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IHE Patient Care Coordination (PCC) Technical Framework Supplement

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Transport Record Summary Profiles (Includes ETS and ITS)

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Trial Implementation

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Foreword

25 This is a supplement to the IHE Patient Care Coordination Technical Framework V7.0. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is submitted for Trial Implementation as of September 9, 2011 and will 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 PCC Technical Framework. Comments are invited and can be submitted at <http://www.ihe.net/pcc/pcccomments.cfm> or by email to pcc@ihe.net.

30 This supplement describes changes to the existing technical framework documents and where indicated amends text by addition (**bold underline**) or removal (~~**bold strikethrough**~~), as well as addition of large new sections introduced by editor’s instructions to “add new text” or similar, which for readability are not bolded or underlined.

35 “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

<i>Replace Section X.X by the following:</i>
--

General information about IHE can be found at: www.ihe.net

Information about the IHE QRPH domain can be found at: <http://www.ihe.net/Domains/index.cfm>

45 Information about the structure of IHE Technical Frameworks and Supplements can be found at: <http://www.ihe.net/About/process.cfm> and <http://www.ihe.net/profiles/index.cfm>

The current version of the IHE Technical Framework can be found at: http://www.ihe.net/Technical_Framework/index.cfm

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140 Introduction

The Transport Record Summary Profile contains the specific information that will be shared during both pre-hospital (911) and interfacility medical transports. Each environment is unique with its own set of challenges and this profile aims to alleviate these issues. It incorporates with the receiving facility care setting to provide near real-time patient information.

145 This supplement is written for Trial Implementation. It is written as changes to the documents listed below. The reader should have already read and understood these documents:

1. [PCC Technical Framework Volume 1, Revision 7.0](#)
2. [PCC Technical Framework Volume 2, Revision 7.0](#)

150 This supplement also references other documents¹. The reader should have already read and understood these documents:

1. [IT Infrastructure Technical Framework Volume 1, Revision 8.0](#)
2. [IT Infrastructure Technical Framework Volume 2, Revision 8.0](#)
3. [IT Infrastructure Technical Framework Volume 3, Revision 8.0](#)
4. [The Patient Identifier Cross-Reference \(PIX\) and Patient Demographic Query \(PDQ\) HL7 v3 Supplement to the IT Infrastructure Technical Framework.](#)
5. HL7 and other standards documents referenced in Volume 1 and Volume 2

155

Open Issues and Questions

- 160 1. *Mandatory Inclusion Flag, Conformance and Cardinality in content module tables 6.3.1.A.4-1, 6.3.1.B.4-1, 6.3.1.C.4-1 is a new convention under discussion and may change based on further feedback.*
2. *New LOINC IDs needed.*
3. *Is the table MOST UP TO DATE WITH RECENT LOINC, DEEDS, NEMESIS changes?*

Closed Issues

- 165 1. *Do we combine profiles into one that accomplishes the task of ETC, EDR and this profile?*
2. *Proper use cases?*

¹ The first four documents can be located on the IHE Website at http://www.ihe.net/Technical_Framework/index.cfm#IT. The remaining documents can be obtained from their respective publishers.

3. *Which fields are R, R2 or O?*
 4. *Profile Name?*
 - 170 5. *NEMESIS Version 3*
 6. *What are other countries doing to support pre-hospital HIT systems?*
 7. *Should the EMS part of the sequence diagram be greyed out still?*
 8. *Are advance directives R2 or R?*
 9. *What are the Physician Update Service Options?*
 - 175 10. *What are the PCR Reconciliation Service Options?*
 11. *What are the clinical data consumer options?*
 12. *Where is the appropriate place to list master headings and sub headings to cover all types of transfers (EDES, EDR, ETC, ENS, etc.)*
 13. *The above questions are null as the profile is taking a different approach.*
- 180

185

Volume 1 – Profiles

Add the following to section 1.5

1.5 Copyright Permissions

Add the following to section 2.4

190

2.4 Dependencies of the PCC Integration Profiles

<Profile Name>	<?>	<?>	<->
----------------	-----	-----	-----

Add the following bullet to the end of the bullet list in section 2.5

2.5 History of Annual Changes

195

In the 2011-2012 cycle of the Patient Care Coordination Initiative, the following content profile was added as a supplement to the technical framework.

- Deprecated the EMS Transfer of Care (ETC) Profile.
- Added the Transport Record Summary Profile that supports the exchange of clinically relevant data between all transport medicine providers and healthcare facilities.

200

Add Section X

X EMS Transport Summary

X.1 Purpose and Scope

205 The goal of this profile is to detail how information is shared during all aspects of patient transport. Whenever a patient is moved between facilities and care services their information about this specific event needs to travel with them. The ability to share this information with the transporters, regardless of transport time, is essential to complete patient care.

We are focused on only those events that involve a transport team, which for this profile is defined as any team of license or certified care providers that create content for the EMR. This team may be part of a fixed wing, helicopter or ambulance transport

210 We are not focused on multiple events associated with long term patient care, but rather each incident that requires a specific number of transports between health care settings.

X.2 Process Flow

X.2.1 EMS Transport

215 The process flow for EMS Transfers of care is shown in Figure X.2.2-1 below. Upon determination of the patient identity, the prehospital provider consumes data previously gathered in other IHE PCC Profiles (e.g., through PHR or HIE system). The prehospital provider creates new data relevant to the care provided. This combined data of the prehospital emergency care provided is then shared with the emergency department content consumer (EDIS). The shaded actors are defined elsewhere in IHE PCC profiles. For details on these actors, see section X.5.6
220 Grouping with Other PCC Content Profiles.

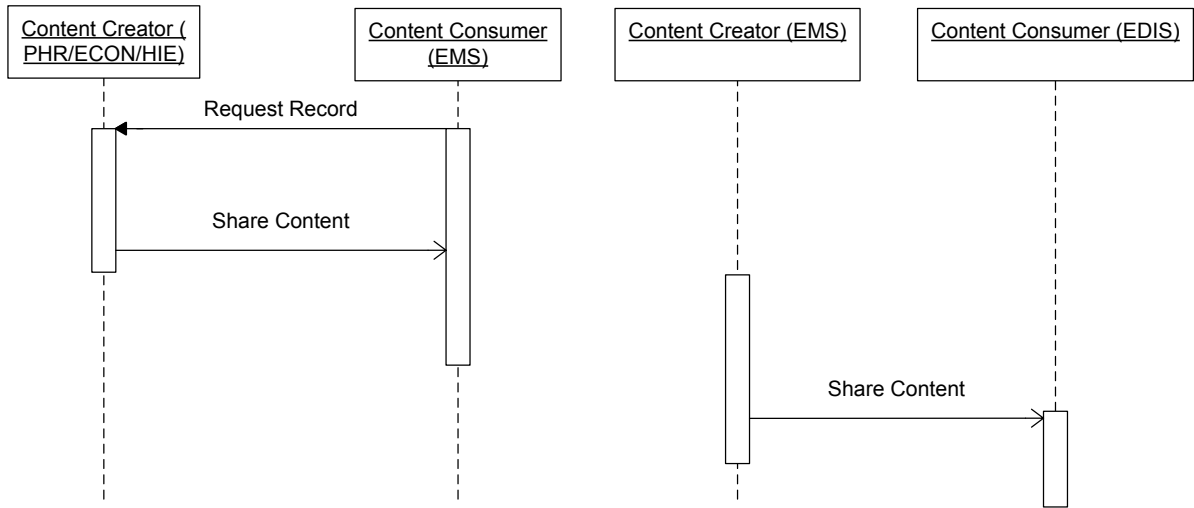
Use Case 1

225 A 47 year old white male patient visits his Primary Care Physician (PCP) because of a recent complaint of chest pain. During his visit the PCP obtains an EKG which shows significant changes in multiple leads. His PCP immediately calls 911. The PCP has an EMR system which is part of the local affinity domain and documents this case appropriately. The 911 providers also participate and are able to obtain the patient's current and past medical history and use this information in their own EMR system and update the record during the transport. Upon arrival at the local ED the 911 providers provide this updated information to the ED.

X.2.2 Diagrams

230 EMS Transport

A transport clinician first must request authorization for access to EMR or appropriate spokesperson. The clinician can then locate the EMR and update it with current clinical information during the transport. The EMR is can then be shared with the local EDIS.



235 **Figure X.2.2-1. EMS Transport Sequence Diagram in Transport Record Summary Profile**

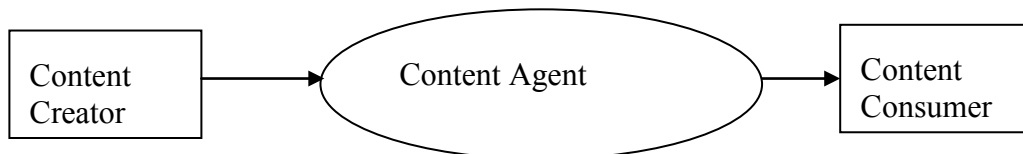
X.3 Actors/Transactions

Figure X.3.1-1 shows the actors directly involved in the Transport Record Summary Profile and the relevant transactions between them. Other actors that may be indirectly involved due to their participation in ETC, EDR, EDES, etc. are not necessarily shown. A Document Source or a Portable Media Creator may embody the Content Creator Actor. A Document Consumer, a Document Recipient or a Portable Media Importer may embody the Content Consumer Actor. The sharing or transmission of content or updates from one actor to the other is addressed by the use of appropriate IHE profiles described in the section on Content Bindings with XDS, XDM and XDR in PCC TF-2:4.1.

245 X.3.1 Content Agent

The Content Agent actor accesses clinical information in structured and non-structured form. It provides a mechanism for a clinician to add new information to the structured and non-structured information.

It authenticates the clinician prior to storage of the additional information data (this step may be combined with other authentication steps used to finalize the record).



255 **Figure X.3.1-1. ETS Actor Diagram**

X.4 Options

Table X.4-1. Options

Actor	Option
Content Consumer	View Option (1)
	Document Import Option (1)
	Section Import Option (1)
	Discrete Data Import Option (1)
Content Creator	No options defined
Content Agent	No Options Defined

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

X.4.1 Content Consumer Options

260 X.4.1.1 View Option

This option defines the processing requirements placed on Content Consumers for providing access, rendering and management of the medical document. See the View Option in PCC TF-2:3.1.1 for more details on this option.

265 A Content Creator Actor should provide access to a style sheet that ensures consistent rendering of the medical document content as was displayed by the Content Consumer Actor.

The Content Consumer Actor shall be able to present a view of the document using this style sheet if present.

X.4.1.2 Document Import Option

270 This option defines the processing requirements placed on Content Consumers for providing access, and importing the entire medical document and managing it as part of the patient record. See the Document Import Option in PCC TF-2:3.1.2 for more details on this option.

X.4.1.3 Section Import Option

275 This option defines the processing requirements placed on Content Consumers for providing access to, and importing the selected section of the medical document and managing them as part of the patient record. See the Section Import Option in PCC TF-2:3.1.3 for more details on this option.

X.4.1.4 Discrete Data Import Option

280 This option defines the processing requirements placed on Content Consumers for providing access, and importing discrete data from selected sections of the medical document and managing them as part of the patient record. See the Discrete Data Import Option in PCC TF-2:3.1.4 for more details on this option.

X.5 Groupings

This section describes the behaviors expected of the Content Creator and Content Consumer actors of this profile when grouped with actors of other IHE profiles.

285 X.5.1 Content Bindings with XDS, XDM and XDR

It is expected that the exchanges of this content will occur in an environment where prehospital providers and emergency care centers have a coordinated infrastructure that serves the information sharing needs of this community of care. Several mechanisms are supported by IHE profiles:

- 290 • A registry/repository-based infrastructure is defined by the IHE Cross Enterprise Document Sharing (XDS) and other IHE Integration Profiles such as patient identification (PIX & PDQ) and notification of availability of documents (NAV).
- A media-based infrastructure is defined by the IHE Cross Enterprise Document Media Interchange (XDM) profile.
- 295 • A reliable messaging-based infrastructure is defined by the IHE Cross Enterprise Document Reliable Interchange (XDR) profile.
- All of these infrastructures support Security and privacy through the use of the Consistent Time (CT) and Audit Trail and Node Authentication (ATNA) profiles.

300 For more details on these profiles, see the IHE IT Infrastructure Technical Framework². Content profiles may impose additional requirements on the transactions used when grouped with actors from other IHE Profiles.

X.5.2 Cross Enterprise Document Sharing, Media Interchange and Reliable Messages

305 Actors from the ITI XDS, XDM and XDR profiles most often 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, and the metadata sent in the document sharing or interchange messages has specific relationships to the content of the clinical document described in the content profile.

X.5.3 Audit Trail and Node Authentication (ATNA)

310 When the Content Creator or Content Consumer actor of this profile is grouped with the Secure Node or Secure Application actor of the ATNA profile, the content creator actor shall generate appropriate audit record events for each of the following trigger events:

² See http://www.ihe.net/Technical_Framework/index.cfm#IT

Trigger Event	Description
Actor-start-stop	Start up and shut-down of the content creator or content consumer actor.
Patient-Record-Event	Creation, access, modification ³ or deletion of the content described within this profile.
Node-Authentication-Failure	Secure node authentication failure is detected.

315 The above list is a minimum set that must be demonstrated by all actors of this profile when grouped with the secure node or secure application actor. Additional audit records shall also be generated depending upon the actions available the product implementing the secure node or secure application actor.

X.5.4 Notification of Document Availability (NAV)

320 A Document Source should provide the capability to issue a Send Notification Transaction per the ITI Notification of Document Availability (NAV) Integration Profile in order to notify one or more Document Consumer(s) of the availability of one or more documents for retrieval. One of the Acknowledgement Request options may be used to request from a Document Consumer that an acknowledgement should be returned when it has received and processed the notification. A Document Consumer should provide the capability to receive a Receive Notification Transaction

325 per the NAV Integration Profile in order to be notified by Document Sources of the availability of one or more documents for retrieval. The Send Acknowledgement option may be used to issue a Send Acknowledgement to a Document Source that the notification was received and processed.

X.5.5 Document Digital Signature (DSG)

330 When a Content Creator Actor needs to digitally sign a document in a submission set, it may support the Digital Signature (DSG) Content Profile as a Document Source. When a Content Consumer Actor needs to verify a Digital Signature, it may retrieve the digital signature document and may perform the verification against the signed document content.

X.5.6 Grouping with Other PCC Content Profiles

335 When the Content Creator of this profile is grouped with a Content Consumers of other profiles found in the IHE PCC Technical Framework, the following key information available in documents specified in these profiles must be able to be transferred from consumer to the creator for incorporation into the exchange.

³ Clinical documents are not normally modified after being finalized. However, prior to that event one or more parties may author the content in stages. Each subsequent stage should be treated as a modification of the previous stage.

Profiles	XDS-MS (Cross Enterprise Document Sharing of Medical Summaries)	XPHR (Exchange of Personal Health Record)	EDR (Emergency Department Referral)	EDES (Emergency Department Encounter Summary)
Entries				
Emergency Contact Information	R	R	R	R
Problems	R	R	R	R
Medications	R	R	R	R
Allergies	R	R	R	R
Advance Directives (e.g., DNR status)	R2	R2	R	R
Pregnancy Status	R2	R2	R2	R2

340 R = Required, R2 = Required if data available

X.6 Security Considerations

X.7 Content Modules

Content Modules describe the content of a payload found in an IHE transaction. Content profiles are transaction neutral. They do not have dependencies upon the transaction that they appear in.

345 The Transport content module is intended to support the exchange of information gathered during pre-hospital emergency care, interfacility care and obtained via other IHE content profiles (e.g., in the case where the EMS system is able to obtain relevant information from a PHR or other HIT system, such as an emergency contact registry (i.e., VIN# ECON, DL# ECON).

350 This content module incorporates other content modules already present in this Technical Framework. The names of these content modules do not always use the terminology used by emergency care providers (e.g., Review of Systems). However, the data elements found in these sections are identical in content regardless of the level of training of the care providing that information, be they a nurse, physician or other health care professional. The purpose of section classification is to identify the type of information found in it. The author that generated this
355 information is separately identified within the content module.

Table X.7-1 describes an abstract list of data elements that must be part of the information presented in tables X.7-2, EMS Transport Data Element Index.

Table X.7-1 Transport Data Element Index

Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Chief Complaint / Primary Diagnosis	4.06 Chief Complaint	ESituation.04 Complaint	Chief Complaint	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1

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Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Medications Given	7.04 ED Medication	EMedications.03 Medication Given	Medications Given	1.3.6.1.4.1.19376.1.5.3.1.3.21
Reason for Referral	Not Available	EPayment.43 Ambulance Transport Reason Code	Reason for Referral	1.3.6.1.4.1.19376.1.5.3.1.3.1
History Present Illness	5.15 ED Clinical Finding	ESituation.05 Duration of Chief Complaint	History Present Illness	1.3.6.1.4.1.19376.1.5.3.1.3.4
History of Pregnancies	5.15 ED Clinical Finding	EHistory.20 Pregnancy	History of Pregnancies	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4
Acuity Assessment	4.08 First ED	Not Available	Acuity Assessment	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.2
Active Problems	5.15 ED Clinical Finding	EHistory.10 Medical/Surgical History	Active Problems	1.3.6.1.4.1.19376.1.5.3.1.3.6
Current Medications	5.09 Current Therapeutic Medication	EHistory.14 Current Medications	Current Medications	1.3.6.1.4.1.19376.1.5.3.1.3.19
Allergies	5.15 ED Clinical Finding	EHistory.08 Medication Allergies, EHistory.09 Environmental/Food Allergies	Allergies	1.3.6.1.4.1.19376.1.5.3.1.3.13
Immunizations	5.15 ED Clinical Finding	EHistory.12 Immunization History	Immunizations	1.3.6.1.4.1.19376.1.5.3.1.3.23
Pertinent Review of Systems	5.15 ED Clinical Finding	ESituation.09 Primary Symptom ESituation.10 Other Associated Symptoms	Pertinent Review of Systems	1.3.6.1.4.1.19376.1.5.3.1.3.18

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Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Family History	5.15 ED Clinical Finding	Not Available	Family History	1.3.6.1.4.1.19376.1.5.3.1.3.14
Social History	5.15 ED Clinical Finding	EHistory.19 Alcohol / Drug Use Indicators	Social History	1.3.6.1.4.1.19376.1.5.3.1.3.16
Coded Physical Examination	5.15 ED Clinical Finding	EExam Assessment/ Exam EVitals Assessment/ Vital Signs	Coded Physical Examination (Includes Required Coded Vital Signs - 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2)	1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1
Relevant Surgical Procedures / Clinical Reports (including links)	Not Available	EHistory.10 Medical/Surgical History	List of Surgeries	1.3.6.1.4.1.19376.1.5.3.1.3.11
Relevant Diagnostic Test and Reports (Lab, Imaging, EKG's, etc.) including links.	Not Available	ELab Laboratory / Imaging Results	Hospital Studies Summary	1.3.6.1.4.1.19376.1.5.3.1.3.29
Care Plan (new meds labs, or x-rays ordered)	Not Available	Not Available	Care Plan (new meds labs, or x-rays ordered)	1.3.6.1.4.1.19376.1.5.3.1.3.31
Mode of Transport to the Emergency Department	4.02 Mode of Transport	EDisposition.16 EMS Transport Method EDisposition.18 Additional Transport Mode Descriptors ETimes.11 Patient Arrived at Destination Date/Time ETimes.06 Unit Arrived on Scene Date/Time	Mode of Transport to the Emergency Department (Includes estimated time of arrival)	1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2

Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Advance Directives	Not Available	EHistory.05 Advance Directives	Advance Directives	1.3.6.1.4.1.19376.1.5.3.1.3.34
Pertinent Insurance Information	3.01 Insurance Coverage or Other Expected Source of Payment	EPayment.01 Primary Method of Payment	Payers	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7
Sending Facility	Not Available	EScene.12 Incident Facility or Location Name	Sending Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.1
Receiving Facility	8.05 Facility Receiving ED Patient	EDisposition.01 Destination / Transferred To, Name	Receiving Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.2

360

X.7.1 EMS Transport Content Module

During a transport described in Use Case 1 that originates as a pre-hospital transport where a patient is first encountered by emergency first responders, data elements located in Table X.7.1-1 must be included with data elements from Table X.7-1.

365

Table X.7.1-1 EMS Transport Data Element Index

Data Elements	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Injury Incident Description	5.03 Injury Incident Description	ESituation Situation EInjury Situation/Trauma	Injury Incident Description	1.3.6.1.4.1.19376.1.5.3.1.1.19.2.1
Mass Casualty Incident	Not Available	EScene.07 Mass Casualty Incident	Mass Casualty Incident	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.3
Unit Response Level	Not Available	EPayment.49 CMS Service Level	Unit Response Level	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.4
Protocols Used	Not Available	EProtocols.01 Protocols Used	Protocols Used	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.5

IHE PCC Technical Framework Supplement – Transport Record Summary Profiles

Data Elements	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Intravenous Fluids Administered	6.02 ED Procedure	EMedications.04 Medications Given Route, 4205 Intravenous	Intravenous Fluids Administered	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6

Y EMS Transport Summary

X.1 Purpose and Scope

370 The goal of this profile is to detail how information is shared during all aspects of patient transport. Whenever a patient is moved between facilities and care services their information about this specific event needs to travel with them. The ability to share this information with the transporters, regardless of transport time, is essential to complete patient care.

375 We are focused on only those events that involve a transport team, which for this profile is defined as any team of license or certified care providers that create content for the EMR. This team may be part of a fixed wing, helicopter or ambulance transport

We are not focused on multiple events associated with long term patient care, but rather each incident that requires a specific number of transports between health care settings.

Y.2 Process Flow

380 Y.2.1 Interfacility Transport

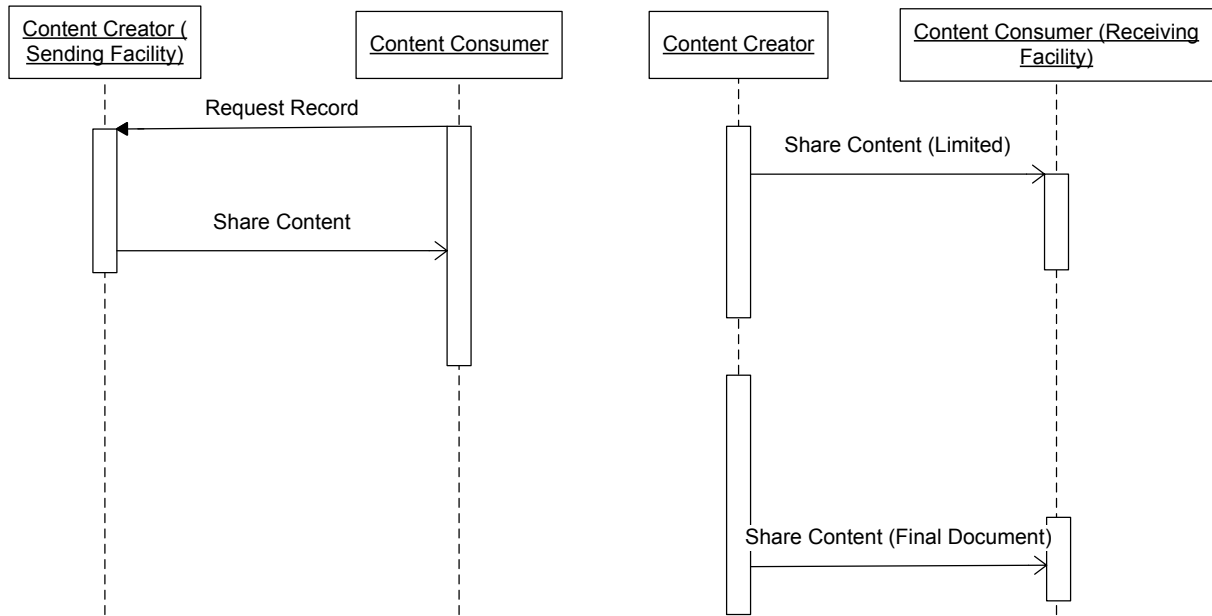
Use Case

385 A 6 year old asian female patient has routinely been seen by specialty providers at a major medical institution with a focus on pediatric intensive care and disease process. The patient's parents notice an acute onset of symptoms associated with her condition that prompts them to bring their daughter to the local ED. While en route the parents notify the major hospital of the situation. The major hospital starts to arrange for rotor wing transport of the patient since they live in a remote area. The local ED is not part of the major hospital affinity domain and has a limited EMR. The ability to provide any records is limited to providing a CD with the information. The rotor wing transport staff consisting of a pediatric intensivist also does not participate in the major hospital's affinity domain, however using XCA, they are able to obtain limited information. They continue to update the EMR locally during the transport for near real-time viewing by the receiving facility and upon arrival can share this information in its entirety with the major hospital's EMR system.

Y.2.2 Diagram

395 Interfacility Transport

A transport clinician first must request authorization for access to EMR or appropriate spokesperson. The clinician can then locate the EMR and update it with current clinical information during the transport. The EMR is updated in near real-time so that the receiving facility can access the most up to date information.



400

Figure Y.2.2-1. Interfacility Transport Sequence Diagram in Transport Record Summary Profile

Y.3 Actors/Transactions

405 Figure Y.3.1-1 shows the actors directly involved in the Transport Record Summary Profile and the relevant transactions between them. Other actors that may be indirectly involved due to their participation in ETC, EDR, EDES, etc. are not necessarily shown. A Document Source or a Portable Media Creator may embody the Content Creator Actor. A Document Consumer, a Document Recipient or a Portable Media Importer may embody the Content Consumer Actor. The sharing or transmission of content or updates from one actor to the other is addressed by the use of appropriate IHE profiles described in the section on Content Bindings with XDS, XDM and XDR in PCC TF-2:4.1.

410

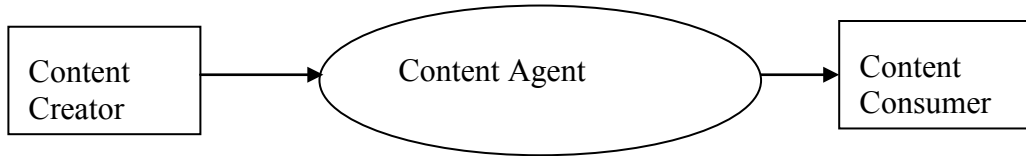
Y.3.1 Content Agent

The Content Agent actor accesses clinical information in structured and non-structured form. It provides a mechanism for a clinician to add new information to the structured and non-structured information.

415

It authenticates the clinician prior to storage of the additional information data (this step may be combined with other authentication steps used to finalize the record).

420



425

Figure Y.3.1-1. TTP Actor Diagram

Y.4 Options

Actor	Option
Content Consumer	View Option (1)
	Document Import Option (1)
	Section Import Option (1)
	Discrete Data Import Option (1)
Content Creator	No options defined
Reconciliation Agent	No options defined

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

430

Y.4.1 Content Consumer Options

Y.4.1.1 View Option

This option defines the processing requirements placed on Content Consumers for providing access, rendering and management of the medical document. See the View Option in PCC TF-2:3.1.1 for more details on this option.

435

A Content Creator Actor should provide access to a style sheet that ensures consistent rendering of the medical document content as was displayed by the Content Consumer Actor.

The Content Consumer Actor shall be able to present a view of the document using this style sheet if present.

Y.4.1.2 Document Import Option

440

This option defines the processing requirements placed on Content Consumers for providing access, and importing the entire medical document and managing it as part of the patient record. See the Document Import Option in PCC TF-2:3.1.2 for more details on this option.

Y.4.1.3 Section Import Option

445 This option defines the processing requirements placed on Content Consumers for providing access to, and importing the selected section of the medical document and managing them as part of the patient record. See the Section Import Option in PCC TF-2:3.1.3 for more details on this option.

Y.4.1.4 Discrete Data Import Option

450 This option defines the processing requirements placed on Content Consumers for providing access, and importing discrete data from selected sections of the medical document and managing them as part of the patient record. See the Discrete Data Import Option in PCC TF-2:3.1.4 for more details on this option.

Y.5 Groupings

455 This section describes the behaviors expected of the Content Creator and Content Consumer actors of this profile when grouped with actors of other IHE profiles.

Y.5.1 Content Bindings with XDS, XDM and XDR

460 It is expected that the exchanges of this content will occur in an environment where prehospital providers and emergency care centers have a coordinated infrastructure that serves the information sharing needs of this community of care. Several mechanisms are supported by IHE profiles:

- A registry/repository-based infrastructure is defined by the IHE Cross Enterprise Document Sharing (XDS) and other IHE Integration Profiles such as patient identification (PIX & PDQ) and notification of availability of documents (NAV).
- 465 • A media-based infrastructure is defined by the IHE Cross Enterprise Document Media Interchange (XDM) profile.
- A reliable messaging-based infrastructure is defined by the IHE Cross Enterprise Document Reliable Interchange (XDR) profile.
- 470 • All of these infrastructures support Security and privacy through the use of the Consistent Time (CT) and Audit Trail and Node Authentication (ATNA) profiles.

For more details on these profiles, see the IHE IT Infrastructure Technical Framework⁴. Content profiles may impose additional requirements on the transactions used when grouped with actors from other IHE Profiles.

⁴ See http://www.ihe.net/Technical_Framework/index.cfm#IT

475 **Y.5.2 Cross Enterprise Document Sharing, Media Interchange and Reliable Messages**

Actors from the ITI XDS, XDM and XDR profiles most often 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, and the metadata sent in the document sharing or interchange messages has specific relationships to the content of the clinical document described in the content profile.

480 **Y.5.3 Audit Trail and Node Authentication (ATNA)**

When the Content Creator or Content Consumer actor of this profile is grouped with the Secure Node or Secure Application actor of the ATNA profile, the content creator actor shall generate appropriate audit record events for each of the following trigger events:

485

Trigger Event	Description
Actor-start-stop	Start up and shut-down of the content creator or content consumer actor.
Patient-Record-Event	Creation, access, modification ⁵ or deletion of the content described within this profile.
Node-Authentication-Failure	Secure node authentication failure is detected.

The above list is a minimum set that must be demonstrated by all actors of this profile when grouped with the secure node or secure application actor. Additional audit records shall also be generated depending upon the actions available the product implementing the secure node or secure application actor.

490 **Y.5.4 Notification of Document Availability (NAV)**

A Document Source should provide the capability to issue a Send Notification Transaction per the ITI Notification of Document Availability (NAV) Integration Profile in order to notify one or more Document Consumer(s) of the availability of one or more documents for retrieval. One of the Acknowledgement Request options may be used to request from a Document Consumer that an acknowledgement should be returned when it has received and processed the notification. A Document Consumer should provide the capability to receive a Receive Notification Transaction per the NAV Integration Profile in order to be notified by Document Sources of the availability of one or more documents for retrieval. The Send Acknowledgement option may be used to issue a Send Acknowledgement to a Document Source that the notification was received and processed.

500

⁵ Clinical documents are not normally modified after being finalized. However, prior to that event one or more parties may author the content in stages. Each subsequent stage should be treated as a modification of the previous stage.

Y.5.5 Document Digital Signature (DSG)

When a Content Creator Actor needs to digitally sign a document in a submission set, it may support the Digital Signature (DSG) Content Profile as a Document Source. When a Content Consumer Actor needs to verify a Digital Signature, it may retrieve the digital signature document and may perform the verification against the signed document content.

Y.5.6 Grouping with Other PCC Content Profiles

When the Content Creator of this profile is grouped with a Content Consumers of other profiles found in the IHE PCC Technical Framework, the following key information available in documents specified in these profiles must be able to be transferred from consumer to the creator for incorporation into the exchange.

Profiles	XDS-MS (Cross Enterprise Document Sharing of Medical Summaries)	XPHR (Exchange of Personal Health Record)	EDR (Emergency Department Referral)	EDES (Emergency Department Encounter Summary)
Emergency Contact Information	R	R	R	R
Problems	R	R	R	R
Medications	R	R	R	R
Allergies	R	R	R	R
Advance Directives (e.g., DNR status)	R2	R2	R	R
Pregnancy Status	R2	R2	R2	R2

R = Required, R2 = Required if data available

Y.6 Security Considerations

<Description of the Profile specific security considerations. This should include the outcomes of a risk assessment. This likely will include profile groupings, and residual risks that need to be assigned to the product design, system administration, or policy.>

Y.7 Content Modules

Content Modules describe the content of a payload found in an IHE transaction. Content profiles are transaction neutral. They do not have dependencies upon the transaction that they appear in.

The Transport content module is intended to support the exchange of information gathered during pre-hospital emergency care, interfacility care and obtained via other IHE content profiles

525 (e.g., in the case where the EMS system is able to obtain relevant information from a PHR or other HIT system, such as an emergency contact registry (i.e., VIN# ECON, DL# ECON).

530 This content module incorporates other content modules already present in this Technical Framework. The names of these content modules do not always use the terminology used by emergency care providers (e.g., Review of Systems). However, the data elements found in these sections are identical in content regardless of the level of training of the care providing that information, be they a nurse, physician or other health care professional. The purpose of section classification is to identify the type of information found in it. The author that generated this information is separately identified within the content module.

Table Y.7-1 describes an abstract list of data elements that must be part of the information presented in table Y.7-2, Interfacility Transport Data Element Index.

535

Table Y.7-1 Transport Data Element Index

Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Chief Complaint / Primary Diagnosis	4.06 Chief Complaint	ESituation.04 Complaint	Chief Complaint	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1
Medications Given	7.04 ED Medication	EMedications.03 Medication Given	Medications Given	1.3.6.1.4.1.19376.1.5.3.1.3.21
Reason for Referral	Not Available	EPayment.43 Ambulance Transport Reason Code	Reason for Referral	1.3.6.1.4.1.19376.1.5.3.1.3.1
History Present Illness	5.15 ED Clinical Finding	ESituation.05 Duration of Chief Complaint	History Present Illness	1.3.6.1.4.1.19376.1.5.3.1.3.4
History of Pregnancies	5.15 ED Clinical Finding	EHistory.20 Pregnancy	History of Pregnancies	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4
Acuity Assessment	4.08 First ED	Not Available	Acuity Assessment	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.2
Active Problems	5.15 ED Clinical Finding	EHistory.10 Medical/Surgical History	Active Problems	1.3.6.1.4.1.19376.1.5.3.1.3.6

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Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Current Medications	5.09 Current Therapeutic Medication	EHistory.14 Current Medications	Current Medications	1.3.6.1.4.1.19376.1.5.3.1.3.19
Allergies	5.15 ED Clinical Finding	EHistory.08 Medication Allergies, EHistory.09 Environmental/Food Allergies	Allergies	1.3.6.1.4.1.19376.1.5.3.1.3.13
Immunizations	5.15 ED Clinical Finding	EHistory.12 Immunization History	Immunizations	1.3.6.1.4.1.19376.1.5.3.1.3.23
Pertinent Review of Systems	5.15 ED Clinical Finding	ESituation.09 Primary Symptom ESituation.10 Other Associated Symptoms	Pertinent Review of Systems	1.3.6.1.4.1.19376.1.5.3.1.3.18
Family History	5.15 ED Clinical Finding	Not Available	Family History	1.3.6.1.4.1.19376.1.5.3.1.3.14
Social History	5.15 ED Clinical Finding	EHistory.19 Alcohol / Drug Use Indicators	Social History	1.3.6.1.4.1.19376.1.5.3.1.3.16
Coded Physical Examination	5.15 ED Clinical Finding	EExam Assessment/ Exam EVitals Assessment/ Vital Signs	Coded Physical Examination (Includes Required Coded Vital Signs - 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2)	1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1
Relevant Surgical Procedures / Clinical Reports (including links)	Not Available	EHistory.10 Medical/Surgical History	List of Surgeries	1.3.6.1.4.1.19376.1.5.3.1.3.11
Relevant Diagnostic Test and Reports (Lab, Imaging, EKG's, etc.) including links.	Not Available	ELab Laboratory / Imaging Results	Hospital Studies Summary	1.3.6.1.4.1.19376.1.5.3.1.3.29

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Data Element	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Care Plan (new meds labs, or x-rays ordered)	Not Available	Not Available	Care Plan (new meds labs, or x-rays ordered)	1.3.6.1.4.1.19376.1.5.3.1.3.31
Mode of Transport to the Emergency Department	4.02 Mode of Transport	EDisposition.16 EMS Transport Method EDisposition.18 Additional Transport Mode Descriptors ETimes.11 Patient Arrived at Destination Date/Time ETimes.06 Unit Arrived on Scene Date/Time	Mode of Transport to the Emergency Department (Includes estimated time of arrival)	1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2
Advance Directives	Not Available	EHistory.05 Advance Directives	Advance Directives	1.3.6.1.4.1.19376.1.5.3.1.3.34
Pertinent Insurance Information	3.01 Insurance Coverage or Other Expected Source of Payment	EPayment.01 Primary Method of Payment	Payers	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7
Sending Facility	Not Available	EScene.12 Incident Facility or Location Name	Sending Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.1
Receiving Facility	8.05 Facility Receiving ED Patient	EDisposition.01 Destination / Transferred To, Name	Receiving Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.2

540 **Y.7.1 Interfacility Transport Content Module**

During a transport described in Use Case 2 that begins at one healthcare facility and ends at another healthcare facility, data elements located in Table Y.7.1-1 must be included with data elements from Table Y.7-1.

545 **Table Y.7.1-1 Interfacility Transport Data Element Index**

Data Elements	DEEDS	NEMESIS v3	PCC Template	PCC Template ID
Diet & Nutrition (NPO)	Not Available	EHistory.21 Last Oral Intake	Diet & Nutrition (NPO)	1.3.6.1.4.1.19376.1.5.3.1.3.33
Extra Attendants Information	Not Available	EPayment.41 Specialty Care Transport Care Provider	Extra Attendants Information	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.6
Invasive Airway	Not Available	EProtocols.01 (1) Protocols Used	Invasive Airway	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.7
Isolation Status	Not Available	EPayment.50 (038.90) EMS Condition Code	Isolation Status	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.8
Patient Care Devices	Not Available	DDevice.02 Device Name or ID	Patient Care Devices	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5
Provider Level	Not Available	DConfiguration.02 State Certification Licensure Levels	Provider Level	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.9
Provider Orders	Not Available	EMedications.11 (4) Medication Authorization EProcedures.11 (4) Procedure Authorization	Provider Orders	1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1
Restraints	Not Available	EPayment.50 (298.90) EMS Condition Code	Restraints	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.10
Ventilator Usage	Not Available	DDevice.03 (19) Medical Device	Ventilator Usage	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.11

		Type		
--	--	------	--	--

Transport Summary Definitions

Share Content (Limited)

550 During transport in Use Case 2, a system must be able to share a limited dataset with the content consumer. This dataset will contain limited pertinent information which is mostly objective. This data includes current vital signs, stat labs and current medication dosages to name a few.

Share Content (Final)

555 During transport in Use Case 2 a large amount of data, both subjective and objective is collected. This dataset will be shared with the content consumer in its entirety according to the defined dataset. This information will include data shared during the transaction Share Content (Limited).

Glossary

560 *Add the following terms to the Glossary:*

***Fixed Wing** – Any transport by airplane*

***Rotor Wing** – Any transport by helicopter*

***NPO** – Nothing by mouth*

565 ***Transport Medicine** – Any field of medicine dealing specifically with an out of care setting environment or restructured to apply to an out of care setting environment.*

Volume 2 – Transactions and Content Modules

570

5.0 Namespaces and Vocabularies

5.1 IHE Format Codes

Profile	Format Code	Media Type	Template ID
NA	urn:ihe:pcc:trs:2011	text/xml	1.3.6.1.4.1.19376.1.5.3.1.1.25.1.1
EMS Transport Summary (ETS)	urn:ihe:pcc:ets:2011	text/xml	1.3.6.1.4.1.19376.1.5.3.1.1.25.1.2
Interfacility Transport Summary (ITS)	urn:ihe:pcc:its:2011	text/xml	1.3.6.1.4.1.19376.1.5.3.1.1.25.1.3

575

6.0 PCC Content Modules

6.3 HL7 Version 3.0 Content Modules

580 6.3.1 CDA Document Content Modules

Add section 6.3.1.A

6.3.1.A Transport Record Summary Specification 1.3.6.1.4.1.19376.1.5.3.1.1.25.1.1

585 The Transport Record Summary document content module is a Medical Summary and inherits all header constraints from Medical Summary (1.3.6.1.4.1.19376.1.5.3.1.1.2). The intention of this document content module is to provide a base from which other document content modules may be derived.

6.3.1.A.1 Format Code

The XDSDocumentEntry format code for this content is “**urn:ihe:pcc:trs:2011**”

6.3.1.A.2 LOINC Code

590 The LOINC code for this document is **XX-TRS**

6.3.1.A.3 Standards

CCD	ASTM/HL7 Continuity of Care Document
CDAR2	HL7 CDA Release 2.0
LOINC	Logical Observation Identifiers, Names and Codes
DEEDS	Data Elements for Emergency Department Systems
NEMESIS	National EMS Information System

6.3.1.A.4 Specification

This section references content modules using Template Id as the key identifier. Definitions of the modules are found in either:

- 595
- IHE Patient Care Coordination Volume 2: Final Text
 - IHE PCC CDA Content Modules Supplement

Table 6.3.1.A.4-1 Transport Record Summary Specification

Section Name	Section Template ID	Mandatory Inclusion Flag <small>Note 1</small>	Conformance <small>Note 1</small>	Cardinality <small>Note 1</small>	Volume 2 Location
Chief Complaint	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1	M	R	[1..1]	PCC TF-2:6.3.3.1.3
Medications Given	1.3.6.1.4.1.19376.1.5.3.1.3.21		R	[0..1]	PCC TF-2:6.3.3.3.3
Reason for Referral	1.3.6.1.4.1.19376.1.5.3.1.3.1	M	R	[1..1]	PCC TF 2:6.3.3.1.1
History Present Illness	1.3.6.1.4.1.19376.1.5.3.1.3.4		R	[1..1]	PCC TF-2:6.3.3.2.1
History of Pregnancies	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4		R		PCC TF-2:6.3.3.2.18
Acuity Assessment	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.2		R	[1..1]	PCC CDA Content Modules: 6.3.3.1.10
Active Problems	1.3.6.1.4.1.19376.1.5.3.1.3.6	M	R	[1..1]	PCC CDA Content Modules:6.3.3.9.6
Current Medications	1.3.6.1.4.1.19376.1.5.3.1.3.19		R	[0..1]	PCC TF-2:6.3.3.3.1
Allergies	1.3.6.1.4.1.19376.1.5.3.1.3.13		R	[0..1]	PCC TF-2:6.3.3.2.11
Immunizations	1.3.6.1.4.1.19376.1.5.3.1.3.23			[0..1]	PCC TF-2:6.3.3.3.5
Pertinent Review of Systems	1.3.6.1.4.1.19376.1.5.3.1.3.18	M	R	[1..1]	PCC TF-2:6.3.3.2.16
Family History	1.3.6.1.4.1.19376.1.5.3.1.3.14			[0..1]	PCC TF-2:6.3.3.2.12
Social History	1.3.6.1.4.1.19376.1.5.3.1.3.16			[0..1]	PCC TF-2:6.3.3.2.14
Coded Physical Examination (Includes Required Coded Vital Signs - 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2)	1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1	M	R	[1..1]	PCC TF-2:6.3.3.4.2
List of Surgeries	1.3.6.1.4.1.19376.1.5.3.1.3.11		R	[0..1]	PCC TF 2:6.3.3.2.9
Hospital Studies	1.3.6.1.4.1.19376.1.5.3.1.3.29		R	[0..*]	PCC TF 2:6.3.3.5.3

Section Name	Section Template ID	Mandatory Inclusion Flag <small>Note 1</small>	Conformance <small>Note 1</small>	Cardinality <small>Note 1</small>	Volume 2 Location
Summary					
Care Plan (new meds labs, or x-rays ordered)	1.3.6.1.4.1.19376.1.5.3.1.3.31	M	R	[1..1]	PCC TF-2:6.3.3.6.1
Mode of Transport to the Emergency Department (Includes estimated time of arrival)	1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2	M	R	[1..1]	PCC TF-2:6.3.3.6.7
Advance Directives	1.3.6.1.4.1.19376.1.5.3.1.3.34		R	[0..1]	PCC TF-2:6.3.3.6.5
Payers	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7		R	[1..1]	PCC TF-2:6.3.3.7.1
Sending Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.1	M	R	[1..1]	PCC CDA Content Modules: 6.3.3.7.6
Receiving Facility	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.2	M	R	[1..1]	PCC CDA Content Modules: 6.3.3.7.7

600 Note 1: In an attempt to clarify our documentation and required fields, we have adopted a method similar in nature to that of HL7. This notation states: If a field has a Mandatory Inclusion Flag, it is required and CAN NOT BE NULL, if it has an R under conformance, it must be present, but CAN BE NULL. Cardinality shows if multiple entries of a section are allowed.

6.3.1.A.5 Conformance

605 CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the Medical Summary content module, and so must conform to the requirements of that template as well, thus all <templateId> elements shown in the example below shall be included.

```

<ClinicalDocument xmlns='urn:hl7-org:v3'>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.1.1' />
  <id root=' ' extension=' ' />
  <code code='XX-TRS' displayName='Transport Record Summary'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
  <title>Transport Record Summary</title>
  <effectiveTime value='20090506012005' />
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='en-US' />
  :
  <component><structuredBody>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1' />
        <!-- Required Chief Complaint Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.21' />
        <!-- Required Medications Given Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.1' />
        <!-- Required Reason for Referral Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.4' />
        <!-- Required History of Present Illness Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.4' />
        <!-- Conditional History of Pregnancies Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.2' />
        <!-- Required Acuity Assessment Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.6' />
        <!-- Required Active Problems Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.19' />
        <!-- Required Current Medications Section content -->
      </section>
    </component>
  </structuredBody>
  </component>
  <section>

```

```

    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.13' />
    <!-- Required Allergies Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.23' />
    <!-- Immunizations Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.18' />
    <!-- Required Pertinent Review of Systems Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.14' />
    <!-- Family History Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.16' />
    <!-- Social History Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.9.15.1' />
    <!-- Required Coded Physical Examination Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.11' />
    <!-- Required List of Surgeries Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.29' />
    <!-- Required Hospital Studies Summary Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.31' />
    <!-- Required Care Plan Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2' />
    <!-- Required Mode of Transport Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.34' />
    <!-- Required Advanced Directives Section content -->
  </section>
</component>
</component>

```

```

<section>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7' />
  <!-- Required Payers Section content -->
</section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.1 ' />
    <!-- Required Sending Facility Section content -->
  </section>
</component>
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.2' />
    <!--Required Receiving Facility Section content -->
  </section>
</component>
</component>

```

610

Figure 6.3.1.A.5-1 Sample Transport Record Summary Document

Add section 6.3.1.B

6.3.1.B EMS Transport Summary Specification 1.3.6.1.4.1.19376.1.5.3.1.1.25.1.2

615 The EMS Transport Summary contains a record of the “referral summary” usually received during transport. This document content module is a Transport Record Summary and inherits all header constraints from Transport Record Summary (1.3.6.1.4.1.19376.1.5.3.1).

6.3.1.B.1 Format Code

The XDSDocumentEntry format code for this content is “**urn:ihe:pcc:ets:2011**”

6.3.1.B.2 LOINC Code

620 The LOINC code for this document is **XX-ETS**

6.3.1.B.3 Standards

CCD	ASTM/HL7 Continuity of Care Document
CDAR2	HL7 CDA Release 2.0
LOINC	Logical Observation Identifiers, Names and Codes
DEEDS	Data Elements for Emergency Department Systems
NEMIS	National EMS Information Sytem

6.3.1.B.4 Specification

This section references content modules using Template Id as the key identifier. Defintions of the modules are found in either:

- 625 • IHE Patient Care Coordination Volume 2: Final Text

- IHE PCC CDA Content Modules Supplement

Table 6.3.1.B.4-1 Emergency Transport Summary Specification

Template Name	Section Template ID / Location	Mandatory Inclusion Flag ^{Note 1}	Conformance ^{Note 1}	Cardinality ^{Note 1}	Volume 2 Location
Injury Incident Description	1.3.6.1.4.1.19376.1.5.3.1.1.19.2.1		R	[1..1]	PCC CDA Content Modules:6.3.3.1.10
Mass Casualty Incident	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.3		R	[0..1]	PCC CDA Content Modules: 6.3.3.7.8
Unit Response Level	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.4	M	R	[1..1]	PCC CDA Content Modules: 6.3.3.7.9
Protocols Used	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.5	M	R	[1..*]	PCC CDA Content Modules: 6.3.3.6.21
Intravenous Fluids Administered	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6		R	[0..1]	PCC CDA Content Modules:6.3.3.8.4

630 Note 1: In an attempt to clarify our documentation and required fields, we have adopted a method similar in nature to that of HL7. This notation states: If a field has a Mandatory Inclusion Flag, it is required and CAN NOT BE NULL, if it has an R under conformance, it must be present, but CAN BE NULL. Cardinality shows if multiple entries of a section are allowed.

6.3.1.B.5 Conformance

635 CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the Medical Summary content module, and so must conform to the requirements of that template as well, thus all

640 <templateId> elements shown in the example below shall be included.

```

<ClinicalDocument xmlns='urn:hl7-org:v3'>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.1.2'/>
  <id root=' ' extension=' '/>
  <code code='XX-ETS' displayName='EMS Transport Summary'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
  <title>EMS Transport Summary</title>
  <effectiveTime value='20090506012005'/>
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='en-US'/>
  :
  <component><structuredBody>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.19.2.1' />
        <!-- Required If Known Injury Incident Description Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.3' />
        <!-- Required If Known Mass Casualty Incident Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.4' />
        <!-- Required Unit Response Level Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.5' />
        <!-- Required Protocols Used Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6' />
        <!-- Required If Known Intravenous Fluids Administered Section content -->
      </section>
    </component>
  </component>
</structuredBody>
</component>
</ClinicalDocument>

```

Figure 6.3.1.B.5-1 Sample Emergency Transport Summary Document

Add section 6.3.1.C

6.3.1.C Interfacility Transport Summary Specification

645

1.3.6.1.4.1.19376.1.5.3.1.1.25.1.3

The Interfacility Transport Summary contains a record of the “referral summary” usually received during transport. This document content module is a Transport Record Summary and inherits all header constraints from Transport Record Summary. (1.3.6.1.4.1.19376.1.5.3.1)

6.3.1.C.1 Format Code

650

The XDSDocumentEntry format code for this content is “urn:ihe:pcc:its:2011”

6.3.1.C.2 LOINC Code

The LOINC code for this document is XX-ITS

6.3.1.C.3 Standards

CCD	ASTM/HL7 Continuity of Care Document
CDAR2	HL7 CDA Release 2.0
LOINC	Logical Observation Identifiers, Names and Codes
DEEDS	Data Elements for Emergency Department Systems
NEMESIS	National EMS Information System

6.3.1.C.4 Specification

655 This section references content modules using Template Id as the key identifier. Definitions of the modules are found in either:

- IHE Patient Care Coordination Volume 2: Final Text
- IHE PCC CDA Content Modules Supplement

660

Table 6.3.1.B.4-1 Emergency Transport Summary Specification

Template Name	Section Template ID	Mandatory Inclusion Flag <small>Note 1</small>	Conformance <small>Note 1</small>	Cardinality <small>Note 1</small>	Volume 2 Location
Diet & Nutrition (NPO)	1.3.6.1.4.1.19376.1.5.3.1.3.33		R	[0..1]	PCC TF 2:6.3.3.6.4
Extra Attendants Information	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.6		R	[0..1]	PCC CDA Content Modules: 6.3.3.7.10
Invasive Airway	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.7		R	[0..1]	PCC CDA Content Modules: 6.3.3.6.22
Isolation Status	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.8		R	[0..1]	PCC CDA Content Modules: 6.3.3.2.56
Patient Care Devices	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5			[0..*]	PCC TF 2:6.3.3.2.19
Provider Level	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.9	M	R	[1..1]	PCC CDA Content Modules: 6.3.3.7.11

Template Name	Section Template ID	Mandatory Inclusion Flag <small>Note 1</small>	Conformance <small>Note 1</small>	Cardinality <small>Note 1</small>	Volume 2 Location
Provider Orders	1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1		R	[0..1]	PCC CDA Supplement 2:6.3.3.6.11
Restraints	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.10		R	[0..1]	PCC CDA Content Modules: 6.3.3.2.57
Ventilator Usage	1.3.6.1.4.1.19376.1.5.3.1.1.25.2.11		R	[0..1]	PCC CDA Content Modules: 6.3.3.6.23

Note 1: In an attempt to clarify our documentation and required fields, we have adopted a method similar in nature to that of HL7. This notation states: If a field has a Mandatory Inclusion Flag, it is required and CAN NOT BE NULL, if it has an R under conformance, it must be present, but CAN BE NULL. Cardinality shows if multiple entries of a section are allowed.

665 **6.3.1.C.5 Conformance**

CDA Release 2.0 documents that conform to the requirements of this content module shall indicate their conformance by the inclusion of the appropriate <templateId> elements in the header of the document. This is shown in the sample document below. A CDA Document may conform to more than one template. This content module inherits from the Medical Summary content module, and so must conform to the requirements of that template as well, thus all <templateId> elements shown in the example below shall be included.

670


```

<ClinicalDocument xmlns='urn:hl7-org:v3'>
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.1.3' />
  <id root=' ' extension=' ' />
  <code code='XX-ITS' displayName='Interfacility Transport Summary'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
  <title>Interfacility Transport Summary</title>
  <effectiveTime value='20090506012005' />
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='en-US' />
  :
  <component><structuredBody>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.33' />
        <!-- Required If Known Diet & Nutrition Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.6' />
        <!-- Required Extra Attendants Information Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.7' />
        <!-- Required Invasive Airway Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.8' />
        <!-- Required If Known Isolation Status Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5' />
        <!-- Patient Care Devices Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.9' />
        <!-- Required Provider Level Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1' />
        <!-- Required If Known Provider Orders Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.10' />
        <!-- Required If Known Restraints Section content -->
      </section>
    </component>
    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.25.2.11' />
        <!-- Required Ventilator Usage Section content -->
      </section>
    </component>
  </structuredBody>
  </component>
</ClinicalDocument>

```

```
</section>  
</component>  
</component>
```

Figure 6.3.1.C.5-1 Sample Interfacility Transport Document

675 **6.3.2 CDA Header Content Modules**

NA

6.3.3 CDA Section Content Modules

See PCC Technical Framework Volume 2 or CDA Content Modules Supplement for Section Content Module definitions.

680 **6.3.4 CDA Entry Content Modules**

NA

6.5 PCC Value Sets

NA