

Integrating the Healthcare Enterprise



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**IHE Pharmacy
Technical Framework Supplement**

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**Community Medication Treatment Plan
(MTP)**

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Rev. 1.3 – Trial Implementation

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Date: October 11, 2017
Author: IHE Pharmacy Technical Committee
Email: pharmacy@ihe.net

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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 11, 2017 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.

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.

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<i>Amend Section X.X by the following:</i>
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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.

Information about the IHE Pharmacy domain can be found at 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 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.

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145 Introduction to this Supplement

The Community 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.

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.

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.

Documents created according to this profile are intended to be used in the context of the “Community Medication Prescription and Dispense” Integration Profile (CMPD). This supplement also references other documents¹. The reader should have already read and understood these documents:

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

¹ The first seven documents can be located on the IHE Website at http://ihe.net/Resources/Technical_Frameworks/. The remaining documents can be obtained from their respective publishers.

² HL7 is the registered trademark of Health Level Seven International.

180 Medication Treatment Plan Items are very close to Prescription 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 Prescription 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:

- Inclusion of non-medication products: shall they be covered by this profile?
- 185 • 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 Community Medication Treatment Plan and the Medication Treatment Plan Items).
Each MTP Item could belong to one or several groups of MTP Items, each group being
190 part of the Community Medication Treatment Plan. A group may represent a kind of “therapeutic protocol” (e.g., a chemotherapy protocol).

Closed Issues

None

General Introduction

195 *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

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

Section not applicable.

200

Appendix B – Transaction Summary Definitions

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

Section not applicable.

205

Glossary

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

Glossary Term	Definition
Medication Treatment Plan	The Medication Treatment Plan 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, dispenses or medication administrations in order to fulfill the medication treatment planned by the item.

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Volume 1 – Profiles

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215

Add the following to Section 2.5

2.5 Dependencies of the Pharmacy Integration Profiles

Community Medication Treatment Plan (MTP)	PCC	Content definition	This profile includes Section and Entry Content Modules of the Patient Care Coordination (PCC) domain.
---	-----	--------------------	--

Add the following to Section 2.7

220

2.7 History of Annual Changes

In the 2016-2017 cycle of the IHE Pharmacy initiative, the following major changes were introduced to this supplement (please see the list of this year’s change proposals for the complete set of changes at ftp://ftp.ihe.net/Pharmacy/Technical_Framework/CP%20Overview):

225

- Profile has been renamed from “Medication Treatment Plan” to “Community Medication Treatment Plan”
- Parent template CCD on section level removed
- Constraint that section id has to be equal to document id has been removed
- Title and text elements have been added on section level
- Reporting of authors into the entry-level refined

230

- Substitution permission structure refined and reorganized at “Substitution Permission Content Module” located in PRE profile
- Pharm-Namespace “ihe:pharm:medication” changed to “ihe:pharm” (see Medicine Entry Content Module located in PRE profile)

235

Important note: Due to the nature of some of the changes, this profile version is no longer downward compatible to the former versions.

Add new Section X

X Community Medication Treatment Plan (MTP) Profile

240 The Community Medication Treatment Plan (MTP) is a Content Module Profile describing the content and format of a medication document. Each medication document describes one medication 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
245 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.

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

250 The Community Medication 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.

A Community 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
255 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).

260 This profile defines the content and format of such a Community 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.

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

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://ihe.net/Technical_Frameworks/.

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

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.

275



280

Figure X.1-1: MTP Actor Diagram

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	Community 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	Community 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

285 **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.

290

Table X.2-1: Community 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.

X.3 MTP Required Actor Groupings

295 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).

300 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.

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.

305 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.

310 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.

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: Community 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		

315

X.4 MTP Overview

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.

320 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.

325 The MTP is also not mandatorily linked to prescriptions, dispenses or medication administrations: it informs that the included medications can be subject of prescriptions, dispenses, pharmaceutical advices or medication 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 enables to link together several actions concerning the same “order”.

330 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.

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

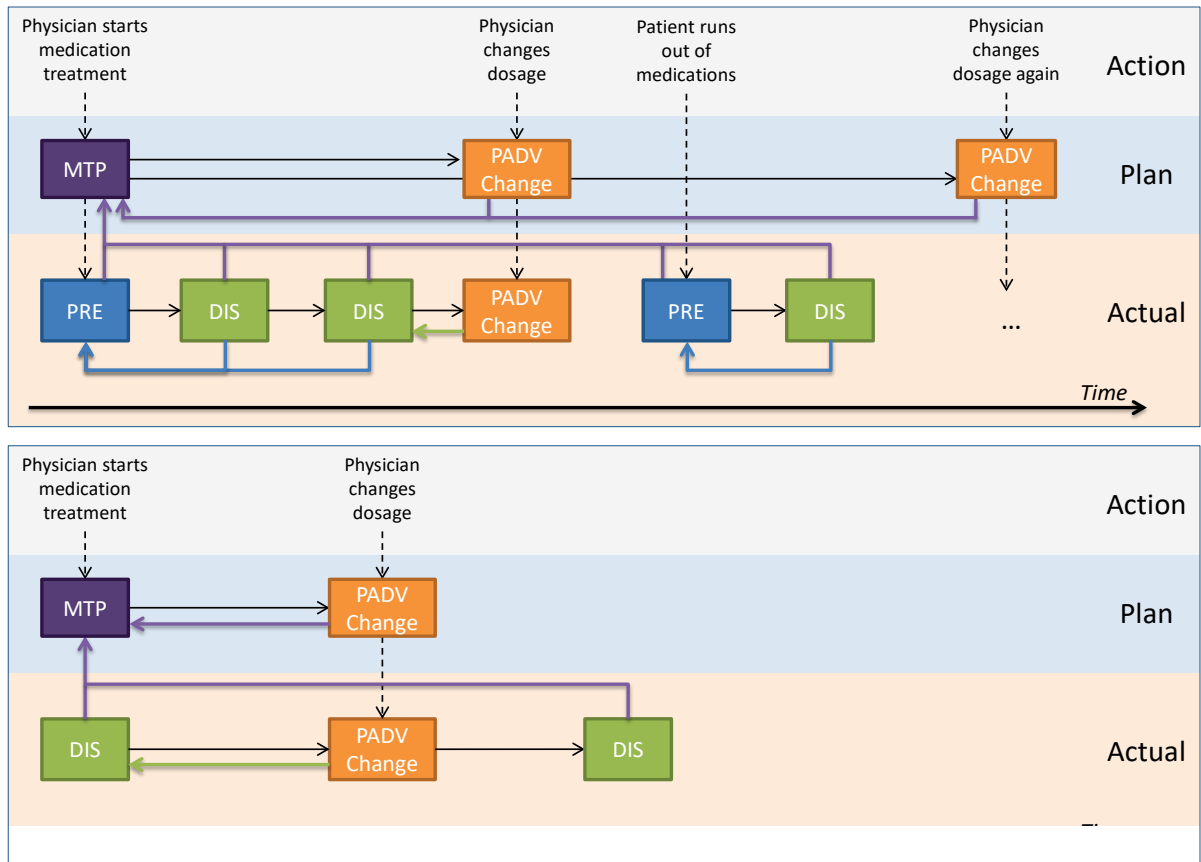
X.4.1 Concepts

335 The Community Medication 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.

340 A Community 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 or 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.

345 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.

350 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.



355

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

This profile defines the content and format of such a Community Medication Treatment Plan document.

360 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

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

365 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 prescription for getting a box of 20 from the pharmacy.

370 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 week before for the paracetamol, 5 days at all for the ibuprofen).

375 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 Medication Prescription and Dispense system to be validated and introduced into the treatment plan. The same occurs for the PRE item in order to be validated and dispensed.

380 Refer to the Community Medication 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:

385 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”).

Main Flow:

Typical workflow related to a new prescription is the following:

- 390
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.

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

- 395
1. The patient informs his healthcare professional that he is / was taking a specific medication;
 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.

400 Post-conditions:

Several actions can occur after having submitted the MTP item:

- Prescription of the MTP item: PRE item;

- Dispense of the MTP item if it does not require a prescription: DIS item;
- Comment or modification of the MTP item: PADV item;
- 405 • 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.

X.5 MTP Security Considerations

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

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.

415 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.

420 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.

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

425 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.

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.

430 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 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

None.

Volume 2 – Transactions

440 Section not applicable.

Appendices

None.

445

Volume 3 – Content Modules

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 ^{®3} Release 2.0

450

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

455

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

Add to Section 5.1.2 IHE ActCode Vocabulary

Section not applicable.

460

Add to Section 5.1.3 IHE RoleCode Vocabulary

Section not applicable.

³ CDA is the registered trademark of Health Level Seven International.

6 Content Modules

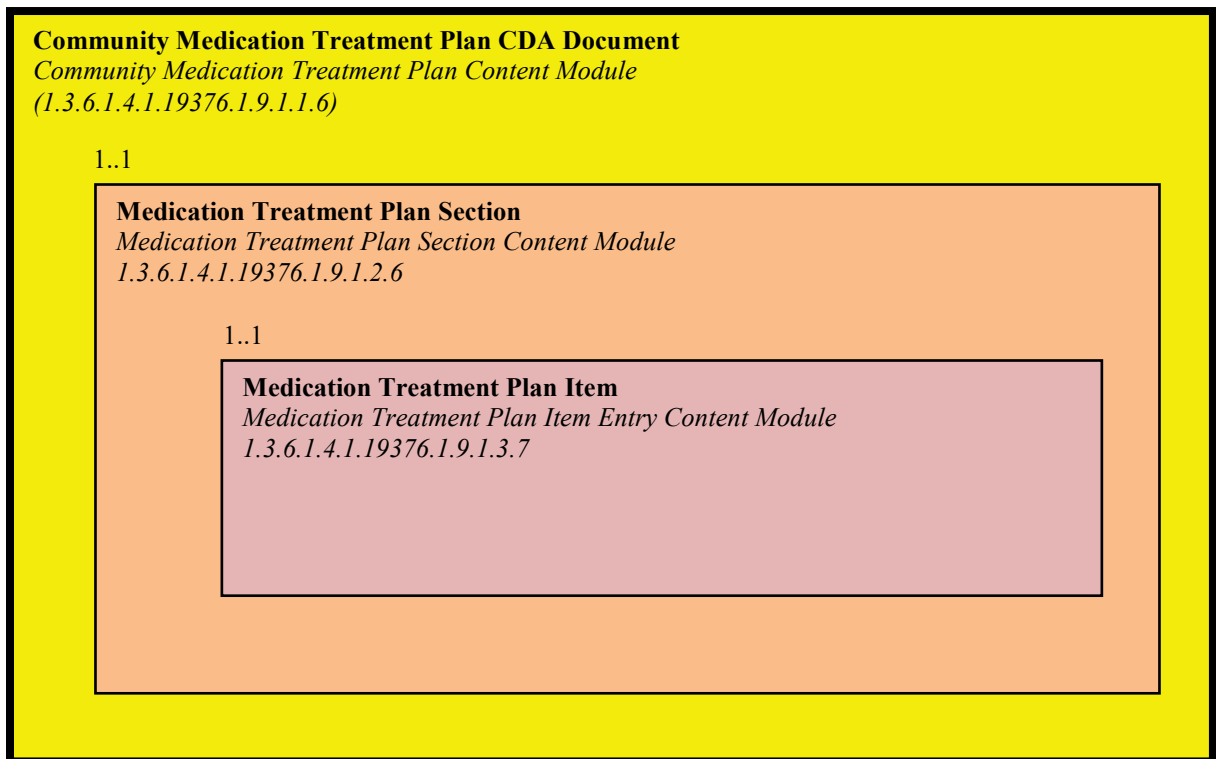
6.3.1 CDA Document Content Modules

465

Add to Section 6.3.1.D Document Content Modules

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

Structure of a Community Medication Treatment Plan Document.



470

6.3.1.D1.1 Format Code

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

6.3.1.D1.2 Parent Template

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

475 **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.

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

Abbreviation	Title	URL
HL7V3 NE2009	HL7 V3 2009 Normative Edition	HL7 V3 2009 Normative Edition
CDAR2	HL7 CDA Release 2.0	HL7 CDA Release 2.0
IHE PCC	IHE PCC Medical Documents Specification (1.3.6.1.4.1.19376.1.5.3.1.1.1)	Medical Documents Specification (1.3.6.1.4.1.19376.1.5.3.1.1.1)
XMLXSL	Associating Style Sheets with XML documents	Associating Style Sheets with XML documents

480 **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.

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

Clinical Data Element	CDA Release 2.0
Patient Information	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
HCP Person Information	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
HCP Organization	author/assignedAuthor/representedOrganization
HCP Organization Name	author/assignedAuthor/representedOrganization/name
HCP Organization Address	author/assignedAuthor/representedOrganization/addr
HCP Organization Telecom	author/assignedAuthor/representedOrganization/telecom

Clinical Data Element	CDA Release 2.0
Service Event⁴	documentationOf/serviceEvent
Date of Service Event	documentationOf/serviceEvent/effectiveTime
Service Event Code	documentationOf/serviceEvent/code
Encounter in the healthcare institution⁵	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

485 **6.3.1.D1.5 Community Medication Treatment Plan (MTP) Document Content Module Specification**

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

490 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 constrained within the section template, are also identified.

⁴ 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.

⁵ Encounter is optional and shall contain encounter information if applicable.

495

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

Template Name		Community 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
Header Elements					
M [1..1]		Patient Information	1.3.6.1.4.1.19376.1.9.1.4.1	PHARM TF-3: 6.3.1.D1.4	
M [1..1]		Healthcare Provider Information	1.3.6.1.4.1.19376.1.9.1.4.2	PHARM TF-3: 6.3.1.D1.4	
R2 [1..1]		Authorizations	1.3.6.1.4.1.19376.1.5.3.1.2.5	PCC TF-2: 6.3.2.7	
Sections					
O [0..1]		General Medical Information (Height, Weight)	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2	PCC TF-2: 6.3.3.4.5	
O [0..1]		Allergies and Drug Sensitivities	1.3.6.1.4.1.19376.1.5.3.1.3.13	PCC TF-2: 6.3.3.2.11	
O [0..1]		Active Problems	1.3.6.1.4.1.19376.1.5.3.1.3.6	PCC TF-2: 6.3.3.2.3	
O [0..1]		Resolved Problems	1.3.6.1.4.1.19376.1.5.3.1.3.8	PCC TF-2: 6.3.3.2.5	
O [0..1]		Immunizations	1.3.6.1.4.1.19376.1.5.3.1.3.23	PCC TF-2: 6.3.3.3.5	
O ⁶ [0..1]		Pregnancy History	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4	PCC TF-2: 6.3.3.2.18	
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:

⁶ In case the patient is currently pregnant, this element is R and shall contain information about the current pregnancy. It shall not be used to document past pregnancies.

500 The sections “General Medical Information (Height, Weight)”, “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.

6.3.1.D1.6 MTP Conformance and Example

505 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.

510 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, Community Medication Treatment Plan template, 1.3.6.1.4.1.19376.1.9.1.1.6.

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

515 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.

```
520 <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'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
525 <title>Medication Treatment Plan</title>
  <effectiveTime value='20150219012005'/>
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='en-US'/>
530 :
  <component>
    <structuredBody>
      :
    </structuredBody>
  </component>
535 </ClinicalDocument>
```

Add to Section 6.3.2 Header Content Modules

6.3.2 CDA Header Content Modules

Section not applicable.

540 **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)

545

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

550

```

<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.9.1.2.6' />
    <id root=' ' extension=' ' />
    <code code='77604-7' displayName='Medication treatment plan.brief'
      codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
    <title>Medication Treatment Plan</title>
    <text>
      Text as described above
    </text>
    <author>
      :
    </author>
    <!-- exactly one Medication Treatment Plan Item -->
    <entry>
      <substanceAdministration classCode='SBADM' moodCode='INT'>
        <templateId root='1.3.6.1.4.1.19376.1.9.1.3.7' />
        :
      </substanceAdministration>
    </entry>
  </section>
</component>

```

555

560

565

6.3.3.10.S1.1 Parent Templates

570 This section content module has no parent structure. The value for ‘section/code’ SHALL be “77604-7”, “Medication treatment plan.brief”.

6.3.3.10.S1.2 Medication Treatment Plan Section ID

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

575 A Medication Treatment Plan identifier SHALL be represented in the section <id> Element. The data type of the ID is II.

6.3.3.10.S1.3 Section title

<title>...</title>

580 A Medication Treatment Plan Section title SHOULD be represented in the section <title> Element. According to CDA R2 rules for structured CDA body, “the absence of the Section.title component signifies an unlabeled section” (see HL7 Clinical Document Architecture, Release 2.0, 1.3.1 Recipient Responsibilities).

6.3.3.10.S1.4 Text

<text>...</text>

585 A <text> element SHOULD be represented in the section and contain the narrative version of the Medication Treatment Plan Item. This narrative block SHALL present the information to the human reader and represent the Medication Treatment Plan Item information, using the various structures available in the CDA: tables, lists, paragraphs, hyperlinks, etc.

6.3.3.10.S1.5 Medication Treatment Plan Author

590 <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 Community Medication Treatment Plan-document, the MTP author and timestamp of the medication treatment plan shall be represented by the <author> element of the section.

595

Data element	HL7 V3 Data Type	CDA Body position (relative XPath expression)
MTP Author Profession	CE	<i>author/functionCode</i>
Timestamp of planning	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

Add to Section 6.3.4.E Entry Content Modules

600 **6.3.4.E1 Medication Treatment Plan Item Entry Content Module** **(1.3.6.1.4.1.19376.1.9.1.3.7)**

605 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 optional other information to the planned item such as patient- and fulfillment instructions and substitution handling.

6.3.4.E1.1 Standards

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

HL7V3 NE2009	HL7 V3 2009 Normative Edition
CCD⁷	ASTM/HL7 Continuity of Care Document
IHE PCC	Medications Entry (1.3.6.1.4.1.19376.1.5.3.1.4.7)

610

6.3.4.E1.2 Parent Template

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.

615 **6.3.4.E1.3 Specification**

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

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.

620

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.

⁷ CCD is the registered trademark of Health Level Seven International.

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```
625 <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='1.3.6.1.4.1.19376.1.9.1.3.6' />
  <id root=' ' extension=' ' />
630 <code code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
  <text><reference value='#med-1' /></text>
  <statusCode code='completed' />
  <effectiveTime xsi:type='IVL_TS'>
    <low value=' ' />
635    <high value=' ' />
  </effectiveTime>
  <effectiveTime operator='A' xsi:type='TS|PIVL_TS|EIVL_TS|PIVL_PPD_TS|SXPR_TS'>
    :
  </effectiveTime>
640 <routeCode code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
  <approachSiteCode code=' ' codeSystem=' ' displayName=' ' codeSystemName=' ' />
  <doseQuantity value=' ' unit=' ' />
  <rateQuantity value=' ' unit=' ' />
  <consumable>
645    <manufacturedProduct classCode="MANU">
      <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7.2" />
      <templateId root="2.16.840.1.113883.10.20.1.53" />
      <manufacturedMaterial classCode="MMAT" determinerCode="KIND">
650        :
        <!-- Medicine Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.1) -->
        :
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
655 <!--
  Author(s) in case of usage elsewhere as in a MTP document
-->
  <author>...</author>
  <author>...</author>
660 <!-- 0..* entries describing the components -->
  <entryRelationship typeCode='COMP' >
    <sequenceNumber value=' ' />
    :
  </entryRelationship>
665 <!-- An optional entry relationship that indicates the reason for use -->
  <entryRelationship typeCode='RSON'>
    <act classCode='ACT' moodCode='EVN'>
      <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.4.1' />
670      <id root=' ' extension=' ' />
    </act>
  </entryRelationship>
  <!-- Reference to a related prescription activity (supply) -->
  <entryRelationship typeCode='REFR'>
675    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7.3' />
  </entryRelationship>
  <!-- Optional instructions for the patient -->
  <entryRelationship typeCode='SUBJ' inversionInd='true'>
680    <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'
        codeSystemName='IHEActCode' />
      ...
685    </entryRelationship>
  <!-- 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' />
```

```
690 <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' />
    ...
695 </entryRelationship>
    <!-- Amount of units of the consumable to dispense -->
    <entryRelationship typeCode='COMP'>
        <supply classCode='SPLY' moodCode='RQO'>
700 <templateId root='1.3.6.1.4.1.19376.1.9.1.3.8' /> <!-- PHARM -->
            <independentInd value='false' />
            <quantity value=' ' unit=' ' />
        </supply>
    </entryRelationship>
    <!-- Substitution permission -->
705 <entryRelationship typeCode='COMP'>
    <act classCode="ACT" moodCode="DEF">
        <templateId root="1.3.6.1.4.1.19376.1.9.1.3.9.1" /> <!-- PHARM SubstitutionPermission -->
        <code code='E' codeSystem='2.16.840.1.113883.5.1070' displayName='equivalent'
            codeSystemName='HL7 Substance Admin Substitution' />
        <statusCode code="completed" />
710 </act>
    </entryRelationship>
    <precondition>
        <criterion>
715 <text><reference value=''></text>
        </criterion>
    </precondition>
</substanceAdministration>
```

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

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

...
</substanceAdministration>

The moodCode SHALL be set to INT.

See PCC TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

725 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 -->

<templateId root='1.3.6.1.4.1.19376.1.9.1.3.7' /> <!-- PHARM -->

730 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 TF-2, 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

<templateId root=' ' />

735 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.

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 TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

740 **6.3.4.E1.3.4 Medication Treatment Plan Item ID**

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

This ID represents the Medication Treatment Plan Item ID and SHALL be present.

See PCC TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

6.3.4.E1.3.5 Code

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

See PCC TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

6.3.4.E1.3.6 Narrative Text

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

750 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.

See PCC TF-2, 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'/>

755 See PCC TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

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

760 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
- 765 • Effective Time (Duration of Treatment)
- Medication Frequency
- Route of Administration
- Approach Site Code
- Dose Quantity
- 770 • Rate Quantity
- Related Components

6.3.4.E1.3.9 <Reserved>

6.3.4.E1.3.10 Consumable

<consumable>

```
775 <manufacturedProduct" classCode="MANU">
    <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7.2"/>
    <templateId root="2.16.840.1.113883.10.20.1.53"/>
    <manufacturedMaterial classCode="MMAT" determinerCode="KIND">
      :
780 <!-- Medicine Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.1) -->
      :
    </manufacturedMaterial>
  </manufacturedProduct>
</consumable>
```

785 The <consumable> element SHALL be present, and SHALL contain a <manufacturedProduct> element.

The <manufacturedProduct> element SHALL contain a <manufacturedMaterial> element.

The <manufacturedMaterial> element SHALL contain a Medicine Entry, conforming to the Medicine Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.1).

- 790 The <consumable> element of a Medication Treatment Plan describes the medication that is included into the plan. As it is a plan and not a prescription, dispense or medication administration, container information SHALL NOT be present except if subsequent prescriptions, dispenses or medication administrations 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, dispenses or medication administrations of this Medication Treatment Plan Item. 795 See PHARM TF-3, Medicine Entry Content 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>

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

- In all other cases (e.g., when used in a “Community 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 planner and timestamp of the Medication Treatment Plan Item. 805

This first author element SHALL be present in case that the “Community Medication Treatment Plan document author” is present (see chapter 6.3.4.E1.3.12).

- 810 The table below shows the meaning of the data elements of this <author> element. It SHOULD be corresponding to the <author> element of the Community Medication Treatment Plan document or, if given, the <author> element of the Medication Treatment Plan section within the Community 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>

Data element	HL7 V3 Data Type	CDA Body position (relative XPath expression)
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>

815 **6.3.4.E1.3.12 Community Medication Treatment Plan document author**

<author>...</author>

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

820 If the author of the Community Medication Treatment Plan document is already present in the “Medication Treatment Plan Author” element (see chapter above) this element SHALL NOT be present.

825 In all other cases (e.g., when used in a “Community Medication List” document according to the PML Profile or in medication sections of other documents as for example Discharge Summaries, etc.) this element MAY be present and represent the author and timestamp of the Community Medication Treatment Plan document.

The table below shows the meaning of the data elements of this <author> element. It SHALL be corresponding to the <author> element of the Community Medication Treatment Plan document header.

830

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

Data element	HL7 V3 Data Type	CDA Body position (relative XPath expression)
MTP document author Organization Name	ON	<i>author/assignedAuthor/representedOrganization/name</i>
MTP document author Organization Address	AD	<i>author/assignedAuthor/representedOrganization/addr</i>

6.3.4.E1.3.13 Reason

```

<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>

```

835

See PCC TF-2, Medication Entry Module (1.3.6.1.4.1.19376.1.5.3.1.4.7) specification.

6.3.4.E1.3.14 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>

```

840

845 See PCC TF-2, 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.E1.3.15 Patient Medication Instructions

```

<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' />
    <code code='PINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
      codeSystemName='IHEActCode' />
    ...

```

850

855 </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.

860 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.)

865 **6.3.4.E1.3.16 Fulfillment Instructions**

<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' />

870 <code code='FINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
codeSystemName='IHEActCode' />

...

</entryRelationship>

875 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.

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

- 880 • 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)
- Information to the preparation of compound medicine (e.g., “20 capsules of phenytoin, 20 ml glycerin, 2ml alcohol, Q.S. Syrup to 200ml”)
- 885 • 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”)

6.3.4.E1.3.17 Amount of units of the consumable to dispense

`<entryRelationship typeCode='COMP'>`

890 `<supply classCode='SPLY' moodCode='RQO'>`
 `...`
 `</supply>`

`</entryRelationship>`

895 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 TF-3, Amount of units of the consumable Entry Module (1.3.6.1.4.1.19376.1.9.1.3.8) specification.

6.3.4.E1.3.18 Substitution permission

`<entryRelationship typeCode='COMP'>`

900 `<act classCode="ACT" moodCode="DEF">`
 `<templateId root='1.3.6.1.4.1.19376.1.9.1.3.9.1' />`
 `...`
 `</act>`

`</entryRelationship>`

905 One or more `<entryRelationship>` elements, each containing a Substitution Permission Entry, MAY be present and describe the substitution permission. If present, it SHALL contain a Substitution Permission Entry conforming to the Substitution Permission Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.9.1).

910 See PHARM TF-3, Substitution Permission Entry Content Module (1.3.6.1.4.1.19376.1.9.1.3.9.1) specification.

6.3.4.E1.3.19 ID of parent container (Community Medication Treatment Plan document)

`<reference typeCode='XCRPT'>`

`<externalDocument>`

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

`</externalDocument>`

`</reference>`

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

In all other cases (e.g., when used in a “Community 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 Community Medication Treatment Plan document, the Medication Treatment Plan Item initially has been created.

925 **6.3.4.E1.3.20 Precondition Criterion**

<precondition>

<criteria>

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

</criteria>

930 **</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.

This element MAY be present.

935 See PCC TF-2, 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>

6.4 Section not applicable

940 This heading is not currently used in a CDA document.

6.5 PHARM Value Sets

Appendices

Appendix A – Validating CDA Documents using the Framework

A.1 Validating Documents

945 For validation of document content modules please refer to PCC TF-2: Appendix A.1.

A.2 Validating Sections

For validation of section content modules please refer to PCC TF-2: Appendix A.2.

A.3 Phases of Validation and Types of Errors

950 For the phases of validation and types of errors please refer to PCC TF-2: Appendix A.3.

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.

- 955 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).

Volume 3 Namespace Additions

960 *Add the following terms to the IHE Namespace:*

- Community 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

965

- 1.3.6.1.4.1.19376.1.9.1.2.6
- Medication Treatment Plan Item Entry Content Module
 - 1.3.6.1.4.1.19376.1.9.1.3.7

970

Volume 4 – National Extensions

Add appropriate Country section

Not applicable