IHE IT Infrastructure Framework
Perfis: PIXv3/PDQv3

Henrique Amaral, PhD
Diretoria IHE Brasil
Healthcare IT

Janeiro 2019

IHE BRASIL | Integrating the Healthcare Enterprise

Resources

- Profiles
- User Handbooks
- Case Studies
- Technical Frameworks
- IHE Technical Framework Documents for Public Comment
- Webinars

Profiles

Healthcare professionals seeking to acquire or upgrade systems need a convenient, reliable way of specifying a level of compliance to standards sufficient to achieve truly efficient interoperability. The purpose of the IHE initiative is to meet that need.

IHE Profiles provide a common language for purchasers and vendors to discuss the integration needs of healthcare sites and the integration capabilities of healthcare IT products. They offer developers a clear implementation path for communication standards supported by industry partners and carefully documented, reviewed and tested. They give purchasers a tool that reduces the complexity, cost and anxiety of implementing interoperable systems.

Profiles and Standards

IHE Profiles organize and leverage the integration capabilities that can be achieved by coordinated implementation of communication standards, such as DICOM, HL7 W3C and security standards. They provide precise definitions of how standards can be implemented to meet specific clinical needs.

IHE Domains and Annual Work Cycles

IHE is organized across a growing number of clinical and operational domains. Each domain produces its own set of Technical Framework documents, in close coordination with other IHE domains. Committees in each domain review and republish these documents annually, often expanding with supplements that define new profiles. Initially, each profile is published for public comment. After the comments received are addressed, the revised profile is republished for trial implementation; that is, for use in the IHE implementation testing process. If criteria for successful testing are achieved, the profile is published as final text and incorporated into the domain's Technical Framework.

The links below lead to brief descriptions of IHE profiles that have been published.

- Cardiology
- Dental
- Endoscopy
- Eye Care
- IT Infrastructure
- Pathology and Laboratory Medicine
- Patient Care Coordination
- Patient Care Device
- Pharmacy
- Quality, Research and Public Health
- Radiation Oncology
- Radiology

IHE INTERNATIONAL Integrating the Healthcare Enterprise

Member Login

Search

About IHE | Participate | Resources | Testing | IHE Domains | IHE Worldwide | News

IHE IT Infrastructure Profiles

Alphabetical by profile name; grouped by profile state.

- [ATNA] Audit Trail and Node Authentication Basic security through (a) functional access controls, (b) defined security audit logging and (c) secure network communications.
- [BPPC] Basic Patient Privacy Consents records a patient's privacy consent acknowledgement (for enforcing privacy appropriate to the use).
- [CT] Consistent Time synchronizes system clocks and time stamps of computers in a network (median error less than 1 second).
- [XCA] Cross-Community Access queries and retrieves patient electronic health records held by other communities.
- [XCPD] Cross-Community Patient Discovery locates communities with electronic health records for a patient and translates patient identifiers across communities.
- [XDM] Cross-enterprise Document Media Interchange transfers documents and metadata using CDs, USB memory, or email attachments.
- [XDR] Cross-enterprise Document Reliable Interchange exchanges health documents between health enterprises using a web-service based point-to-point push network communication.
- [XDS] Cross Enterprise Document Sharing shares and discovers electronic health record documents between healthcare enterprises, physician offices, clinics, acute care in-patient facilities and personal health records.
- [XDS-SD] Cross-enterprise Sharing of Scanned Documents shares unstructured electronic documents including scanned legacy paper and film.
- [XUA] Cross-Enterprise User Assertion communicates claims about the identity of an authenticated principal (user, application, system...) across enterprise boundaries - Federated Identity.
- [XDW] Cross Enterprise Workflow coordinates human and applications mediated workflows across multiple organizations.
- [DSG] Document Digital Signature specifies digital signatures for documents.
- [DSUB] Document Metadata Subscription subscribes for metadata-triggered notifications within an XDS Affinity Domain and across communities.
- [EUA] Enterprise User Authentication enables single sign-on inside an enterprise by facilitating one name per user for participating devices and software.
- [MPQ] Multi-Patient Queries aggregates queries to a Document Registry for data analysis such as provider accreditation, clinical research trial data collection or population health monitoring.
- [PAM] Patient Administration Management establishes the continuity and integrity of patient data in and across acute care settings, as well as among ambulatory caregivers.
- [PDQ] Patient Demographics Query queries by patient demographics for patient identity from a central patient information server.
- [PIX] Patient Identifier Cross Referencing queries for patient identity cross-references between hospitals, sites, health information exchange networks, etc.
- [PDQv3] Patient Demographics Query HL7 v3 extends the Patient Demographics Query profile leveraging HL7 version 3.
- [PIXv3] Patient Identifier Cross-Reference HL7 v3 extends the Patient Identifier Cross-Reference profile leveraging HL7 version 3.
- [PSA] Patient Synchronized Application allows cooperating applications on a workstation to synchronize to selected patient context.
- [PWP] Personnel White Pages provides basic directory information on human workforce members within an organization.
- [RFD] Retrieve Form for Data Capture requests forms from clinical trial sponsors and public health reporting.
- [RID] Retrieve Information for Display provides simple (browser-based) read-only access to clinical information (e.g. allergies or lab results).
- [SVS] Sharing Value Sets distributes centrally-managed, common, uniform nomenclatures.
- [APPC] Advanced Patient Privacy Consents defines a structural representation of a patient-specific Privacy Policy.
- [CSD] Care Services Discovery queries directories containing data about organizations, facilities, services, and providers.
- [XCF] Cross Community Fetch fetches a single or small pre-negotiated list of documents from another community.
- [XCDR] Cross-Community Document Reliable Interchange (XCDR) pushes documents to systems in another community.
- [DEN] Document Encryption encrypts individual documents and portable media content.
- [HPD] Healthcare Provider Directory supports discovery and management of healthcare provider information, both individual and organizational, in a directory structure.
- [IUA] Internet User Authorization provides user authorization for RESTful interfaces.
- [mACM] Mobile Alert Communication Management(mACM) provides a RESTful interface to an alert infrastructure.
- [MHD] Mobile access to Health Documents provides a RESTful interface to Document Sharing including XDS.
- [mCSD] Mobile Care Services Discovery (mCSD) provides a RESTful interface to discover Care Services: Organization, Location, Practitioner, and Health Services.
- [mXDE] Mobile Cross-Enterprise Document Data Element Extraction accesses data elements extracted from shared structured documents.
- [NPFSm] Non-patient File Sharing (NPFSm) provides a RESTful interface enable sharing of non-patient files such as clinical workflow definitions, domain policies, and stylesheets.

IHE BRASIL Integrating the Healthcare Enterprise

Como identificar e gerenciar pacientes com diferentes identificadores e informações demográficas em sistemas distintos?

IHE criou 8 perfis com o propósito de resolver diferentes aspectos deste problema; utilizando padrões utilizados pela indústria de Healthcare.

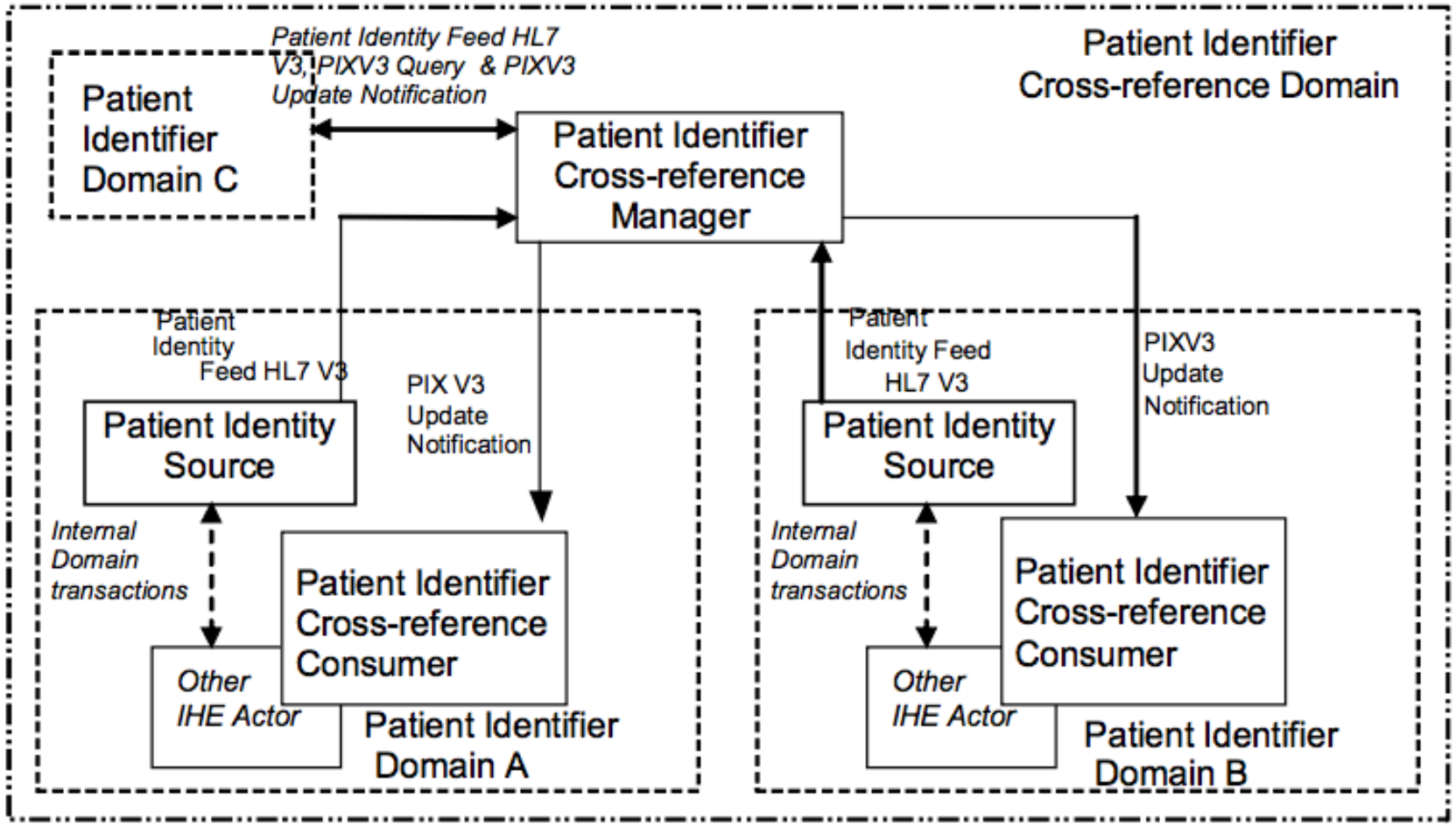
- PIX – Patient Identifier Cross-Referencing
- PIXv3 – Patient Identifier Cross-Referencing HL7 V3
- PIXm – Patient Identifier Cross-Referencing Mobile
- PDQ – Patient Demographic Query
- PDQv3 – Patient Demographic Query HL7 V3
- PDQm – Patient Demographic Query Mobile
- XCPD – Cross-Community Patient Discovery
- PAM – Patient Administration Management

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference (PIX): Definições

- *Profile* de Infraestrutura de TI (IHE IT Infrastructure)
- **Suporta a busca por referência cruzada de ID de pacientes entre hospitais, clínicas, consultórios, e redes de troca de informação em saúde em geral**.
- Suporta o referenciamento cruzado de identificadores de pacientes para **múltiplos Domínios** :
  - Transferindo informações de identificador de paciente de uma fonte de identificação para um gerenciador de referencia cruzada (**Patient Identifier Cross-reference Manager**).
  - Fornecendo a habilidade de acessar a(s) **lista(s) de identificadores de pacientes com referência cruzada** tanto pela busca/resposta quanto pela notificação de atualização.
  - Os identificadores cruzados de pacientes são usados por sistemas "consumidores de identificadores" para correlacionar as informações de um único paciente de fontes que "conhecem" o paciente por outros identificadores. **Isto permite o usuário médico ter uma maior visão da informações do paciente**.
- A funcionalidade do PIXV3 é idêntica ao PIX, as diferenças estão no formato das mensagens e no uso de serviços web baseados em SOAP.

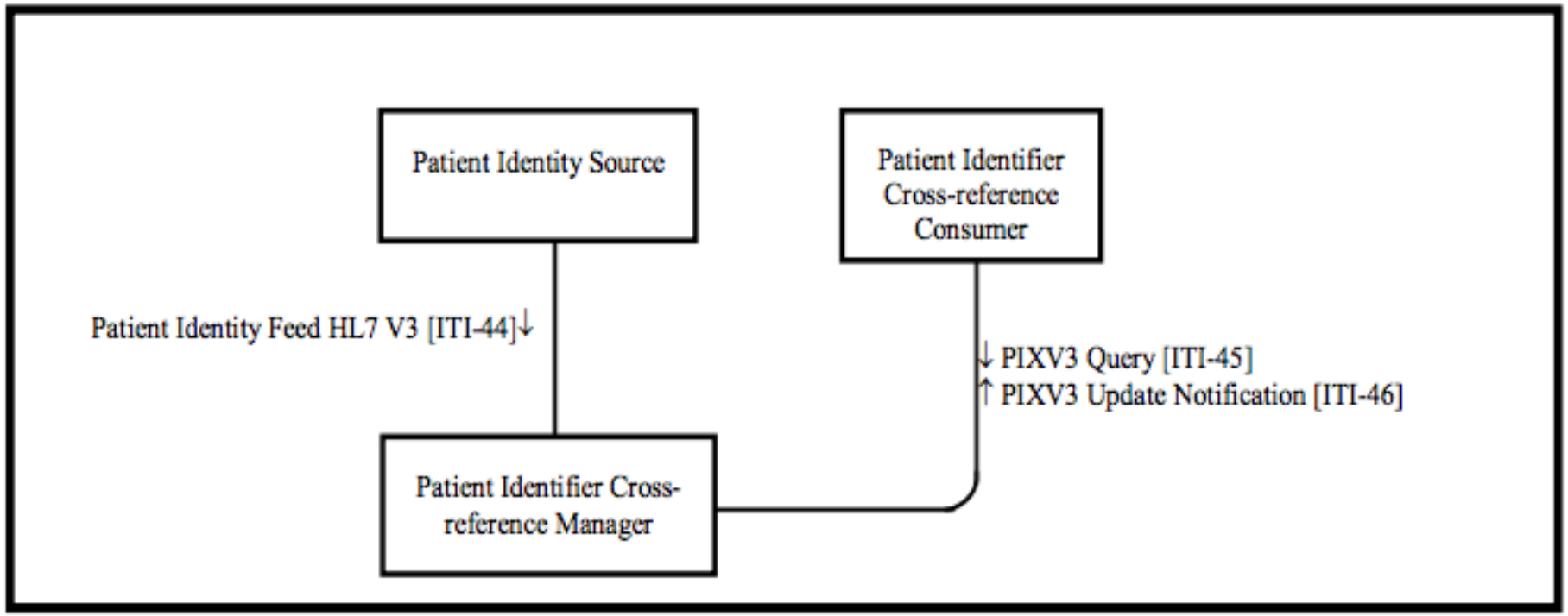
Patient Identifier Cross-referencing HL7 V3 (PIXV3) Fluxo do Processo



IHE_ITI_TF_Vol1 , pg 231

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-referencing HL7 V3 (PIXV3)
Atores e Transações



IHE_ITI_TF_Vol1 , pg 232

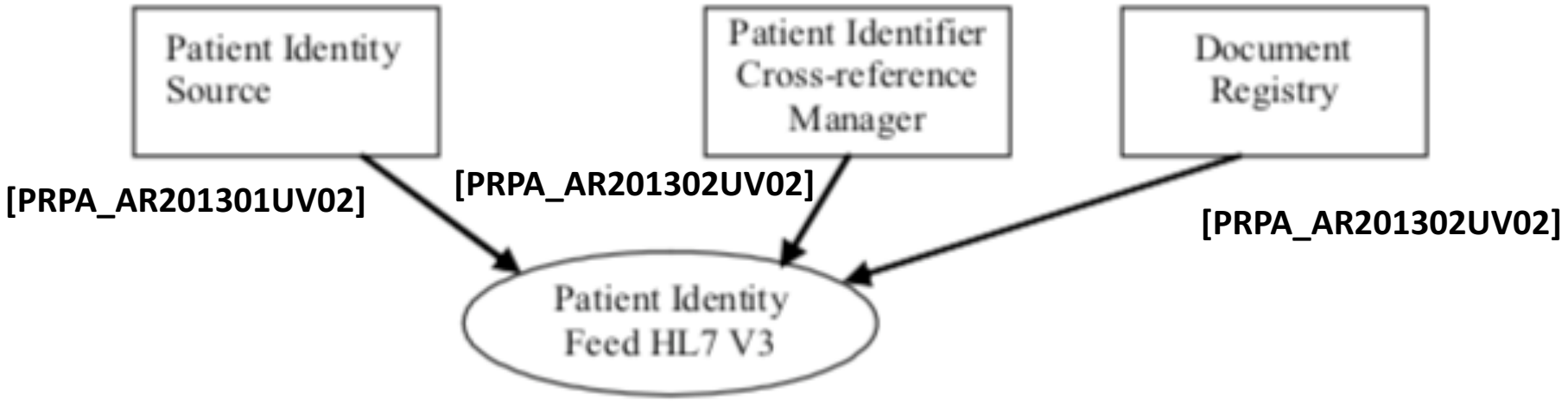
IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference HL7 V3 (PIXV3) Transações

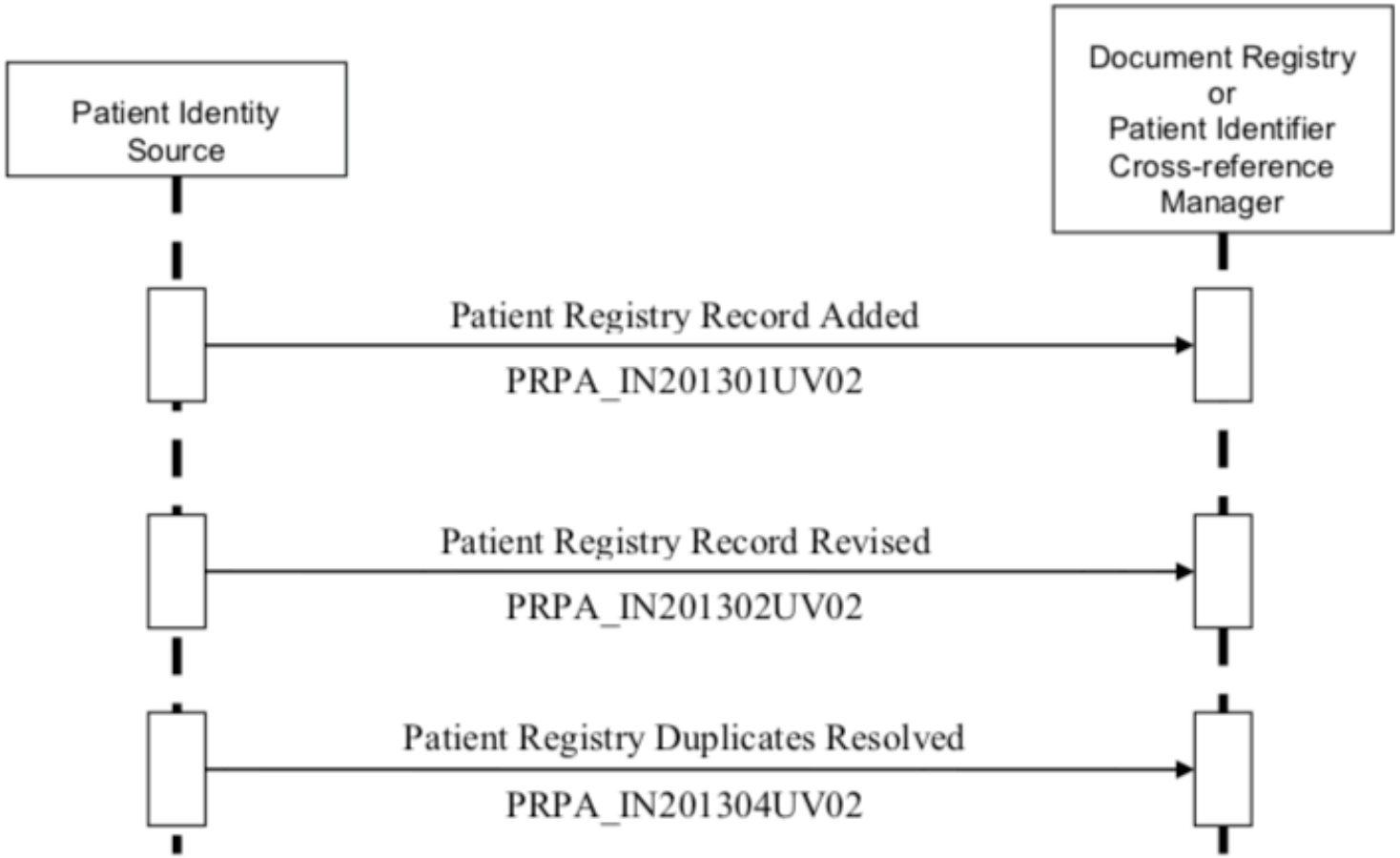
Actors	Transactions	Optionality	Section
Patient Identity Source	Patient Identity Feed HL7 V3 [ITI-44]	R	ITI TF-2b: 3.44
Patient Identifier Cross-reference Consumer	PIXV3 Query [ITI-45]	R	ITI TF-2b: 3.45
	PIXV3 Update Notification [ITI-46]	O	ITI TF-2b: 3.46
Patient Identifier Cross-reference Manager	Patient Identity Feed HL7 V3 [ITI-44]	R	ITI TF-2b: 3.44
	PIXV3 Query [ITI-45]	R	ITI TF-2b: 3.45
	PIXV3 Update Notification [ITI-46]	R	ITI TF-2b: 3.46

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference HL7 V3 (PIXV3)
Patient Identity Feed HL7 V3 [ITI-44]

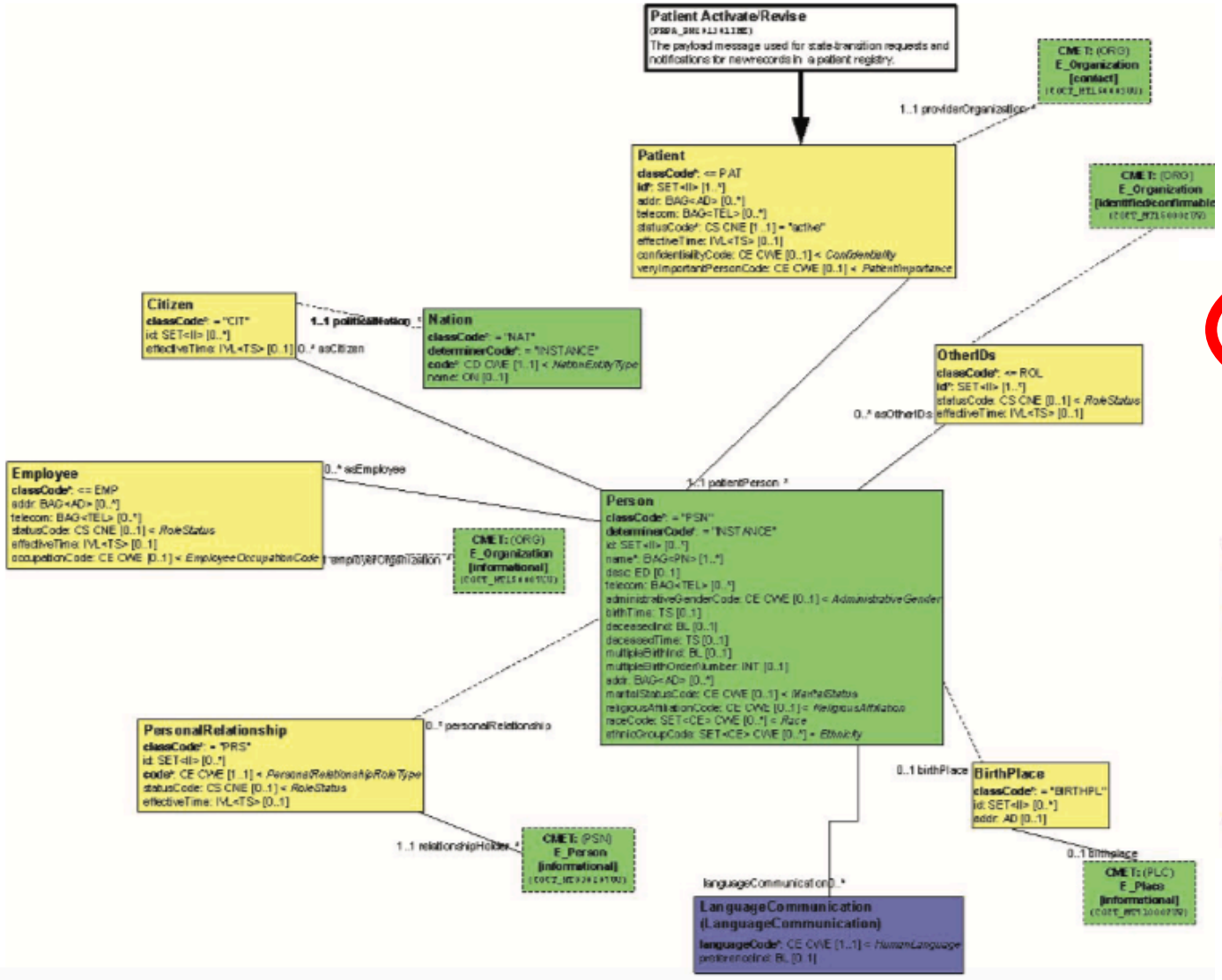


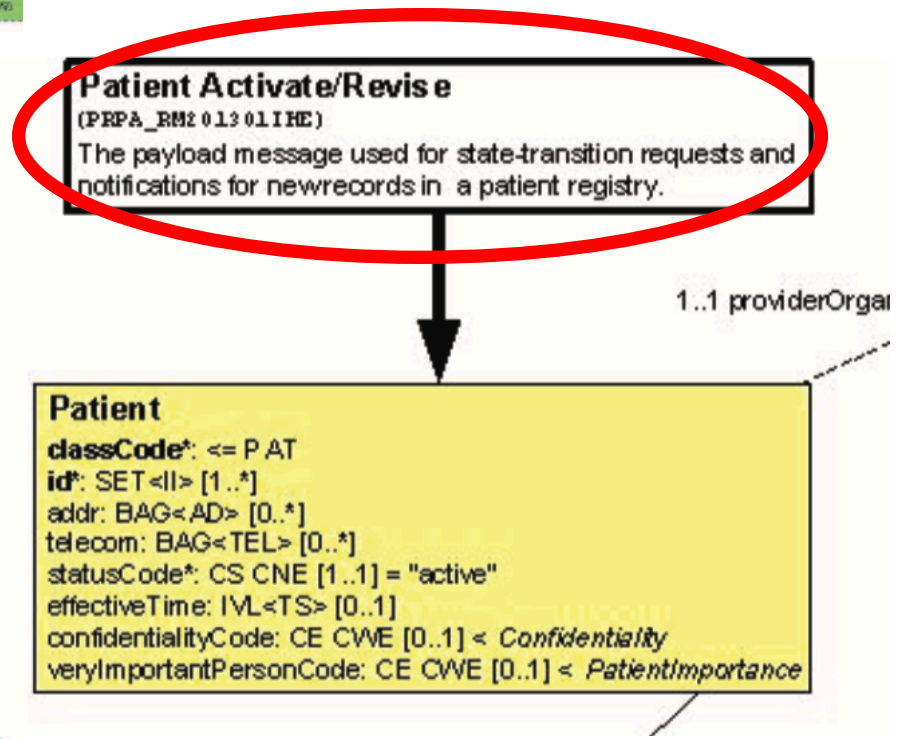
Patient Identifier Cross-Reference HL7 V3 (PIXV3)
Diagrama de Interação (Triggers para ITI-44)



IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference HL7 V3 (PIXV3) Message Information Model





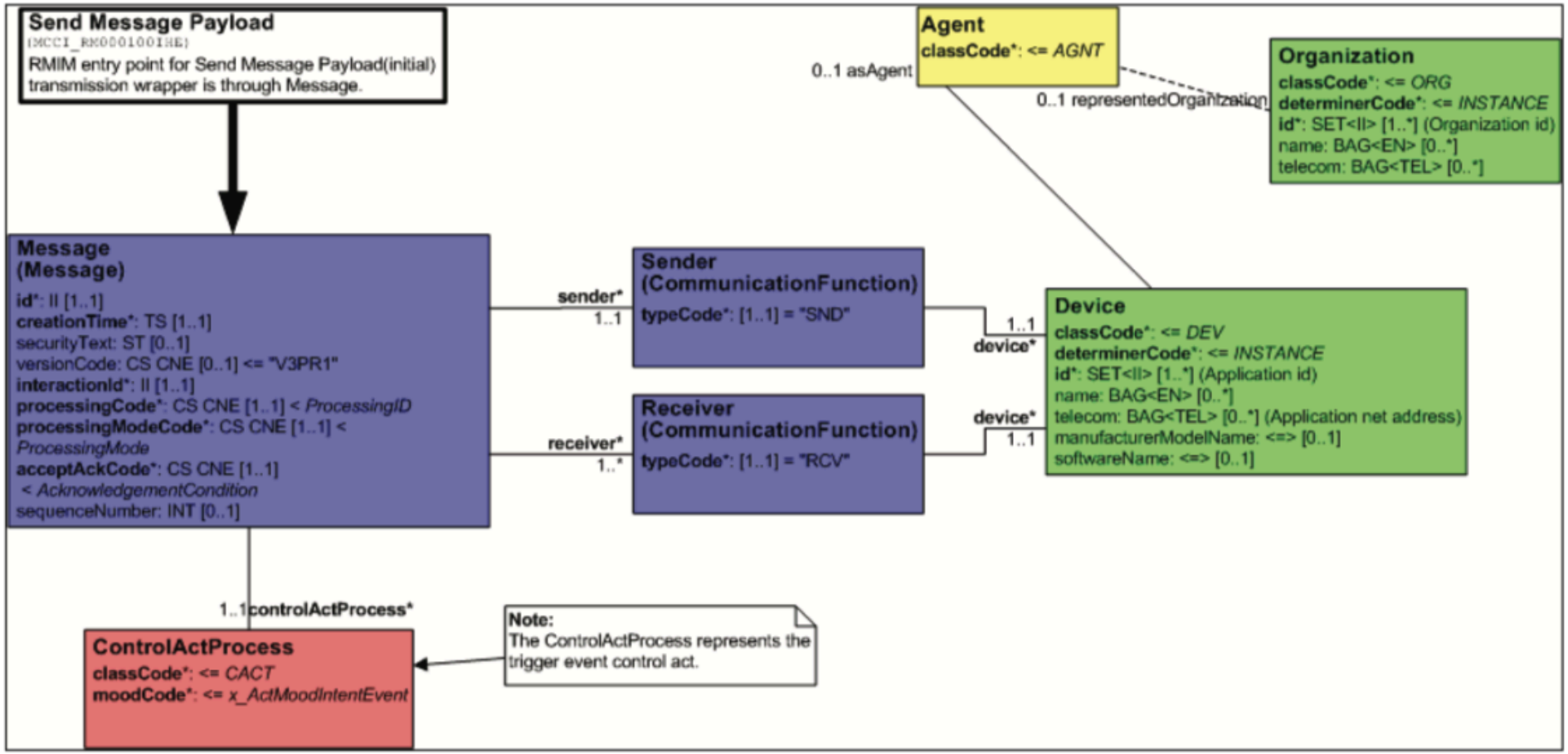
IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference HL7 V3 (PIXV3) Diagrama de Classes de Paciente

PRPA_HD201301IHE Patient Activate/Revise	This HMD extract defines the message used to report that a new patient record was added, or a patient record was updated. Derived from Figure 3.44.4.1.2.2-1 (PRPA_RM201301IHE)
Patient	The primary record for the focal person in a Patient Identity Source
classCode [1..1] (M) Patient (CS) {CNE:PAT}	Structural attribute; this is a "patient" role
id [1..*] (M) Patient (SET<II>)	Identifiers designated by this patient identity source for the focal person
statusCode [1..1] Patient (CS) {CNE:active, fixed value= "active"}	A value specifying the state of this record in a patient registry (based on the RIM role class state-machine). This record is active.
confidentialityCode [0..*] Patient (SET<CE>) {CWE:Confidentiality}	Value(s) that control the disclosure of information about this living subject as a patient
veryImportantPersonCode [0..1] Patient (CE) {CWE:PatientImportance}	A code specifying the patient's special status granted by the scoper organization, often resulting in preferred treatment and special considerations. Examples include board member, diplomat.
Person	A subtype of LivingSubject representing a human being Either Person.name or Patient.id must be non-null
classCode [1..1] (M) Person (CS) {CNE:PSN, fixed value= "PSN"}	Structural attribute; this is a "person" entity
determinerCode [1..1] (M) Person (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific person
name [1..*] Person (BAG<PN>)	Name(s) for this person
telecom [0..*] Person (BAG<TEL>)	Telecommunication address(es) for communicating with this person
administrativeGenderCode [0..1] Person (CE) {CWE:AdministrativeGender}	A value representing the gender (sex) of this person. Note: this attribute does not include terms related to clinical gender which is a complex physiological, genetic and sociological concept that requires multiple observations in order to be comprehensively

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference HL7 V3 (PIXV3) Control Act and Transmission Wrappers



Patient Identifier Cross-Reference HL7 V3 (PIXV3) Model Attributes

MCCI_HD000100IHE Send Message Payload	This HMD extract defines the transmission wrapper used to send HL7 V3 Message Payload. Derived from Figure O.1.1-1 (MCCI_RM000100IHE)
Message	The transmission focal class. According of the XML ITS, the root XML element representing this class will be the HL7 interaction ID
id [1..1] (M) Transmission (II)	Unique message ID
creationTime [1..1] (M) Transmission (TS)	Time stamp representing the time the message was created. Note that this is different from the time when the event which triggered the message occurred.
versionCode [0..1] Message (CS) {CNE:HL7StandardVersionCode, default= "V3PR1"}	The HL7 Version used in this message
interactionId [1..1] (M) Message (II)	The HL7 Interaction ID represented by this message
processingCode [1..1] (M) Message (CS) {CNE:ProcessingID}	This attribute defines whether the message is part of a production, training, or debugging system. Valid values are D (Debugging), T (Testing), P (Production) – see http://hl7.org/v3ballot2007may/html/infrastructure/vocabulary/ProcessingID.htm
processingModeCode [1..1] (M) Message (CS) {CNE:ProcessingMode}	This attribute defines whether the message is being sent in current processing, archive mode, initial load mode, restore from archive mode, etc. Valid values are A (Archive), T (Current processing), I (Initial Load), R (Restore from archive) – see http://hl7.org/v3ballot2007may/html/infrastructure/vocabulary/ProcessingMode.htm
acceptAckCode [1..1] (M) Message (CS) {CNE:AcknowledgementCondition}	Acknowledgement Condition codes describe the conditions under which accept or application level acknowledgements are required to be returned in response to the message send operation. Valid values are AL (Always), ER (Error/reject only), NE (Never).
sequenceNumber [0..1] Message (INT)	An optional sequence number.
Sender	
typeCode [1..1] (M) CommunicationFunction (CS) {CNE:SND, fixed value= "SND"}	Structural attribute; this is a "Sender" communication function
Receiver	
typeCode [1..1] (M) CommunicationFunction (CS) {CNE:RCV, fixed value= "RCV"}	Structural attribute; this is a "Receiver" communication function
Device	
classCode [1..1] (M) Entity (CS) {CNE:DEV, default= "DEV"}	Structural attribute; this entity is a "Device"
determinerCode [1..1] (M) Entity (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific device
id [1..*] (M) Entity (SET<II>)	The application ID(s). IHE restriction: id.root SHALL be an ISO OID, and id.extension SHALL NOT have a value.
name [0..*] Entity (BAG<EN>)	Optional Sender or Receiver name
telecom [0..*] Entity (BAG<TEL>)	Optional network address of the application

MCCI_HD000100IHE Send Message Payload	This HMD extract defines the transmission wrapper used to send HL7 V3 Message Payload. Derived from Figure O.1.1-1 (MCCI_RM000100IHE)
manufacturerModelName [0..1] Device (SC)	Optional application brand name
softwareName [0..1] Device (SC)	Optional software name
Agent	This role links the application with the organization to which it belongs
classCode [1..1] (M) Role (CS) {CNE:AGNT, default= "AGNT"}	Structural attribute; this is the Agent role
Organization	The sender or receiver organization
classCode [1..1] (M) Entity (CS) {CNE:ORG, default= "ORG"}	Structural attribute; this entity is an organization
determinerCode [1..1] (M) Entity (CS) {CNE:INSTANCE, fixed value= "INSTANCE"}	Structural attribute; this is a specific organization
id [1..*] (M) Entity (SET<II>)	The organization ID(s). IHE restriction: id.root SHALL be an ISO OID, and id.extension SHALL NOT have a value.
name [0..*] Entity (BAG<EN>)	Optional organization name
telecom [0..*] Entity (BAG<TEL>)	Optional telecommunications address
ControlActProcess	This is the stub where the focal class of the transmission content will be placed in the message.

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference (PIXV3)
Registro de Auditoria de Segurança

	Field Name	Opt	Value Constraints
Event **AuditMessage/ EventIdentification**	EventID	M	EV(110110, DCM, "Patient Record")
	EventActionCode	M	"C" (create) , "U" (update), or "D" (delete) as appropriate
	EventDateTime	*M*	*not specialized*
	EventOutcomeIndicator	*M*	*not specialized*
	EventTypeCode	M	EV("ITI-44", "IHE Transactions", "Patient Identity Feed")
Source (Patient Identity Source Actor) (1)			
Human Requestor (0..n)			
Destination (Patient Identifier Cross-reference Manager or Document Registry) (1)			
Audit Source (Patient Identity Source Actor) (1)			
Patient (1)			

Where:

Source **AuditMessage/ ActiveParticipant**	*UserID*	*U*	*not specialized*
	AlternativeUserID	M	the process ID as used within the local operating system in the local system logs.
	UserName	*U*	*not specialized*
	UserIsRequestor	*U*	*not specialized*
	RoleIDCode	M	EV(110153, DCM, "Source")
	NetworkAccessPointTypeCode	M	"1" for machine (DNS) name, "2" for IP address
	NetworkAccessPointID	M	the machine name or IP address.

IHE BRASIL Integrating the Healthcare Enterprise

Patient Identifier Cross-Reference (PIXV3)
Exemplos Mensagens PIXv3

Index of /TF_Implementation_Material/ITI/examples/PIXV3/

[parent directory]

Name	Size	Date Modified
01_PatientRegistryRecordAdded1.xml	3.5 kB	10/28/10, 10:00:00 PM
01_PatientRegistryRecordAdded1_20110228.xml	3.6 kB	2/22/11, 9:00:00 PM
01_PatientRegistryRecordAdded1_20110328.xml	3.6 kB	4/18/11, 9:00:00 PM
01_PatientRegistryRecordAdded1_20110504.xml	3.5 kB	5/3/11, 9:00:00 PM
02_PatientRegistryRecordAdded1Ack.xml	1.2 kB	10/23/08, 10:00:00 PM
02_PatientRegistryRecordAdded1Ack_20110228.xml	1.2 kB	2/22/11, 9:00:00 PM
02_PatientRegistryRecordAdded1Ack_20110328.xml	1.2 kB	4/18/11, 9:00:00 PM
03_PatientRegistryRecordAdded2.xml	4.0 kB	10/23/08, 10:00:00 PM
03_PatientRegistryRecordAdded2_20110228.xml	4.0 kB	2/22/11, 9:00:00 PM
03_PatientRegistryRecordAdded2_20110328.xml	4.0 kB	4/18/11, 9:00:00 PM
04_PatientRegistryRecordRevised2.xml	4.1 kB	10/23/08, 10:00:00 PM
04_PatientRegistryRecordRevised2_20110228.xml	4.1 kB	2/22/11, 9:00:00 PM
04_PatientRegistryRecordRevised2_20110328.xml	4.1 kB	4/18/11, 9:00:00 PM
05_PatientRegistryDuplicatesResolved.xml	2.8 kB	10/23/08, 10:00:00 PM
05_PatientRegistryDuplicatesResolved_20110328.xml	2.8 kB	4/18/11, 9:00:00 PM
05_PatientRegistryDuplicatesResolved_20110504.xml	2.8 kB	5/3/11, 9:00:00 PM
06_PIXQuery1.xml	1.9 kB	10/23/08, 10:00:00 PM
06_PIXQuery1_20110228.xml	1.9 kB	2/22/11, 9:00:00 PM
06_PIXQuery1_20110328.xml	1.9 kB	4/18/11, 9:00:00 PM
07_PIXQuery1Response.xml	4.2 kB	10/23/08, 10:00:00 PM
07_PIXQuery1Response_20110228.xml	4.2 kB	2/22/11, 9:00:00 PM
07_PIXQuery1Response_20110328.xml	4.2 kB	4/18/11, 9:00:00 PM

ftp://ftp.ihe.net/TF_Implementation_Material/ITI/examples/

https://github.com/ihebrasil/PROADI-SUS-HAOC

This XML file does not appear to have any style information associated with it. The document tree is shown below.


```
<PRPA_IN201301UV02 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3
../../schema/HL7V3/NE2008/multicacheschemas/PRPA_IN201301UV02.xsd" ITSVersion="XML_1.0">
  <id root="22a0f9e0-4454-11dc-a6be-3603d6866807"/>
  <creationTime value="20070803130624"/>
  <interactionId root="2.16.840.1.113883.1.6" extension="PRPA_IN201301UV02"/>
  <processingCode code="P"/>
  <processingModeCode code="R"/>
  <acceptAckCode code="AL"/>
  <receiver typeCode="RCV">
    <device classCode="DEV" determinerCode="INSTANCE">
      <id root="1.2.840.114350.1.13.99999.4567"/>
      <telecom value="https://example.org/PatientFeed"/>
    </device>
  </receiver>
  <sender typeCode="SND">
    <device classCode="DEV" determinerCode="INSTANCE">
      <id root="1.2.840.114350.1.13.99998.8734"/>
    </device>
  </sender>
```


This XML file does not appear to have any style information associated with it. The document tree is shown below.


```
<PRPA_IN201304UV02 xmlns="urn:hl7-org:v3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:hl7-org:v3
../../schema/HL7V3/NE2008/multicacheschemas/PRPA_IN201304UV02.xsd" ITSVersion="XML_1.0">
  <id root="2.16.840.1.113883.19.3.2409" extension="6754"/>
  <creationTime value="20070803162915"/>
  <interactionId root="2.16.840.1.113883.1.6" extension="PRPA_IN201304UV02"/>
  <processingCode code="P"/>
  <processingModeCode code="T"/>
  <acceptAckCode code="AL"/>
  <receiver typeCode="RCV">
    <device classCode="DEV" determinerCode="INSTANCE">
      <id root="1.2.840.114350.1.13.99999.4567"/>
      <telecom value="https://example.org/PatientFeed"/>
    </device>
  </receiver>
  <sender typeCode="SND">
    <device classCode="DEV" determinerCode="INSTANCE">
      <id root="1.2.840.114350.1.13.99998.8734"/>
    </device>
  </sender>
```


IHE BRASIL Integrating the Healthcare Enterprise

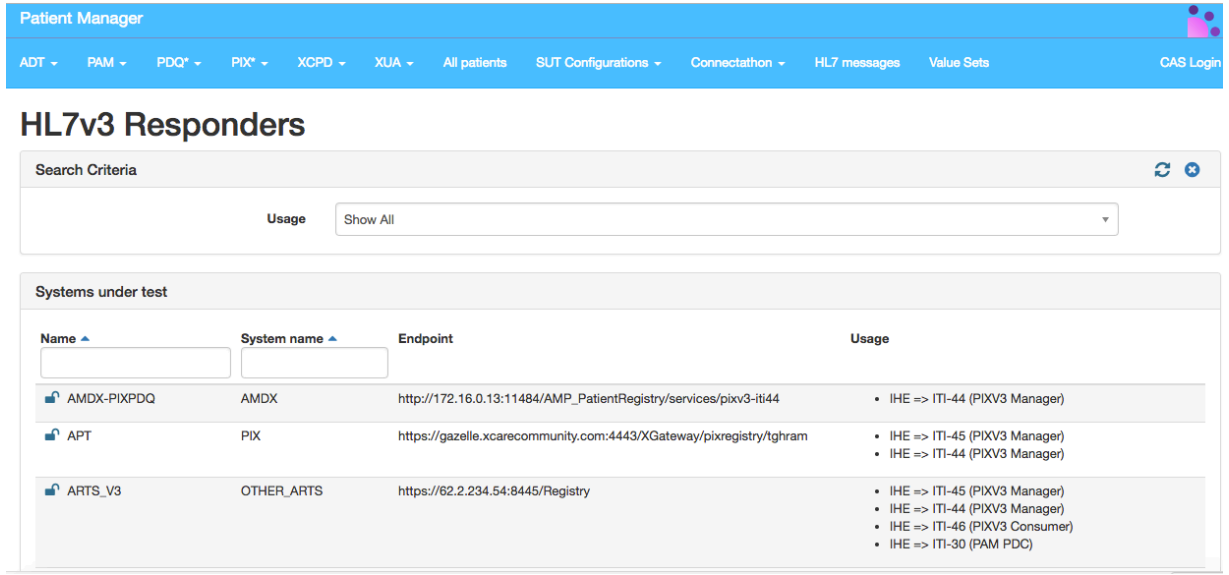
Patient Identifier Cross-Reference (PIXV3)
Ferramentas PIXv3

Index to IHE Test Tools

This table lists the tools available for testing IHE profiles, along with links to the tool & documentation.
To determine which tool to use for the profile you want to test, please refer to the domain-specific Index to Pre-Connectathon Tests in the next section.

Tool	Developed by	Type	Tool Location / Installation	User documentation & Training	Ready to use?	Support	Used for
CDA Validation tool	NIST	web-based or download	CDA Validation Tool	CDA Tool home page	Yes	CDA Validator contact	**PCC**: all CDA-based profiles except APE, TRS, ETS, ITS
DICOMscope CPI Visualization tools	OFFIS	install/run locally	IHE Display Consistency distribution page	DICOMscope overview page	Yes		**RAD**: CPI
DVTk DICOM validator	Philips, ICT		access via External Validation Service Front-End, IHE-->DICOM	DVTk training & documentation	Yes	DVTk forum	various DICOM-based profiles
Gazelle CDA Generator	IHE-Europe at Kereval	web-based	CDA Generator	CDA Generator info page	Yes		
Gazelle Demographic Data Server (DDS)	IHE-Europe at Kereval	web-based	Demographic Data Server, or on your connectathon's gazelle under menu *Connectathon / Patient Generation & Sharing*	DDS info page also, Patient Generation & Sharing training slides	Yes	submit issues & questions to our Jira issue tracker	c'thon testing
Gazelle External Validation Services (EVS) aka "EVSClient"	IHE-Europe at Kereval	web-based	External Validation Service Front-End	Gazelle External Validation Services user guide	Yes	submit issues & questions to our Jira issue tracker	**AP**: APW, ARPH **CARD**: CATH, ECHO, REWF, STRESS, CRC, RCS-C **ITI**: many; see here **LAB**: LAW, LBL, LCSD, LDA, LPOCT, LTW **PCC**: XBeR, XTHM **PHARM**: DIS, HMW, PADV, PRE, CMPD-WD **QRPH**: ADX **RAD**: XDS-I.b (Wado)
Gazelle DSUB validator	IHE-Europe at Kereval	web-based	access via External Validation Service Front-End, IHE-->DSUB	DSUB validator info page	Yes		**ITI**: DSUB
Gazelle HPD validator & simulator	IHE-Europe at Kereval	web-based	access via External Validation Service Front-End, IHE-->Healthcare Provider Directory HPD Simulator	HPD simulator info page	Yes	submit issues & questions to our Jira issue tracker	**ITI**: HPD
Gazelle HL7 validator	IHE-Europe at Kereval	web-based	Gazelle HL7 validator	HL7 validator info	Yes	submit issues & questions to our Jira issue tracker	many

https://gazelle.ihe.net/PatientManager/hl7v3/sut/sutAsHL7v3Responder.seam

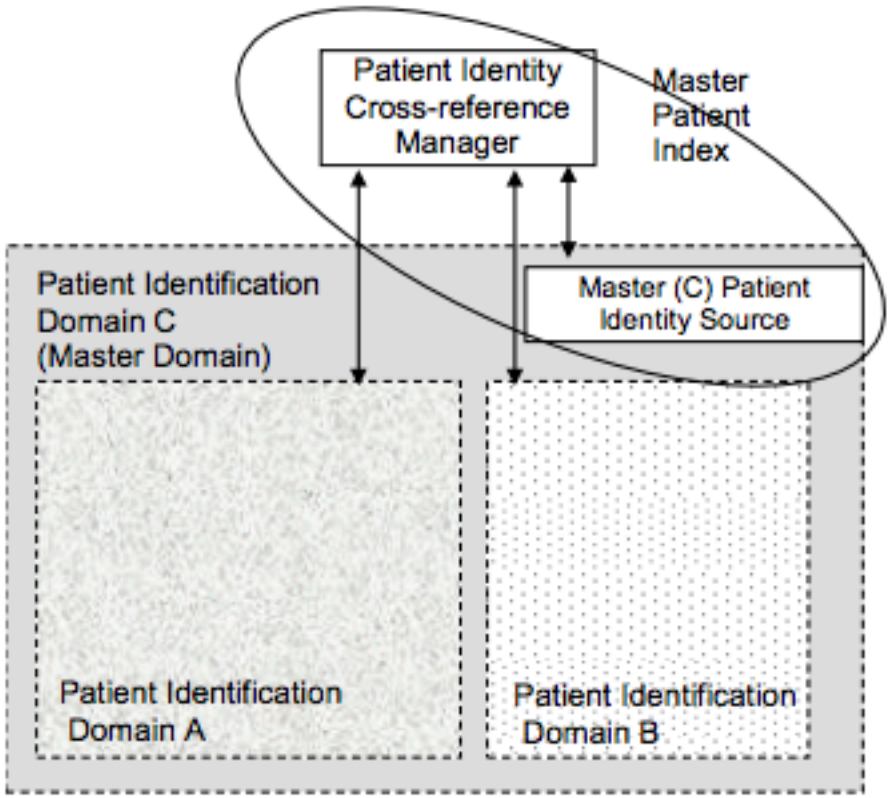


IHE Brasil GitHub: https://github.com/ihebrasil/PROADI-SUS-HAOC

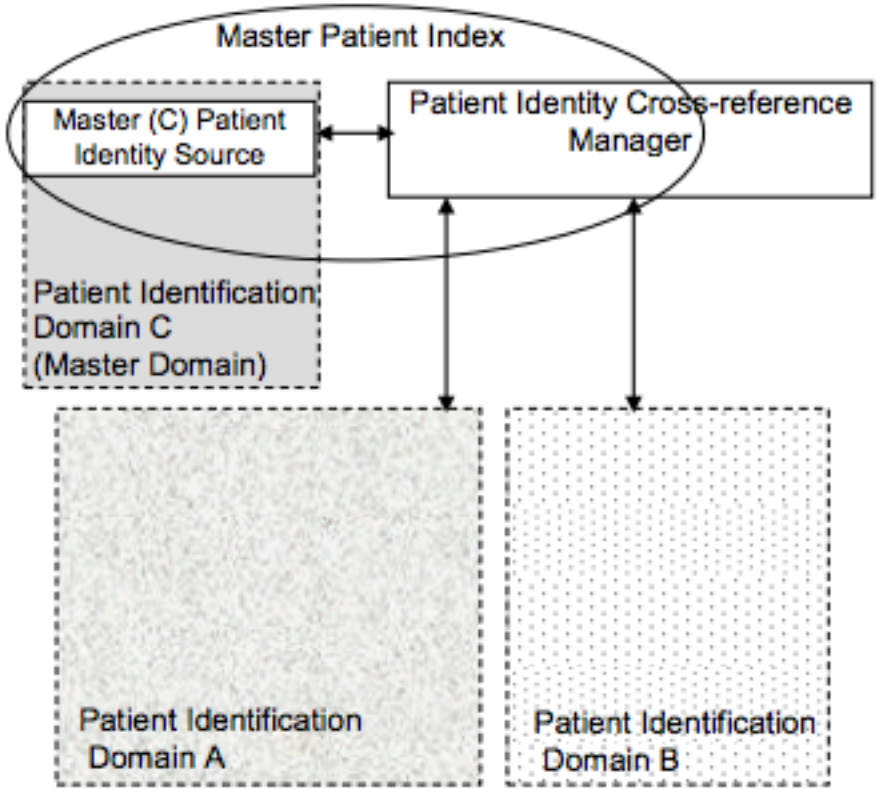
https://gazelle.ihe.net/PatientManager/hl7v3/sut/sutAsHL7v3Responder.seam

IHE BRASIL Integrating the Healthcare Enterprise

Relação PIX Integration Profile e eMPI



Two domains included in a Master Patient Index



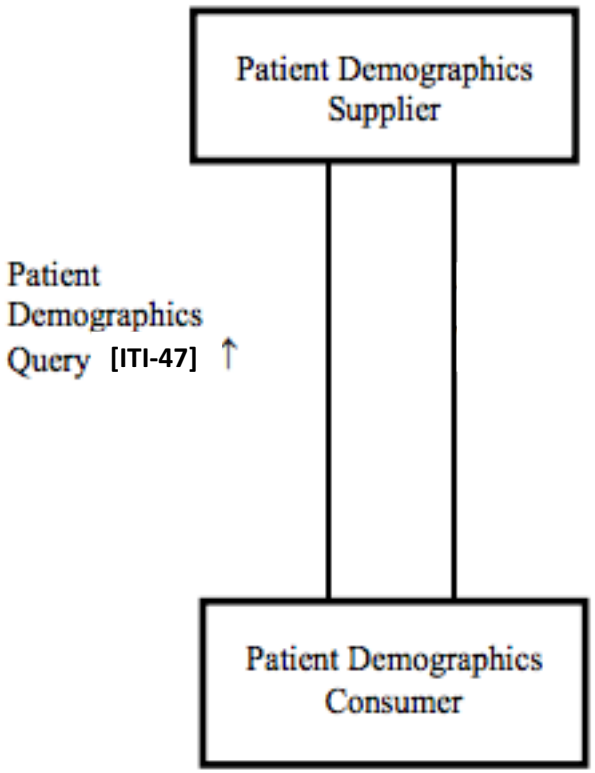
The same configuration represented as 3 cross-referenced domains

IHE BRASIL Integrating the Healthcare Enterprise

Patient Demographics Query HL7 V3 (PDQV3) Definições

- Profile de Infraestrutura de TI (IHE IT Infrastructure)
- **Promover formas para que múltiplas aplicações distribuídas pesquisem (query) por informações do paciente baseado em critérios de busca definidos pelo usuário e tenha como retorno informações demográficas (e de atendimento) do paciente diretamente na aplicação.**
- Esta transação envolve uma solicitação do *Patient Demographics Consumer* por informações sobre pacientes cujos dados demográficos correspondem aos dados fornecidos na mensagem de consulta. A solicitação é recebida pelo Patient Demographics Supplier. O Patient Demographics Supplier processa imediatamente a solicitação e retorna uma resposta na forma de informações demográficas para correspondência de pacientes.
- PDQ é em 3 níveis de mensageria HL7: HL7 V2 (PQD), HL7 V3 (PDQ V3)m e HL7 FHIR (PDQM). Todos possuem propósitos idênticos, porém utilizando diferentes padrões.

Patient Demographics Query HL7V3 (PDQV3)
Atores e Transações

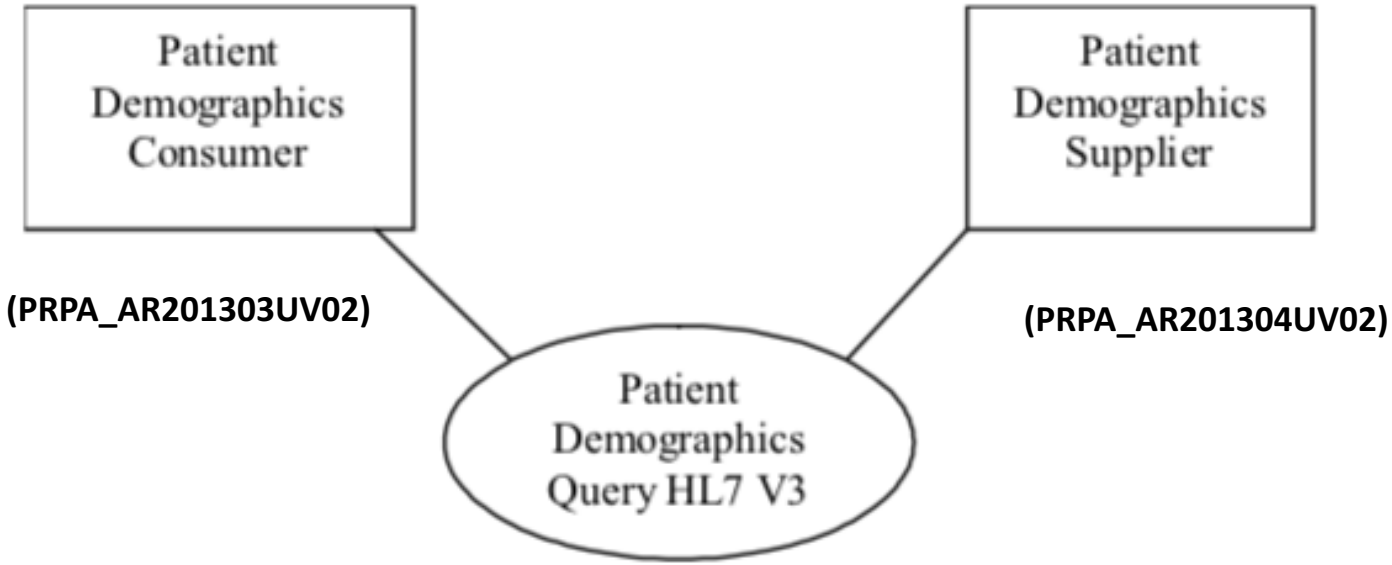


Actors	Transactions	Optionality	Section
Patient Demographics Consumer	Patient Demographics Query HL7 V3 [ITI-47]	R	ITI TF-2b: 3.47
Patient Demographics Supplier	Patient Demographics Query HL7 V3 [ITI-47]	R	ITI TF-2b: 3.47

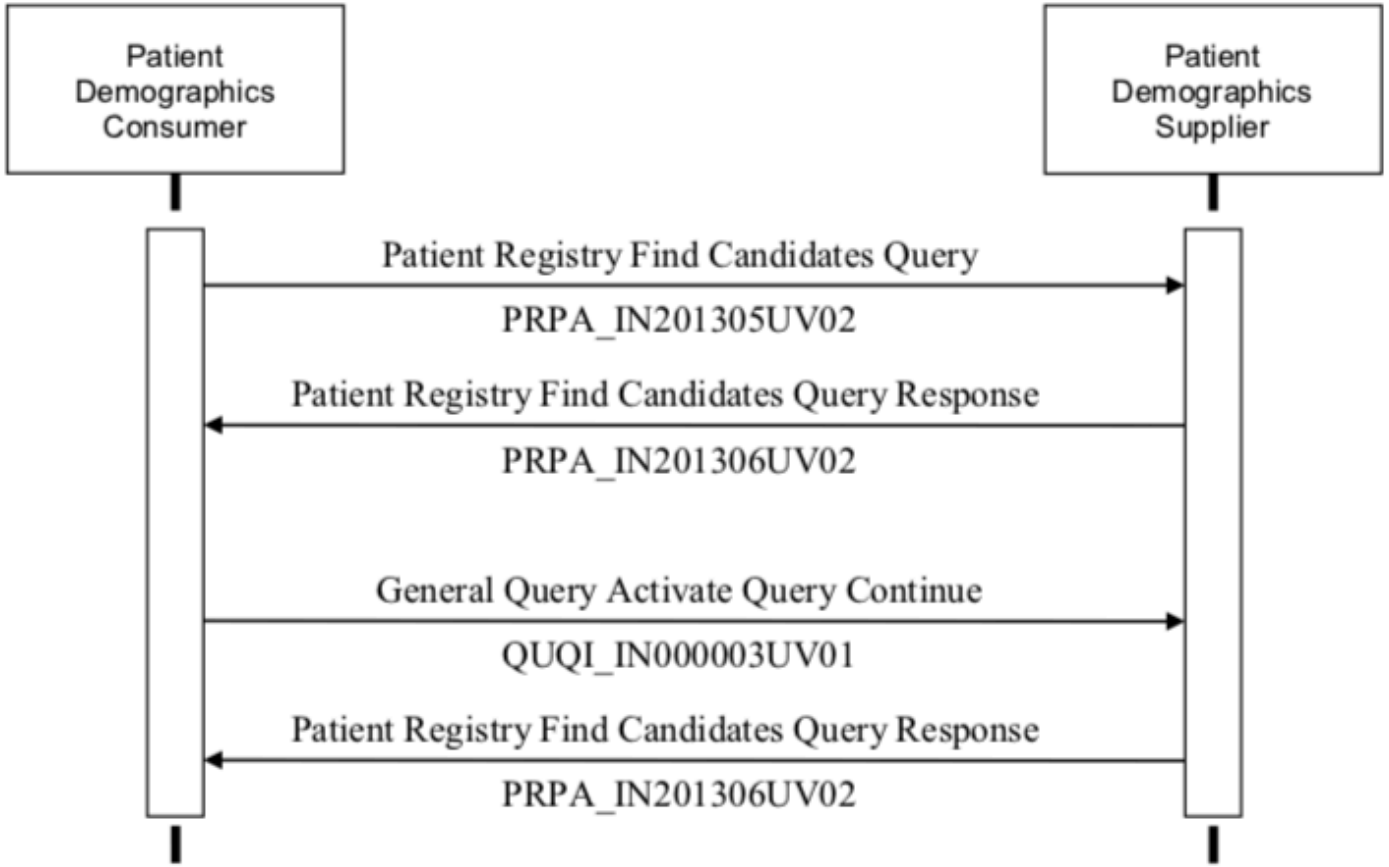
Actor	Options	Vol. & Section
Patient Demographics Consumer	Continuation	ITI TF-1: 24.2.1
	Pediatric Demographics	ITI TF-1: 24.2.2
Patient Demographics Supplier	Continuation	ITI TF-1: 24.2.1
	Pediatric Demographics	ITI TF-1: 24.2.2

IHE BRASIL Integrating the Healthcare Enterprise

Patient Demographics Query HL7V3 (PDQV3)
Patient Demographics Query [ITI-47]

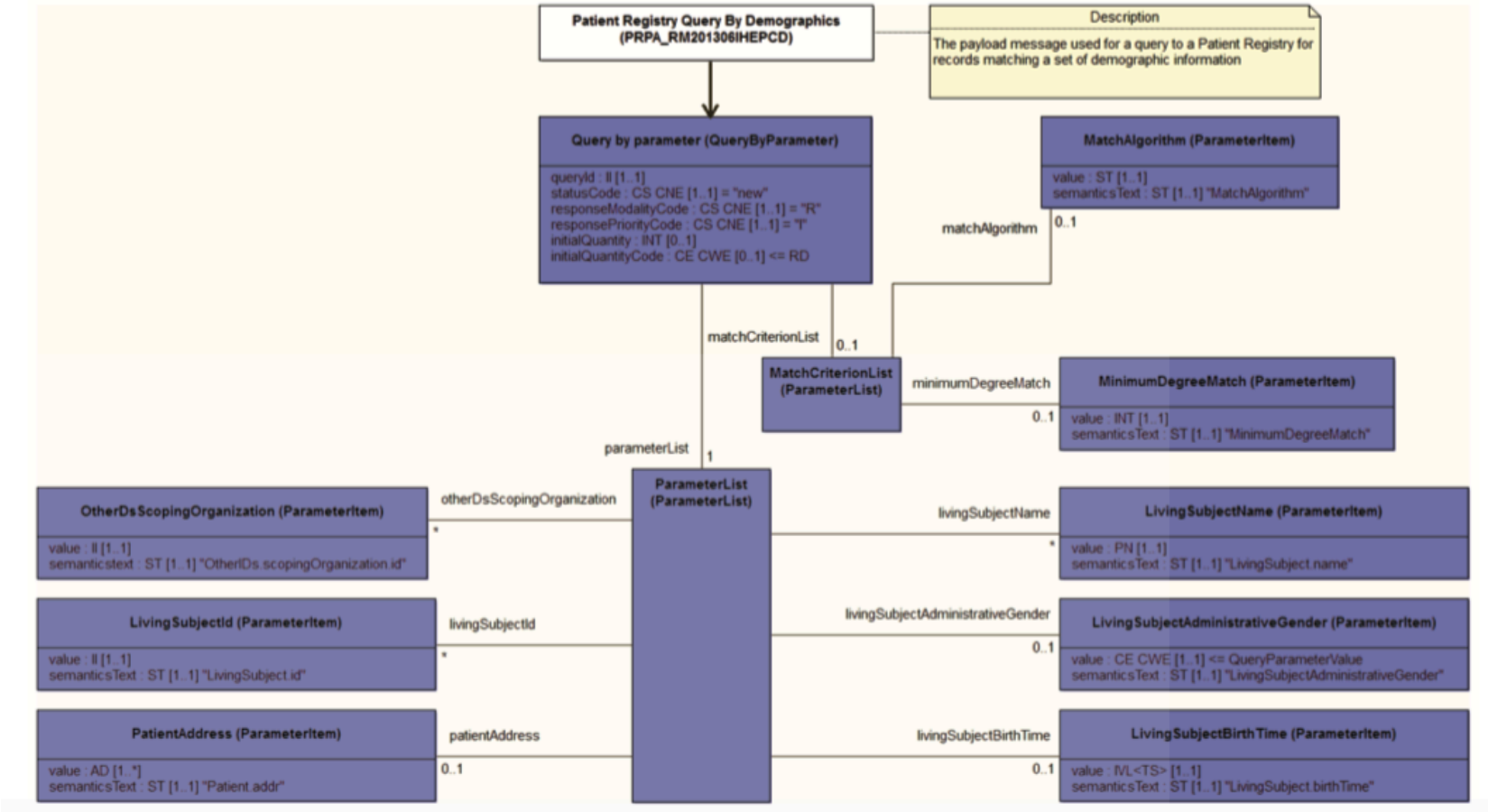


Patient Demographics Query HL7 V3 (PDQV3)
Diagrama de Interação [ITI-47]



IHE BRASIL Integrating the Healthcare Enterprise

Patient Demographics Query HL7 V3 (PDQV3)
Message Information Model - Query by Demographics Message



IHE BRASIL Integrating the Healthcare Enterprise

Referências

- IHE IT Infrastructure (ITI) Technical FrameworK, Volume 1 (ITI TF-1) – Integration Profiles (Revision 15.0 – July 24, 2018)
- IHE IT Infrastructure (ITI) Technical FrameworK, Volume 2a (ITI TF-2a) – Integration Profiles (Revision 15.0 – July 24, 2018)
- IHE IT Infrastructure (ITI) Technical FrameworK, Volume 2b (ITI TF-2b) – Integration Profiles (Revision 15.0 – July 24, 2018)
- IHE IT Infrastructure (ITI) Technical FrameworK, Volume 2x (ITI TF-2x) – Integration Profiles (Revision 15.0 – July 24, 2018)

Obrigado!

- IHE Brasil: http://www.ihe.org.br/siteWP/
- IHE International: https://www.ihe.net/
- IHE Brasil GitHub: https://github.com/ihebrasil/PROADI-SUS-HAOC

secretaria@ihe.org.br

Diretoria IHE 2018-2019

Ricardo Staciarini Puttini

Rodrigo Andre Cuevas Gaete

Osmeire Aparecida Chamelette Sanzovo

Marcelo Rodrigues dos Santos

Francisco Andrade de Oliveira

Henrique Tomaz do Amaral Silva

IHE BRASIL Integrating the Healthcare Enterprise