883.10.21.4.12	Containment	 UV Comment Activity	DYNAMIC
	2.16.840.1.113883.10.12.329	Containment	 CDA Precondition	DYNAMIC
Relationship	Version: template 2.16.840.1.113883.10.21.4.1 <i>UV Medication Order</i> (2015-10-07) Specialization: template 2.16.840.1.113883.10.12.308 <i>CDA SubstanceAdministration</i> (2005-09-07)   			

Example

Example

```

<substanceAdministration classCode="SBADM" moodCode="RQO">
  <templateId root="2.16.840.1.113883.10.21.4.1"/>
  <id root="1.2.3.99.99.99" extension="58768437489739"/>
  <code code="..." codeSystem="..."/>
  <text>...</text>
  <statusCode code="active"/>
  <effectiveTime value="..."/>
  <repeatNumber value="..."/>
  <routeCode code="IPINHL" codeSystem="2.16.840.1.113883.5.112" displayName="Inhalation, respiratory Inhalation, intrapulmonary Inhalation, oral"/>
  <approachSiteCode code="..." codeSystem="2.16.840.1.113883.5.1052"/>
  <administrationUnitCode code="PUFF" codeSystem="2.16.840.1.113883.5.85" displayName="Puff"/>
  <consumable typeCode="CSM">
    <!-- Consumable -->
  </consumable>
  <participant typeCode="DEV">
    <!-- Device -->
  </participant>
  <participant typeCode="LOC">
    <!-- Location -->
  </participant>
  <entryRelationship typeCode="COMP">
    <!-- Subordinate Substance Administrations -->
  </entryRelationship>
  <entryRelationship typeCode="COMP">
    <!-- Annotations -->
  </entryRelationship>
  <precondition>
    <!-- Precondition -->
  </precondition>
</substanceAdministration>

```

Item	DT	Card	Conf	Description	Label
h17:substanceAdministration					Medi...rder
└ @classCode	CS	1 ... 1	F	SBADM	
└ @moodCode	CS	1 ... 1	F	RQO	
└ h17:templateId	II	1 ... 1	M		Medi...rder

└ @root	uid	1 ... 1 F	2.16.840.1.113883.10.21.4.1	
└ hl7:id	II	1 ... * R		Medi...rder
└ hl7:code	CD (extensible)	0 ... 1 R		Medi...rder
	CONF	The value of @code should be drawn from value set 2.16.840.1.113883.1.11.19708 <i>ActSubstanceAdministrationCode</i> (DYNAMIC)		
└ hl7:text	ED	0 ... 1		Medi...rder
└ hl7:statusCode	CS (required)	1 ... 1 M		Medi...rder
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.11.21.2 <i>ActStatusActiveCompletedAbortedSuspended</i> (DYNAMIC)		
Included			from 2.16.840.1.113883.10.21.9.1 <i>UV Use Period</i> (DYNAMIC)	
			The effectiveTime element encodes the use period of the medication, it is always expressed as an interval of time.	
			It may be expressed using the low and high OR with the width element.	
			The first is used to indicate a specified interval (e.g. from march 15th, 2017); the latter for indicating a 'floating' period (e.g. 2 weeks).	
Choice		1 ... 1	Elements to choose from:	
			<ul style="list-style-type: none"> hl7:effectiveTime[hl7:low hl7:high] hl7:effectiveTime[hl7:width] 	
			Case 1: specified interval The low and high values of the first effectiveTime element represent the start and stop times for the medication. The low value represents the start time, and the high value represents the stop time. If either the low or the high value is unknown, this shall be recorded by setting the nullFlavor attribute to UNK.	
└ hl7:effectiveTime	IVL_TS	0 ... 1 C	In case of unbounded period (continuous therapy) the high element will be valued with the nullFlavor attribute to NA.	

where [hl7:low or
hl7:high]

The high value records the end of the medication regime according to the information provided in the prescription or order. For example, if the prescription is for enough medication to last 30 days, then the high value should contain a date that is 30 days later than the low value. The rationale is that a provider, seeing a prescription that has not been refilled would normally assume that the medication is no longer being taken, even if the intent of the treatment plan is to continue the medication indefinitely.

└ @nullFlavor

cs

0 ... 1

Example

Known Interval

```
<effectiveTime xsi:type="IVL_TS">
  <low value="20130321"/>
  <high value="20140321"/>
</effectiveTime>
```

Example

Information not available about the period

```
<effectiveTime xsi:type="IVL_TS" nullFlavor="NI"/>
```

Example

Unknown end date

```
<effectiveTime xsi:type="IVL_TS">
  <low value="20130321"/>
  <high nullFlavor="UNK"/>
</effectiveTime>
```

Example

continuous therapy

```
<effectiveTime xsi:type="IVL_TS">
  <low value="20130321"/>
  <high nullFlavor="NA"/>
</effectiveTime>
```

└ hl7:low

IVXB_TS

1 ... 1 R

Medi...rder

└ hl7:high

IVXB_TS

0 ... 1 R

Medi...rder

└ hl7:effectiveTime

IVL_TS

0 ... 1 C

Case 2: 'floating' period:

The width element is used to specify a period of (actual or intended) administration that is not anchored to any specific date (e.g. a two weeks therapy)

Medi...rder

where [hl7:width]

Example

2 week period

		<pre><effectiveTime xsi:type="IVL_TS"> <width value="2" unit="w"/> </effectiveTime></pre>	
└ h17:low	NP		Medi...rder
└ h17:width	PQ	1 ... 1 R	Medi...rder
└ @unit	cs	1 ... 1 R	
	CONF	The value of @unit shall be drawn from value set 2.16.840.1.113883.11.21.1 <i>Medication Time Units (UCUM)</i> (DYNAMIC)	
└ h17:repeatNumber	IVL_INT	0 ... 1	Medi...rder
└ h17:routeCode	CE (example)	0 ... 1	Medi...rder
	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.14581 <i>RouteOfAdministration</i> (DYNAMIC)	
└ h17:approachSiteCode	CD (example)	0 ... *	Medi...rder
	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.19724 <i>HumanSubstanceAdministrationSite</i> (DYNAMIC)	
└ h17:doseQuantity	IVL_PQ	NP	Medi...rder
└ h17:rateQuantity	IVL_PQ	NP	Medi...rder
└ h17:maxDoseQuantity	RTO_PQ_PQ	0 ... 1	Medi...rder
└ h17:administrationUnitCode	CE	NP	Medi...rder
└ h17:subject		0 ... 1 C	The patient, subject to requested dispenses or subject to substances being administered to. Contains 2.16.840.1.113883.10.12.320 <i>CDA Subject (Body)</i> (DYNAMIC)
	Constraint	Condition: This can be omitted if the patient context that is provided in the CDA header is identical to the	

		subject	Elements to choose from:		
Choice			1 ... 1	<ul style="list-style-type: none"> hl7:consumable containing template 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC) hl7:consumable containing template 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC) 	
	└ hl7:consumable		0 ... 1 R	Consumable: The medication that is administered (simple) Contains 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC)	Medi...rder
	└ @typeCode	cs	1 ... 1 F	CSM	
	└ hl7:consumable		0 ... 1 R	Consumable: The medication that is administered (detail) Contains 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC)	Medi...rder
	└ @typeCode	cs	1 ... 1 F	CSM	
	└ hl7:author		0 ... *	Prescriber: A party that originates the order and therefore has responsibility for the information given in the order. Contains 2.16.840.1.113883.10.12.318 <i>CDA Author (Body)</i> (DYNAMIC)	Medi...rder
	└ hl7:participant		0 ... 1	Record Target: indicates the person who's medical record holds the documentation of this medication statement. This element is only populated when the document is placed in a medical record of someone other than the patient (subject). Contains 2.16.840.1.113883.10.12.321 <i>CDA Participant (Body)</i> (DYNAMIC)	Medi...rder
where [<i>@typeCode</i> ='RCT']					
	└ @typeCode	cs	1 ... 1 F	RCT	
	└ hl7:participant		0 ... 1	Verifier: The person or organization that has primary responsibility for the order. The responsible party is not necessarily present in an action, but is accountable for the action through the power to delegate. Contains 2.16.840.1.113883.10.12.321 <i>CDA Participant (Body)</i> (DYNAMIC)	Medi...rder

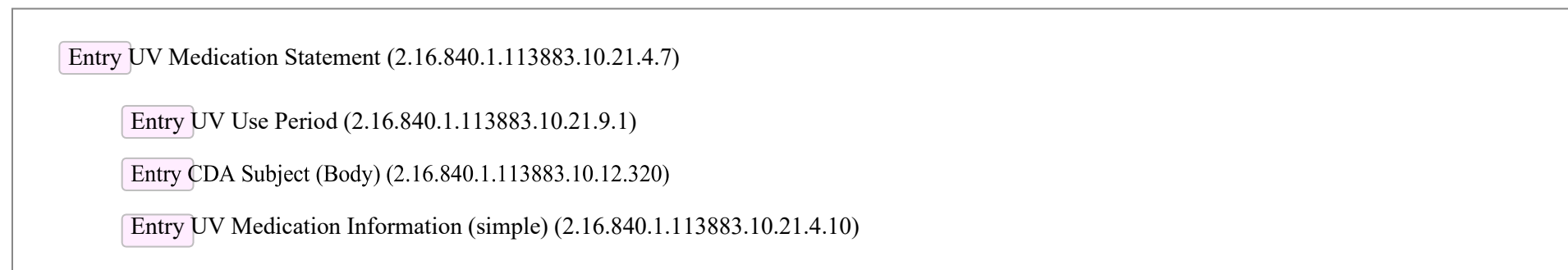
where [<i>@typeCode</i> ='VRF']				
└ @typeCode	cs	1 ... 1 F	VRF	
└ h17:entryRelationship		0 ... * C	<p>Subordinate Substance Administration Request as a component of the overall order.</p> <p>At least one subordinated Substance Administration should be present to convey information about dosages (dose, frequency of intakes,..) unless dosage is unknown.</p> <p>Subordinated Substance Administration elements can be also used either to handle split dosing, or to support combination medications.</p> <p>Contains 2.16.840.1.113883.10.21.4.6 <i>UV Subordinate Substance Administration</i> (DYNAMIC)</p>	Medi...rder
where [<i>h17:substanceAdministration</i>]				
└ @typeCode	cs	1 ... 1 F	COMP	
	Constraint	At least one subordinate element SHALL be present.		
	Example	<pre><entryRelationship typeCode="COMP"> <!-- component: Subordinate Substance Administration Request. --> <substanceAdministration classCode="SBADM" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.6"/> <!-- .. --> </substanceAdministration> </entryRelationship></pre>		
└ h17:sequenceNumber	INT	0 ... 1	Sequence number of the SubordinateSubstance Administration.	Medi...rder
└ h17:entryRelationship		0 ... 1 R	<p>Dispense Request as a component of the overall order. This element is used in the medication order when the dispense request information contains additional information to support a fully specified medication prescription. For example, to include the validity period of the dispense or the organization to dispense the medication.</p> <p>Contains 2.16.840.1.113883.10.21.4.2 <i>UV Dispense Request</i> (DYNAMIC)</p>	Medi...rder
where [<i>h17:supply</i>]				
└ @typeCode	cs	1 ... 1 F	COMP	
	Example	<pre><entryRelationship typeCode="COMP"> <!-- component: The Dispense Request is a component of the overall order. --></pre>		

				<pre> <supply classCode="SPLY" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.2"/> <!-- .. --> </supply> </entryRelationship> </pre>	
h17:entryRelationship		0 ... * R	Reason: Specifies the reason (indication) for authoring the order. Contains 2.16.840.1.113883.10.20.22.4.19 <i>Indication (V2)</i> (DYNAMIC)	Medi...rder	
@typeCode	cs	1 ... 1 F	RSO		
Example		<pre> <entryRelationship typeCode="RSO"> <priorityNumber value="1"/> <act> <!-- Clinical Statement Minimal --> </act> </entryRelationship> </pre>			
pharm:priorityNumber	INT.NONNEG	0 ... 1 R	Indicates the priority of this reason for the order in relation to its sibling reasons.	Medi...rder	
h17:entryRelationship		0 ... * R	Pertinent Information: Specifies any pertinent information (observation) relevant to the order. Contains 2.16.840.1.113883.10.21.4.3 <i>UV ClinicalStatement Observation</i> (DYNAMIC)	Medi...rder	
@typeCode	cs	1 ... 1 F	PERT		
Example		<pre> <entryRelationship typeCode="PERT"> <observation> <!-- Clinical Statement Observation --> </observation> </entryRelationship> </pre>			
h17:entryRelationship		0 ... 1 R	Permission: The order can be the subject of the permissions related to substitution. Contains 2.16.840.1.113883.10.21.4.5 <i>UV Substitution Permission</i> (DYNAMIC)	Medi...rder	
where [h17:act]					
@typeCode	cs	1 ... 1 F	COMP		
h17:entryRelationship		0 ... 1 R	Encounter: Used to link an order to a specific encounter. Contains 2.16.840.1.113883.10.21.4.4 <i>UV ClinicalStatement Encounter</i> (DYNAMIC)	Medi...rder	

where [hl7:encounter]				
└ @typeCode	cs	1 ... 1 F	COMP	
Example		<pre><encounter classCode="ENC" moodCode="EVN"> <id/> <code code="..." /> </encounter></pre>		
└ hl7:entryRelationship		0 ... *	Annotations: The Medication Order can be the subject of annotations. Contains 2.16.840.1.113883.10.21.4.12 <i>UV Comment Activity</i> (DYNAMIC)	Medi...rder
└ @typeCode	cs	1 ... 1 F	COMP	
└ hl7:precondition		0 ... *	Precondition: A requirement to be true before the SubstanceAdministration is performed. Contains 2.16.840.1.113883.10.12.329 <i>CDA Precondition</i> (DYNAMIC)	Medi...rder

5.1.2 UV Medication Statement

The following graph gives an overview of the high-level template components of this template, followed by the actual definition.



* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Medication Information (detail) (2.16.840.1.113883.10.21.4.11)

Entry UV Content(2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient(2.16.840.1.113883.3.1937.777.15.10.2)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA RelatedEntity (2.16.840.1.113883.10.12.316)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry UV Subordinate Substance Administration (2.16.840.1.113883.10.21.4.6)

Entry UV Medication Order Reference (2.16.840.1.113883.10.21.4.8)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)


* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)












* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Dispense Event Reference (2.16.840.1.113883.10.21.4.9)

The boxes reflect the CDA Template Types. Symbols: * denotes templates with more than one classification, @ indicates a recursion in the definition

Id	2.16.840.1.113883.10.21.4.7	Effective Date	2021-08-04 14:09:15 Other versions this id:
Status	 Draft	Version Label	2021
Name	UVMedicationstatement	Display Name	UV Medication Statement
Description			
Universal Medication Statement: Recording a "medication statement" is an activity that can be performed by a variety of healthcare professionals, or the patient, or non-health-			

care professionals. Examples of recording medication statements include taking a patient's medication history, recording reported use of medications where the source of the patient information is from a third party and not the patient e.g. a family member when the patient is unable to communicate their medication history.

Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.7			
Label	MedicationStatement			
Classification	CDA Entry Level Template			
Open/Closed	Open (other than defined elements are allowed)			
Uses	Uses 11 templates			
	Uses	as	Name	Version
	2.16.840.1.113883.10.21.9.1	Include	 UV Use Period	DYNAMIC
	2.16.840.1.113883.10.12.320	Containment	 CDA Subject (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.10	Containment	 UV Medication Information (simple) (2021)	DYNAMIC
	2.16.840.1.113883.10.21.4.11	Containment	 UV Medication Information (detail) (2021)	DYNAMIC
	2.16.840.1.113883.10.12.318	Containment	 CDA Author (Body)	DYNAMIC
	2.16.840.1.113883.10.12.153	Containment	 CDA AssignedEntity	DYNAMIC
	2.16.840.1.113883.10.12.316	Containment	 CDA RelatedEntity	DYNAMIC
	2.16.840.1.113883.10.12.321	Containment	 CDA Participant (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.6	Containment	 UV Subordinate Substance Administration	DYNAMIC
	2.16.840.1.113883.10.21.4.8	Containment	 UV Medication Order Reference	DYNAMIC
	2.16.840.1.113883.10.21.4.9	Containment	 UV Dispense Event Reference	DYNAMIC
Relationship	Version: template 2.16.840.1.113883.10.21.4.7 <i>UV Medication Statement</i> (2017-05-01) Specialization: template 2.16.840.1.113883.10.12.308 <i>CDA SubstanceAdministration</i> (2005-09-07) ref ad1bbr-			
Example	<div>Example</div> <pre><substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.7"/></pre>			

```

<id root="1.2.3.99.99.99" extension="988437489739"/>
<code code="..." codeSystem="..."/>
<text>...</text>
<statusCode code="active"/>
<effectiveTime value="..."/>
<repeatNumber value="..."/>
<routeCode code="SOAK" codeSystem="2.16.840.1.113883.5.112" displayName="Immersion (soak)"/>
<approachSiteCode code="..." codeSystem="2.16.840.1.113883.5.1052"/>
<administrationUnitCode code="PUFF" displayName="Puff" codeSystem="2.16.840.1.113883.5.85"/>
<consumable typeCode="CSM">
  <!-- Consumable -->
</consumable>
<participant typeCode="DEV">
  <!-- Device -->
</participant>
<participant typeCode="LOC">
  <!-- Location -->
</participant>
<entryRelationship typeCode="COMP">
  <!-- Subordinate Substance Administrations -->
</entryRelationship>
<entryRelationship typeCode="COMP">
  <!-- Annotations -->
</entryRelationship>
<precondition>
  <!-- Precondition -->
</precondition>
</substanceAdministration>

```

Example**Example**

```

<substanceAdministration classCode="SBADM" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.21.4.7"/>
  <id root="1.2.3.999" extension="--example only--"/>
  <code code="DRUG" displayName="Drug therapy" codeSystem="2.16.840.1.113883.5.4"/>
  <text/>
  <statusCode code="active"/>
  <!-- include template 'UV Use Period' (dynamic) .. 0 -->
  <repeatNumber/>
  <routeCode code="SOAK" displayName="Immersion (soak)" codeSystem="2.16.840.1.113883.5.112"/>
  <approachSiteCode code="--code--" codeSystem="2.16.840.1.113883.5.1052"/>
  <administrationUnitCode code="APPPFUL" displayName="Applicatorful" codeSystem="2.16.840.1.113883.5.85"/>
  <subject>
    <!-- template 'CDA Subject (Body)' (dynamic) -->
  </subject>
  <consumable typeCode="CSM">
    <!-- template 2.16.840.1.113883.10.12.312 'CDA ManufacturedProduct' (dynamic) -->
  </consumable>

```

```

<!-- choice: 1..1
element hl7:author
element hl7:participant[@typeCode='AUT']
-->
<!-- choice: 0..1
element hl7:informant[exists(hl7:assignedEntity)]
element hl7:participant[@typeCode='INF']
element hl7:informant[exists(hl7:relatedEntity)]
-->
<participant typeCode="RCT">
  <!-- template 2.16.840.1.113883.10.12.321 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="VRF">
  <!-- template 2.16.840.1.113883.10.12.321 'CDA Participant (Body)' (dynamic) -->
</participant>
<entryRelationship typeCode="COMP">
  <sequenceNumber value="1"/>
  <!-- template 2.16.840.1.113883.10.21.4.6 'Subordinate Substance Administration' (dynamic) -->
</entryRelationship>
<entryRelationship typeCode="REFR">
  <!-- template 2.16.840.1.113883.10.21.4.8 'UV Medication Order Reference' (dynamic) -->
</entryRelationship>
<entryRelationship typeCode="REFR">
  <!-- template 2.16.840.1.113883.10.21.4.9 'UV Dispense Event Reference' (dynamic) -->
</entryRelationship>
</substanceAdministration>

```

Example

```

<substanceAdministration classCode="SBADM" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.21.4.7"/>
  <id root="1.2.3.99.99.99" extension="988437489739"/>
  <code code="..." codeSystem="...">
  <text>...</text>
  <statusCode code="active"/>
  <effectiveTime value="...">
  <repeatNumber value="...">
  <routeCode code="SOAK" codeSystem="2.16.840.1.113883.5.112" displayName="Immersion (soak)"/>
  <approachSiteCode code="..." codeSystem="2.16.840.1.113883.5.1052"/>
  <administrationUnitCode code="PUFF" displayName="Puff" codeSystem="2.16.840.1.113883.5.85"/>
  <consumable typeCode="CSM">
    <!-- Consumable -->
  </consumable>
  <participant typeCode="DEV">
    <!-- Device -->
  </participant>
  <participant typeCode="LOC">
    <!-- Location -->
  </participant>

```

Example

```

</participant>
<entryRelationship typeCode="COMP">
  <!-- Subordinate Substance Administrations -->
</entryRelationship>
<entryRelationship typeCode="COMP">
  <!-- Annotations -->
</entryRelationship>
<precondition>
  <!-- Precondition -->
</precondition>
</substanceAdministration>

```

Item	DT	Card	Conf	Description	Label
hl7:substanceAdministration					Medi...ment
└ @classCode	cs	1 ... 1	F	SBADM	
└ @moodCode	cs	1 ... 1	R	EVN will be used to record a medication statement where the patient is currently taking or has taken the medication in the past. INT will be used to record a medication statement where the patient plans to take the medication or be administered the medication in the future.	
	CONF			@moodCode shall be "EVN" or @moodCode shall be "INT"	
└ hl7:templateId	II	1 ... 1	M		Medi...ment
└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.7	
└ hl7:id	II	0 ... *	R		Medi. .ment
└ hl7:code	CD (preferred)	0 ... 1	R	The code element is valorized with the ACT code DRUG; FD or IMMUNIZ unless it is used for asserting the known absence of medication treatments or no information about them.	Medi. ...ment
	CONF			The value of @code comes preferably from value set 2.16.840.1.113883.1.11.19708 <i>ActSubstanceAdministrationCode</i> (DYNAMIC)	

		or	The value of @code comes preferably from value set 2.16.840.1.113883.11.21.5 <i>Unknown or absent medication</i> (DYNAMIC)	
└ h17:text	ED	0 ... 1		Medi...ment
└ h17:statusCode	CS (required)	1 ... 1 M		Medi...ment
	CONF		The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.19890 <i>x_ActStatusActive-Complete</i> (DYNAMIC)	
Included			from 2.16.840.1.113883.10.21.9.1 <i>UV Use Period</i> (DYNAMIC)	
			The effectiveTime element encodes the use period of the medication, it is always expressed as an interval of time.	
			It may be expressed using the low and high OR with the width element.	
Choice		1 ... 1	The first is used to indicate a specified interval (e.g. from march 15th, 2017); the latter for indicating a 'floating' period (e.g. 2 weeks).	
			Elements to choose from:	
			<ul style="list-style-type: none"> hl7:effectiveTime[hl7:low hl7:high] hl7:effectiveTime[hl7:width] 	
			Case 1: specified interval	
			The low and high values of the first effectiveTime element represent the start and stop times for the medication. The low value represents the start time, and the high value represents the stop time. If either the low or the high value is unknown, this shall be recorded by setting the nullFlavor attribute to UNK.	
└ h17:effectiveTime	IVL_TS	0 ... 1 C	In case of unbounded period (continuous therapy) the high element will be valued with the nullFlavor attribute to NA.	Medi...ment
			The high value records the end of the medication regime according to the information provided in the prescription or order. For example, if the prescription is for enough medication to last 30 days, then the high value should contain a date that is 30 days later then the low value. The rationale is that a provider, seeing a prescription that has not been refilled would normally assume that the	

where [hl7:low or hl7:high]			medication is no longer being taken, even if the intent of the treatment plan is to continue the medication indefinitely.	
<div>└ @nullFlavor</div>	cs	0 ... 1		
	Example	Known Interval <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high value="20140321"/> </effectiveTime></pre>		
	Example	Information not available about the period <pre><effectiveTime xsi:type="IVL_TS" nullFlavor="NI"/></pre>		
	Example	Unknown end date <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="UNK"/> </effectiveTime></pre>		
	Example	continous therapy <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="NA"/> </effectiveTime></pre>		
<div>└ hl7:low</div>	IVXB_TS	1 ... 1 R	Medi...ment	
<div>└ hl7:high</div>	IVXB_TS	0 ... 1 R	Medi...ment	
<div>└ hl7:effectiveTime</div>	IVL_TS	0 ... 1 C	Case 2: 'floating' period: The width element is used to specify a period of (actual or intended) administration that is not anchored to any specific date (e.g. a two weeks therapy)	
where [hl7:width]				
	Example	2 week period <pre><effectiveTime xsi:type="IVL_TS"> <width value="2" unit="w"/> </effectiveTime></pre>		
<div>└ hl7:low</div>	NP		Medi...ment	

└ h17:width	PQ	1 ... 1 R	Medi...ment
└ @unit	cs	1 ... 1 R	
	CONF	The value of @unit shall be drawn from value set 2.16.840.1.113883.11.21.1 <i>Medication Time Units (UCUM)</i> (DYNAMIC)	
└ h17:repeatNumber	IVL_INT	0 ... 1	Medi...ment
└ h17:routeCode	CE (example)	0 ... 1	Medi...ment
	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.14581 <i>RouteOfAdministration</i> (DYNAMIC)	
└ h17:approachSiteCode	CD (example)	0 ... *	Medi...ment
	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.19724 <i>HumanSubstanceAdministrationSite</i> (DYNAMIC)	
└ h17:doseQuantity	IVL_PQ	NP	Medi...ment
└ h17:rateQuantity	IVL_PQ	NP	Medi...ment
└ h17:maxDoseQuantity	RTO_PQ_PQ	0 ... 1	Medi...ment
└ h17:administrationUnitCode	CE	NP	Medi...ment
└ h17:subject		0 ... 1 C	Patient: The patient that takes the medicine. Contains 2.16.840.1.113883.10.12.320 <i>CDA Subject (Body)</i> (DYNAMIC) Medi...ment
	Constraint	Condition: This can be omitted if the patient context that is provided in the CDA header is identical to the subject	
Elements to choose from:			
Choice		1 ... 1	▪ h17:consumable containing template 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC)

				<ul style="list-style-type: none"> hl7:consumable containing template 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC) 	
└─ hl7:consumable		0 ... 1 R	Consumable: The medication that is administered (simple) Contains 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC)	Medi...ment	
└─ @typeCode	CS	1 ... 1 F	CSM		
└─ hl7:consumable		0 ... 1 R	Consumable: The medication that is administered (detail) Contains 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC)	Medi...ment	
└─ @typeCode	CS	1 ... 1 F	CSM		
Choice		1 ... 1	<p>Required author of the medication statement: healthcare professional or patient Elements to choose from:</p> <ul style="list-style-type: none"> hl7:author containing template 2.16.840.1.113883.10.12.318 <i>CDA Author (Body)</i> (DYNAMIC) hl7:participant[@typeCode='AUT'] 		
└─ hl7:author			Use this if the author of the medication statement is a healthcare professional Contains 2.16.840.1.113883.10.12.318 <i>CDA Author (Body)</i> (DYNAMIC)	Medi...ment	
Example		<p>Author of the medication statement is a healthcare professional</p> <pre> <author> <time value="20170221"/> <assignedAuthor> <id root="1.2.3.99.99.99" extension="75487435893498"/> <assignedPerson> <name> <given qualifier="IN">Ampu</given> <prefix qualifier="VV">L.</prefix> <family>Lee</family> </name> </assignedPerson> </assignedAuthor> </author> </pre>			

<div>└ h17:participant</div>		Use this if the author of the medication statement is the patient			Medi...ment
where [@typeCode='AUT']					
<div>└ @typeCode</div>	cs	1 ... 1 F	AUT		
	Example	Author of the medication statement is the patient <participant typeCode="AUT"> <time value="20170121091548"/> <participantRole classCode="PAT"/> </participant>			
<div>└ h17:time</div>	TS	1 ... 1 R			Medi...ment
<div>└ h17:participantRole</div>		1 ... 1 M			Medi...ment
<div>└ @classCode</div>	cs	1 ... 1 F	PAT		
			Optional informants of the medication statement: healthcare professional or patient contact party (related party) Elements to choose from:		
Choice		0 ... 1	<div><div>▪ h17:informant[exists(hl7:assignedEntity)]</div><div>▪ h17:participant[@typeCode='INF']</div><div>▪ h17:informant[exists(hl7:relatedEntity)]</div></div>		
<div>└ h17:informant</div>		Use this if the informant of the medication statement is a healthcare professional			Medi...ment
where [exists(hl7:assignedEntity)]					
<div>└ @typeCode</div>	cs	0 ... 1 F	INF		
<div>└ @contextControlCode</div>	cs	0 ... 1 F	OP		
	Example	Informant of the medication statement is a healthcare professional <informant> <assignedEntity> <id root="1.2.3.99.99.99" extension="75487435893498"/>			

				<pre><assignedPerson> <name> <given qualifier="IN">Ampu</given> <prefix qualifier="VV">L.</prefix> <family>Lee</family> </name> </assignedPerson> </assignedEntity> </informant></pre>	
└─	h17:assignedEntity		1 ... 1	Contains 2.16.840.1.113883.10.12.153 CDAAssignedEntity (DYNAMIC)	Medi...ment
└─	h17:participant			Use this if the informant of the medication statement is the patient	Medi...ment
where [@typeCode='INF']					
└─	@typeCode	cs	1 ... 1 F	INF	
		Example	Informant of the medication statement is the patient <pre><participant typeCode="INF"> <time value="20170121091548"/> <participantRole classCode="PAT"/> </participant></pre>		
└─	h17:time	TS	1 ... 1 R		Medi...ment
└─	h17:participantRole		1 ... 1 M		Medi...ment
└─	@classCode	cs	1 ... 1 F	PAT	
└─	h17:informant			Use this if the informant of the medication statement is a contact party (related party)	Medi...ment
where [exists(h17:relatedEntity)]					
└─	@typeCode	cs	0 ... 1 F	INF	
└─	@contextControlCode	cs	0 ... 1 F	OP	
		Example	Informant of the medication statement is a contact party (related party) <pre><informant> <relatedEntity classCode="AGNT"> <relatedPerson classCode="PSN" determinerCode="INSTANCE"></pre>		

<pre> <name> <!-- .. --> </name> </relatedPerson> </relatedEntity> </informant> </pre>				
└─ hl7:relatedEntity		1 ... 1	Contains 2.16.840.1.113883.10.12.316 <i>CDA RelatedEntity</i> (DYNAMIC)	Medi...ment
└─ hl7:participant		0 ... 1	Record Target: indicates the person who's medical record holds the documentation of this medication statement. This element is only populated when the document is placed in a medical record of someone other than the patient (subject). Contains 2.16.840.1.113883.10.12.321 <i>CDA Participant (Body)</i> (DYNAMIC)	Medi...ment
where [<i>@typeCode</i> ='RCT']				
└─ @typeCode	cs	1 ... 1 F	RCT	
└─ hl7:participant		0 ... 1	Verifier: The person or organization that has primary responsibility for the medication statement. The responsible party is not necessarily present in an action, but is accountable for the action through the power to delegate. Contains 2.16.840.1.113883.10.12.321 <i>CDA Participant (Body)</i> (DYNAMIC)	Medi...ment
where [<i>@typeCode</i> ='VRF']				
└─ @typeCode	cs	1 ... 1 F	VRF	
└─ hl7:entryRelationship		0 ... * C	Subordinate Substance Administration Statement as a component of the overall medication statement. At least one subordinated <substanceAdministration> has to be present to convey information about dosages (dose, frequency of intakes,...) unless medications are unknown or known absent. Subordinated <substanceAdministration> elements can be also used either to handle split dosing, or to support combination medications. Contains 2.16.840.1.113883.10.21.4.6 <i>UV Subordinate Substance Administration</i> (DYNAMIC)	Medi...ment
where [<i>hl7:substanceAdministration</i>]				
└─ @typeCode	cs	1 ... 1 F	COMP	

		Constraint	At least one subordinate <substanceAdministration> element SHALL be present unless medications are unknown or known absent.</substanceAdministration>		
		Example	<pre> <entryRelationship typeCode="COMP"> <!-- component: Subordinate Substance Administration Statement. --> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.6"/> <!-- .. --> </substanceAdministration> </entryRelationship> </pre>		
└ h17:sequenceNumber	INT	0 ... 1	Sequence number of the Subordinate Substance Administration.		Medi...ment
└ h17:entryRelationship		0 ... * R	Medication Order Reference. Contains 2.16.840.1.113883.10.21.4.8 <i>UV Medication Order Reference</i> (DY-NAMIC)		Medi...ment
where [@typeCode='REFR'] [h17:substanceAdministration]					
└ @typeCode	cs	1 ... 1 F	REFR		
		Example	<pre> <entryRelationship typeCode="REFR"> <substanceAdministration classCode="SBADM" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.8"/> <!-- .. --> </substanceAdministration> </entryRelationship> </pre>		
└ h17:entryRelationship		0 ... * R	Dispense Event Reference. Contains 2.16.840.1.113883.10.21.4.9 <i>UV Dispense Event Reference</i> (DY-NAMIC)		Medi...ment
where [@typeCode='REFR'] [[h17:supply]					
└ @typeCode	cs	1 ... 1 F	REFR		
		Example	<pre> <entryRelationship typeCode="REFR"> <supply classCode="SPLY" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.9"/> <!-- .. --> </supply> </entryRelationship> </pre>		

5.1.3 UV Medication Administration

The following graph gives an overview of the high-level template components of this template, followed by the actual definition.

Entry UV Medication Administration (2.16.840.1.113883.10.21.4.13)

Entry UV Use Period (2.16.840.1.113883.10.21.9.1)

Entry CDA Subject (Body) (2.16.840.1.113883.10.12.320)

Entry UV Medication Information (simple) (2.16.840.1.113883.10.21.4.10)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Medication Information (detail) (2.16.840.1.113883.10.21.4.11)

Entry UV Content(2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient(2.16.840.1.113883.3.1937.777.15.10.2)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA RelatedEntity (2.16.840.1.113883.10.12.316)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry UV Subordinate Substance Administration (2.16.840.1.113883.10.21.4.6)

Entry UV Substitution Event Administration (2.16.840.1.113883.10.21.4.14)

Entry UV Medication Order Reference (2.16.840.1.113883.10.21.4.8)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Dispense Event Reference (2.16.840.1.113883.10.21.4.9)













The boxes reflect the CDA Template Types. Symbols: * denotes templates with more than one classification, @ indicates a recursion in the definition

Id	2.16.840.1.113883.10.21.4.13	Effective Date	2019-02-17
Status	 Draft	Version Label	
Name	UVMedicationadministration	Display Name	UV Medication Administration

Description

Universal Medication Administration: This includes information about an actual administration of a medication. Medication administrations include information about medication use where the medications have been prescribed or not prescribed. Medication administrations may include "negative" statements such as "the patient was not given medication ABC". Due to implementation experience, dosage information is always put into the subordinate substance administration entries.

Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.13
Label	MedicationAdministration
Classification	CDA Entry Level Template
Open/Closed	Open (other than defined elements are allowed)

Uses	Uses 12 templates			
	Uses	as	Name	Version
	2.16.840.1.113883.10.21.9.1	Include	 UV Use Period	DYNAMIC
	2.16.840.1.113883.10.12.320	Containment	 CDA Subject (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.10	Containment	 UV Medication Information (simple) (2021)	DYNAMIC
	2.16.840.1.113883.10.21.4.11	Containment	 UV Medication Information (detail) (2021)	DYNAMIC
	2.16.840.1.113883.10.12.318	Containment	 CDA Author (Body)	DYNAMIC
	2.16.840.1.113883.10.12.153	Containment	 CDA AssignedEntity	DYNAMIC
	2.16.840.1.113883.10.12.316	Containment	 CDA RelatedEntity	DYNAMIC
	2.16.840.1.113883.10.12.321	Containment	 CDA Participant (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.6	Containment	 UV Subordinate Substance Administration	DYNAMIC
	2.16.840.1.113883.10.21.4.14	Containment	 UV SubstitutionEvent Administration	DYNAMIC
	2.16.840.1.113883.10.21.4.8	Containment	 UV Medication Order Reference	DYNAMIC
	2.16.840.1.113883.10.21.4.9	Containment	 UV Dispense Event Reference	DYNAMIC
Relationship				
Specialization: template 2.16.840.1.113883.10.12.308 <i>CDA SubstanceAdministration</i> (2005-09-07) ref ad1bbr-				
Example	Example			
	<pre> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.13"/> <id root="1.2.3.99.99.99" extension="988437489739"/> <code code="DRUG" codeSystem="2.16.840.1.113883.5.4"/> <text>...</text> <statusCode code="active"/> <effectiveTime value="..."/> <repeatNumber value="..."/> <routeCode code="SOAK" codeSystem="2.16.840.1.113883.5.112" displayName="Immersion (soak)"/> <approachSiteCode code="..." codeSystem="2.16.840.1.113883.5.1052"/> <administrationUnitCode code="PUFF" displayName="Puff" codeSystem="2.16.840.1.113883.5.85"/> <consumable typeCode="CSM"> <!-- Consumable --> </consumable> <participant typeCode="DEV"> </pre>			

```

    <!-- Device -->
  </participant>
  <participant typeCode="LOC">
    <!-- Location -->
  </participant>
  <entryRelationship typeCode="COMP">
    <!-- Subordinate Substance Administrations -->
  </entryRelationship>
  <entryRelationship typeCode="COMP">
    <!-- Annotations -->
  </entryRelationship>
  <precondition>
    <!-- Precondition -->
  </precondition>
</substanceAdministration>

```

Example

```

<substanceAdministration classCode="SBADM" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.21.4.13"/>
  <id root="1.2.3.999" extension="--example only--"/>
  <code code="DRUG" codeSystem="2.16.840.1.113883.5.4"/>
  <text>...</text>
  <statusCode code="active"/>
  <!-- include template 'UV Use Period' (dynamic) .. O -->
  <routeCode code="SOAK" displayName="Immersion (soak)" codeSystem="2.16.840.1.113883.5.112"/>
  <approachSiteCode code="--code--" codeSystem="2.16.840.1.113883.5.1052"/>
  <administrationUnitCode code="APPFUL" displayName="Applicatorful" codeSystem="2.16.840.1.113883.5.85"/>
  <subject>
    <!-- template 'CDA Subject (Body)' (dynamic) -->
  </subject>
  <consumable typeCode="CSM">
    <!-- template 2.16.840.1.113883.10.12.312 'CDA ManufacturedProduct' (dynamic) -->
  </consumable>
  <!-- choice: 1..1
element hl7:author
element hl7:participant[@typeCode='AUT']
-->
  <participant typeCode="RCT">
    <!-- template 2.16.840.1.113883.10.12.321 'CDA Participant (Body)' (dynamic) -->
  </participant>
  <participant typeCode="VRF">
    <!-- template 2.16.840.1.113883.10.12.321 'CDA Participant (Body)' (dynamic) -->
  </participant>
  <entryRelationship typeCode="COMP">
    <sequenceNumber value="1"/>
    <!-- template 2.16.840.1.113883.10.21.4.6 'Subordinate Substance Administration' (dynamic) -->
  </entryRelationship>

```

```

<entryRelationship typeCode="REFR">
  <!-- template 2.16.840.1.113883.10.21.4.8 'UV Medication Order Reference' (dynamic) -->
</entryRelationship>
<entryRelationship typeCode="REFR">
  <!-- template 2.16.840.1.113883.10.21.4.9 'UV Dispense Event Reference' (dynamic) -->
</entryRelationship>
</substanceAdministration>

```

Item	DT	Card	Conf	Description	Label
hl7:substanceAdministration					Medi...tion
└ @classCode	CS	1 ... 1	F	SBADM	
└ @moodCode	CS	1 ... 1	F	EVN	
└ hl7:templateId	II	1 ... 1	M		Medi...tion
└└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.13	
hl7:id	II	0 ... *	R		Medi...tion
	Constraint	If the use case requires updates on the order, the ID shall be made mandatory.			
└ hl7:code	CD (extensible)	0 ... 1		The code element is valorized with the ACT code from the indicated value set unless it is used for asserting the known absence of medication treatments or no information about them.	Medi. .tion
	CONF	The value of @code should be drawn from value set 2.16.840.1.113883.1.11.19708 <i>ActSubstanceAdministrationCode</i> (DYNAMIC) or The value of @code should be drawn from value set 2.16.840.1.113883.11.21.5 <i>Unknown or absent medication</i> (DYNAMIC)			
└ hl7:text	ED	0 ... 1			Medi. .tion
└ hl7:statusCode	CS (required)	1 ... 1	M		Medi. .tion

	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.19890 x_ActStatusActive-Complete (DYNAMIC)		
Included		from 2.16.840.1.113883.10.21.9.1 UV Use Period (DYNAMIC)		
Choice	1 ... 1	The effectiveTime element encodes the use period of the medication, it is always expressed as an interval of time. It may be expressed using the low and high OR with the width element. The first is used to indicate a specified interval (e.g. from march 15th, 2017); the latter for indicating a 'floating' period (e.g. 2 weeks). Elements to choose from:		
		<ul style="list-style-type: none">hl7:effectiveTime[hl7:low hl7:high]hl7:effectiveTime[hl7:width]		
<div>hl7:effectiveTime</div>		IVL_TS	0 ... 1 C	Medi...tion
where [hl7:low or hl7:high]				
<div>@nullFlavor</div>		cs	0 ... 1	
Example		Known Interval <effectiveTime xsi:type="IVL_TS">		

			<pre><low value="20130321"/> <high value="20140321"/> </effectiveTime></pre>	
	Example		Information not available about the period <pre><effectiveTime xsi:type="IVL_TS" nullFlavor="NI"/></pre>	
	Example		Unknown end date <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="UNK"/> </effectiveTime></pre>	
	Example		continous therapy <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="NA"/> </effectiveTime></pre>	
└ h17:low	IVXB_TS	1 ... 1 R		Medi...tion
└ h17:high	IVXB_TS	0 ... 1 R		Medi...tion
└ h17:effectiveTime	IVL_TS	0 ... 1 C	Case 2: 'floating' period: The width element is used to specify a period of (actual or intended) adminis- tration that is not anchored to any specific date (e.g. a two weeks therapy)	Medi...tion
where [h17:width]				
	Example		2 week period <pre><effectiveTime xsi:type="IVL_TS"> <width value="2" unit="w"/> </effectiveTime></pre>	
└ h17:low		NP		Medi...tion
└ h17:width	PQ	1 ... 1 R		Medi...tion
└ @unit	cs	1 ... 1 R		
	CONF	The value of @unit shall be drawn from value set 2.16.840.1.113883.11.21.1 <i>Medication Time Units (UCUM)</i> (DYNAMIC)		
└ h17:repeatNumber	IVL_INT	0 ... 1		Medi...tion

└ h17:routeCode	CE (example)	0 ... 1		Medi...tion
	CONF		Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.14581 <i>RouteOfAdministration</i> (DYNAMIC)	
└ h17:approachSiteCode	CD (example)	0 ... *		Medi...tion
	CONF		Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.19724 <i>HumanSubstanceAdministrationSite</i> (DYNAMIC)	
└ h17:doseQuantity	IVL_PQ	NP		Medi...tion
└ h17:rateQuantity	IVL_PQ	NP		Medi...tion
└ h17:maxDoseQuantity	RTO_PQ_PQ	0 ... 1		Medi...tion
└ h17:administrationUnitCode	CE	NP		Medi...tion
└ h17:subject		0 ... 1 C	Patient: The patient that takes the medicine. Contains 2.16.840.1.113883.10.12.320 <i>CDA Subject (Body)</i> (DYNAMIC)	Medi...tion
	Constraint		Condition: This can be omitted if the patient context that is provided in the CDA header is identical to the subject	
Elements to choose from:				
Choice		1 ... 1	<ul style="list-style-type: none"> hl7:consumable containing template 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC) hl7:consumable containing template 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC) 	
└ h17:consumable		0 ... 1 R	Consumable: The medication that is administered (simple) Contains 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC)	Medi...tion
└ @typeCode	cs	1 ... 1 F	CSM	

<div> <div>h17:consumable</div> </div>			0 ... 1 R	Consumable: The medication that is administered (detail) Contains 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DY- Medi...tion NAMIC)	
<div> <div>@typeCode</div> </div>		cs	1 ... 1 F	CSM	
				Required author of the medication administration: healthcare professional or patient Elements to choose from:	
Choice			1 ... 1	<ul style="list-style-type: none"> h17:author containing template 2.16.840.1.113883.10.12.318 <i>CDA Author (Body)</i> (DYNAMIC) h17:participant[@typeCode='AUT'] 	
<div> <div>h17:author</div> </div>				Use this if the author of the medication statement is a healthcare professional Contains 2.16.840.1.113883.10.12.318 <i>CDA Author (Body)</i> (DYNAMIC)	Medi...tion
		Example		Author of the medication statement is a healthcare professional <pre> <author> <time value="20170221"/> <assignedAuthor> <id root="1.2.3.99.99.99" extension="75487435893498"/> <assignedPerson> <name> <given qualifier="IN">Ampu</given> <prefix qualifier="VV">L.</prefix> <family>Lee</family> </name> </assignedPerson> </assignedAuthor> </author> </pre>	
<div> <div>h17:participant</div> </div>				Use this if the author of the medication administration is the patient	Medi...tion
where [@typeCode='AUT']					
<div> <div>@typeCode</div> </div>		cs	1 ... 1 F	AUT	
		Example		Author of the medication statement is the patient <pre> <participant typeCode="AUT"> <time value="20170121091548"/> <participantRole classCode="PAT"/> </participant> </pre>	

└ h17:time	TS	1 ... 1 R		Medi...tion
└ h17:participantRole		1 ... 1 M		Medi...tion
└ @classCode	cs	1 ... 1 F	PAT	
Optional informants of the medication administration: healthcare professional or patient contact party (related party) Elements to choose from:				
Choice		0 ... 1	<ul style="list-style-type: none"> h17:informant[exists(h17:assignedEntity)] h17:participant[@typeCode='INF'] h17:informant[exists(h17:relatedEntity)] 	
└ h17:informant			Use this if the informant of the medication statement is a healthcare professional	Medi...tion
where [exists(h17:assignedEntity)]				
└ @typeCode	cs	0 ... 1 F	INF	
└ @contextControlCode	cs	0 ... 1 F	OP	
Example			<p>Informant of the medication statement is a healthcare professional</p> <pre> <informant> <assignedEntity> <id root="1.2.3.99.99" extension="75487435893498"/> <assignedPerson> <name> <given qualifier="IN">Ampu</given> <prefix qualifier="VV">L.</prefix> <family>Lee</family> </name> </assignedPerson> </assignedEntity> </informant> </pre>	
└ h17:assignedEntity		1 ... 1	Contains 2.16.840.1.113883.10.12.153 CDAAssignedEntity (DYNAMIC)	Medi...tion

<div>└ h17:participant</div> <div>where [@typeCode='INF']</div>		Use this if the informant of the medication statement is the patient			Medi...tion
<div>└ @typeCode</div>	CS	1 ... 1 F	INF		
	Example	Informant of the medication statement is the patient <pre><participant typeCode="INF"> <time value="20170121091548"/> <participantRole classCode="PAT"/> </participant></pre>			
<div>└ h17:time</div>	TS	1 ... 1 R			Medi...tion
<div>└ h17:participantRole</div>		1 ... 1 M			Medi...tion
<div>└ @classCode</div>	CS	1 ... 1 F	PAT		
<div>└ h17:informant</div> <div>where [exists(h17:relatedEntity)]</div>		Use this if the informant of the medication statement is a contact party (related party)			Medi...tion
<div>└ @typeCode</div>	CS	0 ... 1 F	INF		
<div>└ @contextControlCode</div>	CS	0 ... 1 F	OP		
	Example	Informant of the medication statement is a contact party (related party) <pre><informant> <relatedEntity classCode="AGNT"> <relatedPerson classCode="PSN" determinerCode="INSTANCE"> <name> <!-- .. --> </name> </relatedPerson> </relatedEntity> </informant></pre>			
<div>└ h17:relatedEntity</div>		1 ... 1	Contains 2.16.840.1.113883.10.12.316 CDA RelatedEntity (DYNAMIC)		Medi...tion
<div>└ h17:participant</div>		0 ... 1	Record Target: indicates the person who's medical record holds the documentation of this medication statement. This element is only populated when the		Medi...tion

				document is placed in a medical record of someone other than the patient (subject). Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	
where [<i>@typeCode</i> ='RCT']					
└ @typeCode	cs	1 ... 1 F	RCT		
└ h17:participant				Verifier: The person or organization that has primary responsibility for the medication statement. The responsible party is not necessarily present in an action, but is accountable for the action through the power to delegate. Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	Medi...tion
where [<i>@typeCode</i> ='VRF']					
└ @typeCode	cs	1 ... 1 F	VRF		
└ h17:participant				Location Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	Medi...tion
where [<i>@typeCode</i> ='LOC']					
└ @typeCode		1 ... 1 F	LOC		
└ h17:entryRelationship				Subordinate Substance Administration Statement as a component of the overall medication statement. At least one subordinated <substanceAdministration> has to be present to convey information about dosages (dose, frequency of intakes,...) unless medications are unknown or known absent. Subordinated <substanceAdministration> elements can be also used either to handle split dosing, or to support combination medications. Contains 2.16.840.1.113883.10.21.4.6 UV Subordinate Substance Administration (DYNAMIC)	Medi...tion
where [<i>h17:substanceAdministration</i>]					
└ @typeCode	cs	1 ... 1 F	COMP		
Constraint	At least one subordinate <substanceAdministration> element SHALL be present unless medications are unknown or known absent.				
Example	<pre><entryRelationship typeCode="COMP"> <!-- component: Subordinate Substance Administration Statement. --></pre>				

		<pre> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.6"/> <!-- .. --> </substanceAdministration> </entryRelationship> </pre>		
└─ h17:sequenceNumber	INT	0 ... 1	Sequence number of the Subordinate Substance Administration.	Medi...tion
└─ h17:entryRelationship		0 ... 1 R	Information about any substitutions in medication that have been made. Contains 2.16.840.1.113883.10.21.4.14 <i>UV Substitution Event Administration</i> (DYNAMIC)	Medi...tion
where [<i>@typeCode</i> ='COMP']				
└─ @typeCode	cs	1 ... 1 F	COMP	
		Example	<pre> <entryRelationship typeCode="COMP"> <act classCode="ACT" moodCode="EVN"> <!-- .. --> </act> </entryRelationship> </pre>	
└─ h17:entryRelationship		0 ... * R	Medication Order Reference. Contains 2.16.840.1.113883.10.21.4.8 <i>UV Medication Order Reference</i> (DYNAMIC)	Medi...tion
where [<i>@typeCode</i> ='REFR'] [<i>h17:substanceAdministration</i>]				
└─ @typeCode	cs	1 ... 1 F	REFR	
		Example	<pre> <entryRelationship typeCode="REFR"> <substanceAdministration classCode="SBADM" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.8"/> <!-- .. --> </substanceAdministration> </entryRelationship> </pre>	
└─ h17:entryRelationship		0 ... * R	Dispense Event Reference. Contains 2.16.840.1.113883.10.21.4.9 <i>UV Dispense Event Reference</i> (DYNAMIC)	Medi...tion
where [<i>@typeCode</i> ='REFR'] [<i>h17:supply</i>]				
└─ @typeCode	cs	1 ... 1 F	REFR	
		Example	<pre> <entryRelationship typeCode="REFR"> </pre>	

```

<supply classCode="SPLY" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.21.4.9"/>
  <!-- .. -->
</supply>
</entryRelationship>

```

5.1.4 UV Medication Dispense

The following graph gives an overview of the high-level template components of this template, followed by the actual definition.

Entry UV Medication Dispense (2.16.840.1.113883.10.21.4.15)

Entry CDA Subject (Body) (2.16.840.1.113883.10.12.320)

Entry UV Medication Information (simple) (2.16.840.1.113883.10.21.4.10)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Medication Information (detail) (2.16.840.1.113883.10.21.4.11)

Entry UV Content(2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Content (2.16.840.1.113883.3.1937.777.15.10.1)

Entry UV Generalized Medicine Class (2.16.840.1.113883.3.1937.777.15.10.3)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient (2.16.840.1.113883.3.1937.777.15.10.2)

Entry UV Ingredient(2.16.840.1.113883.3.1937.777.15.10.2)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Performer (Body) (2.16.840.1.113883.10.12.323)

* CDA AssignedEntity (2.16.840.1.113883.10.12.153)

* CDA Person (2.16.840.1.113883.10.12.152)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry CDA Participant (Body) (2.16.840.1.113883.10.12.321)

Entry CDA Device (2.16.840.1.113883.10.12.315)

Entry CDA PlayingEntity (2.16.840.1.113883.10.12.313)

Entry UV Medication Order Reference (2.16.840.1.113883.10.21.4.8)

Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)

Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

Entry UV Comment Activity (2.16.840.1.113883.10.21.4.12)


Entry CDA Author (Body) (2.16.840.1.113883.10.12.318)

* CDA Person (2.16.840.1.113883.10.12.152)








Entry CDA Device (2.16.840.1.113883.10.12.315)

* CDA Organization (2.16.840.1.113883.10.12.151)

The boxes reflect the CDA Template Types. Symbols: * denotes templates with more than one classification, @ indicates a recursion in the definition

Id	2.16.840.1.113883.10.21.4.15	Effective Date	2021-08-04 16:35:09 Other versions this id:
Status	 Draft	Version Label	2021
Name	UVMedicationDispense	Display Name	UV Medication Dispense
Description	Universal Dispense Request (Supply Request)		

▪  UVMedicationDispense as of 2019-02-17

Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.15		
Classification	CDA Entry Level Template		
Open/Closed	Open (other than defined elements are allowed)		
Uses	Uses 7 templates		
	UsesasNameVersion		
	2.16.840.1.113883.10.12.320Containment	 CDA Subject (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.10Containment	 UV Medication Information (simple) (2021)	DYNAMIC
	2.16.840.1.113883.10.21.4.11Containment	 UV Medication Information (detail) (2021)	DYNAMIC
	2.16.840.1.113883.10.12.323Containment	 CDA Performer (Body)	DYNAMIC
	2.16.840.1.113883.10.12.321Containment	 CDA Participant (Body)	DYNAMIC
	2.16.840.1.113883.10.21.4.8Containment	 UV Medication Order Reference	DYNAMIC
2.16.840.1.113883.10.21.4.12Containment	 UV Comment Activity	DYNAMIC	
Relationship	Specialization: template 2.16.840.1.113883.10.12.309 CDA Supply (2005-09-07) <div>ref ad1bbr-</div>		
Example	<div>Example</div> <pre><supply classCode="SPLY" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.15"/> <id root="..." extension="--example only--"/> <code/> <text/> <statusCode code="active"/> <effectiveTime value="20170601"/> <independentInd value="false"/> <quantity value="1"/> <expectedUseTime> <low value="20170601"/> <low value="20170615"/> </expectedUseTime> <subject> <!-- template 'CDA Subject (Body)' (dynamic) --> </subject> <product typeCode="PRD"> <!-- template 'CDA ManufacturedProduct' (dynamic) --> </product> </supply></pre>		

```

</product>
<performer>
  <!-- template 'CDA Performer (Body)' (dynamic) -->
</performer>
<participant typeCode="ORG">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="DST">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="RCV">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="LOC">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<entryRelationship typeCode="COMP">
  <!-- template 'DispenseRequest' (dynamic) -->
</entryRelationship>
</supply>

```

Item	DT	Card	Conf	Description	Label
h17:supply					(UVM...nse)
└ @classCode	CS	1 ... 1	F	SPLY	
└ @moodCode	CS	1 ... 1	F	EVN	
└ h17:templateId	II	1 ... 1	M		(UVM...nse)
└└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.15	
└ h17:id	II	0 ... *			(UVM. .nse)
└ h17:code	CD (extensible)	0 ... 1			(UVM. .nse)
	CONF	The value of @code should be drawn from value set 2.16.840.1.113883.1.11.16208 ActPharmacySupplyType (DYNAMIC)			
└ h17:text	ED	0 ... 1			(UVM. .nse)

└ h17:statusCode	CS	0 ... 1		(UVM...nse)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.11.21.6 <i>ActStatusActiveCompleted</i> (DYNAMIC)		
└ h17:effectiveTime	TS	0 ... 1	Date/Time of Dispense	(UVM...nse)
└ h17:independentInd	BL	0 ... 1		(UVM...nse)
└ h17:quantity	PQ	0 ... 1		(UVM...nse)
└ h17:expectedUseTime	IVL_TS	0 ... 1		(UVM...nse)
└ h17:subject		0 ... 1	Contains 2.16.840.1.113883.10.12.320 <i>CDA Subject (Body)</i> (DYNAMIC)	(UVM...nse)
Elements to choose from:				
Choice		0 ... 1	<ul style="list-style-type: none"> hl7:product containing template 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC) hl7:product containing template 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC) 	
└ h17:product		0 ... 1 R	Consumable: The medication that is administered (simple) Contains 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (DYNAMIC)	(UVM...nse)
└ @typeCode	CS	1 ... 1 F	PRD	
└ h17:product		0 ... 1 R	Consumable: The medication that is administered (detail) Contains 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (DYNAMIC)	(UVM...nse)
└ @typeCode	CS	1 ... 1 F	PRD	
└ h17:performer		0 ... *	Dispenser Contains 2.16.840.1.113883.10.12.323 <i>CDA Performer (Body)</i> (DYNAMIC)	(UVM...nse)


└ h17:participant		0 ... 1	Origin Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVM...nse)
└ @typeCode	cs	1 ... 1 F	ORG	
└ h17:participant		0 ... 1	Destination Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVM...nse)
where [@typeCode='DST']				
└ @typeCode	cs	1 ... 1 F	DST	
└ h17:participant		0 ... *	Receiver Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVM...nse)
where [@typeCode='RCV']				
└ @typeCode	cs	1 ... 1 F	RCV	
└ h17:participant		0 ... 1	Location Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVM...nse)
where [@typeCode='LOC']				
└ @typeCode	cs	1 ... 1 F	LOC	
└ h17:entryRelationship		0 ... * R	Reference to the fulfilled Medication Order Contains 2.16.840.1.113883.10.21.4.8 UV Medication Order Reference (DYNAMIC)	(UVM...nse)
where [@typeCode='REFR'] [h17:substanceAdministration]				
└ @typeCode	cs	1 ... 1 F	REFR	
Example	<pre><entryRelationship typeCode="REFR"> <substanceAdministration classCode="SBADM" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.8"/> <!-- .. --> </substanceAdministration> </entryRelationship></pre>			
└ h17:entryRelationship		0 ... *	Annotations: The Medication Dispense can be the subject of annotations. Contains 2.16.840.1.113883.10.21.4.12 UV CommentActivity (DYNAMIC)	(UVM...nse)

@typeCode	cs	1 ... 1 F	COMP
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5.2 Entry Level Templates

These entry level templates are used Section "Use Case Entry Level Templates".

5.2.1 UV ClinicalStatement Encounter



Id	2.16.840.1.113883.10.21.4.4	Effective Date	2017-01-02
Status	 Draft	Version Label	
Name	UVClinicalStatementMinimalEncounter	Display Name	UV ClinicalStatement Encounter







Description	Universal Clinical Statement Minimal Encounter
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.4
Classification	CDA Entry Level Template
Open/Closed	Open (other than defined elements are allowed)
Relationship	Specialization: template 2.16.840.1.113883.10.12.302 <i>CDA Encounter</i> (2005-09-07) ref ad1bbr- Adaptation: template 2.16.840.1.113883.10.20.22.4.49 <i>Encounter Activity</i> (V3) (DYNAMIC) ref cdda-

Item	DT	Card	Conf	Description	Label
h17:encounter					(UVC...ter)

└ @classCode	cs	1 ... 1 F	ENC	
└ @moodCode	cs	1 ... 1 F	EVN	
└ hl7:templateId	II	1 ... 1 R		(UVC...ter)
└ @root	uid	1 ... 1 F	2.16.840.1.113883.10.21.4.4	
└ hl7:id	II	0 ... *		(UVC...ter)

5.2.2 UV ClinicalStatement Observation

Id	2.16.840.1.113883.10.21.4.3	Effective Date	2016-05-01
Status	 Draft	Version Label	
Name	UVClinicalStatementMinimalObservation	Display Name	UV ClinicalStatement Observation
Description	Universal Clinical Statement Minimal Observation		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.3		
Classification	CDA Entry Level Template		
Open/Closed	Open (other than defined elements are allowed)		
Uses	Uses 8 templates		
	Uses	as	Name
	2.16.840.1.113883.10.12.320 Containment		CDA Subject (Body)
	2.16.840.1.113883.10.12.322 Containment		CDA Specimen

2.16.840.1.113883.1 .12.323 Containment		CDA Performer (Body)	DYNAMIC
2.16.840.1.113883.1 .12.318 Containment		CDA Author (Body)	DYNAMIC
2.16.840.1.113883.1 .12.319 Containment		CDA Informant (Body)	DYNAMIC
2.16.840.1.113883.1 .12.321 Containment		CDA Participant (Body)	DYNAMIC
2.16.840.1.113883.1 .12.324 Containment		CDA Reference	DYNAMIC
2.16.840.1.113883.1 .12.329 Containment		CDA Precondition	DYNAMIC

Relationship

Specialization: template 2.16.840.1.113883.10.12.303 *CDA Observation* (2005-09-07) [ref ad1bbr-](#)


Item	DT	Card Conf	Description	Label
hl7:observation				(UVC...ion)
└ @classCode	cs	1 ... 1 F	OBS	
└ @moodCode	cs	1 ... 1 F	EVN	
└ @negationInd	bl	0 ... 1		
└ hl7:templateId	II	1 ... 1 R		(UVC...ion)
└ └ @root	uid	1 ... 1 F	2.16.840.1.113883.10.21.4.3	
└ hl7:id	II	0 ... *		(UVC...ion)
└ hl7:code	CD	1 ... 1 R	This code (e.g. drawn from LOINC) specifies the type of observation, e.g. a lab value (creatinine) or a measurement of the body weight or a body surface.	(UVC...ion)
	CONF		shall be drawn from concept domain "ObservationCode"	
└ hl7:derivationExpr	ST	0 ... 1		(UVC...ion)
└ hl7:text	ED	0 ... 1		(UVC...ion)

└ h17:statusCode	CS	0 ... 1	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.15933 <i>ActStatus</i> (DYNAMIC)	
└ h17:effectiveTime	IVL_TS	0 ... 1	(UVC...ion)
└ h17:priorityCode	CE	0 ... 1	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.16866 <i>ActPriority</i> (DYNAMIC)	
└ h17:repeatNumber	IVL_INT	0 ... 1	(UVC...ion)
└ h17:languageCode	CS	0 ... 1	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.11526 <i>HumanLanguage</i> (DYNAMIC)	
└ h17:value	ANY	0 ... *	(UVC...ion)
└ h17:interpretationCode	CE	0 ... *	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.78 <i>ObservationInterpretation</i> (DYNAMIC)	
└ h17:methodCode	CE	0 ... *	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.14079 <i>ObservationMethod</i> (DYNAMIC)	
└ h17:targetSiteCode	CD	0 ... *	(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.19724 <i>HumanSubstanceAdministrationSite</i> (DYNAMIC)	
└ h17:subject		0 ... 1	Contains 2.16.840.1.113883.10.12.320 <i>CDA Subject(Body)</i> (DYNAMIC) (UVC...ion)

└ h17:specimen		0 ... *	Contains 2.16.840.1.113883.10.12.322 CDA Specimen (DYNAMIC)	(UVC...ion)
└ h17:performer		0 ... *	Contains 2.16.840.1.113883.10.12.323 CDA Performer (Body) (DYNAMIC)	(UVC...ion)
└ h17:author		0 ... *	Contains 2.16.840.1.113883.10.12.318 CDA Author (Body) (DYNAMIC)	(UVC...ion)
└ h17:informant		0 ... *	Contains 2.16.840.1.113883.10.12.319 CDA Informant (Body) (DYNAMIC)	(UVC...ion)
└ h17:participant		0 ... *	Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVC...ion)
└ h17:reference		0 ... *	Contains 2.16.840.1.113883.10.12.324 CDA Reference (DYNAMIC)	(UVC...ion)
└ h17:precondition		0 ... *	Contains 2.16.840.1.113883.10.12.329 CDA Precondition (DYNAMIC)	(UVC...ion)
└ h17:referenceRange		0 ... *		(UVC...ion)
└ @typeCode	CS	1 ... 1 F	REFV	
└ h17:observationRange		1 ... 1 R		(UVC...ion)
└ @classCode	CS	0 ... 1 F	OBS	
└ @moodCode	CS	0 ... 1 F	EVN.CRT	
└ h17:code	CD	0 ... 1		(UVC...ion)
└ @codeSystem	CONF	0 ... 1 F	2.16.840.1.113883.5.4 (Act Code)	
└ h17:text	ED	0 ... 1		(UVC...ion)
└ h17:value	ANY	0 ... 1		(UVC...ion)
└ h17:interpretationCode	CE	0 ... 1		(UVC...ion)
	CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.78 ObservationInterpreta-		


tion (DYNAMIC)


5.2.3 UV Comment Activity

Id	2.16.840.1.113883.10.21.4.12	Effective Date	2018-03-21
Status	 Draft	Version Label	
Name	UVCommentactivity	Display Name	UV Comment Activity

Description


Comments that the provider makes about the activity, e.g. order or dispense. Comments are free text data that cannot otherwise be recorded using data elements already defined by this specification. They are not to be used to record information that can be recorded elsewhere. For example, a free text description of the severity of an allergic reaction would not be recorded in a comment.













Classification	CDA Entry Level Template			
Open/Closed	Open (other than defined elements are allowed)			
Uses	Uses 1 template			
	Uses	as	Name	Version
	2.16.840.1.113883.10.12.318 Containment		CDA Author (Body)	DYNAMIC
Relationship	Specialization: template 2.16.840.1.113883.10.12.301 CDA Act (2005-09-07) ref ad1bbr-			

Item	DT	Card	Conf	Description	Label
hl7:act					(UVC...ity)
 @classCode		1 ... 1 F		ACT	

└ @moodCode		1 ... 1 F	EVN	
└ hl7:templateId	II	1 ... 1 M		(UVC...ity)
└ @root	uid	1 ... 1 F	2.16.840.1.113883.10.21.4.12	
└ hl7:code	CD	1 ... 1 M		(UVC...ity)
└ @code	CONF	1 ... 1 F	48767-8	
└ @codeSystem		1 ... 1 F	2.16.840.1.113883.6.1 (LOINC)	
└ hl7:text		1 ... 1 M		(UVC...ity)
└ hl7:reference	TEL	1 ... 1 R		(UVC...ity)
└ @nullFlavor	cs	0 ... 1 F	NA	
└ hl7:author		0 ... 1	Contains 2.16.840.1.113883.10.12.318 CDA Author(Body) (DYNAMIC)	(UVC...ity)

5.2.4 UV Dispense Request

Id	2.16.840.1.113883.10.21.4.2	Effective Date	2016-05-01
Status	 Draft	Version Label	
Name	UVDispenseRequest	Display Name	UV Dispense Request
Description	Universal Dispense Request (Supply Request)		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.2		

Classification	CDA Entry Level Template																				
Open/Closed	Open (other than defined elements are allowed)																				
Uses	Uses 4 templates																				
	<table><tr><th>Uses</th><th>as</th><th>Name</th><th>Version</th></tr><tr><td>2.16.840.1.113883.10.12.320 Containment</td><td></td><td>CDA Subject (Body)</td><td>DYNAMIC</td></tr><tr><td>2.16.840.1.113883.10.12.312 Containment</td><td></td><td>CDA ManufacturedProduct</td><td>DYNAMIC</td></tr><tr><td>2.16.840.1.113883.10.12.323 Containment</td><td></td><td>CDA Performer (Body)</td><td>DYNAMIC</td></tr><tr><td>2.16.840.1.113883.10.12.321 Containment</td><td></td><td>CDA Participant (Body)</td><td>DYNAMIC</td></tr></table>	Uses	as	Name	Version	2.16.840.1.113883.10.12.320 Containment		CDA Subject (Body)	DYNAMIC	2.16.840.1.113883.10.12.312 Containment		CDA ManufacturedProduct	DYNAMIC	2.16.840.1.113883.10.12.323 Containment		CDA Performer (Body)	DYNAMIC	2.16.840.1.113883.10.12.321 Containment		CDA Participant (Body)	DYNAMIC
	Uses	as	Name	Version																	
	2.16.840.1.113883.10.12.320 Containment		CDA Subject (Body)	DYNAMIC																	
	2.16.840.1.113883.10.12.312 Containment		CDA ManufacturedProduct	DYNAMIC																	
2.16.840.1.113883.10.12.323 Containment		CDA Performer (Body)	DYNAMIC																		
2.16.840.1.113883.10.12.321 Containment		CDA Participant (Body)	DYNAMIC																		
Relationship	Specialization: template 2.16.840.1.113883.10.12.309 <i>CDA Supply</i> (2005-09-07) ref ad1bbr-																				
Example	<div>Example</div> <pre><supply classCode="SPLY" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.2"/> <id root="..." extension="--example only--"/> <code/> <text/> <statusCode code="active"/> <effectiveTime xsi:type="IVL_TS"> <low value="20170601"/> <high value="20170801"/> </effectiveTime> <repeatNumber/> <independentInd value="false"/> <quantity value="1"/> <expectedUseTime> <low value="20160511153724"/> </expectedUseTime> <subject> <!-- template 'CDA Subject (Body)' (dynamic) --> </subject> <product typeCode="PRD"> <!-- template 'CDA ManufacturedProduct' (dynamic) --> </product> <performer> <!-- template 'CDA Performer (Body)' (dynamic) --> </performer> <participant typeCode="ORG"></pre>																				

```

<!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="DST">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="RCV">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<participant typeCode="LOC">
  <!-- template 'CDA Participant (Body)' (dynamic) -->
</participant>
<entryRelationship typeCode="COMP">
  <!-- template 'DispenseRequest' (dynamic) -->
</entryRelationship>
</supply>


```

Item	DT	Card	Conf	Description	Label
h17:supply					(UVD...est)
└ @classCode	cs	1 ... 1	F	SPLY	
└ @moodCode	cs	1 ... 1	F	RQO	
└ h17:templateId	II	1 ... 1	M		(UVD...est)
└└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.2	
└ h17:id	II	0 ... *			(UVD. .est)
└ h17:code	CD (extensible)	0 ... 1			(UVD. .est)
	CONF	The value of @code should be drawn from value set 2.16.840.1.113883.1.11.16208 ActPharmacySupplyType (DYNAMIC)			
└ h17:text	ED	0 ... 1			(UVD. .est)
└ h17:statusCode	CS	0 ... 1			(UVD. .est)

└ @code	CONF	0 ... 1 F	active	
└ h17:effectiveTime	IVL_TS	0 ... 1	Validity period of the Dispense Request	(UVD...est)
└ h17:repeatNumber	IVL_INT	0 ... 1		(UVD...est)
└ h17:independentInd	BL	0 ... 1		(UVD...est)
└ h17:quantity	PQ	0 ... 1		(UVD...est)
└ h17:expectedUseTime	IVL_TS	0 ... 1		(UVD...est)
└ h17:subject		0 ... 1	Contains 2.16.840.1.113883.10.12.320 CDA Subject (Body) (DYNAMIC)	(UVD...est)
└ h17:product		0 ... 1 R	Contains 2.16.840.1.113883.10.12.312 CDA ManufacturedProduct (DYNAMIC)	(UVD...est)
└ @typeCode	cs	0 ... 1 F	PRD	
└ h17:performer		0 ... *	Contains 2.16.840.1.113883.10.12.323 CDA Performer (Body) (DYNAMIC)	(UVD...est)
└ h17:participant		0 ... 1	Origin Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVD...est)
└ @typeCode		1 ... 1 F	ORG	
└ h17:participant		0 ... 1	Destination Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVD...est)
where [@typeCode='DST']				
└ @typeCode		1 ... 1 F	DST	
└ h17:participant		0 ... *	Receiver Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC)	(UVD...est)
where [@typeCode='RCV']				
└ @typeCode		1 ... 1 F	RCV	

<div> <div>h17:participant</div> <div>0 ... 1</div> </div> <div>Location</div> <div>Contains 2.16.840.1.113883.10.12.321 CDA Participant (Body) (DYNAMIC) (UVD...est)</div>	
where [<i>@typeCode</i> ='LOC']	
<div> <div>@typeCode</div> <div>1 ... 1 F</div> </div> <div>LOC</div>	

5.2.5 UV Dispense Event Reference


Id	2.16.840.1.113883.10.21.4.9	Effective Date	2017-03-30
Status	 Draft	Version Label	
Name	UVDispenseEventReference	Display Name	UV Dispense Event Reference

Description	This is a reference to a Dispense Event
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.9
Label	DispenseEventReference
Classification	CDA Entry Level Template
Open/Closed	Open (other than defined elements are allowed)
Relationship	Specialization: template 2.16.840.1.113883.10.12.309 CDA Supply (2005-09-07) ref ad1bbr-

Example	<div>Example</div> <pre><supply classCode="SPLY" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.9"/> <id root="1.2.3.99.99.99" extension="978437489739"/></pre>
----------------	--

</supply>					
Item	DT	Card	Conf	Description	Label
hl7:supply					Disp...ence
└ @classCode	cs	1 ... 1	F	SPLY	
└ @moodCode	cs	1 ... 1	F	EVN	
└ hl7:templateId	II	1 ... 1	M		Disp...ence
└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.9	
└ hl7:id	II	1 ... 1	R		Disp...ence

5.2.6 UV Medication Information (detail)

Id	2.16.840.1.113883.10.21.4.11	Effective Date	2021-08-04 12:39:04 Other versions this id: <ul style="list-style-type: none"> <input type="radio"/> UVMedicationInformationdetail as of 2017-05-10
Status	 Draft	Version Label	2021
Name	UVMedicationInformationdetail	Display Name	UV Medication Information (detail)
Description	Universal Medication Information (detail)		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.11		
Classification	CDA Entry Level Template		

Open/Closed	Open (other than defined elements are allowed)				
Uses	Uses 4 templates				
	Uses	as	Name		Version
	2.16.840.1.113883.3.1937.777.15.10.1	Include	UV Content		DYNAMIC
	2.16.840.1.113883.3.1937.777.15.10.3	Include	UV Generalized Medicine Class		DYNAMIC
	2.16.840.1.113883.3.1937.777.15.10.2	Include	UV Ingredient		DYNAMIC
	2.16.840.1.113883.10.12.151	Containment	CDA Organization		DYNAMIC
Relationship	Version: template 2.16.840.1.113883.10.21.4.11 <i>UV Medication Information (detail)</i> (2017-05-10) Specialization: template 2.16.840.1.113883.10.12.312 <i>CDA ManufacturedProduct</i> (2005-09-07) <small>ref ad1bbr-</small> Adaptation: template 1.3.6.1.4.1.19376.1.9.1.3.1 <i>IHE MedicineEntryContentModule</i> (DYNAMIC) <small>ref ch-pharm-</small>				

Item	DT	Card	Conf	Description	Label
h17:manufacturedProduct					(UVM...ail)
└ @classCode	cs	1 ... 1	F	MANU	
└ h17:templateId	II	1 ... 1	M		(UVM...ail)
└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.11	
└ h17:manufacturedMaterial					(UVM...ail)
└ @classCode	cs	0 ... 1	F	MMAT	
└ @determinerCode	cs	0 ... 1	F	KIND	
└ h17:code	CE	0 ... 1	R	The code describes the code of the medication. The medication may be either <ul style="list-style-type: none">a brand/product or	(UVM...ail)

				<ul style="list-style-type: none"> described as a generic/scientific name or a descriptor of a magistral preparation/compound medicine 	
└ h17:originalText	ED	0 ... 1	R	The originalText should contain a reference whose URI value points to the name and strength of the medication in the corresponding section.text, or just the name alone if strength is not relevant.	(UVM...ail)
└ h17:reference	TEL	1 ... 1	R		(UVM...ail)
└ h17:translation	CE	0 ... *		Product code(s) from any organizational or jurisdictional system	(UVM...ail)
	CONF	shall be drawn from concept domain "Product Code"			
				The element SHOULD contain the name of the medication (e.g., "Adol 500mg Caplet"). The medication may be either	
└ h17:name	EN	0 ... 1	R	<ul style="list-style-type: none"> a brand/product or described as a generic/scientific name or a descriptor of a magistral preparation/compound medicine 	(UVM...ail)
└ pharm:formCode	CE	0 ... 1		This code represents the pharmaceutical dose form (e.g., tablet, capsule, liquid) and SHOULD be present, if not implied by the product. It MAY be present if implied by the product. The value of this code may affect the units used in the substance administration quantity element.	(UVM...ail)
└ h17:lotNumberText	ST	0 ... 1		The lotNumberText element MAY be pre-	(UVM...ail)

L pharm:expirationTime	TS	0 ... 1	<p>sent and is a string representation of a lot number of this specific instance of the product. The provided lot number SHALL refer to the primary packaged item described in the Packaging element.</p> <p>The pharm:expirationTime element MAY be present and SHALL contain a value attribute containing the date (e.g., specific date, specific date including time) of expiration of this specific instance of the product. The value given in the pharm:expirationTime element SHALL refer to the primary packaged item described in the Medicine Packaging element.</p>	(UVM...ail)
L @value		1 ... 1 R		
L pharm:asContent		0 ... *	<p>This structure describes the packaging of the medication. It represents the primary description of the packaging of the medicine (e.g., the medicine is packaged in ampoules of 50ml volume each) and may include additional packaging information of how many of the primary packaged items are within an outer package (e.g., 5 ampoules are packaged in a box).</p> <p>The primary description of the package should be consistent with the given pharmaceutical dose form (pharm:formCode of the medication). Example: a consistent pharmaceutical dose form to the package form "Ampoules" would be e.g., "Solution for injection".</p> <p>In case the package describes a product, the pharm:code element provides the code for the product.</p> <p>In case the package describes a product, and the package has a brand name, it</p>	(UVM...ail)

should be described in the pharm:name element (e.g., Xylocaine 1% with Adrenaline Inj, 5 injections package).
The pharm:formCode element represents the form of the product/container (e.g., tablet container, bottle, ...).

The <pharm:capacityQuantity> element describes the capacity of the packaging, while the <pharm:quantity> the actual quantity of inner packaged items in the outer packaging container.

The product might have a single (30 pills bottle) or multiple (5 vials 10 ml; box with 2 blisters of 20 tablets) layers of packaging. In the latter case, the most inner (nested) item represents the most outer package item.
For example the case
 |--Box
 |----2 blisters
 |-----20 tablets
is described as "20 tablets" contained by "a blister"; "2 blisters" contained by one box. The most inner package represents the Packaged Medicinal Product.

@classCode

cs 1 ... 1 F CONT

Example

```
<pharm:asContent classCode="CONT">  
  <pharm:containerPackagedProduct classCode="CONT" determiner-
```

Example

```

Code="KIND">
  <!-- Packaged Medicinal Product -->
  <pharm:code codeSystem="1.999.999" code="PC_ID" display-
Name="Packaged Product Name"/>
  <pharm:name>100 MIRACLE PILLS(TM)</pharm:name>
  <pharm:formCode codeSystem="0.4.0.127.0.16.1.1.2.1"
code="30009000" displayName="Box" CodeSystemName="EDQM"/>
</pharm:containerPackagedProduct>
</pharm:asContent>

```

General example

```

<pharm:asContent classCode="CONT">
  <pharm:quantity value=" " unit=" "/>
  <pharm:containerPackagedProduct classCode="CONT" determiner-
Code="KIND">
    <!-- Medicinal product code (package-level) -->
    <pharm:code code=" " displayName=" " codeSystem=" " codeSystem-
Name=" " />
    <!-- Brand name (package) -->
    <pharm:name> . . . </pharm:name>
    <pharm:formCode code=" " displayName=" " codeSystem=" " codeSys-
temName=" " />
    <pharm:capacityQuantity value=" " unit=" "/>
    <pharm:asContent>
      <pharm:containerPackagedProduct classCode="CONT" determiner-
Code="KIND">
        <pharm:capacityQuantity value=" " unit=" "/>
        </pharm:containerPackagedProduct>
      </pharm:asContent>
    </pharm:containerPackagedProduct>
  </pharm:asContent>

```

Example

Medicinal product with pharmaceutical dose form "Tablets", available as a "Tablet container" with 30 tablets

```

<pharm:asContent classCode="CONT">
  <!-- 30 tablets in the package -->
  <pharm:quantity value="30" unit="{tablet}"/>
  <pharm:containerPackagedProduct classCode="CONT" determiner-
Code="KIND">
    <!-- . . -->
    <pharm:formCode code=" " displayName="Tablet container" codeSys-
tem=" " codeSystemName=" " />
  </pharm:containerPackagedProduct>
</pharm:asContent>

```

Example

Medicinal product with pharmaceutical dose form 'Solution for injection', available as "Ampoules" with 50ml volume, packaged as 5 ampoules per box

Example

```

<pharm:asContent classCode="CONT">
  <pharm:quantity value="50" unit="ml"/>
  <!-- 50ml per ampoule -->
  <pharm:containerPackagedProduct classCode="CONT" determiner-
Code="KIND">
    <!-- .. -->
    <pharm:formCode code=" " displayName="Ampoules" codeSystem=" "
codeSystemName=" "/>
    <pharm:asContent>
      <!-- 5 ampoules in a box -->
      <pharm:quantity value="5"/>
      <pharm:containerPackagedProduct classCode="CONT" determiner-
Code="KIND">
        <!-- .. -->
        </pharm:containerPackagedProduct>
      </pharm:asContent>
    </pharm:containerPackagedProduct>
  </pharm:asContent>

```

Packaged Medicinal Product with multiple layers packaging

```

<pharm:asContent classCode="CONT">
  <pharm:containerPackagedProduct>
    <!-- Inner Package -->
    <pharm:code codeSystem="..." code="..." displayName="..." />
    <pharm:asContent>
      <pharm:containerPackagedProduct>
        <!-- Intermediate Package -->
        <pharm:asContent>
          <pharm:containerPackagedProduct>
            <!-- Outer Package / Packaged Medicinal Product -->
            </pharm:containerPackagedProduct>
          </pharm:asContent>
        </pharm:containerPackagedProduct>
      </pharm:asContent>
    </pharm:containerPackagedProduct>
  </pharm:asContent>

```








Included

└─ pharm:quantity	PQ	0 ... 1	R	from 2.16.840.1.113883.3.1937.777.15.10.1 UV Con- tent (DYNAMIC)	
└─ pharm:containerPackagedProduct		1 ... 1	R	The quantity which specified how many in- ner packaged content entities are in an	(UVM...ail)
└─ @classCode	cs	1 ... 1	F	CONT	(UVM...ail)

L @determinerCode	CS	1 ... 1	F	KIND	
L pharm:code	CE	0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
L pharm:name	EN	0 ... *		It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)
L pharm:formCode	CE	0 ... 1		This element encodes the type of the most inner package item or of the or the Packaged Medicinal Product.	(UVM...ail)
L pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
L @value		1 ... 1	R		
L @unit	CS	0 ... 1			
L pharm:asContent		0 ... *		In case of multiple layers of packaging (5 vials 10 ml; box with 2 blisters of 20 tablets) this element can be used for describing the intermediate Packaged Medicinal Product Item or the Packaged Medicinal Product. For example in the case \\--Box	(UVM...ail)

\ ----2 blisters
 \ -----20 tablets
 it describes the "2 blisters"

In the case of
 \--Box
 \ ----5 vials
 it represents the Packaged Medicinal Product.

 @classCode	cs	1 ... 1	F	CONT	
 pharm:quantity	PQ	0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity.	(UVM...ail)
 pharm:containerPackagedProduct		1 ... 1	R	It represents the intermediate Package Item or the Packaged Medicinal Product	(UVM...ail)
 @classCode	cs	1 ... 1	F	CONT	
 @determinerCode	cs	1 ... 1	F	KIND	
 pharm:code	CD	0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
 pharm:name	ST	0 ... 1	R	It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)

└─ <code>pharm:formCode</code>	CE	1 ... 1	R	This element encodes the type of the intermediate package item or of the or the Packaged Medicinal Product.	(UVM...ail)
└─ <code>pharm:capacityQuantity</code>	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
└─ <code>@value</code>		1 ... 1	R		
└─ <code>@unit</code>	CS	0 ... 1			
└─ <code>pharm:asContent</code>		0 ... *	R	In case of multiple layers of packaging (box with 2 blisters of 20 tablets) this element is used for describing the most outer Packaged Medicinal Product Item or the Packaged Medicinal Product. For example in the case └--Box └----2 blisters └-----20 tablets it describes the Packaged Medicinal Product.	(UVM...ail)
└─ <code>@classCode</code>	CS	1 ... 1	F	CONT	
└─ <code>pharm:quantity</code>	PQ	0 ... 1	R		(UVM...ail)
└─ <code>pharm:containerPackagedProduct</code>		1 ... 1	R	When present, it represents the Packaged Medicinal Product	(UVM...ail)
└─ <code>@classCode</code>	CS	1 ... 1	F	CONT	
└─ <code>@determinerCode</code>	CS	1 ... 1	F	KIND	
└─ <code>pharm:code</code>	CD	0 ... 1		When present, it can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
└─ <code>pharm:name</code>	ST	0 ... 1	R		(UVM...ail)

└─ <code>pharm:formCode</code>	CE	1 ... 1	R	(UVM...ail)
└─ <code>pharm:capacityQuantity</code>	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded. (UVM...ail)
└─ <code>@value</code>		1 ... 1	R	
└─ <code>@unit</code>	CS	0 ... 1		
└─ <code>pharm:asSpecializedKind</code>		0 ... *	R	The Medicinal Product can be classified according to various classification systems, which may be jurisdictional or international as for example the WHO ATC drug code, or the IDMP Pharmaceutical Product Identifier(s) (PhPID Set) when it will be available for use. The generalizedMaterialKind/code element is used to convey these codes.
└─ <code>@classCode</code>	CS	1 ... 1	F	GRIC
<div>Example</div> <pre><pharm:asSpecializedKind classCode="GRIC"> <pharm:generalizedMedicineClass classCode="MMAT"> <pharm:code code=" " displayName=" " codeSystem=" " codeSystem- Name=" " /> </pharm:generalizedMedicineClass> </pharm:asSpecializedKind></pre>				
Included from 2.16.840.1.113883.3.1937.777.15.10.3 UV Generalized Medicine Class (DYNAMIC)				
└─ <code>pharm:generalizedMedicineClass</code>		0 ... *		(UVM...ail)
└─ <code>@classCode</code>	CS	1 ... 1	F	MMAT
└─ <code>pharm:code</code>		1 ... 1	R	(UVM...ail)
└─ <code>pharm:name</code>		0 ... *		(UVM...ail)

└─ pharm:part			0 ... *		(UVM...ail)
└─ @classCode	CS		1 ... 1	F	PART
└─ pharm:id	II		0 ... 1		(UVM...ail)
└─ pharm:quantity	PQ		0 ... 1		(UVM...ail)
└─ pharm:partProduct			1 ... 1		(UVM...ail)
└─ pharm:asContent			0 ... *		(UVM...ail)
└─ @classCode	CS		1 ... 1	F	CONT
Included					from 2.16.840.1.113883.3.1937.777.15.10.1 UV Content (DYNAMIC)
└─ pharm:quantity	PQ		0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity. (UVM...ail)
└─ pharm:containerPackagedProduct			1 ... 1	R	(UVM...ail)
└─ @classCode	CS		1 ... 1	F	CONT
└─ @determinerCode	CS		1 ... 1	F	KIND
└─ pharm:code	CE		0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID. (UVM...ail)
└─ pharm:name	EN		0 ... *		It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element (UVM...ail)

L	pharm:formCode	CE	0 ... 1	can be used for the brand name. This element encodes the type of the most inner package item or of the or the Packaged Medicinal Product.	(UVM...ail)
	pharm:capacityQuantity	PQ	0 ... 1	Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
L	@value		1 ... 1	R	
L	@unit	CS	0 ... 1		
L	pharm:asContent		0 ... *	In case of multiple layers of packaging (5 vials 10 ml; box with 2 blisters of 20 tablets) this element can be used for describing the intermediate Packaged Medicinal Product Item or the Packaged Medicinal Product.	(UVM...ail)
				For example in the case \--Box \----2 blisters \-----20 tablets it describes the "2 blisters"	
L	@classCode	CS	1 ... 1	In the case of \--Box \----5 vials it represents the Packaged Medicinal Product.	
				CONT	

└─ pharm:quantity	PQ	0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity.	(UVM...ail)
└─ pharm:containerPackagedProduct		1 ... 1	R	It represents the intermediate Package Item or the Packaged Medicinal Product	(UVM...ail)
└─ @classCode	CS	1 ... 1	F	CONT	
└─ @determinerCode	CS	1 ... 1	F	KIND	
└─ pharm:code	CD	0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
└─ pharm:name	ST	0 ... 1	R	It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)
└─ pharm:formCode	CE	1 ... 1	R	This element encodes the type of the intermediate package item or of the or the Packaged Medicinal Product.	(UVM...ail)
└─ pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
└─ @value		1 ... 1	R		
└─ @unit	CS	0 ... 1			
└─ pharm:asContent		0 ... *	R	In case of multiple layers of packaging (box with 2 blisters of 20 tablets) this element is used for describing the most outer Packaged Medicinal Product Item or the Packaged Medicinal Product.	(UVM...ail)

					For example in the case \--Box \ ----2 blisters \ -----20 tablets it describes the Packaged Medicinal Product.
	└ @classCode	cs	1 ... 1	F	CONT
	└ pharm:quantity	PQ	0 ... 1	R	(UVM...ail)
	└ pharm:containerPackagedProduct		1 ... 1	R	When present, it represents the Packaged Medicinal Product (UVM...ail)
	└ @classCode	cs	1 ... 1	F	CONT
	└ @determinerCode	cs	1 ... 1	F	KIND
	└ pharm:code	CD	0 ... 1		When present, it can be used to convey the Packaged Medicinal Product ID. (UVM...ail)
	└ pharm:name	ST	0 ... 1	R	(UVM...ail)
	└ pharm:formCode	CE	1 ... 1	R	(UVM...ail)
	└ pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded. (UVM...ail)
	└ @value		1 ... 1	R	
	└ @unit	cs	0 ... 1		
	└ pharm:asSpecializedKind		0 ... *		(UVM...ail)
	└ @classCode	cs	1 ... 1	F	GRIC
Included					from 2.16.840.1.113883.3.1937.777.15.10.3 UV Generalized Medicine Class (DYNAMIC)

└─ pharm:generalizedMedicineClass		0 ... *		(UVM...ail)
└─ @classCode	CS	1 ... 1	F	MMAT
└─ pharm:code		1 ... 1	R	(UVM...ail)
└─ pharm:name		0 ... *		(UVM...ail)
└─ pharm:part		0 ... *		(UVM...ail)
└─ @classCode	CS	1 ... 1	F	PART
└─ pharm:id	II	0 ... 1		(UVM...ail)
└─ pharm:quantity	PQ	0 ... 1		(UVM...ail)
└─ pharm:partProduct		1 ... 1		(UVM...ail)
└─ pharm:asContent		0 ... *		(UVM...ail)
└─ @classCode	CS	1 ... 1	F	CONT
Included				from 2.16.840.1.113883.3.1937.777.15.10.1 UV Content (DYNAMIC)
└─ pharm:quantity	PQ	0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity. (UVM...ail)
└─ pharm:containerPackagedProduct		1 ... 1	R	(UVM...ail)
└─ @classCode	CS	1 ... 1	F	CONT
└─ @determinerCode	CS	1 ... 1	F	KIND
└─ pharm:code	CE	0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. (UVM...ail)

			If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	
└─ pharm:name	EN	0 ... *	It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name. (UVM...ail)	
└─ pharm:formCode	CE	0 ... 1	This element encodes the type of the most inner package item or of the or the Packaged Medicinal Product. (UVM...ail)	
└─ pharm:capacityQuantity	PQ	0 ... 1	Captures the number of product units the package would contain if fully loaded. (UVM...ail)	
└─ @value		1 ... 1	R	
└─ @unit	CS	0 ... 1		
			In case of multiple layers of packaging (5 vials 10 ml; box with 2 blisters of 20 tablets) this element can be used for describing the intermediate Packaged Medicinal Product Item or the Packaged Medicinal Product.	
└─ pharm:asContent		0 ... *	<p>For example in the case</p> <pre>--Box ----2 blisters -----20 tablets</pre> <p>it describes the "2 blisters"</p> <p>(UVM...ail)</p>	

					In the case of \\--Box \\ ----5 vials it represents the Packaged Medicinal Product.
└ @classCode	CS	1 ... 1	F	CONT	
└ pharm:quantity	PQ	0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity.	(UVM...ail)
└ pharm:containerPackagedProduct		1 ... 1	R	It represents the intermediate Package Item or the Packaged Medicinal Product	(UVM...ail)
└ @classCode	CS	1 ... 1	F	CONT	
└ @determinerCode	CS	1 ... 1	F	KIND	
└ pharm:code	CD	0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
└ pharm:name	ST	0 ... 1	R	It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)
└ pharm:formCode	CE	1 ... 1	R	This element encodes the type of the intermediate package item or of the or the Packaged Medicinal Product.	(UVM...ail)
└ pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)

└ @value		1 ... 1	R	
└ @unit	CS	0 ... 1		
└ pharm:asContent		0 ... *	R	In case of multiple layers of packaging (box with 2 blisters of 20 tablets) this element is used for describing the most outer Packaged Medicinal Product Item or the Packaged Medicinal Product. For example in the case \--Box \ ----2 blisters \ -----20 tablets it describes the Packaged Medicinal Product. (UVM...ail)
└ @classCode	CS	1 ... 1	F	CONT
└ pharm:quantity	PQ	0 ... 1	R	(UVM...ail)
└ pharm:containerPackagedProduct		1 ... 1	R	When present, it represents the Packaged Medicinal Product (UVM...ail)
└ @classCode	CS	1 ... 1	F	CONT
└ @determinerCode	CS	1 ... 1	F	KIND
└ pharm:code	CD	0 ... 1		When present, it can be used to convey the Packaged Medicinal Product ID. (UVM...ail)
└ pharm:name	ST	0 ... 1	R	(UVM...ail)
└ pharm:formCode	CE	1 ... 1	R	(UVM...ail)
└ pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded. (UVM...ail)
└ @value		1 ... 1	R	

	└ @unit	CS	0 ... 1			
	└ pharm:asSpecializedKind		0 ... *			(UVM...ail)
	└ @classCode	CS	1 ... 1	F	GRIC	
Included					from 2.16.840.1.113883.3.1937.777.15.10.3 UV Generalized Medicine Class (DYNAMIC)	
	└ pharm:generalizedMedicineClass		0 ... *			(UVM...ail)
	└ @classCode	CS	1 ... 1	F	MMAT	
	└ pharm:code		1 ... 1	R		(UVM...ail)
	└ pharm:name		0 ... *			(UVM...ail)
	└ pharm:part		0 ... *			(UVM...ail)
	└ @classCode	CS	1 ... 1	F	PART	
	└ pharm:id	II	0 ... 1			(UVM...ail)
	└ pharm:quantity	PQ	0 ... 1			(UVM...ail)
	└ pharm:partProduct		1 ... 1			(UVM...ail)
	└ pharm:asContent		0 ... *			(UVM...ail)
	└ @classCode	CS	1 ... 1	F	CONT	
Included					from 2.16.840.1.113883.3.1937.777.15.10.1 UV Content (DYNAMIC)	
	└ pharm:quantity	PQ	0 ... 1	R	The quantity which specified how many inner packaged content entities are in an outer packaging container entity.	(UVM...ail)

└─ pharm:containerPackagedProduct			1 ... 1	R		(UVM...ail)
└─ @classCode	CS		1 ... 1	F	CONT	
└─ @determinerCode	CS		1 ... 1	F	KIND	
└─ pharm:code	CE		0 ... 1		It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
└─ pharm:name	EN		0 ... *		It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)
└─ pharm:formCode	CE		0 ... 1		This element encodes the type of the most inner package item or of the or the Packaged Medicinal Product.	(UVM...ail)
└─ pharm:capacityQuantity	PQ		0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
└─ @value			1 ... 1	R		
└─ @unit	CS		0 ... 1			
└─ pharm:asContent			0 ... *		In case of multiple layers of packaging (5 vials 10 ml; box with 2 blisters of 20 tablets) this element can be used for describing the intermediate Packaged Medicinal Product Item or the Packaged Medicinal Product.	(UVM...ail)

For example in the case

\--Box

\----2 blisters

\-----20 tablets

it describes the "2 blisters"

In the case of

\--Box

\----5 vials

it represents the Packaged Medicinal Product.

└ @classCode

cs

1 ... 1

F

CONT

└ pharm:quantity

PQ

0 ... 1

R

The quantity which specified how many inner packaged content entities are in an outer packaging container entity.

(UVM...ail)

└ pharm:containerPackagedProduct

1 ... 1

R

It represents the intermediate Package Item or the Packaged Medicinal Product

(UVM...ail)

└ @classCode

cs

1 ... 1

F

CONT

└ @determinerCode

cs

1 ... 1

F

KIND

└ pharm:code

CD

0 ... 1

It represents the code of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used to convey the Packaged Medicinal Product ID.

(UVM...ail)

└─ <code>pharm:name</code>	ST	0 ... 1	R	It represents the Name of the Package Item or of the Packaged Medicinal Product. If this is also the most outer <pharm:containerPackagedProduct> than this element can be used for the brand name.	(UVM...ail)
└─ <code>pharm:formCode</code>	CE	1 ... 1	R	This element encodes the type of the intermediate package item or of the or the Packaged Medicinal Product.	(UVM...ail)
└─ <code>pharm:capacityQuantity</code>	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
└─ <code>@value</code>		1 ... 1	R		
└─ <code>@unit</code>	cs	0 ... 1			
└─ <code>pharm:asContent</code>		0 ... *	R	In case of multiple layers of packaging (box with 2 blisters of 20 tablets) this element is used for describing the most outer Packaged Medicinal Product Item or the Packaged Medicinal Product. For example in the case └--Box └----2 blisters └-----20 tablets it describes the Packaged Medicinal Product.	(UVM...ail)
└─ <code>@classCode</code>	cs	1 ... 1	F	CONT	
└─ <code>pharm:quantity</code>	PQ	0 ... 1	R		(UVM...ail)
└─ <code>pharm:containerPackagedProduct</code>		1 ... 1	R	When present, it represents the Packaged Medicinal Product	(UVM...ail)
└─ <code>@classCode</code>	cs	1 ... 1	F	CONT	
└─ <code>@determinerCode</code>	cs	1 ... 1	F	KIND	

	└─ pharm:code	CD	0 ... 1		When present, it can be used to convey the Packaged Medicinal Product ID.	(UVM...ail)
	└─ pharm:name	ST	0 ... 1	R		(UVM...ail)
	└─ pharm:formCode	CE	1 ... 1	R		(UVM...ail)
	└─ pharm:capacityQuantity	PQ	0 ... 1		Captures the number of product units the package would contain if fully loaded.	(UVM...ail)
	└─ @value		1 ... 1	R		
	└─ @unit	CS	0 ... 1			
	└─ pharm:asSpecializedKind		0 ... *			(UVM...ail)
	└─ @classCode	CS	1 ... 1	F	GRIC	
Included					from 2.16.840.1.113883.3.1937.777.15.10.3 UV Generalized Medicine Class (DYNAMIC)	
	└─ pharm:generalizedMedicineClass		0 ... *			(UVM...ail)
	└─ @classCode	CS	1 ... 1	F	MMAT	
	└─ pharm:code		1 ... 1	R		(UVM...ail)
	└─ pharm:name		0 ... *			(UVM...ail)
	└─ pharm:part		0 ... *			(UVM...ail)
	└─ @classCode	CS	1 ... 1	F	PART	
	└─ pharm:ingredient		0 ... *			(UVM...ail)
	└─ @classCode	CS	1 ... 1	R		

Included		CONF	The value of @classCode shall be drawn from value set 2.16.840.1.113883.1.11.10430 <i>RoleClassIngredientEntity</i> (DYNAMIC) from 2.16.840.1.113883.3.1937.777.15.10.2 <i>UV Ingredient</i> (DYNAMIC)			
	└ pharm:quantity	RTO_PQ_PQ	0 ... 1	(UVM...ail)		
	Example	10 mg of the ingredient per ml <pre><pharm:quantity> <numerator xsi:type="PQ" value="10" unit="mg"/> <denominator xsi:type="PQ" value="1" unit="ml"/> </pharm:quantity></pre>				
	Example	2% of the ingredient <pre><pharm:quantity> <numerator xsi:type="PQ" value="2" unit="%"/> <denominator xsi:type="PQ" value="1"/> </pharm:quantity></pre>				
		Example	5mg of the ingredient <pre><pharm:quantity> <numerator xsi:type="PQ" value="5" unit="mg"/> <denominator xsi:type="PQ" value="1"/> </pharm:quantity></pre>			
	└ pharm:numerator	PQ	0 ... 1	(UVM...ail)		
	└ pharm:denominator	PQ	0 ... 1	(UVM...ail)		
	└ pharm:ingredientSubstance		0 ... 1	The substance used for this product plying the role indicated in the ingredient class-Code. The <code> element contains the coded representation of the ingredient and the <name> element may be used for the plain text representation. (UVM...ail)		
	└ @classCode	cs	1 ... 1	F	MMAT	
	└ @determinerCode	cs	1 ... 1	F	KIND	

└─ pharm:code		CD	0 ... 1	C	(UVM...ail)
└─ pharm:name		EN	0 ... 1	C	(UVM...ail)
		Schematron assert	role	error	
			test	pharm:code or pharm:name	
			Message	Either the name or the code of the substance (or both) shall be provided	
└─ pharm:ingredient			0 ... *		(UVM...ail)
└─ @classCode		cs	1 ... 1	R	
		CONF	The value of @classCode shall be drawn from value set 2.16.840.1.113883.1.11.10430 <i>RoleClassIngredientEntity</i> (DYNAMIC)		
Included				from 2.16.840.1.113883.3.1937.777.15.10.2 <i>UV Ingredient</i> (DYNAMIC)	
└─ pharm:quantity		RTO_PQ_PQ	0 ... 1		(UVM...ail)
		Example	10 mg of the ingredient per ml <pre><pharm:quantity> <numerator xsi:type="PQ" value="10" unit="mg"/> <denominator xsi:type="PQ" value="1" unit="ml"/> </pharm:quantity></pre>		
		Example	2% of the ingredient <pre><pharm:quantity> <numerator xsi:type="PQ" value="2" unit="%" /> <denominator xsi:type="PQ" value="1"/> </pharm:quantity></pre>		
		Example	5mg of the ingredient <pre><pharm:quantity> <numerator xsi:type="PQ" value="5" unit="mg"/> <denominator xsi:type="PQ" value="1"/> </pharm:quantity></pre>		
└─ pharm:numerator		PQ	0 ... 1		(UVM...ail)



└ pharm:denominator		PQ	0 ... 1			(UVM...ail)
└ pharm:ingredientSubstance			0 ... 1	The substance used for this product playing the role indicated in the ingredient class-Code. The <code> element contains the coded representation of the ingredient and the <name> element may be used for the plain text representation. (UVM...ail)		
└ @classCode		cs	1 ... 1	F	MMAT	
└ @determinerCode		cs	1 ... 1	F	KIND	
└ pharm:code		CD	0 ... 1	C	(UVM...ail)	
└ pharm:name		EN	0 ... 1	C	(UVM...ail)	
		Schematron assert	role	error		
			test	pharm:code or pharm:name		
			Message	Either the name or the code of the substance (or both) shall be provided		
└ pharm:ingredient			0 ... *			(UVM...ail)
└ @classCode		cs	1 ... 1	R		
		CONF	The value of @classCode shall be drawn from value set 2.16.840.1.113883.1.11.10430 <i>RoleClassIngredientEntity</i> (DYNAMIC)			
Included			from 2.16.840.1.113883.3.1937.777.15.10.2 <i>UV Ingredient</i> (DYNAMIC)			
└ pharm:quantity		RTO_PQ_PQ	0 ... 1			(UVM...ail)
		Example	10 mg of the ingredient per ml <pharm:quantity> <numerator xsi:type="PQ" value="10" unit="mg"/>			

		<pre><denominator xsi:type="PQ" value="1" unit="ml"/> </pharm:quantity> 2% of the ingredient <pharm:quantity> <numerator xsi:type="PQ" value="2" unit="%" /> <denominator xsi:type="PQ" value="1" /> </pharm:quantity> 5mg of the ingredient <pharm:quantity> <numerator xsi:type="PQ" value="5" unit="mg" /> <denominator xsi:type="PQ" value="1" /> </pharm:quantity></pre>			
└─ pharm:numerator		PQ	0 ... 1		(UVM...ail)
└─ pharm:denominator		PQ	0 ... 1		(UVM...ail)
└─ pharm:ingredientSubstance			0 ... 1	The substance used for this product playing the role indicated in the ingredient class-Code. The <code> element contains the coded representation of the ingredient and the <name> element may be used for the plain text representation.	(UVM...ail)
└─ @classCode		cs	1 ... 1	F	MMAT
└─ @determinerCode		cs	1 ... 1	F	KIND
└─ pharm:code		CD	0 ... 1	C	(UVM...ail)
└─ pharm:name		EN	0 ... 1	C	(UVM...ail)
		Schematron assert	role	error	
			test	pharm:code or pharm:name	
			Message	Either the name or the code of the substance (or both) shall be provided	

L pharm:ingredient	0 ... *	<p>This module provides the list of the ingredients (substances with a role) used for this product; one or more ingredients may be present.</p> <p>The classCode of "ACTI" indicates that this is an active ingredient.</p> <p>(UVM...ail)</p>	
L @classCode	CS	1 ... 1 R	CONF
	<p>The value of @classCode shall be drawn from value set 2.16.840.1.113883.1.11.10430 <i>RoleClassIngredientEntity</i> (DYNAMIC)</p>		
Example	<pre> <pharm:ingredient classCode="ACTI"> <pharm:quantity> <numerator xsi:type="PQ" value=" " unit=" " /> <denominator xsi:type="PQ" value=" " unit=" " /> </pharm:quantity> <pharm:ingredientSubstance classCode="MMAT" determinerCode="KIND"> <pharm:code code=" " displayName=" " codeSystem="2.16.840.1.113883.6.73" codeSystemName="ATC WHO"/> </pharm:ingredientSubstance> </pharm:ingredient> </pre>		
Included		<p>from 2.16.840.1.113883.3.1937.777.15.10.2 <i>UV Ingredient</i> (DYNAMIC)</p>	
L pharm:quantity	RTO_PQ_PQ	0 ... 1	(UVM...ail)
Example	<p>10 mg of the ingredient per ml</p> <pre> <pharm:quantity> <numerator xsi:type="PQ" value="10" unit="mg"/> <denominator xsi:type="PQ" value="1" unit="ml"/> </pharm:quantity> </pre>		
Example	<p>2% of the ingredient</p> <pre> <pharm:quantity> <numerator xsi:type="PQ" value="2" unit="%"/> <denominator xsi:type="PQ" value="1"/> </pharm:quantity> </pre>		
Example	<p>5mg of the ingredient</p> <pre> <pharm:quantity> <numerator xsi:type="PQ" value="5" unit="mg"/> <denominator xsi:type="PQ" value="1"/> </pharm:quantity> </pre>		

└─ pharm:numerator	PQ	0 ... 1			(UVM...ail)
└─ pharm:denominator	PQ	0 ... 1			(UVM...ail)
└─ pharm:ingredientSubstance		0 ... 1		The substance used for this product playing the role indicated in the ingredient class-Code. The <code> element contains the coded representation of the ingredient and the <name> element may be used for the plain text representation.	(UVM...ail)
└─ @classCode	cs	1 ... 1	F	MMAT	
└─ @determinerCode	cs	1 ... 1	F	KIND	
└─ pharm:code	CD	0 ... 1	C		(UVM...ail)
└─ pharm:name	EN	0 ... 1	C		(UVM...ail)
	Schematron assert	role	error		
		test	pharm:code or pharm:name		
		Message	Either the name or the code of the substance (or both) shall be provided		
└─ hl7:manufacturerOrganization		0 ... 1	R	Contains 2.16.840.1.113883.10.12.151 CDA Organization (DYNAMIC)	(UVM...ail)

5.2.7 UV Medication Information (simple)

Id	2.16.840.1.113883.10.21.4.10	Effective Date	2021-09-29 19:15:16 Other versions this id: <ul style="list-style-type: none"> ○ UVMedicationInformationsimple as of 2021-09-29 19:15:02 ○ UVMedicationInformationsimple as of 2017-05-10
Status	 Draft	Version Label	2021
Name	UVMedicationInformationsimple	Display Name	UV Medication Information (simple)
Description	Universal Medication Information (simple)		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.10		
Classification	CDA Entry Level Template		
Open/Closed	Open (other than defined elements are allowed)		
Uses	Uses 1 template		
	Uses	as	Name
	2.16.840.1.113883.10.12.151 Containment		CDA Organization
Relationship	Version: template 2.16.840.1.113883.10.21.4.10 <i>UV Medication Information (simple)</i> (2017-05-10) Specialization: template 2.16.840.1.113883.10.12.312 <i>CDA ManufacturedProduct</i> (2005-09-07) ref ad1bbr- Adaptation: template 2.16.840.1.113883.10.20.22.4.54 <i>Immunization Medication Information (V2)</i> (2014-06-09) ref ccda-		
Example	US RxNorm Code <hl7:manufacturedProduct classCode="MANU">		



	<pre> <hl7:templateId root="2.16.840.1.113883.10.21.4.10"/> <hl7:manufacturedMaterial classCode="MMAT" determinerCode="KIND"> <hl7:code code="243670" codeSystem="2.16.840.1.113883.6.88" displayName="Aspirin 81 MG Oral Tablet"/> </hl7:manufacturedMaterial> </hl7:manufacturedProduct> </pre>
Example	<p>Dutch G-Standaard Artikel Code</p> <pre> <hl7:manufacturedProduct classCode="MANU"> <hl7:templateId root="2.16.840.1.113883.10.21.4.10"/> <hl7:manufacturedMaterial classCode="MMAT" determinerCode="KIND"> <hl7:code code="14145839" codeSystem="2.16.840.1.113883.2.4.4.8" codeSystemName="G-Standaard Artikel" displayName="FUROSEMIDE CF 40MG TABLET"/> </hl7:manufacturedMaterial> </hl7:manufacturedProduct> </pre>
Example	<p>German Pharmaceutical Product Code</p> <pre> <hl7:manufacturedProduct classCode="MANU"> <hl7:templateId root="2.16.840.1.113883.10.21.4.10"/> <hl7:manufacturedMaterial classCode="MMAT" determinerCode="KIND"> <hl7:code code="4213974" codeSystem="1.2.276.0.76.4.6" displayName="RAMIPRIL STADA 5 mg"/> <hl7:lotNumberText>675-86574</hl7:lotNumberText> </hl7:manufacturedMaterial> <hl7:manufacturerOrganization> <hl7:name>STADA GmbH</hl7:name> </hl7:manufacturerOrganization> </hl7:manufacturedProduct> </pre>







Item	DT	Card	Conf	Description	Label
hl7:manufacturedProduct					(UVM...ple)
└ @classCode	cs	1 ... 1	F	MANU	
└ hl7:templateId	II	1 ... 1	M		(UVM...ple)
└└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.10	
└ hl7:manufacturedMaterial		1 ... 1	M		(UVM...ple)
└└ @classCode	cs	0 ... 1	F	MMAT	

└ @determinerCode	cs	0 ... 1 F	KIND	
			The code element describes the code of the medication. The medication may be either	
└ h17:code	CD	1 ... 1 R	<ul style="list-style-type: none"> a brand/product or described as a generic/scientific name or a descriptor of a magistral preparation/compound medicine 	(UVM...ple)
			If the medicine has no code / is uncoded (e.g., magistral preparations, compound medicine, ...) nullFlavor="NA" SHALL be used.	
└ h17:translation	CE	0 ... *		(UVM...ple)
	CONF	shall be drawn from concept domain "Product Code"		
└ h17:lotNumberText		0 ... 1		(UVM...ple)
└ h17:manufacturerOrganization		0 ... 1 R	Contains 2.16.840.1.113883.10.12.151 CDA Organization (DYNAMIC)	(UVM...ple)

5.2.8 UV Medication Order Reference


Id	2.16.840.1.113883.10.21.4.8	Effective Date	2017-03-30
Status	🟡 Draft	Version Label	
Name	UVMedicationOrderReference	Display Name	UV Medication Order Reference
Description	Universal Medication Medication Order Reference		

Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.8			
Label	MedicationOrderReference			
Classification	CDA Entry Level Template			
Open/Closed	Open (other than defined elements are allowed)			
Uses	Uses 1 template			
	Uses	as	Name	Version
	2.16.840.1.113883.10.12.318	Containment	 CDA Author (Body)	DYNAMIC
Relationship	Specialization: template 2.16.840.1.113883.10.12.308 <i>CDA SubstanceAdministration</i> (2005-09-07) 			
Example	<div>Example</div> <pre><substanceAdministration classCode="SBADM" moodCode="RQO"> <templateId root="2.16.840.1.113883.10.21.4.8"/> <id root="1.2.3.99.99.99" extension="988437489739"/> </substanceAdministration></pre>			

Item	DT	Card	Conf	Description	Label
hl7:substanceAdministration					Medi...ence
 @classCode	cs	1 ... 1	F	SBADM	
 @moodCode	cs	1 ... 1	F	RQO	
 hl7:templateId	II	1 ... 1	M		Medi...ence
 @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.8	
 hl7:id	II	1 ... 1	R		Medi. .ence
 hl7:author		0 ... *		Prescriber: A party that originates the order and therefore has responsibility for the information given in the order.	Medi. .ence

Contains 2.16.840.1.113883.10.12.318 CDA Author (Body) (DYNAMIC)

5.2.9 UV Subordinate Substance Administration

Id	2.16.840.1.113883.10.21.4.6	Effective Date	2017-04-30
Status	 Draft	Version Label	
Name	UVSubordinateadministration	Display Name	UV Subordinate Substance Administration
Description	Universal Subordinate Substance Administration to convey information about dosages		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.6		
Classification	CDA Entry Level Template		
Open/Closed	Open (other than defined elements are allowed)		
Relationship	Specialization: template 2.16.840.1.113883.10.12.308 CDA SubstanceAdministration (2005-09-07) ref ad1bbr-		

Example

Example

```
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.21.4.6"/>
  <statusCode code="active"/>
  <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true">
    <period value="12" unit="h"/>
  </effectiveTime>
  <doseQuantity xsi:type="IVL_PQ" value="2" unit="{puff}"/>
  <consumable>
    <manufacturedProduct>
      <manufacturedMaterial nullFlavor="NA"/>
    </manufacturedProduct>
  </consumable>
</substanceAdministration>
```

Item	DT	Card Conf	Description	Label
hl7:substanceAdministration		1 ... 1 R		(UVS...ion)
└ @classCode	cs	1 ... 1 F	SBADM	
└ @moodCode	cs	1 ... 1 R	If the subordinate substance administration refers to Medication Order then a substance administration request (moodCode is 'RQO') is used. If it refers to a Medication Statement, the moodCode shall be set to event/intent (moodCode is 'EVN' or 'INT').	
	CONF		The value of @moodCode shall be drawn from value set 2.16.840.1.113883.11.21.4 <i>Mood Code Evn Int Rqo</i> (DYNAMIC)	
	Constraint		The moodCode of this subordinate substance administration SHALL be the same of the parent substance administration	
└ hl7:templateId	II	1 ... 1 M		(UVS...ion)
└ @root	uid	1 ... 1 F	2.16.840.1.113883.10.21.4.6	
└ hl7:statusCode	CS	1 ... 1 M		(UVS...ion)
	Constraint		The statusCode of this subordinate substance administration SHALL be the same of that of the parent substance administration.	
	CONF		The value of @code shall be drawn from value set 2.16.840.1.113883.11.21.2 <i>ActStatusActiveCompletedAbortedSuspended</i> (DYNAMIC)	
Choice		1 ... 1	<p>Elements to choose from:</p> <ul style="list-style-type: none"> hl7:effectiveTime[@value or @nullFlavor] hl7:effectiveTime[@xsi:type='PIVL_TS'] hl7:effectiveTime[@xsi:type='EIVL_TS'] hl7:effectiveTime[@xsi:type='SXPR_TS'] 	

L h17:effectiveTime where [@value or @nullFlavor]	TS	0 ... 1 C	This required element describes the frequency of intakes. If not known it shall be valued with the nullflavor "UNK" (UVS...ion)
Example	Once (known date) <code><effectiveTime value="20170404"/></code>		
Example	Unknown <code><effectiveTime nullFlavor="UNK"/></code>		
L h17:effectiveTime where [@xsi:type='PIVL_TS']	PIVL_TS	0 ... 1 C	Periodic Time Interval (UVS...ion)
Example	Every 4 hours <code><effectiveTime xsi:type="PIVL_TS" institutionSpecified="false"> <period value="4" unit="h"/> </effectiveTime></code>		
Example	Twice a day <code><effectiveTime xsi:type="PIVL_TS" institutionSpecified="true"> <period value="12" unit="h"/> </effectiveTime></code>		
L h17:effectiveTime where [@xsi:type='EIVL_TS']	EIVL_TS	0 ... 1 C	Event Related Time Interval (UVS...ion)
Example	After meal <code><effectiveTime xsi:type="EIVL_TS"> <event code="PC" codeSystem="2.16.840.1.113883.5.139"/> </effectiveTime></code>		
Example	One hour before breakfast <code><effectiveTime xsi:type="EIVL_TS"> <event code="ACM" codeSystem="2.16.840.1.113883.5.139"/> <offset> <low value="1" unit="h"/> </offset> </effectiveTime></code>		
L h17:event L @code	EIVL.event	0 ... 1 C	(UVS...ion)
	cs	0 ... 1	


		CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.10706 <i>TimingEvent</i> (DYNAMIC)	
<div> <div>h17:effectiveTime</div> <div>where [@xsi:type='SXPR_TS']</div> </div>	SXPR_TS	0 ... 1 R	Combined Time Interval	(UVS...ion)
		<p>The doseQuantity describes the amount of the medication given (the dosage).</p> <p>If a dose range is given (e.g., 1-2 tablets, or 325-750mg), then the <low> and <high> bounds are specified in their respective elements; otherwise only one physical quantity is specified (e.g. 2 drops)</p> <p>The dose can be in some known and measurable unit, such as grams, milligrams, or described in "administration" units (unit of presentation, such as capsules).</p> <p>If the dose is in countable items (tablets, caplets, "eaches"), then the unit could be omitted or valorized using the UCUM annotations for describing the type of countable items (e.g. .{tablet}, {puff},...).</p> <p>The unit attribute – when expresses unit of measures- shall be derived from the UCUM code system.</p> <p>The used elements should contain a <translation> element that provides a reference to the originalText found in the narrative body of the document.</p>		
<div> <div>h17:doseQuantity</div> <div>@unit</div> </div>	IVL_PQ	0 ... 1 R		(UVS...ion)
		cs	0 ... 1	
Example	Not pre-coordinated consumable <pre><doseQuantity value="25" unit="mg"/></pre>			
Example	Pre-coordinated consumable - Dose Range <pre><doseQuantity> <low value="1" unit="{tablet}"/> <high value="2" unit="{tablet}"/> </doseQuantity></pre>			
Example	Pre-coordinated consumable <pre><doseQuantity value="2" unit="{puff}"/></pre>			
Example	Pre-coordinated consumable with text reference <pre><doseQuantity value="2" unit="{puff}"></pre>			

Example		<pre> <translation> <originalText> <reference value="#text-ref-1"/> </originalText> </translation> </doseQuantity> Textual dosage <doseQuantity nullFlavor="OTH"> <translation> <originalText> <reference value="#text-ref-1"/> </originalText> </translation> </doseQuantity> </pre>		
└ h17:rateQuantity	IVL_PQ	0 ... 1	(UVS...ion)	
└ h17:maxDoseQuantity	RTO_PQ_PQ	0 ... 1	(UVS...ion)	
└ h17:administrationUnitCode	CE	0 ... 1	(UVS...ion)	
		CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.1.11.14570 <i>AdministrableDrug-Form</i> (DYNAMIC)	
└ h17:consumable		1 ... 1 R	(UVS...ion)	
└ └ h17:manufacturedProduct		1 ... 1 R	(UVS...ion)	
└ └ └ h17:manufacturedMaterial		1 ... 1 R	(UVS...ion)	
└ @nullFlavor	cs	1 ... 1 F	NA	

5.2.10 UV Substitution Event Administration

Id 2.16.840.1.113883.10.21.4.14


Effective Date 2019-02-17

Status	 Draft	Version Label	
Name	UVSubstitutionEventAdministration	Display Name	UV Substitution EventAdminstration
Description	Information about a substitution made for this adminstration.		
Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.14		
Classification	CDA Entry Level Template		
Open/Closed	Open (other than defined elements are allowed)		
Relationship	Specialization: template 2.16.840.1.113883.10.12.301 CDA Act (2005-09-07) ref ad1bbr-		
Example	Example		
	<pre><act classCode="ACT" moodCode="EVN"> <templateId root="2.16.840.1.113883.10.21.4.14"/> <code code="TE" codeSystem="2.16.840.1.113883.5.1070" displayName="therapeutic alternative"/> <entryRelationship typeCode="RSON"> <act classCode="ACT" moodCode="EVN"> <!-- Reason for substitution --> </act> </entryRelationship> </act></pre>		

Item	DT	Card	Conf	Description	Label
h17:act		1 ... 1	M		(UVS...ion)
└ @classCode	cs	1 ... 1	F	ACT	
└ @moodCode	cs	1 ... 1	F	DEF	
└ h17:templateId	II	1 ... 1	M		(UVS...ion)
└└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.14	
└ h17:code	CE (example)	1 ... 1		The type of substitution made.	(UVS. .ion)

	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.16621 <i>ActSubstanceAdminSubstitutionCode</i> (DYNAMIC)		
└ h17:entryRelationship		0 ... 1 C	Indicates the reason substitution.	(UVS...ion)
└ @typeCode	cs	1 ... 1 F	RSN	
Example		<pre><entryRelationship typeCode="RSN"> <code code="FP" codeSystem="2.16.840.1.113883.5.8" displayName="formulary policy"> <originalText>Formulary policy</originalText> </code> </entryRelationship></pre>		
└ h17:act		1 ... 1		(UVS...ion)
└ @classCode	cs	1 ... 1 F	ACT	
└ @moodCode	cs	1 ... 1 F	EVN	
└ h17:code	CD (example)	1 ... 1		(UVS...ion)
	CONF	Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.19377 <i>SubstanceAdminSubstitutionReason</i> (DYNAMIC)		

5.2.11 UV Substitution Permission

Id	2.16.840.1.113883.10.21.4.5	Effective Date	2017-01-02
Status	 Draft	Version Label	
Name	UVSubstitutionPermission	Display Name	UV Substitution Permission
Description	Information about a substitution permission for this administration.		

Context	Parent nodes of template element with id 2.16.840.1.113883.10.21.4.5			
Classification	CDA Entry Level Template			
Open/Closed	Open (other than defined elements are allowed)			
Relationship	Specialization: template 2.16.840.1.113883.10.12.301 CDA Act (2005-09-07) <div>ref ad1bbr-</div>			
Example	Example			
	<pre><act classCode="ACT" moodCode="DEF"> <templateId root="2.16.840.1.113883.10.21.4.5"/> <code code="TE" codeSystem="2.16.840.1.113883.5.1070" displayName="therapeutic alternative"/> <entryRelationship typeCode="RSON"> <act classCode="ACT" moodCode="EVN"> <!-- Reason no substitution --> </act> </entryRelationship> </act></pre>			


Item	DT	Card	Conf	Description	Label
h17:act		1 ... 1	M		(UVS...ion)
└ @classCode	cs	1 ... 1	F	ACT	
└ @moodCode	cs	1 ... 1	F	DEF	
└ h17:templateId	II	1 ... 1	M		(UVS...ion)
└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.21.4.5	
└ h17:code	CE (example)	1 ... 1		The type of substitution that this permission relates to.	(UVS. ...ion)
	CONF			Examples of the value of @code are in the valuet set 2.16.840.1.113883.1.11.16621 ActSubstanceAdminSubstitutionCode (DYNAMIC)	
└ h17:entryRelationship		0 ... 1	C	Used when substitution is not allowed and may indicate the reason for why substitution is not allowed.	(UVS. ...ion)

└ @typeCode	cs	1 ... 1 F	RSO	
Example	<pre><entryRelationship typeCode="RSO"> <code code="PAT" codeSystem="2.16.840.1.113883.5.8" displayName="Patient request"> <originalText>Patient objects</originalText> </code> </entryRelationship></pre>			
└ h17:act		1 ... 1		(UVS...ion)
└ @classCode	cs	1 ... 1 F	ACT	
└ @moodCode	cs	1 ... 1 F	EVN	
└ h17:code	CD (example)	1 ... 1		(UVS...ion)
	CONF	Examples of the value of @code are in the value set 2.16.840.1.113883.1.11.19719 <i>SubstanceAdmin-SubstitutionNotAllowedReason</i> (DYNAMIC)		

5.2.12 UV Use Period

Id	2.16.840.1.113883.10.21.9.1	Effective Date	2017-05-02 Other versions this id:
Status	 Draft	Version Label	<ul style="list-style-type: none"> <input type="radio"/> Useperiod as of 2017-01-02
Name	Useperiod	Display Name	UV Use Period
Description			
This element encodes the start and stop time of the medication regimen. This is an interval of time (xsi:type='IVL_TS'), and must be specified as shown. This is an additional			

constraint placed upon CDA Release 2.0 by this profile, and simplifies the exchange of start/stop and frequency information between EMR systems.

Classification	CDA Entry Level Template				
Open/Closed	Open (other than defined elements are allowed)				
Item	DT	Card	Conf	Description	Label
<i>Choice</i>		1 ... 1		<p>The effectiveTime element encodes the use period of the medication, it is always expressed as an interval of time.</p> <p>It may be expressed using the low and high OR with the width element.</p> <p>The first is used to indicate a specified interval (e.g. from march 15th, 2017); the latter for indicating a 'floating' period (e.g. 2 weeks).</p> <p>Elements to choose from:</p> <ul style="list-style-type: none"> hl7:effectiveTime[hl7:low hl7:high] hl7:effectiveTime[hl7:width] 	
 hl7:effectiveTime	IVL_TS	0 ... 1	C	<p>Case 1: specified interval</p> <p>The low and high values of the first effectiveTime element represent the start and stop times for the medication. The low value represents the start time, and the high value represents the stop time. If either the low or the high value is unknown, this shall be recorded by setting the nullFlavor attribute to UNK.</p> <p>In case of unbounded period (continuous therapy) the high element will be valued with the nullFlavor attribute to NA.</p> <p>The high value records the end of the medication regime according to the information provided in the prescription or order. For example, if the prescription is for enough medication to last 30 days, then the high value should contain a date that is 30 days later then the low value. The rationale is that a provider, seeing a prescription that has not been refilled would normally assume that the medication is no longer being taken, even if the intent of the treatment plan is to continue the medication indefinitely.</p>	(Use...iod)
<p>where [hl7:low or hl7:high]</p>					


└ @nullFlavor	cs	0 ... 1		
	Example	Known Interval <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high value="20140321"/> </effectiveTime></pre>		
	Example	Information not available about the period <pre><effectiveTime xsi:type="IVL_TS" nullFlavor="NI"/></pre>		
	Example	Unknown end date <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="UNK"/> </effectiveTime></pre>		
	Example	continous therapy <pre><effectiveTime xsi:type="IVL_TS"> <low value="20130321"/> <high nullFlavor="NA"/> </effectiveTime></pre>		
└ h17:low	IVXB_TS	1 ... 1 R		(Use...iod)
└ h17:high	IVXB_TS	0 ... 1 R		(Use...iod)
└ h17:effectiveTime	IVL_TS	0 ... 1 C	Case 2: 'floating' period: The width element is used to specify a period of (actual or intended) administration that is not anchored to any specific date (e.g. a two weeks therapy)	(Use...iod)
where [h17:width]				
	Example	2 week period <pre><effectiveTime xsi:type="IVL_TS"> <width value="2" unit="w"/> </effectiveTime></pre>		
└ h17:low		NP		(Use...iod)
└ h17:width	PQ	1 ... 1 R		(Use...iod)
└ @unit	cs	1 ... 1 R		

CONF

The value of @unit shall be drawn from value set 2.16.840.1.113883.11.21.1 *Medication Time Units (UCUM)* (DYNAMIC)

5.3 Templates drawn from C-CDA (not subject of this guide)

5.3.1 Indication (V2)

Id	2.16.840.1.113883.10.20.22.4.19 <small>ref ccda-</small>	Effective Date	2014-06-09
Status	 Draft	Version Label	2.1
Name	IndicationV2	Display Name	Indication (V2)

Description

This template represents the rationale for an action such as an encounter, a medication administration, or a procedure. The id element can be used to reference a problem recorded elsewhere in the document, or can be used with a code and value to record the problem. Indications for treatment are not laboratory results; rather the problem associated with the laboratory

result should be sited (e.g., hypokalemia instead of a laboratory result of Potassium 2.0 mEq/L). Use the Drug Monitoring Act `[[templateId 2.16.840.1.113883.10.20.22.4.123]]` to indicate if a particular drug needs special monitoring (e.g., anticoagulant therapy). Use Precondition for Substance Administration (V2) `[[templateId 2.16.840.1.113883.10.20.22.4.25.2]]` to represent that a

medication is to be administered only when the associated criteria are met.

Context	Parent nodes of template element with id 2.16.840.1.113883.10.20.22.4.19
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Classification	CDA Entry Level Template				
Open/Closed	Open (other than defined elements are allowed)				
Relationship	Specialization: template 2.16.840.1.113883.10.12.303 <i>CDA Observation</i> (2005-09-07) ref ad1bbr- Version: template 2.16.840.1.113883.10.20.22.4.19 <i>Indication</i> (2013-01-31) ref ccda-				

Item	DT	Card	Conf	Description	Label
cda:observation					(Ind...nV2)
└ @classCode		1 ... 1	F	OBS SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-7480).	CONF...7480
└ @moodCode		1 ... 1	F	EVN SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-7481).	CONF...7481
└ cda:templateId	II	1 ... 1	M	C-CDA R1.1 templateId root without an extension	CONF...2936
└ @root	uid	1 ... 1	F	2.16.840.1.113883.10.20.22.4.19	
└ cda:templateId	II	1 ... 1	M	SHALL contain exactly one [1..1] templateId (CONF:1098-7482) such that it	CONF ..7482
└ @root		1 ... 1	F	2.16.840.1.113883.10.20.22.4.19 SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.19" (CONF:1098-10502).	CONF ..0502
└ @extension		1 ... 1	F	2014-06-09 SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32570).	CONF ..2570
└ cda:id	II	1 ... *		SHALL contain at least one [1..*] id (CONF:1098-7483).	CONF ..7483
└ cda:code	CD (preferred)	1 ... 1		SHALL contain exactly one [1..1] code, which MAY be selected from ValueSet	CONF ...1229

Problem Type urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC 2014-09-02 (CONF:1098-31229).				
	CONF	The value of @code comes preferably from value set 2.16.840.1.113883.3.88.12.3221.7.2 <i>Problem Type</i> (DYNAMIC)		
└ cda:statusCode	CS	1 ... 1 M	SHALL contain exactly one [1..1] statusCode (CONF:1098-7487).	CONF...7487
└ @code	CONF	1 ... 1 F	completed	
└ cda:effectiveTime	IVL_TS	0 ... 1 R	SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-7488).	CONF...7488
└ cda:value	CD (preferred)	0 ... 1	MAY contain zero or one [0..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1098-7489).	CONF...7489
	CONF	The value of @code comes preferably from value set 2.16.840.1.113883.3.88.12.3221.7.4 <i>Problem</i> (DYNAMIC)		

6 Appendix (Informative)

6.1 Acronyms and abbreviations

- **C-CDA:** Consolidated CDA
- **CDA:** Clinical Document Architecture
- **DSTU:** Draft Standard for Trial Use
- **EDQM:** European Directorate for the Quality of Medicines & Healthcare
- **EHR:** Electronic Healthcare Record
- **HL7:** Health Level Seven
- **HP:** Healthcare Professional
- **IDMP:** IDentification of Medicinal Products (ISO Standard)
- **IHE:** Integrating the Healthcare Enterprise
- **ISO:** International Organization for Standardization
- **JIC:** Joint Initiative Council on SDO Global Health Informatics Standardization
- **LOINC:** Logical Observation Identifiers Names & Codes
- **MPID:** Medicinal Product Identifier
- **PCID :** Medicinal Product Package Identifier
- **PhPID(s):** Pharmaceutical Product Identifier(s)
- **SDO:** Standard Developing Organization
- **STU:** Standard for Trial Use
- **UCUM:** Unified Code for Units of Measure

6.2 Glossary

- **Prescribing** is an activity that can be performed by a variety of healthcare professionals and involves a variety of orderable items (see glossary entry). For the purposes of the following Implementation Guide, prescribing is defined as the act of prescribing a medication in either an ambulatory or an institutional setting. This could include initiating a new medication order or making all kinds of modifications to existing orders.
- **Dispensing** is an activity undertaken to fulfill the logistical requirements of a prescription. It supplies the materials needed to perform the prescribed actions by those who will perform them. Examples of dispensing include eyeglasses, contact lenses and medications. For the purposes of the following ballot material, dispensing is defined as supplying a medication in fulfillment of a prescription or medication order. While dispensing in these circumstances would usually be performed by a pharmacist, other health care providers such as nurses or physicians might also dispense medications.
- **Administration** is an activity undertaken to give medication to the patient. In the community, this process is usually not recorded, since the majority occurs in the patient's home; only administrations undertaken by a healthcare professional, such as vaccination, tend to be formally documented. Administration of medication in the institutional setting is usually recorded on a dose-by-dose basis, and may be messaged on that basis, or a summary of all

the administrations occurring during an inpatient stay may be described.

6.3 Integrated examples

The *Medication on CDA* specification releases are published at the Pharmacy Templates Material Publication Page on HL7 GitHub^[4]. This GitHub offers XML materials (also compacted as a ZIP to download) like the W3C schemas and example CDA document instances. A set of use cases have been defined and represented in *Medication on CDA* format.

6.4 Validation artifacts

You can test your implementation (instances) against the *Medication on CDA* specification. To download materials to your computer for local testing and validation consider...

- ...the W3C schemas (actually valid for any CDA specification) located at the PHARM Materials Page on HL7 GitHub^[4].
- ...the ISO schematron, automatically generated by ART-DECOR based on the definitions, located at the Pharmacy Templates Material Publication Page on ART-DECOR^[5]. These are files to do validation locally by associating PHARM CDA instances with the main schematron using an XML editor or to use the derived XSLT conversions and apply the according XSLT derivation to your local PHARM CDA instance.

For further information you can follow the documentation.

6.5 Operational information

- The original specification is hosted on the logical ART-DECOR main server art-decor.org under the *Governance Group HL7 International*, the project is reachable at the Project Live Landing Page^[6].
- Any *Medication on CDA* specification release in HTML format resides at the Publication Page^[7]. It is likely that the publication site will move to hl7.org permanently, we will inform about that process.

6.6 Licenses

Following is a non-exhaustive list of third-party terminologies that may require a separate license:

- **SNOMED CT**: SNOMED International (formerly know as International Healthcare Terminology Standards Development Organization IHTSDO)^[8] or info@ihtsdo.org
- **Logical Observation Identifiers Names & Codes (LOINC)**: The Regenstrief Institute, Inc.
- **Unified Code for Units of Measure (UCUM)** : Regenstrief Institute, Inc. and the UCUM Organization

7 List of all artifacts used in this guide

7.1 CDA Templates

- 2.16.840.1.113883.10.21.4.1 UV Medication Order
- 2.16.840.1.113883.10.21.4.2 UV Dispense Request
- 2.16.840.1.113883.10.21.4.3 UV ClinicalStatement Observation
- 2.16.840.1.113883.10.21.4.4 UV ClinicalStatement Encounter
- 2.16.840.1.113883.10.21.4.5 UV Substitution Permission
- 2.16.840.1.113883.10.21.4.6 UV Subordinate Substance Administration
- 2.16.840.1.113883.10.21.4.7 UV Medication Statement
- 2.16.840.1.113883.10.21.4.8 UV Medication Order Reference
- 2.16.840.1.113883.10.21.4.9 UV Dispense Event Reference
- 2.16.840.1.113883.10.21.4.10 UV Medication Information (simple)
- 2.16.840.1.113883.10.21.4.11 UV Medication Information (detail)
- 2.16.840.1.113883.10.21.4.12 UV Comment Activity
- 2.16.840.1.113883.10.21.4.13 UV Medication Administration
- 2.16.840.1.113883.10.21.4.14 UV Substitution Event Administration
- 2.16.840.1.113883.10.21.4.15 UV Medication Dispense
- 2.16.840.1.113883.10.21.9.1 UV Use Period

7.1.1 References (re-used) from current C-CDA

- 2.16.840.1.113883.10.20.22.4.19 Indication (V2)


7.1.2 Unconstrained Templates from the original CDA specification

- 2.16.840.1.113883.10.12.151 CDA Organization
- 2.16.840.1.113883.10.12.152 CDA Person
- 2.16.840.1.113883.10.12.153 CDA AssignedEntity
- 2.16.840.1.113883.10.12.310 CDA LabeledDrug
- 2.16.840.1.113883.10.12.311 CDA Material
- 2.16.840.1.113883.10.12.312 CDA ManufacturedProduct
- 2.16.840.1.113883.10.12.313 CDA PlayingEntity
- 2.16.840.1.113883.10.12.315 CDA Device
- 2.16.840.1.113883.10.12.316 CDA RelatedEntity
- 2.16.840.1.113883.10.12.318 CDA Author (Body)

- 2.16.840.1.113883.10.12.319 CDA Informant (Body)
- 2.16.840.1.113883.10.12.320 CDA Subject (Body)
- 2.16.840.1.113883.10.12.321 CDA Participant (Body)
- 2.16.840.1.113883.10.12.322 CDA Specimen
- 2.16.840.1.113883.10.12.323 CDA Performer (Body)
- 2.16.840.1.113883.10.12.324 CDA Reference
- 2.16.840.1.113883.10.12.325 CDA ExternalAct
- 2.16.840.1.113883.10.12.326 CDA ExternalObservation
- 2.16.840.1.113883.10.12.327 CDA ExternalProcedure
- 2.16.840.1.113883.10.12.328 CDA ExternalDocument
- 2.16.840.1.113883.10.12.329 CDA Precondition


7.2 Value Sets

7.2.1 Medication Time Units (UCUM)

Id	2.16.840.1.113883.11.21.1	EffectiveDate	2015-04-29
Status	 Final	Version Label	3.0
Name	MedicationTimeUnits	Display Name	Medication Time Units (UCUM)
Description	Medication Time Units, expressed in UCUM		
Source Code System	2.16.840.1.113883.6.8 - <i>Unified Code for Units of Measure</i> - http://unitsofmeasure.org		
Level/ Type	Code	Display Name	Code System
0-L	a	Year	Unified Code for Units of Measure
0-L	h	Hour	Unified Code for Units of Measure
0-L	min	Minute	Unified Code for Units of Measure
0-L	mo	Month	Unified Code for Units of Measure
0-L	s	Second	Unified Code for Units of Measure
0-L	wk	Week	Unified Code for Units of Measure

Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.


7.2.2 ActStatusActiveCompletedAbortedSuspended

Id	2.16.840.1.113883.11.21.2	Effective Date	2017-03-06
Status	 Draft	Version Label	
Name	ActStatusCodeActiveCompletedAbortedSuspended	Display Name	ActStatusActiveCompletedAbortedSuspended
Source Code System	2.16.840.1.113883.5.14 - ActStatus - http://terminology.hl7.org/CodeSystem/v3-ActStatus		

Level/ Type	Code	Display Name	Code System
0-L	completed	Completed	ActStatus
0-L	aborted	Aborted	ActStatus
0-L	active	Active	ActStatus
0-L	suspended	Suspended	ActStatus

Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.


7.2.3 Substance Administration Code

Id	2.16.840.1.113883.11.21.3	Effective Date	2018-02-16
Status	 Draft	Version Label	
Name	SubstanceAdministrationCode	Display Name	Substance Administration Code
Source Code System	2.16.840.1.113883.5.4 - Act Code - http://terminology.hl7.org/CodeSystem/v3-ActCode		

Level/ Type	Code	Display Name	Code System	Description
0-L	DRUG	Drug therapy	Act Code	Medication Administration
0-L	IMMUNIZ	Immunization	Act Code	Immunization
0-L	ASSERTION	Assertion	Act Code	Medication Statement

Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.


7.2.4 Mood Code Evn Int Rqo

Id	2.16.840.1.113883.11.21.4	Effective Date	2018-03-21
Status	 Draft	Version Label	

Name	MoodCodeEvnIntRqo	Display Name	Mood Code Evn Int Rqo
Source Code System	2.16.840.1.113883.5.1001 - Act Mood - http://terminology.hl7.org/CodeSystem/v3-ActMood		
Level/ Type	Code	Display Name	Code System
0-L	EVN	Event	Act Mood
0-L	INT	Intent	Act Mood
0-L	RQO	Request	Act Mood


Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.

7.2.5 Unknown or absent medication

Id	2.16.840.1.113883.11.21.5	Effective Date	2018-03-21
Status	 Draft	Version Label	
Name	Unknownorabsentmedication	Display Name	Unknown or absent medication
Copyright	This artefact includes content from SNOMED Clinical Terms® (SNOMED CT®) which is copyright of the International Health Terminology Standards Development Organisation (IHTSDO). Implementers of these artefacts must have the appropriate SNOMED CT Affiliate license - for more information contact http://www.snomed.org/snomed-ct/get-snomed-ct or info@snomed.org .		
Source Code System	2.16.840.1.113883.6.96 - SNOMED Clinical Terms - http://snomed.info/sct		
Level/ Type	Code	Display Name	Code System
0-L	182904002	Drug treatment unknown (finding)	SNOMED Clinical Terms
0-L	182849000	No drug therapy prescribed (situation)	SNOMED Clinical Terms

Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.

7.2.6 ActStatusCodeActiveCompleted

Id	2.16.840.1.113883.11.21.6	Effective Date	2019-02-17
Status	 Draft	Version Label	
Name	ActStatusCodeActiveCompleted	Display Name	ActStatusActiveCompleted

Source Code System		2.16.840.1.113 83.5.14 - <i>ActStatus</i> - http://terminology.hl7.org/CodeSystem/v3-ActStatus	
Level/ Type	Code	Display Name	Code System
0-L	active	Active	ActStatus
0-L	completed	Completed	ActStatus

Legenda: Type L=leaf, S=specializable, A=abstract, D=deprecated. NullFlavors to appear in @nullFlavor attribute instead of @code. NullFlavor OTH (other) suggests text in originalText.

7.2.7 Referenced HL7 Version 3 Value Sets

- 2.16.840.1.113883.1.11.13955 ActEncounterCode
- 2.16.840.1.113883.1.11.16208 ActPharmacySupplyType
- 2.16.840.1.113883.1.11.16866 ActPriority
- 2.16.840.1.113883.1.11.15933 ActStatus
- 2.16.840.1.113883.1.11.19708 ActSubstanceAdministrationCode
- 2.16.840.1.113883.1.11.16621 ActSubstanceAdminSubstitutionCode
- 2.16.840.1.113883.1.11.14570 AdministrableDrugForm
- 2.16.840.1.113883.1.11.11526 HumanLanguage
- 2.16.840.1.113883.11.20.9.18 MoodCodeEvnInt
- 2.16.840.1.113883.1.11.78 Observation Interpretation
- 2.16.840.1.113883.1.11.14079 ObservationMethod
- 2.16.840.1.113883.1.11.14581 RouteOfAdministration
- 2.16.840.1.113883.1.11.19719 SubstanceAdminSubstitutionNotAllowedReason
- 2.16.840.1.113883.1.11.19377 SubstanceAdminSubstitutionReason
- 2.16.840.1.113883.1.11.10706 TimingEvent
- 2.16.840.1.113883.1.11.19447 x_ActRelationshipEntryRelationship
- 2.16.840.1.113883.1.11.19890 x_ActStatusActiveComplete

7.3 Datatypes

Datatypes for element definitions used

- ANY –ANY
- BL–Boolean

- CD – Concept Descriptor
- CE – Coded with Equivalents
- CS – Coded Simple Value
- ED – Encapsulated Data
- EN – Entity Name
- II – Instance Identifier
- INT – Integer
- INT.NONNEG – Interval of Integer, non-negative
- IVL_INT – Interval of Integer
- IVL_PQ – Interval of Physical Quantity
- IVL_TS – Interval of Time Stamp
- IVXB_TS – Interval Boundary of Time Stamp
- PIVL_TS – Periodic Interval of Timezone
- PQ – Physical Quantity
- RTO_PQ_PQ – Ratio Physical Quantity / Physical Quantity
- ST – Character String
- TEL – Telecommunication Address
- TS – Time Stamp

Datatypes for attributes used

- bl – boolean code
- cs – code
- uid – identifier

7.4 Extensions

7.4.1 Detailed medications information

This specification uses CDA extensions in order to provide details about medications, as further described in the section on the design conventions for Medicinal Product Identification and as used in template 2.16.840.1.113883.10.21.4.11 *UV Medication Information (detail)*. The extension uses the namespace `URN:HL7-ORG:PHARM`.

This is the list of elements defined for that template.

- `pharm:formCode` (Administrable Pharmaceutical Dose Form)
- `pharm:asContent` (Packaging of the medication)
 - `pharm:quantity`

- pharm:containerPackagedMedicine (Most inner Package Item or the Packaged Medicinal Product)
 - pharm:code
 - pharm:name (Name of the Package Item or of the Packaged Medicinal Product)
 - pharm:formCode (type of the most inner package item or of the or the Packaged Medicinal Product)
 - pharm:capacityQuantity (the functional capacity of the container)
 - pharm:asContent (Containing package)
 - pharm:quantity
 - pharm:containerPackagedMedicine (Intermediate Package Item or the Packaged Medicinal Product)
 - pharm:code
 - pharm:name (Name of the Package Item or of the Packaged Medicinal Product)
 - pharm:formCode (type of the intermediate package item or of the or the Packaged Medicinal Product)
 - pharm:capacityQuantity (the functional capacity of the container)
 - pharm:asContent (Containing package)
 - pharm:quantity
 - pharm:containerPackagedMedicine (Packaged Medicinal Product)
 - pharm:code
 - pharm:name (Name of the Packaged Medicinal Product)
 - pharm:formCode (type of the Packaged Medicinal Product)
 - pharm:capacityQuantity (the functional capacity of the container)
- pharm:asSpecializedKind (used to represent any classification of the product (ATC code, future PhPIDs,...))
 - pharm:generalizedMaterialKind
 - pharm:code
 - pharm:name
- pharm:ingredient (list of active substances used for this product)
 - pharm:quantity (strength)
 - pharm:ingredientSubstance (active substance)
 - pharm:code

- pharm:name

8 How to read the table view for templates

The template definitions are shown in a table view. It is comprised of *Template Meta data* and the *Template Design*. For further information please refer to the HL7 Templates Standard: Specification and Use of Reusable Information Constraint Templates, Release 1^[2].

Templates may also be included in the hierarchical graph view (often used for CDA), see below.

8.1 Template Meta data

IPS CDA custodian —

Id	2.16.840.1.113883.10.22.2.3	Effective Date	valid from 2017-04-11
Status	Draft	Version Label	
Name	IPSCDAcustodian	Display Name	IPS CDA custodian

▼ Description

The custodian element represents the organization that is in charge of maintaining and is entrusted with the care of the document.

This information is required by the CDA R2 standard and shall be recorded in the **ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization** element.

There is only one custodian per CDA document. Allowing that a CDA document may not represent the original form of the authenticated document, the custodian represents the steward of the original source document. The custodian may be the document originator, a health information exchange, or other responsible party.

The representedCustodianOrganization **SHALL** have:

- the name, addr and telecom elements (nullFlavor allowed)
- the id element from the CDA R2 model

Classification CDA Header Level Template

Open/Closed Open (other than defined elements are allowed)

Used by / Uses ▼ Used by 0 transactions and 1 template, Uses 1 template

Used by	as	Name	Version
2.16.840.1.113883.10.22.1.1	Include	International Patient Summary	2017-04-11

Uses	as	Name	Version
2.16.840.1.113883.10.22.9.1	Containment	IPS CDA Organization	DYNAMIC

Relationship Adaptation: template 2.16.840.1.113883.10.12.104 CDA custodian (2005-09-07) (from repository: ad1bbr-)

Example ▼ Example

```
<custodian typeCode="CST">
  <assignedCustodian classCode="ASSIGNED">
    <representedCustodianOrganization classCode="ORG" determinerCode="INSTANCE">
      <!-- ... -->
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
```










The upper right part of the template table contains the template meta data. Template id, status and the template name are shown (1). Furthermore the Version (effective date), a possible version label and the display name are shown (2).

The description area (plain or an accordion) contains the template descriptions/purpose (3), followed by classifications and whether the template is defined as open or closed (4).

The usage part (5) may list templates that uses this template or what templates this templates uses. A relationship list (6) may show all relationships to other templates or models.

Examples may show the correct use of the template by an XML fragment (7).

Used by 0 transactions and 3 templates, Uses 4 templates

Used by	as	Name	Version
2.16.840.1.113883.10.22.4.5	Containment	 IPS Allergy and Intolerance Concern	2016-11-11
2.16.840.1.113883.10.22.3.2		 IPS Allergies and Intolerances Section	2016-11-11
2.16.840.1.113883.10.22.1.1		 International Patient Summary	2017-04-11
Uses	as	Name	Version
2.16.840.1.113883.10.22.4.6	Containment	 IPS Reaction Manifestation	DYNAMIC
2.16.840.1.113883.10.22.4.18	Containment	 IPS Criticality Observation	DYNAMIC
2.16.840.1.113883.10.22.4.19	Containment	 IPS Certainty Observation	DYNAMIC
2.16.840.1.113883.10.22.4.21	Containment	 IPS Allergy Status Observation	2017-05-24

The relationship list shows all relationships to other templates or models for this template. It is divided in the "Used by" part listing templates that make use of this template, and a "Uses" listing all templates that are used by this templates, either as inclusion or containment. Indirect relationships like the parent Document Level Template for a Section Level Template are marked with a chain symbol.

The PDF version is rendered in the same way, but maybe with different fonts etc. to fit customized publication requirements.

Id	2.16.840.1.113883.10.22.3.12	Effective Date	valid from 2017-04-13
Status	 Draft	Version Label	
Name	IPSAdvanceDirectivesSection	Display Name	IPS Advance Directives Section

Description

The advance directive section shall contain a narrative description of patient's advance directive.
 Entries for references to consent and advance directive documents when known will be specified by future versions of this template.

Context	Parent nodes of template element with id 2.16.840.1.113883.10.22.3.12
Classification	CDA Section Level Template
Open/Closed	Open (other than defined elements are allowed)

Used by / Uses

Used by 0 transactions and 1 template, Uses 2 templates

Used by	as	Name	Version
2.16.840.1.113883.10.22.1.1	Containment	 International Patient Summary	2017-04-11
Uses	as	Name	Version
2.16.840.1.113883.10.22.4.14	Containment	 IPS Body Author	2017-03-02
2.16.840.1.113883.10.12.319	Containment	 CDA Informant (Body)	DYNAMIC

Relationship

Adaptation: template 1.3.6.1.4.1.19376.1.5.3.1.3.35 (DYNAMIC)
 Adaptation: template 1.3.6.1.4.1.19376.1.5.3.1.3.34 (DYNAMIC)
 Adaptation: template 2.16.840.1.113883.10.20.22.2.17 (DYNAMIC)

8.2 Table view of Template Design

Item	DT	Card	Conf	Description	Label
▼ hl7:section		0 ... *			Immuniza...
@classCode	cs	0 ... 1	F	DOCSECT	
@moodCode	cs	0 ... 1	F	EVN	
▼ hl7:templateId	II	1 ... 1	M		Immuniza...
@root	uid	1 ... 1	F	2.16.840.1.113883.3.1937.99.61.7.10.900202	
▼ hl7:templateId	II	1 ... 1	R		Immuniza...
@root	uid	1 ... 1	F	2.16.840.1.113883.10.12.201	
▼ hl7:code	CE CNE	0 ... 1		Description in addition	Immuniza...
@code	CONF	1 ... 1	F	11369-6	
@codeSystem		1 ... 1	F	2.16.840.1.113883.6.1	
▼ hl7:title	ST	1 ... 1	M		Immuniza...
	CONF			element content shall be "Vaccinations"	
hl7:text	SD.TEXT	1 ... 1	M		Immuniza...
▼ hl7:entry		0 ... *		Contains 2.16.840.1.113883.3.1937.99.61.7.10.900203 My Immunization Activity (DYNAMIC)	Immuniza...
@typeCode	st	1 ... 1	F	DRIV	

The headings of the table view of a template design are:

Item (1) contains the XML document tree view of all elements and attributes specified in the template design. Elements are denoted by a preceding triangle and attributes by a preceding "@".

DT (2) data types, contains the data type of the item, for more information on valid data types for element and attributes (see [2]).

Card / Conf (3) cardinality (Card) and conformance (Conf) of the item. Cardinality is the usual notion of min and max occurrences of the element. For attributes 0..1 denotes optionality, 1..1 say that the attribute is required and NP denotes prohibited attributes. Conformance may display values as shown in the following table.

Values of the conformance column

Conf	Short	Description
O	optional	Data is truly optional
R	required	If data is present and not masked (e.g. for privacy reasons), it must be provided, otherwise it may be omitted or explicitly null flavored. Sender and receiver must support this element.
M	mandatory	The data must be populated with a valid value from the associated value domain, otherwise the instance is not valid and may not be communicated. Sender and receiver must support this element.
C	conditional	There are conditions when data has to be provided (e.g. co-constraints like "information about pregnancy IF the patient is "female". Sender and receiver must support this element.
F	fixed	The data has a fixed value.
NP	not permitted	Data shall not be present

Description (4) contains a textual description of the item, may also contain constraints and values for fixed attributes.

Label (5) is a human readable label that is displayed upon errors, warnings or notes during validation.

8.2.1 Details of the table view

Item	DT	Card	Conf	Description	Label
▼ hl7:section		0 ... *			Immuniza...
@classCode	cs	0 ... 1	F	DOCSECT	
@moodCode	cs	0 ... 1	F	EVN	
▼ hl7:templateId	II	1 ... 1	M		Immuniza...
@root	uid	1 ... 1	F	2.16.840.1.113883.3.1937.99.61.7.10.900202	
▼ hl7:templateId	II	1 ... 1	R		Immuniza...
@root	uid	1 ... 1	F	2.16.840.1.113883.10.12.201	
▼ hl7:code	CE CNE	0 ... 1		Description in addition	Immuniza...
@code	CONF	1 ... 1	F	11369-6	
@codeSystem		1 ... 1	F	2.16.840.1.113883.6.1	
▼ hl7:title	ST	1 ... 1	M		Immuniza...
	CONF			element content shall be "Vaccinations"	
hl7:text	SD.TEXT	1 ... 1	M		Immuniza...
▼ hl7:entry		0 ... *		Contains 2.16.840.1.113883.3.1937.99.61.7.10.900203 My Immunization Activity (DYNAMIC)	Immuniza...
@typeCode	st	1 ... 1	F	DRIV	

The actual template design shows the XML structure in a hierarchical list of elements (items) that are typically prefixed by the namespace "hl7:" or "cda:" (1).

Elements are denoted with a triangle, attributes with an @ sign (2).

Data types are specified according to the list of supported data types (3). They may be simple data types (lowercase), regular data types (uppercase) or flavors thereof. In case of coded elements, the coding strength (Required/CNE, Extensible/CWE, Preferred or Example) can be highlighted near the datatype (e.g. "CD.IPS (Extensible/CWE)"); the absence of indications about the strength (e.g. "CE.IPS") shall be interpreted as "Required/CNE".

Values of the coding strength column

Strength	Displayed as	Description
Required	Required/ CNE	Coded with no exceptions; this element SHALL be from the specified value set
Extensible	Extensible/ CWE	Coded with Exceptions; 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. If the value set does not cover the concept (based on human review), alternate codings (or, data type allowing, text) may be included instead.
Preferred	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	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.

The cardinality and conformance column is explained above (4).

Fixed values for e.g. attributes are also shown in the "description" column (5), preceded by a "F" in the Conf column.

Conformance statements are shown together with a CONF box, e.g. a @code and a @codeSystem with fixed and required values (6).

An optional label is displayed at the rightmost column (7).

Inclusion or containments of other templates, e.g. an entry within a section, are shown accordingly (8) along with their template id, display name and flexibility/stability indication, i.e. "DYNAMIC" (the most recent version) or a STATIC binding together with a version date.

		Elements to choose from:
Choice	1 ... 1	<ul style="list-style-type: none"> hl7:assignedPerson hl7:representedOrganization

Choices of elements are shown as a choice list with the elements in questions summarised in a bullet point list.

CONF	The value of @code shall be drawn from value set 2.16.840.1.113883.11.22.25 <i>Medicine Doseform</i> (2017-05-03)
------	---

A typical Conformance Statement is the binding of a coded element to a value set. This is expressed in the way shown. The value set is represented with the id, display name and the flexibility/stability of the binding.

Constraint	At least one subordinate <substance.Administration> element SHALL be present unless medications are unknown or known absent.
------------	--

In case a constraint is expressed in words, a box "Constraint" accompanies the textual expression of the constraint.

Schematron assert	role	 error
	test	not(@value) or starts-with(@value, '#')
	Message	This reference /@value SHALL begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1)

In cases where constraints are expressed by formalised rules in ISO Schematron, the rule along with the role (error, warning), the test and the assertion message is shown.

8.3 How to read the Templates hierarchical graph view

Section	IPS Results Section (2.16.840.1.113883.10.22.3.14)
Entry	IPS Result Organizer (2.16.840.1.113883.10.22.4.9)
Entry	IPS Laboratory Result Observation (2.16.840.1.113883.10.22.4.13)

Templates are often included in the hierarchical graph view (often used for CDA). It gives an overview of e.g. section and entries and their nesting/relationships.

* CDA Person (2.16.840.1.113883.10.12.152)

@ UV Dispense Request (2.16.840.1.113883.10.21.4.2)

In case a template has more than one type (CDA Person for header, section and entry templates), it is denoted with a *, if a recursive definition is detected, this is shown with the symbol @.

8.4 How to read the *where* criteria

Templates sometimes include criteria for identifying distinct elements from a list (e.g. in a choice).

The criteria used to identify the items are shown in square brackets using the assertion *where [criteria]*

Criteria can be:

1. an **xpath expression** as in the example : *where [hl7:low or hl7:high]*
2. or an **integer** indexing the items of the list: e.g. *where [1]; where [2]*

9 References

9.1 Literature

- Boone KW: The CDA Book. Springer 2011, ISBN 978-0-85729-336-7

9.2 Links

1. http://www.hl7.org/implement/standards/product_brief.cfm?product_id=379
2. HL7 Templates Standard: Specification and Use of Reusable Information Constraint Templates, Release 1
http://www.hl7.org/implement/standards/product_brief.cfm?product_id=377
3. ISO/TS 13582:2013 Health informatics -- Sharing of OID registry information
4. Pharmacy Templates Material Publication Page on HL7 GitHub <https://github.com/HL7/CDA-pharma>
5. Pharmacy Templates Material Publication Page on ART-DECOR <https://hl7intl.art-decor.pub/index.php?prefix=pharmcda->
6. Pharmacy Templates Project Live Landing Page <http://art-decor.org/art-decor/decor-project--pharmcda->
7. **Cite error: Invalid `<ref>` tag; no text was provided for refs named PHARMPUBPAGE**
8. Get SNOMED CT <http://www.ihtsdo.org/snomed-ct/get-snomed-ct>

9.3 Figures

1. Locating ballot comments