

Integrating the Healthcare Enterprise



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**IHE Pharmacy  
Technical Framework Supplement**

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**Medication Treatment Plan  
(MTP)**

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**Rev. 1.2 – Trial Implementation**

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25 **Please verify you have the most recent version of this document. See [here](#) for Trial Implementation and Final Text versions and [here](#) for Public Comment versions.**

## Foreword

30 This is a supplement to the forthcoming IHE Pharmacy Technical Framework. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published on October 21, 2016 for trial implementation and may be available for testing at subsequent IHE Connectathons. The supplement may be amended based on the results of testing. Following successful testing it will be incorporated into the forthcoming  
35 Pharmacy Technical Framework. Comments are invited and may be submitted at [http://www.ihe.net/Pharmacy\\_Public\\_Comments](http://www.ihe.net/Pharmacy_Public_Comments).

This supplement describes changes to the existing technical framework documents.

“Boxed” instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume.

40 *Amend Section X.X by the following:*

Where the amendment adds text, make the added text **bold underline**. Where the amendment removes text, make the removed text **~~bold strikethrough~~**. When entire new sections are added, introduce with editor’s instructions to “add new text” or similar, which for readability are not bolded or underlined.

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General information about IHE can be found at: [www.ihe.net](http://www.ihe.net).

Information about the IHE Pharmacy domain can be found at: [http://www.ihe.net/IHE\\_Domains](http://www.ihe.net/IHE_Domains).

Information about the organization of IHE Technical Frameworks and Supplements and the process used to create them can be found at: [http://www.ihe.net/IHE\\_Process](http://www.ihe.net/IHE_Process) and  
50 <http://www.ihe.net/Profiles>.

The current versions of IHE Pharmacy Technical Framework supplements can be found at: [http://www.ihe.net/Technical\\_Frameworks](http://www.ihe.net/Technical_Frameworks).

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## Introduction to this Supplement

145 The Medication Treatment Plan Profile (MTP) describes the content and format of a medication document generated during the process in which a health care professional (in most cases, but not necessarily always, a medical specialist or a general practitioner) adds a medication to the medication treatment plan of a patient. It does not describe the case where it is the patient himself/herself who adds information about his/her medication: this case is the subject of another profile.

150 A medication treatment plan item is an entity describing a medication included in the medication treatment plan of the patient. Such medications can as well be medications that will later be prescribed by e.g., a medical specialist or a general practitioner, as self-medications reported by the patient himself.

155 The MTP document can contain all medications the patient was supposed to take in the past as well as those that are current and active (i.e., should be taken by the patient). The term “Plan” therefore refers to the fact that the contained information can be used to make an intake plan for the patient. In this case, the plan describes which medications the patient has (or had in case of terminated medications) to take, the amount of each medication and at what time in the day. The plan in itself has no dependency on prescriptions or dispenses, which are related to the logistic process necessary to get the drugs when specific procurement rules apply.

160 Documents created according to this profile are intended to be used in the context of the “Community Prescription and Dispense” Integration Profile (CMPD). This supplement also references other documents<sup>1</sup>. The reader should have already read and understood these documents:

- 165 1. [PHARM Common parts document](#)
2. [PHARM Community Prescription and Dispense Integration Profile \(CMPD\)](#)
3. [PCC Technical Framework Volume 1](#)
4. [PCC Technical Framework Volume 2](#)
5. [IT Infrastructure Technical Framework Volume 1](#)
6. [IT Infrastructure Technical Framework Volume 2](#)
- 170 7. [IT Infrastructure Technical Framework Volume 3](#)
8. HL7®<sup>2</sup> and other standards documents referenced in this document
9. [IHE Pharmacy White Paper](#)

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<sup>1</sup> The first seven documents can be located on the IHE Website at [http://ihe.net/Resources/Technical\\_Frameworks/](http://ihe.net/Resources/Technical_Frameworks/). The remaining documents can be obtained from their respective publishers.

<sup>2</sup> HL7 is the registered trademark of Health Level Seven International.

175 Medication Treatment Plan items are very close to Prescription (PRE) items: the main difference resides in the position in the global workflow of the two: while a MTP item is more an information (“this medication is part of the medication treatment plan”), a PRE item represents an instantiated *prescription* of the same medication. Most of the normative sections of the MTP Profile will therefore be identical to the corresponding ones in the PRE Profile.

## Open Issues and Questions

Open issues from the PRE Profile:

- 180
- Inclusion of non-medication products: shall they be covered by this profile?
  - Grouping and linkage of several Medication Treatment Plan Items into groups in order to represent a logical relation between several MTP items (i.e., expression of a layer between the complete Medication Treatment Plan and the Medication Treatment Plan Items).
- 185 Each MTP Item could belong to one or several groups of MTP Items, each group being part of the Medication Treatment Plan. A group may represent a kind of “therapeutic protocol” (e.g., a chemotherapy protocol).

## Closed Issues

None

190

## General Introduction

*Update the following Appendices to the General Introduction as indicated below. Note that these are not appendices to Volume 1.*

### Appendix A - Actor Summary Definitions

195 *Add the following actors to the IHE Technical Frameworks General Introduction list of actors:*

Section not applicable.

### Appendix B - Transaction Summary Definitions

200 *Add the following transactions to the IHE Technical Frameworks General Introduction list of Transactions:*

Section not applicable.

## Glossary

205 *Add the following glossary terms to the IHE Technical Frameworks General Introduction Glossary:*

Glossary Term	Definition
Medication Treatment Plan	The Medication Treatment Plan (MTP) of a patient is the collection of all medications the patient was planned to take in the past, presently or in the future. The Medication Treatment Plan is the complete set of all Medication Treatment Plan Items of the patient, i.e., not partitioned or grouped by pathology, planner, organization, etc.
Medication Treatment Plan Item	A Medication Treatment Plan Item is a single medication the patient was planned to take in the past or is planned to take presently or in the future, including its name, dosage, frequency of intake, etc. as well as other information such as patient- and fulfillment instructions and substitution handling. A Medication Treatment Plan Item triggers prescriptions and/or, dispenses in order to fulfill the medication treatment planned by the item.

# Volume 1 – Profiles

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<i>Add the following to Section 2.5</i>
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## 2.5 Dependencies of the Pharmacy Integration Profiles

Medication Treatment Plan (MTP)	PCC	Content definition	This profile includes Section and Entry Content Modules of the Patient Care Coordination (PCC) domain.
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215 *Add the following to Section 2.7*

## 2.7 History of Annual Changes

### X Medication Treatment Plan (MTP) Profile

220 The Medication Treatment Plan (MTP) is a Content Module Profile describing the content and format of a medication document. Each medication document describes one medications of a patient, i.e., a medication that has been, is or will be taken by the patient. Depending on the nature of the medication, it can then be prescribed (if dispense requires a medical prescription) and dispensed (if dispense is performed by an entity documenting the dispense process). A medication treatment plan item can also be used by a healthcare professional to document the fact that the patient is taking some medication. Pharmacists can also use this entity for describing over-the-counter medication before dispensing it.

225 Documents created according to this profile are intended to be used in the context of the “Community Prescription and Dispense” Integration Profile (CMPD).

230 The Community Pharmacy Prescription and Dispense workflow starts with the creation of a medication treatment plan when the health care professional decides that the patient needs a medication.

235 A medication treatment plan document is issued by one healthcare professional for one patient, in the context of zero or one administrative encounter (between the patient and the healthcare professional and/or the healthcare institution). A medication treatment plan contains one Medication Treatment Plan Item (“line” on a medication plan). Each line relates to one and only one medication. A medication is generally the outcome of a clinical decision, but can as well be



the outcome of a recommendation of a pharmacist (over-the-counter dispense) or the outcome of a decision of the patient (self-medication).

240 This profile defines the content and format of such a medication treatment plan document. It does not handle the situation where it is the patient himself/herself who adds information about his/her medication: this case is the subject of another profile.

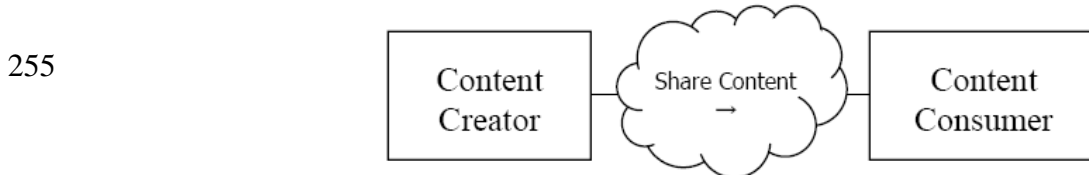
For a detailed overview on the whole Pharmacy domain business processes, please refer to the “Common parts” document, which is accompanying this profile.

### X.1 MTP Actors, Transactions, and Content Modules

245 This section defines the actors, transactions, and/or content modules in this profile. General definitions of actors are given in the Technical Frameworks General Introduction Appendix A at [http://www.ihe.net/Technical\\_Framework/index.cfm](http://www.ihe.net/Technical_Framework/index.cfm).

Figure X.1-1 shows the actors directly involved in the MTP Profile and the direction that the content is exchanged.

250 A product implementation using this profile must group actors from this profile with actors from a workflow or transport profile to be functional. The grouping of the content module described in this profile to specific actors is described in more detail in the “Required Actor Groupings” section below.



**Figure X.1-1: MTP Actor Diagram**

260 Table X.1-1 lists the content module(s) defined in the MTP Profile. To claim support with this profile, an actor shall support all required content modules (labeled “R”) and may support optional content modules (labeled “O”).

**Table X.1-1: MTP Profile - Actors and Content Modules**

Actors	Content Modules	Optionality	Reference
Content Creator	Medication Treatment Plan Content Module 1.3.6.1.4.1.19376.1.9.1.1.6	R	MTP TF-3: 6.3.1.D1
Content Consumer	Medication Treatment Plan Content Module 1.3.6.1.4.1.19376.1.9.1.1.6	R	MTP TF-3: 6.3.1.D1

265 **X.1.1 Actor Descriptions and Actor Profile Requirements**

Most requirements are documented in Transactions (Volume 2) and Content Modules (Volume 3). This section documents any additional requirements on profile’s actors.

**X.2 MTP Actor Options**

Options that may be selected for each actor in this profile, if any, are listed in the Table X.2-1. Dependencies between options when applicable are specified in notes.

**Table X.2-1: Medication Treatment Plan - Actors and Options**

Actor	Option Name	Reference
Content Consumer	View Option (See Note 1)	PCC TF-2: 3.1.1
	Document Import Option (See Note 1)	PCC TF-2: 3.1.2
	Section Import Option (See Note 1)	PCC TF-2: 3.1.3
	Discrete Data Import Option (See Note 1)	PCC TF-2: 3.1.4
Content Creator	No options defined	

Note 1: The actor shall support at least one of these options.

275 **X.3 MTP Required Actor Groupings**

An actor from this profile (Column 1) shall implement all of the required transactions and/or content modules in this profile *in addition to* all of the transactions required for the grouped actor (Column 2).

280 If this is a content profile, and actors from this profile are grouped with actors from a workflow or transport profile, the Content Bindings reference column references any specifications for mapping data from the content module into data elements from the workflow or transport transactions.

285 In some cases, required groupings are defined as at least one of an enumerated set of possible actors; this is designated by merging column one into a single cell spanning multiple potential grouped actors. Notes are used to highlight this situation.

Section X.5 describes some optional groupings that may be of interest for security considerations and Section X.6 describes some optional groupings in other related profiles.

290 Actors from the Pharmacy CMPD Profile embody the Content Creator and Content Consumer sharing function of this profile. A Content Creator or Content Consumer may be grouped with appropriate actors from the XDS, XDM or XDR Profiles to exchange the content described therein. The metadata sent in the document sharing or interchange messages has specific relationships or dependencies (which we call bindings) to the content of the clinical document described in the content profile.

295 The Patient Care Coordination Technical Framework defines the bindings to use when grouping the Content Creator of this profile with actors from the Pharmacy CMPD Integration Profiles.

**Table X.3-1: Medication Treatment Plan - Required Actor Groupings**

MTP Actor	Actor to be grouped with	Reference	Content Bindings Reference
Content Consumer	ITI XDS.b Document Consumer	ITI TF-1: 10.1	PCC TF-2 :4.1
	ITI XDR Document Recipient	ITI TF-1: 15.1	PCC TF-2 :4.1
	ITI XDM Portable Media Importer	ITI TF-1: 16.1	PCC TF-2 :4.1
Content Consumer	ITI Consistent Time Client	ITI TF-1:7.1	--
Content Creator	none		

## X.4 MTP Overview

300 The MTP describes all medication the patient had to take, is taking or will take in the future, regardless who decided to include each medication in the medication plan.

There is an important difference between the MTP and the treatment card a patient may have: while the first contains all medications (including past medications), the latter contains only the current (active) treatment.

305 The MTP is also not mandatorily linked to prescriptions or dispenses: it informs that the included medications can be subject of prescriptions, dispenses, pharmaceutical advices or administrations. As such, it represents the “head” of a chain of actions “add – prescribe – dispense – advice” - all concerning the same medication treatment plan item. This of course does not prevent the same product to be described in several medication treatment plan items: it  
 310 enables to link together several actions concerning the same “order”.

The origin of the information “You (patient) have to take this medication” is generally coming from a healthcare provider (physician, pharmacist). The case where the origin is the patient himself, saying “I am taking this product” (e.g., vitamins), is not covered by this profile.

315 Documents created according to this profile are intended to be used in the context of the “Community Prescription and Dispense” Integration Profile (CMPD).

### X.4.1 Concepts

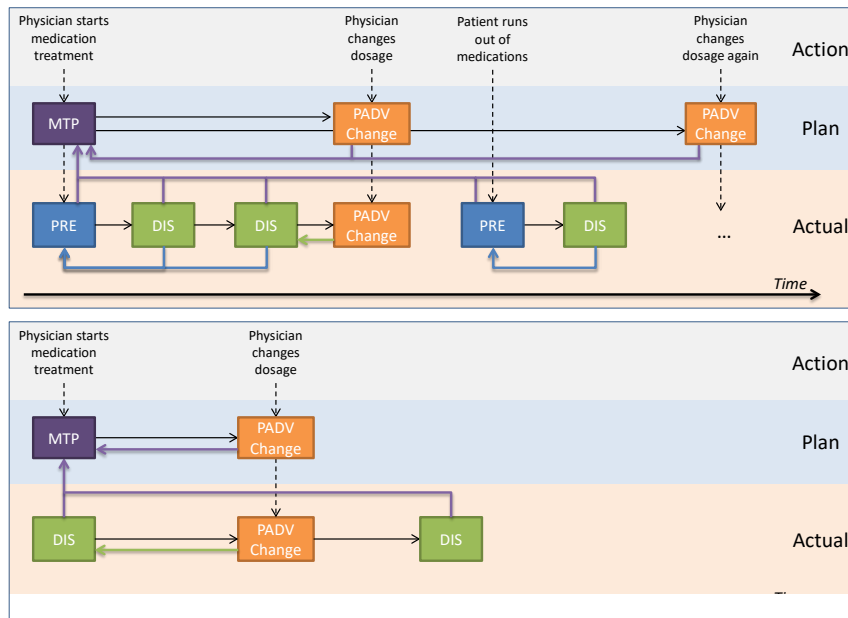
The Community Pharmacy Prescription and Dispense workflow starts with the inclusion of a medication in the medication treatment plan. This action is generally performed by a healthcare professional (physician or pharmacist) but can also be performed by the patient himself.

320 A medication treatment plan document is issued by one ordering person for one patient, in the context of zero (inclusion in the absence of the patient of by the patient himself) or one

administrative encounter (between the patient and the ordering person (physician or pharmacist) and/or the healthcare institution / pharmacy). A medication treatment plan contains one Medication Treatment Plan Item (line that exists or did exist on a treatment plan). Each line relates to one medication.

The first situation illustrates the inclusion of a new medication in the patient’s treatment plan. A medication treatment plan item is created, a prescription is issued and dispensed in two steps (partial dispense). Then the dosage is changed. After a while the patient runs out of medication and the prescription is renewed and dispensed again. Finally a second dosage change is performed.

The second situation illustrates the inclusion of a new medication in the patient’s treatment plan. No prescription is required for getting it from a pharmacy. A medication treatment plan item is created and dispensed. Then the dosage is changed. Finally the patient goes back to the pharmacy because he ran out of medication.



**Figure X.4.1-1: Relationships with the other IHE Pharmacy profiles**

This profile defines the content and format of such a medication treatment plan document. For a detailed overview on the whole Pharmacy domain business processes, please refer to the “Common parts” document, which is accompanying this profile.

**X.4.2 Use Cases**

#### **X.4.2.1 Use Case #1: Update of the Medication Treatment Plan**

345 This use case occurs when a new medication has to be added to the medication treatment plan.

##### **X.4.2.1.1 Update of the Medication Treatment Plan Use Case Description**

Suffering from a severe flu, a patient is visiting his general practitioner. The patient informs his GP that he is already taking paracetamol three times a day. As it is not efficient enough, the GP complements the treatment with 1 tab of ibuprofen twice a day during 5 days. He makes a  
350 prescription for getting a box of 20 from the pharmacy.

In order to document the whole medication, the GP creates two Medication Treatment Plan items (i.e., two MTP documents) through his prescribing module: one for describing the paracetamol that the patient is already taking since 1 week, and one for describing the ibuprofen medication. Both MTP items describe the corresponding medication as well as the duration (starting one  
355 week before for the paracetamol, 5 days at all for the ibuprofen).

The prescription itself (also created through the prescribing module) results in a Prescription item describing the exact prescribed medication (including brand name, size of box, etc.).

MTP items shall then be assembled and be submitted to the Community Pharmacy Prescription and Dispense system to be validated and introduced into the treatment plan. The same occurs for  
360 the PRE item in order to be validated and dispensed.

Refer to the Community Pharmacy Prescription and Dispense Integration Profile (CMPD) for detailed use case information.

##### **X.4.2.1.2 Update of the Medication Treatment Plan Process Flow**

Pre-conditions:

365 This content module is being used when a healthcare professional decides to describe a new medication treatment in the patient’s medication treatment plan. Note that such description may be made a posteriori for documentation purpose (e.g., when the patient is telling him “some time ago, I took this medication”).

370 Main Flow:

Typical workflow related to a new prescription is the following:

1. The healthcare professional decides that the patient needs a specific medication.
2. The medication is described in the medication treatment plan through a MTP Item;
3. The medication is prescribed through a PRE Item.

375 Typical workflow related to the documentation of patient’s words is the following:

1. The patient informs his healthcare professional that he is / was taking a specific medication;

- 380 2. If the healthcare professional endorses the medication, the medication is taken over by the healthcare professional into the medication treatment plan through a MTP Item (detailed description) or through another entity from an ad-hoc profile.

Post-conditions:

Several actions can occur after having submitted the MTP item:

- Prescription of the MTP item: PRE item;
- 385 • Dispense of the MTP item if it does not require a prescription: DIS item;
- Comment or modification of the MTP item: PADV item;
- Generation of a treatment card for the patient from the active MTP items (items with a starting date in the past and an ending date in the future).

More detailed scenarios can be found in the IHE Pharmacy White Paper.

## 390 **X.5 MTP Security Considerations**

The security considerations for a content module are dependent upon the security provisions defined by the grouped actor(s).

395 The MTP Integration Profile assumes that a minimum security and privacy environment has been established across all participants. There must exist security policies regarding the use of training, agreements, risk management, business continuity and network security that need to be already in place prior to the implementation of MTP.

The IHE ITI ATNA Integration Profile is required of the actors involved in the IHE transactions specified in this profile to protect node-to-node communication and to produce an audit trail of the PHI related actions when they exchange messages.

400 In addition, the IHE ITI DSG Integration Profiles can be applied to the actors involved in the transactions specified in this profile to securely identify individuals involved in transactions and verify document integrity and authorizations (DSG).

Interested parties should also read the detailed Security Considerations sections provided for each of the aforementioned profiles in the IHE ITI Technical Framework and its supplements.

405 The MTP Profile does have a few security considerations of its own.

Pharmacy systems should be thoughtfully designed so that providers are able to review and verify information before it is imported into their Pharmacy system, and that positive user acknowledgements are made before import, and audit trails are recorded when imports occur.

410 Imported information should be traceable both to the source Pharmacy system, and the receiver that accepted it into the Pharmacy system. XDS Affinity domain policies should support policies and procedures for tracing information flows between Pharmacy systems.

Because the information being transferred is in XML, it will be common that different Pharmacy systems utilize different transformations to render the contents into human readable form. A

415 Content Creator should make available the transforms used by the sending provider to review the documents, and a Content Consumer must support rendering the information as seen by the sending provider, allowing both providers to see what was sent in its original rendered form.

## **X.6 MTP Cross Profile Considerations**

Section not applicable.

## Appendices

420 None.



## **Volume 2 – Transactions**

Section not applicable.

## Appendices

425 None.

## **Volume 3 – Content Modules**

430 **5 Namespaces and Vocabularies**

*Add to Section 5 Namespaces and Vocabularies*

codeSystem	codeSystemName	Description
1.3.6.1.4.1.19376.1.9	IHE Pharmacy Object Identifiers	This is the root OID for all IHE Pharmacy objects
1.3.6.1.4.1.19376.1.5.3.4		Namespace OID used for IHE Extensions to CDA® <sup>3</sup> Release 2.0

435 See also the Namespaces and Vocabularies of the IHE PCC Technical Framework ([PCC-TF2/Namespaces and Vocabularies](#)).

*Add to Section 5.1.1 IHE Format Codes*

Profile	Format Code	Media Type	Template ID
<b>2015 Profiles</b>			
Medication Treatment Plan (MTP)	urn:ihe:pharm:mtp:2015	text/xml	1.3.6.1.4.1.19376.1.9.1.1.6

440 *Add to Section 5.1.2 IHE ActCode Vocabulary*

Section not applicable.

*Add to Section 5.1.3 IHE RoleCode Vocabulary*

Section not applicable.

445

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<sup>3</sup> CDA is the registered trademark of Health Level Seven International.

## 6 Content Modules

### 6.3.1 CDA Document Content Modules

*Add to Section 6.3.1.D Document Content Modules*

450

#### 6.3.1.D1 Medication Treatment Plan (MTP) Document Content Module

##### 6.3.1.D1.1 Format Code

The XSDDocumentEntry format code for this content is **urn:ihe:pharm:mtp:2015**.

##### 6.3.1.D1.2 Parent Template

455 This document is an instance of the [Medical Document](#) template.

##### 6.3.1.D1.3 Referenced Standards

All standards which are reference in this document are listed below with their common abbreviation, full title, and link to the standard.

460

**Table 6.3.1.D1.3-1: MTP - Referenced Standards**

Abbreviation	Title	URL
HL7V3 NE2009	HL7 V3 2009 Normative Edition	<a href="#">HL7 V3 2009 Normative Edition</a>
CDAR2	HL7 CDA Release 2.0	<a href="#">HL7 CDA Release 2.0</a>
CCD® <sup>4</sup>	ASTM/HL7 Continuity of Care Document	<a href="#">ASTM/HL7 Continuity of Care Document</a>
XMLXSL	Associating Style Sheets with XML documents	<a href="#">Associating Style Sheets with XML documents</a>

#### 6.3.1.D1.4 Data Element Requirement Mappings to CDA

This section identifies the mapping of data between referenced standards into the CDA implementation guide.

465

**Table 6.3.1.D1.4-1: MTP - Data Element Requirement Mappings to CDA**

Clinical Data Element	CDA Release 2.0
-----------------------	-----------------

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<sup>4</sup> CCD is the registered trademark of Health Level Seven International.

Clinical Data Element	CDA Release 2.0
<b>Patient Information</b>	recordTarget/patientRole
Patient Administrative Identifiers	recordTarget/patientRole/id
Patient Name	recordTarget/patientRole/patient/name
Patient Gender	recordTarget/patientRole/patient/administrativeGenderCode
Patient Birth Date	recordTarget/patientRole/patient/birthTime
Patient Address	recordTarget/patientRole/addr
Patient Telecom	recordTarget/patientRole/telecom
<b>HCP Person Information</b>	author
HCP ID(s)	author/assignedAuthor/id
HCP Profession	author/functionCode
HCP Name	author/assignedAuthor/assignedPerson/name
HCP Telecom	author/assignedAuthor/telecom
HCP Specialty	author/assignedAuthor/code
<b>HCP Represented Organization</b>	author/assignedAuthor/representedOrganization
HCP Organization Name	author/assignedAuthor/representedOrganization/name
HCP Organization Address	author/assignedAuthor/representedOrganization/addr
HCP Organization Telecom	author/assignedAuthor/representedOrganization/telecom
<b>Service Event</b> <sup>5</sup>	documentationOf/serviceEvent
Date of Service Event	documentationOf/serviceEvent/effectiveTime
Service Event Code	documentationOf/serviceEvent/code
<b>Encounter in the healthcare institution</b> <sup>6</sup>	componentOf/encompassingEncounter
ID of the encounter	componentOf/encompassingEncounter/id
Date of Admission/Encounter start date	componentOf/encompassingEncounter/effectiveTime/low
Date of Discharge/Encounter end date	componentOf/encompassingEncounter/effectiveTime/high
Authorization	authorization/consent
Patient contacts	guardian
General Medical Information Height, Weight	VITAL SIGNS
Allergies and Drug Sensitivities	ALLERGIES, ADVERSE REACTIONS, ALERTS
Active Problems	PROBLEM LIST
Resolved Problems	HISTORY OF PAST ILLNESS
Immunizations	HISTORY OF IMMUNIZATIONS
Pregnancy History	HISTORY OF PREGNANCIES
Medication Treatment Plan	MEDICATION TREATMENT PLAN

<sup>5</sup> Service Event is optional and may contain service event information of the medical event in which context the inclusion in the medication treatment plan has been taken.

<sup>6</sup> Encounter is optional and shall contain encounter information if applicable.

### 6.3.1.D1.5 Medication Treatment Plan (MTP) Document Content Module Specification

470 This section specifies the header, section, and entry content modules which comprise the Medication Treatment Plan (MTP) Document Content Module, using the Template ID as the key identifier.

Sections that are used according to the definitions in other specifications are identified with the relevant specification document. Additional constraints on vocabulary value sets, not specifically  
475 constrained within the section template, are also identified.

**Table 6.3.1.D.5-1: Medication Treatment Plan Document Content Module Specification**

Template Name		Medication Treatment Plan			
Template ID		1.3.6.1.4.1.19376.1.9.1.1.6			
Parent Template		1.3.6.1.4.1.19376.1.5.3.1.1.1 [PCC]			
General Description		A document containing one Medication Treatment Plan Item representing one medication included in the global treatment plan of the patient.			
Document Code		SHALL be 77603-9 LOINC, “Medication treatment plan.extended”			
Opt and Card	Condition	Header Element or Section Name	Template ID	Specification Document	Vocabulary Constraint
<b>Header Elements</b>					
M [1..1]		Patient Information	1.3.6.1.4.1.19376.1.9.1.4.1		
M [1..1]		Healthcare Provider Information	1.3.6.1.4.1.19376.1.9.1.4.2		
R2 [1..1]		Authorizations	1.3.6.1.4.1.19376.1.5.3.1.2.5		
<b>Sections</b>					
O [0..1]		General Medical Information	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2		
O [0..1]		Height, Weight	1.3.6.1.4.1.19376.1.5.3.1.3.13		
O [0..1]		Allergies and Drug Sensitivities	1.3.6.1.4.1.19376.1.5.3.1.3.6		
O [0..1]		Active Problems	1.3.6.1.4.1.19376.1.5.3.1.3.8		
O [0..1]		Resolved Problems	1.3.6.1.4.1.19376.1.5.3.1.3.23		
O [0..1]		Immunizations	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4		

M [1..1]		Medication Treatment Plan	1.3.6.1.4.1.19376.1.9.1.2.6	PHARM TF-3: 6.3.3.10.S1	
-------------	--	---------------------------	-----------------------------	----------------------------	--

Additional explanation:

480 The sections “Coded Vital Signs”, “Allergies and Drug Sensitivities”, “Active Problems”, “Resolved Problems”, “Immunizations”, “Pregnancy History” are considered as sections containing medical information of the patient.

Although real-world projects may require some of these information, no stricter constraints as optional (O) could be applied to these sections in the profile due to the large degree of diversity in business requirements and privacy issues among different current.

485 **6.3.1.D1.6 MTP Conformance and Example**

CDA Release 2.0 documents that conform to the requirements of this document content module shall indicate their conformance by the inclusion of the 1.3.6.1.4.1.19376.1.9.1.1.6 XML elements in the header of the document.

490 A CDA Document may conform to more than one template. This content module inherits from the PCC TF Medical Document, 1.3.6.1.4.1.19376.1.5.3.1.1.1, content modules and so must conform to the requirements of those templates as well as this document specification, Medication Treatment Plan template, 1.3.6.1.4.1.19376.1.9.1.1.6.

A complete example of the Medication Treatment Plan (MTP) Document Content Module is available on the IHE ftp server.

495 Note that this is an example and is meant to be informative and not normative. This example shows the <templateId (OIDs)> elements for all of the specified templates.

```

500 <ClinicalDocument xmlns='urn:hl7-org:v3'>
    <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.1'/>
    <templateId root='1.3.6.1.4.1.19376.1.9.1.1.6' />
    <id root=' ' extension=' '/>
    <code code='77603-9' displayName=' Medication treatment plan.extended '
505   codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
    <title>Medication Treatment Plan</title>
    <effectiveTime value='20150219012005' />
    <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
510 <languageCode code='en-US' />
    :
    <component>
        <structuredBody>
            :
515         </structuredBody>
        </component>
    </ClinicalDocument>

```

*Add to Section 6.3.2 Header Content Modules*



### 6.3.2 CDA Header Content Modules

520 Section not applicable.

The header for the Medication Treatment Plan document shall support the following header constraints as noted in this section. Note that this content profile is realm agnostic. These header constraints are based on the C-CDA header constraints but all references to US Realm specific types have been removed.

### 525 6.3.3 CDA Section Content Modules

*Add to Section 6.3.3.10 Section Content Modules*

#### 6.3.3.10.S1 Medication Treatment Plan Section Content Module (1.3.6.1.4.1.19376.1.9.1.2.6)

530

<b>Template ID</b>	1.3.6.1.4.1.19376.1.9.1.2.6	
<b>Parent Template</b>		
<b>General Description</b>	The Medication Treatment Plan Section contains a description of the patient. It includes entries for Medication Treatment Plan Items as described in the Medication Treatment Plan Item Entry Content Module.	
<b>LOINC Code</b>	<b>Opt</b>	<b>Description</b>
77604-7	R	Medication treatment plan.brief
<b>Entries</b>	<b>Opt</b>	<b>Description</b>
1.3.6.1.4.1.19376.1.9.1.3.7	R	Medication Treatment Plan Item Entry Content Module

```

535 <component>
      <section>
535         <templateId root='1.3.6.1.4.1.19376.1.9.1.2.6' />
          <!-- The section ID is the Medication Treatment Plan ID -->
          <id root=' ' extension=' ' />
          <code code='77604-7' displayName='Medication treatment plan.brief'
540             codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
          <title>Medication Treatment Plan</title>
          <text>
            Text as described above
          </text>
          <author>
545             :
          </author>
          <!-- Medication Treatment Plan Item -->
          <entry>
            :
550             <!-- Required element indicating the Medication Treatment Plan entry content module -->
             <templateId root='1.3.6.1.4.1.19376.1.9.1.3.7' />
            :
          </entry>
555     </section>
  </component>

```

### 6.3.3.10.S1.1 Parent Templates

This section has no parent structure. The value for ‘section/code’ SHALL be “77604-7” “Medication Treatment Plan”.

### 560 6.3.3.10.S1.2 Medication Treatment Plan ID

**<id root=' ' extension=' ' />**

A Medication Treatment Plan identifier SHALL be represented in the section <id> Element. The data type of the ID is II. Although HL7 allows for multiple identifiers, one and only one shall be used.

565

If this section is used in a Medication Treatment Plan document, this identifier shall be set equal to the document ID (ClinicalDocument/id).

### 6.3.3.10.S1.3 Medication Treatment Plan Author

570 **<author>...</author>**

In the case where the MTP author or the timestamp of a medication treatment plan is different from the author and timestamp of the medication treatment plan-document, the MTP author and timestamp of the medication treatment plan shall be represented by the <author> element of the section.

575

Data element	HL7 V3 Data Type	CDA Body position (relative XPath expression)
MTP Author Profession	CE	<i>author/functionCode</i>
Timestamp of inclusion	TS	<i>author/time</i>
MTP Author ID	II	<i>author/assignedAuthor/id</i>
MTP Author Specialty	CE	<i>author/assignedAuthor/code</i>
MTP Author Name	PN	<i>author/assignedAuthor/assignedPerson/name</i>
MTP Author Organization Identifier	II	<i>author/assignedAuthor/representedOrganization/id</i>
MTP Author Organization Name	ON	<i>author/assignedAuthor/representedOrganization/name</i>
MTP Author Organization Address	AD	<i>author/assignedAuthor/representedOrganization/addr</i>

### 6.3.4 CDA Entry Content Modules

580 *Add to Section 6.3.4.E Entry Content Modules*

#### 6.3.4.E1 Medication Treatment Plan Item Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.7)

585 A Medication Treatment Plan Item belongs to one medication treatment plan and represents one medication. It may be associated with one or more observations. A Medication Treatment Plan Item describes the medicine and dosage information as well as other information such as patient and optionally fulfillment instructions.

##### 6.3.4.E1.1 Standards

590 This part describes the general structure for a Medication Treatment Plan Item. It is based on the following standards:

<b>HL7V3 NE2009</b>	<a href="#">HL7 V3 2009 Normative Edition</a>
<b>CCD</b>	<a href="#">ASTM/HL7 Continuity of Care Document</a>
<b>IHE PCC</b>	<a href="#">Medications Entry (1.3.6.1.4.1.19376.1.5.3.1.4.7)</a>

##### 6.3.4.E1.2 Parent Template

595 This entry content module is based on the HL7 CCD template medication activity 2.16.840.1.113883.10.20.1.24 and inherits the structure of the Medication Entry Content Module, 1.3.6.1.4.1.19376.1.5.3.1.4.7.

### **6.3.4.E1.3 Specification**

This section makes use of the medicine and instruction entry content modules.

600

This specification relies on the PCC Medication Entry Content Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification and only describes additional constraints.

The chapters below identify and describe these fields, and indicate the constraints on whether or not they are required to be sent. The fields are listed in the order that they appear in the CDA XML content.

605

```

610 <substanceAdministration classCode='SBADM' moodCode='INT'>
    <templateId root='2.16.840.1.113883.10.20.1.24' />
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7' />
    <templateId root='1.3.6.1.4.1.19376.1.9.1.3.7' />
    <templateId root='1.3.6.1.4.1.19376.1.9.1.3.1' />
    <templateId root='1.3.6.1.4.1.19376.1.9.1.3.6' />
    <id root=' ' extension=' ' />
    <code code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
615 <text><reference value='#med-1' /></text>
    <statusCode code='completed' />
    <effectiveTime xsi:type='IVL_TS'>
        <low value=' ' />
        <high value=' ' />
    </effectiveTime>
620 <effectiveTime operator='A' xsi:type='TS|PIVL_TS|EIVL_TS|PIVL_PPD_TS|SXPR_TS'>
        :
    </effectiveTime>
    <routeCode code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
625 <approachSiteCode code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
    <doseQuantity value=' ' unit=' ' />
    <rateQuantity value=' ' unit=' ' />
    <consumable>
        :
630 <!-- Medicine Entry Module (1.3.6.1.4.1.19376.1.9.1.3.1) -->
        :
    </consumable>
    <!--
        Author of the inclusion in case of usage elsewhere as in a MTP document
635 -->
    <author>
        :
    </author>
    <!-- 0..* entries describing the components -->
640 <entryRelationship typeCode='COMP' >
    <sequenceNumber value=' ' />
        :
    </entryRelationship>
    <!-- An optional entry relationship that indicates the reason for use -->
645 <entryRelationship typeCode='RSON'>
    <act classCode='ACT' moodCode='EVN'>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.4.1' />
        <id root=' ' extension=' ' />
    </act>
    </entryRelationship>
650 <!-- Reference to a related prescription activity (supply) -->
    <entryRelationship typeCode='REFR'>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7.3' />
        :
    </entryRelationship>
655 <!-- Optional instructions for the patient -->
    <entryRelationship typeCode='SUBJ' inversionInd='true'>
    <act classCode='ACT' moodCode='INT'>
        <templateId root='2.16.840.1.113883.10.20.1.49' />
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3' />
660 <code code='PINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
        codeSystemName='IHEActCode' />
        ...
    </entryRelationship>
665 <!-- Optional instructions for Prescriber and/or Dispenser -->
    <entryRelationship typeCode='SUBJ' inversionInd='true'>
    <act classCode='ACT' moodCode='INT'>
        <templateId root='2.16.840.1.113883.10.20.1.43' />
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3.1' />
670 <code code='FINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
        codeSystemName='IHEActCode' />
        ...
    </entryRelationship>
    <!-- Amount of units of the consumable to dispense -->

```

```

675 <entryRelationship typeCode='COMP'>
    <templateId root='1.3.6.1.4.1.19376.1.9.1.3.8' /> <!-- PHARM -->
    <supply classCode='SPLY' moodCode='RQO'>
      <independentInd value='false' />
      <quantity value=' ' unit=' ' />
    </supply>
680 </entryRelationship>
    <!-- Substitution handling -->
    <entryRelationship typeCode='COMP'>
      <templateId root='1.3.6.1.4.1.19376.1.9.1.3.9' /> <!-- PHARM -->
685 <supply classCode='SPLY' moodCode='RQO'>
      <independentInd value='false' />
      <pharm:subjectOf4>
        <pharm:substitutionPermission classCode='SUBST' moodCode='PERM'>
          <pharm:code code='E' displayName='equivalent' codeSystem='2.16.840.1.113883.5.1070'
690 codeSystemName='HL7 Substance Admin Substitution' />
        </pharm:substitutionPermission>
      </pharm:subjectOf4>
    </supply>
    </entryRelationship>
695 <precondition>
  <criterion>
    <text><reference value=''></text>
  </criterion>
</precondition>
</substanceAdministration>

```

700

### 6.3.4.E1.3.1 Medication Treatment Plan Item Entry General Specification

```
<substanceAdministration classCode='SBADM' moodCode='INT'>
```

```
...
```

```
</substanceAdministration>
```

705 The moodCode SHALL be set to INT.

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

### 6.3.4.E1.3.2 Medication Treatment Plan Item Entry TemplateID

```
<templateId root='2.16.840.1.113883.10.20.1.24' /> <!-- CCD -->
```

```
<templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7' /> <!-- PCC -->
```

710 &lt;templateId root='1.3.6.1.4.1.19376.1.9.1.3.7' /&gt; &lt;!-- PHARM --&gt;

A templateId of '1.3.6.1.4.1.19376.1.9.1.3.7' SHALL be present to indicate that this entry is conforming to the Medication Treatment Plan Item Entry Content Module.

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

### 6.3.4.E1.3.3 Medication Treatment Plan Item Entry Additional Template ID

715 &lt;templateId root=' ' /&gt;

The <templateId> element identifies this <entry> as a particular type of medication event, allowing for validation of the content.

The templateId must use one of the values in the table below for the root attribute.

720

Root	Description
1.3.6.1.4.1.19376.1.5.3.1.4.7.1	A "normal" <substanceAdministration> act that may not contain any subordinate <substanceAdministration> acts.
1.3.6.1.4.1.19376.1.5.3.1.4.8	A <substanceAdministration> act that records tapered dose information in subordinate <substanceAdministration> act.
1.3.6.1.4.1.19376.1.5.3.1.4.9	A <substanceAdministration> act that records split dose information in subordinate <substanceAdministration> acts.
1.3.6.1.4.1.19376.1.5.3.1.4.10	A <substanceAdministration> act that records conditional dose information in subordinate <substanceAdministration> acts.
1.3.6.1.4.1.19376.1.5.3.1.4.11	A <substanceAdministration> act that records combination medication component information in subordinate <substanceAdministration> acts.

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

**6.3.4.E1.3.4 Medication Treatment Plan Item ID**

<id root=' ' extension=' '/>

725 This ID represents the Medication Treatment Plan Item ID and SHALL be present.  
See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

**6.3.4.E1.3.5 Code**

<code code=' ' displayName=' ' codeSystem=' ' codeSystemName=' '/>

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

730 **6.3.4.E1.3.6 Narrative Text**

<text><reference value=' '/></text>

This element SHALL be present. The URI given in the value attribute of the <reference> element points to an element in the narrative content that contains the complete text describing the medication included in the plan.

735 See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

**6.3.4.E1.3.7 Status Code**

<statusCode code='completed'/>

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

740 Please note that this element does NOT represent the status of the Medication Treatment Plan Item. There is no dedicated data element to record such a status, please refer to the Community Medication Prescription and Dispense (CMPD) Profile for more information.

### 6.3.4.E1.3.8 Dosage Instructions

745 The Medication Treatment Plan Item SHALL contain dosage instructions according to the specification of the dosage instructions in the Dosage Instructions Content Module (1.3.6.1.4.1.19376.1.9.1.3.6).

Note: The following elements part of the Dosage Instructions:

- Medication Treatment Plan Item Entry Additional Template ID
- Effective Time (Duration of Treatment)
- Medication Frequency
- 750 • Route of Administration
- Approach Site Code
- Dose Quantity
- Rate Quantity
- Related Components

### 755 6.3.4.E1.3.9 <Reserved>

### 6.3.4.E1.3.10 Consumable

<consumable>

:

<!-- Medicine Entry Module (1.3.6.1.4.1.19376.1.9.1.3.1) -->

760 :

</consumable>

The <consumable> element SHALL be present, and shall contain a medication entry, conforming to the Medicine Entry template (1.3.6.1.4.1.19376.1.9.1.3.1).

765 The <consumable> element of a Medication Therapy Plan describes the medication that is included into the plan. As it is a plan and not a prescription or dispense, container information SHALL NOT be present except if subsequent prescriptions and/or dispenses have to be constrained by e.g., the inclusion of the patient in a case study using specific packages and/or lot numbers. In such situations, container information SHALL be present and SHALL be repeated in subsequent prescriptions and/or dispenses of this medication treatment plan item.

770 See PHARM-TF3, Medicine Entry Module (1.3.6.1.4.1.19376.1.9.1.3.1) specification.

### 6.3.4.E1.3.11 Medication Treatment Plan Author

<author>...</author>



775 In the case that the Medication Treatment Plan Item is used within a Medication Treatment Plan document according to the “Medication Treatment Plan” (MTP) Profile this element SHALL NOT be present.

780 In all other cases (e.g., when used in a “Pharmacy Medication List” document according to the PML Profile or in medication sections of other documents as for example Discharge Summaries, etc.) this element SHOULD be present and represent the author of the Medication Treatment Plan Item. It SHALL contain the author and the timestamp of the Medication Treatment Plan document in which the Medication Treatment Plan Item was described (or, if given, the author of the Medication Treatment Plan section within the Medication Treatment Plan document).

Data element	HL7 V3 Data Type	CDA Body position (relative XPath expression)
MTP Author Profession	CE	<i>author/functionCode</i>
Timestamp of creation	TS	<i>author/time</i>
MTP Author ID	II	<i>author/assignedAuthor/id</i>
MTP Author Specialty	CE	<i>author/assignedAuthor/code</i>
MTP Author Name	PN	<i>author/assignedAuthor/assignedPerson/name</i>
MTP Author Organization Identifier	II	<i>author/assignedAuthor/representedOrganization/id</i>
MTP Author Organization Name	ON	<i>author/assignedAuthor/representedOrganization/name</i>
MTP Author Organization Address	AD	<i>author/assignedAuthor/representedOrganization/addr</i>

**6.3.4.E1.3.12 Reason**

785 **<entryRelationship typeCode='RSON'>**  
     **<act classCode='ACT' moodCode='EVN'>**  
         **<templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.4.1' />**  
         **<id root=' ' extension=' ' />**  
     **</act>**

790 **</entryRelationship>**  
 See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

**6.3.4.E1.3.13 Reference to a related prescription activity (supply)**

**<entryRelationship typeCode='REFR'>**

---

```
—<templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7.3' />
```

795 —;

```
—</entryRelationship>
```

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

This element SHALL NOT be present.

### 6.3.4.E1.3.14 Patient Medication Instructions

800 &lt;entryRelationship typeCode='SUBJ' inversionInd='true'&gt;

```
<act classCode='ACT' moodCode='INT'>
```

```
<templateId root='2.16.840.1.113883.10.20.1.49' />
```

```
<templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3' />
```

```
<code code='PINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
```

805 &lt;codeSystemName='IHEActCode' /&gt;

```
...
```

```
</entryRelationship>
```

At most one instruction MAY be provided for each <substanceAdministration> entry. When present, this entry relationship SHALL contain a [Patient Medication Instructions](#) (1.3.6.1.4.1.19376.1.5.3.1.4.3) entry.

810

Patient Medication Instructions (used in a Medication Treatment Plan Item) are comments from “author to patient” and may contain the following information:

- Human readable dosage instructions (e.g., a representation of the structured dosage instructions as narrative text, any special dosage instructions which could not have been represented in structured way, etc.)
- General comments by the author to the patient (e.g., “take with food”, etc.)

815

### 6.3.4.E1.3.15 Fulfillment Instructions

```
<entryRelationship typeCode='SUBJ' inversionInd='true'>
```

```
<act classCode='ACT' moodCode='INT'>
```

820 &lt;templateId root='2.16.840.1.113883.10.20.1.43' /&gt;

```
<templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3.1' />
```

```
<code code='FINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
```

```
<codeSystemName='IHEActCode' />
```

```
...
```

825 &lt;/entryRelationship&gt;

At most one instruction MAY be provided for each <substanceAdministration> entry.-When present, this entry relationship SHALL contain a [Medication Fulfillment Instructions](#) (1.3.6.1.4.1.19376.1.5.3.1.4.3.1) entry.

830 Fulfillment Instructions (used in a Medication Treatment Plan Item) are comments from “author to prescriber and/or dispenser” and may contain the following information:

- A proposal of a product/brand including information about substitution in case of prescribing Generic/Scientific names (e.g., author adds the generic “Paracetamol” but proposes the product “Adol 500mg Caplet” to be prescribed and/or dispensed because the patient is used to that medicine)
- 835 • Information to the preparation of compound medicine (e.g., “20 capsules of phenytoin, 20 ml glycerin, 2ml alcohol, Q.S. Syrup to 200ml”)
- General comments by the author to the prescriber and/or dispenser (e.g., if the patient is very old: “Patient is instructed about the dosing, but please repeat the instruction to ensure that the patient understood how to intake the medicine”)

#### 840 **6.3.4.E1.3.16 Amount of units of the consumable to dispense**

```
<entryRelationship typeCode='COMP'>
  <supply classCode='SPLY' moodCode='RQO'>
    ...
  </supply>
```

845 </entryRelationship>

This element MAY be present and describes the amount of units to be dispensed. If present, it shall contain a quantity conforming to the Amount of units of the consumable Entry template (1.3.6.1.4.1.19376.1.9.1.3.8). See PHARM-TF3, Amount of units of the consumable Entry Module (1.3.6.1.4.1.19376.1.9.1.3.8) specification.

#### 850 **6.3.4.E1.3.17 Substitution handling**

```
<entryRelationship typeCode='COMP'>
  <supply classCode="SPLY"
    moodCode="RQO">
    <independentInd value="false" />
```

855 ...  
</supply>

</entryRelationship>

860 One or more <entryRelationship> elements, each containing a Substitution handling entry, MAY be present and describe the substitution handling. If present, it shall contain a Substitution handling entry conforming to the Substitution handling Entry template

(1.3.6.1.4.1.19376.1.9.1.3.9). See PHARM-TF3, Substitution handling Entry Module (1.3.6.1.4.1.19376.1.9.1.3.9) specification.

#### 6.3.4.E1.3.18 ID of parent container (Medication Treatment Plan document)

865 <reference typeCode='XCRPT'>  
     <externalDocument>  
         <id root=' ' extension=' '/>  
     </externalDocument>  
 </reference>

870 In the case that the Medication Treatment Plan Item is used within a Medication Treatment Plan document according to the “Medication Treatment Plan” (MTP) Profile this element SHALL NOT be present.

In all other cases (e.g., when used in a “Pharmacy Medication List” document according to the PML Profile or in medication sections of other documents as for example Discharge Summaries, etc.) this element SHOULD be present and contain the identifier of the Medication Treatment Plan document, the Medication Treatment Plan Item initially has been created.

875

#### 6.3.4.E1.3.19 Precondition Criterion

<precondition>  
     <criterion>  
 880      <text><reference value=' '></text>  
     </criterion>  
 </precondition>

In a CDA document, the preconditions for use of the medication are recorded in the <precondition> element. The value attribute of the <reference> element is a URL that points to the CDA narrative describing those preconditions.

885

This element MAY be present.

See PCC TF2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

<i>Add to sections 6.4 and 6.5 Value Sets</i>
---

890

## 6.4 Section not applicable

This heading is not currently used in a CDA document.

## 6.5 MTP Value Sets

*Add Section 6.5.2*

### 895 6.5.2 IHE Pharmacy Item Type List

The Pharmacy Item Type List is used in the Prescription Item Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.2), the Dispense Item Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.4) and in the Pharmaceutical Advice Item Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.3) for explicitly indicating to which kind of item a reference (entryRelationship with typeCode='REFR') points to.

900

code: **see column “Code”**

codeSystem: **1.3.6.1.4.1.19376.1.9.2.2**

codeSystemName: **IHE Pharmacy Item Type List**

905

<b>Code</b>	<b>Display Name</b>
MTPItem	Medication Treatment Plan Item
PREItem	Prescription Item
DISItem	Dispense Item
PADVItem	Pharmaceutical Advice Item

# Appendices

## Appendix A – Validating CDA Documents using the Framework

### A.1 Validating Documents

For validation of document content modules please refer to PCC-TF2, Appendix A.1.

910 **A.2 Validating Sections**

For validation of section content modules please refer to PCC-TF2, Appendix A.2.

### A.3 Phases of Validation and Types of Errors

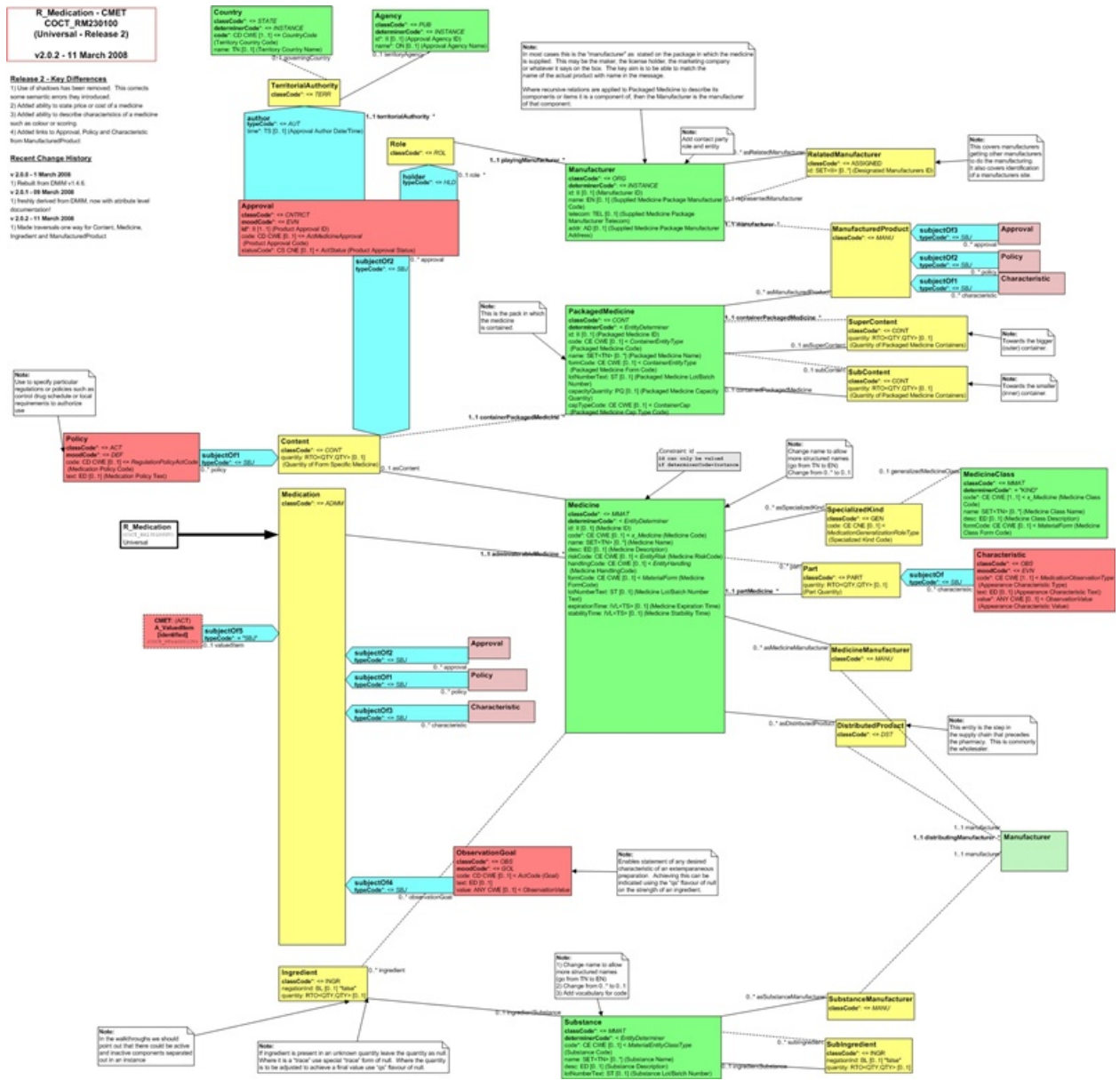
For the phases of validation and types of errors please refer to PCC-TF2, Appendix A.3.

915 **Appendix B – Extensions to CDA Release 2**

**B.1 IHE PHARM Extensions**

All Extensions to CDA Release 2.0 created by the IHE PHARM Technical Committee are in the namespace urn:ihe:pharm:medication.

920 The approach used to create extension elements created for the PHARM Technical Framework is the same as was used for the PCC Technical Framework, the HL7 Care Record Summary (see Appendix E) and the ASTM/HL7 Continuity of Care Document (see Section 7.2).



925



## Volume 3 Namespace Additions

*Add the following terms to the IHE Namespace:*

- 930
  - Medication Treatment Plan (MTP) Document Content Module
    - 1.3.6.1.4.1.19376.1.9.1.1.6
  - Medication Treatment Plan Section Content Module
    - 1.3.6.1.4.1.19376.1.9.1.2.6
  - Medication Treatment Plan Entry Content Module
- 935
  - 1.3.6.1.4.1.19376.1.9.1.3.7

## Volume 4 – National Extensions

*Add appropriate Country section*

940

Not applicable